

## **Assessment of the finds from St Oswald's School, Fulford (OSA02 EV14)**

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### **Summary**

The evaluation at St Oswald's School, Fulford produced a moderate quantity of finds, principally pottery, but including clay tobacco pipes, glass, iron, lead alloy and stone (coal). The finds indicate rural settlement in the Roman period but with a material culture approaching that of the fortress at York rather than the 'native' population. The end of this occupation appears to have been within the Roman period and no definite 4<sup>th</sup>-century material was present.

Medieval activity may have been restricted to open field agriculture with a scatter of finds brought onto the fields with manure.

In the mid 17<sup>th</sup>-century, almost certainly associated with the Civil War, a flat-bottomed trench was dug in which a small but remarkable group of finds was deposited. These include a glass lens, lead pistol and musket shot and a complete iron axe head.

### **Description**

#### **Ceramic Building Material**

Twenty-one fragments of ceramic building material were recovered. Flat roof tiles datable to the medieval or post-medieval period were recovered from contexts 2003, 5003 and 5006. A modern (ie later 19<sup>th</sup> or 20<sup>th</sup>-century) brick was recovered from context 3006. The remaining fragments were too small for reliable identification. None, however, were of indisputable Romano-British form or fabric. In three cases, however, the fragments come from contexts which have produced no finds later than the Roman period (1007, 2009 and 4009).

#### **Clay Tobacco Pipes**

Eighteen fragments of clay tobacco pipe were recovered. Those from context 5005 form a group dating to the mid 17<sup>th</sup> century. This is confirmed by their bore diameters and the forms of the two heeled bowls present (Fig 2). One of these heels is stamped with a capital H (Fig 1).



**Figure 1**



**Figure 2**

Unstratified pipe fragments include two further bowls, both of 19<sup>th</sup>-century type. One of these is stamped 'DUTCH CUTTY' (Fig 3) on a plain spurred bowl and the other has complex ornamentation of ridges separating columns of dots (Fig 4). The spur of the latter bowl is stamped with a small 'c'.



Figure 3



Figure 4

## Glass



**Figure 5**

Two fragments of a blue-green square bottle were recovered from context 4001 (Fig 5). They come from the base of the vessel and have a moulded raised ring. The vessel walls appear to be concave. The vessel is associated only with Roman finds. A similar sherd was recently examined from a rural site at Elloughton, on the Romano-British ladder settlement at the foot of the Wolds and it is clear that these bottles were not uncommon on rural settlements in the north of England.



**Figure 6**

A glass lens from context 5005 is of considerable potential interest (Fig 6). The lens was broken in antiquity into two pieces and is 36mm in diameter and has two polished convex faces. It is chipped around the edge rather than being ground as with recent spectacle lenses. There is no sign of any mounting around the lens (for example, metal staining from a metal mount or any trace of an organic glue). Both surfaces are covered with a network of randomly-orientated scratches which are most dense in the centre and thin out towards the edge. Under high magnification these scratches are seen to be in straight lines and sometimes to have a twisted cord appearance. Some, by contrast, appear to have been made by a minute milled object. Clearly, these scratches were neither caused by random movement after burial nor through the cleaning of the lens with a gritty cloth or fingers.

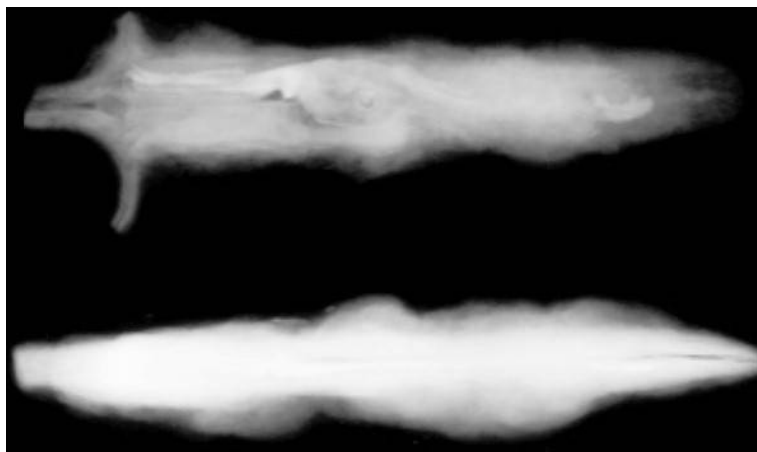
The glass is colourless and does not have any evidence of weathering. It was examined under plane polarised light to confirm that it is indeed glass rather than rock crystal. Its weight (approx 5gm) suggests that the glass may be high in lead. Lead crystal was not made in England until the late 17<sup>th</sup> century and therefore, if this object is dated by the clay pipes and lead shot, then it was probably made abroad.

The lens might have been used in a telescope or in spectacles. The scratched surfaces may argue against a telescope, which ought to have protected the inner surface.

## Iron

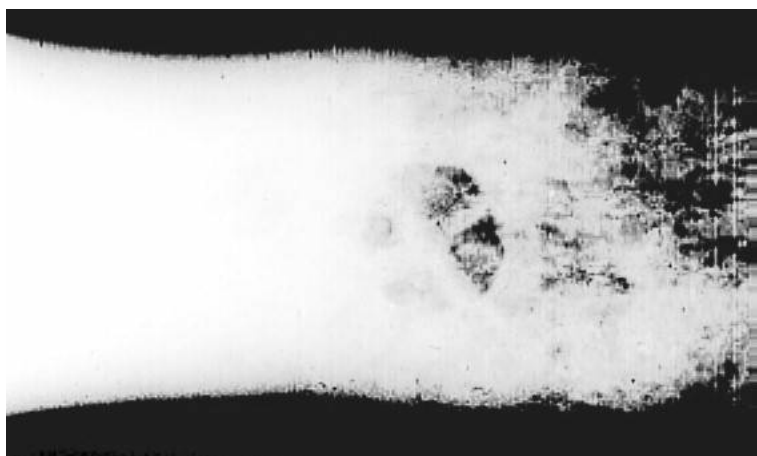
A collection of slag from iron working was found in context 4001 and a single piece of slag was recovered from context 5003. The latter context contains material of modern date and the fragment may be fuel ash slag.

A small object from context 5003 appears on X-ray to be a nail (OSA02 EV14 Plate 2).



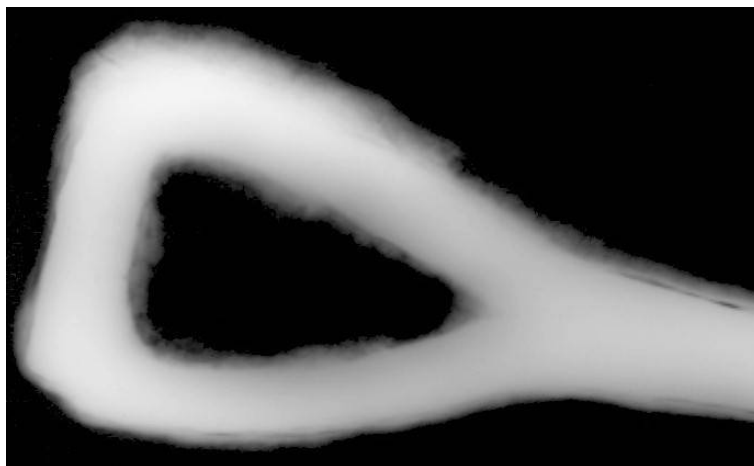
**Figure 7**

An object from context 5005 is too complex for identification simply from the X-ray (Fig 5. OSA02 EV14 Plate 3). One interpretation is that it might be part of the mechanism from a flintlock pistol. Another, equally justified from the X-ray evidence, is that it is the remains of a pair of scissors since the transverse X-ray seems to show two blades rather than one piece of metal. Only investigative cleaning would be able to resolve the identity of the object. Nevertheless, further opinions might be sought by circulating the X-ray images to relevant specialists, such as the Royal Armouries Museum. Given the uncertainty as to what the X-ray reveals, an illustration would at present be unhelpful. However, it may be that specialists with more familiarity with 17<sup>th</sup>-century ironwork might be able to provide parallels with whose help the object could be reconstructed.



**Figure 8 Enhanced image of X-radiograph of iron axe to show maker's mark**

An axe head from context 5005 has an almost parallel blade and a circular maker's mark (Fig 6), consisting of a raised cross against a countersunk circular background. X-radiography (OSA02 EV14 Plates 1 and 2) shows that the blade is parallel for most of its length and comes to a point only in the last c.20mm. The back of the head is flat and the shaft void has a rounded wedge shape (Fig 7). The axe requires drawing and research to establish its likely function (general purpose /military /woodworking) and whether the maker's mark is known from other tools or weapons.



**Figure 9 X-radiograph of iron axe to show wedge-shaped shaft socket**

### **Lead alloy**



**Figure 10**

Eighteen lead shot were recovered from context 5005 (Fig 10). At present they are encrusted with silty clay and in few cases could their diameter be measured. However, the soil probably does not add more than a gram or two to the overall weight of the shot (Table 1). It is clear that the shot vary in size and that there is some grouping by size. Two shot which varied in weight by 2gm had the same diameter. The fact that four have the same weight to within a gram, however, suggests that these were made in the same moulds. The calibre of the shot was measured in mm and translated to hundredths of an inch. This showed a range in size from .55 to .69. For comparison, the size of pistol shot varied from .40 to

.65, that of carbines from .60 to .70 and muskets from .70 to .80. It seems likely that the smaller shot were definitely used with a pistol whereas the majority are probably too large, although on the small size for a musket. There was considerable lee-way in the size of the shot that could be used in a 17<sup>th</sup>-century firearm. During any period of use the bore would begin to foul up and the smaller the effective bore the smaller the shot that could be fired.

**Table 1**

Weight	Number	Calibre (inches)
18	1	0.55
23	1	0.59
25	1	-
27	2	-
30	3	-
31	1	-
32	1	0.67
34	1	0.67
38	4	0.69
39	1	-
<b>Grand Total</b>	<b>16</b>	<b>-</b>

The shot are covered in small concave depressions and flattened surfaces. These are likely to be due to their being carried loose in a bag. None show any sign of use. They were cast in a two-part mould but only in the case of the smallest piece was there any trace of the casting seam or burring.

## Pottery

### Roman

Sixty-four sherds of Romano-British pottery were recovered (Table 1). The pottery is in a very abraded condition even though some of the sherds are of some size. This is consistent with their being debris from occupation on or close to the site and having been subjected to a harsh burial environment. The range of material present is wide, with imported amphorae sherds of two identified types (AP25 and AP27) together with two further possible amphora sherds. Samian ware of Central Gaulish and Southern Gaulish (Les Matres de Veyres) types was also present. Coarsewares include York-made Eboracum wares, the products of regional industries such as BB2, Dales-type shelly ware and Crambeck and some sherds of heavily-gritted handmade pottery.

In terms of date, the pottery ranges from the late 1<sup>st</sup>/early 2<sup>nd</sup> century through to the late 3<sup>rd</sup> or 4<sup>th</sup> century. However, there is an absence of calcite-gritted ware, despite the presence of a sherd identified as G18, a late unburnished handmade ware. The form of this vessel, a flanged dish or bowl, would be acceptable in the 2<sup>nd</sup> or 3<sup>rd</sup> centuries and it is possible that this is actually evidence for the continuity of this 'native' tradition throughout the Roman period. Accepting a mid Roman date for this sherd, the sequence stops at some point in the late 3<sup>rd</sup> or early 4<sup>th</sup> centuries.



**Table 2**

Broad cname	broadsource	cname	NoSH	NoV	Wt
AMPH	Imported	YATAP25	7	7	576
AMPH	Imported	YATAP27	1	1	6
AMPH	Imported	YATAA?	2	2	35
BURNISHED	Regional industries	YATB02	2	2	25
BURNISHED	Regional industries	YATB12	2	2	42
EBOR	York	YATE05?	1	1	42
EBOR	York	YATE02	1	1	2
EBOR	York	YATE01	23	22	172
GREY	Local	YATG18?	1	1	52
GREY	Unknown British?	YATG02	2	2	12
GREY	Unknown British?	YATG00	1	1	3
GREY	York	YATG01	6	4	67
MORTARIA	Regional industries	YATM01	1	1	61
MORTARIA	York	YATM03?	1	1	17
NATIVE	Unknown British?	YATN01	1	1	7
NATIVE	Unknown British?	YATN02?	1	1	6
SAMIAN	Imported	YATS00?	1	1	3
SAMIAN	Imported	YATS02?	1	1	19
SAMIAN	Imported	YATS03	5	5	19
SHELLY	Regional industries	YATH01	4	3	43
'WHITE'	Unknown British?	YATP00	1	1	3

As a consequence of the poor condition of the sherds, 27 could not be assigned to a form or class of vessel (Table 2). The remainder show that the collection covers a wide range of forms indicating food preparation and storage (amphorae, bowls, dishes, jars and mortaria), drinking (beakers and flagons), and dining/display (Samian). The range of forms indicates a high degree of Romanisation.

**Table 3**

Broad Class	Total
Unclassed	27
Amphora	10
Beakers	2
Bowls	4
Dishes	2
Flagons	2
Flagons/Jars	2
Jars	12
Mortaria	2

Samian	2
Grand Total	65

A single vessel requires illustration, the G18 bowl, which is also recommended for thin-section analysis to establish its source and relationship with Iron Age/early Roman 'native' wares, late Roman handmade wares and Anglo-Saxon wares in the Vale of York, all of which have similar fabrics. Chemical analysis of the fabric might be able to determine whether or not the vessel was more closely related to earlier or later Roman wares.

### Medieval and later

Fourteen sherds of medieval or later pottery were recovered from the site. Three of these are of Yorkshire Gritty ware, which first occurs in the years following the Norman conquest but which continued to be produced into the 13<sup>th</sup> century (YG). There are three sherds of types which first occur in the middle years of the 12<sup>th</sup> century but which are then current for a century. These are Beverley glazed ware (BEVO), Staxton-type ware (STAXT) and York glazed ware (YORK). Given the presence of these sherds it is likely that the YG sherds are of similar date.

Later medieval wares consist of a single sherd of Brandsby-type ware, dating to the mid 13<sup>th</sup>-century or later, a sherd from a Low Countries Red Earthenware vessel and a sherd of Humber ware. All three of these types had a long period of currency in the later medieval period, extending into the 16<sup>th</sup> century.

Finally, two sherds of Ryedale ware were present. This ware replaced Brandsby-type ware (or its successor, Hambleton-type ware) in the early 16<sup>th</sup> century but was still current in the late 17<sup>th</sup> century.

**Table 4**

Date	cname	Total
	11.2YG	3
11.2 Total		3
	12.2BEVO	1
	STAXT	1
	YORK	1
12.2 Total		3
	13.2BRANSBY	1
13.2 Total		1
	14.2DUTR	1
	HUM	4
14.2 Total		5
	16.1RYEDALE	2
16.1 Total		2
Grand Total		14

The range of forms represented is unexceptional (bowls, jars and jugs).

### Stone

Two fragments of burnt coal were present, from contexts 2003 and 5003. They are probably modern.

## Assessment

### Stratigraphy

The finds came from fifteen stratified contexts as well as unstratified material from various trenches. Although the finds from these contexts vary in date from the Roman period to modern the size of the groups is so small, and the degree of mixing in some assemblages is so high that the deposition dates of the assemblages can only be given an earliest possible date (*tpq*, Table 4). Six contexts might therefore be of Roman date: 3004, 4001, 4006, 4007, 4009 and 5009. Three contexts may be medieval (4005, 4020 and 5006). Two contexts may be post-medieval (3001 and 5005) and three are modern (2003, 3006, and 5003). Two contexts produced sherds of unidentifiable ceramic building material and are therefore of Roman or later date.

**Table 5**

Context	Date
1007?	Undated tile only
2003	Mixed Roman>modern
2009	undated tile only
3001	Pmed
3004	late 1st/2 <sup>nd</sup>
3006	Modern
4001	Late Roman
4005	Med
4006	Roman
4007	late 2nd+
4009	Roman?
4020	medieval, but mixed
5003	mixed med to modern
5005	mid 17th c
5006	Med/pmed
5009	2 <sup>nd</sup> +

### Interpretation

The Roman finds seem to indicate the existence of a rural settlement at which iron-working of some kind was carried out and with the possibility that structures with tile roofs existed nearby. This settlement seems to have begun at the start of the Roman period but probably did not extend long into the 4<sup>th</sup> century (although in a collection of this size the absence of distinctive 4<sup>th</sup>-century material may be an accident of discovery).

There is no evidence for Anglo-Saxon occupation on the site and the earliest positively-identified post-Roman material dates to the later 12<sup>th</sup> or early 13<sup>th</sup> century. There is a scatter of later medieval and post-medieval material but it is unclear if any of these finds indicate settlement. Even the stratified

material from context 4020 is not a contemporary group and it is quite likely that the sherds indicate manuring of open fields.

There is a single group of mid 17<sup>th</sup>-century finds which do indicate some activity on the site, from context 5005. It has been suggested on the basis of the nature of the feature in which they were found, and the presence of the lead shot that these finds may relate to Civil War activity. The date of the clay pipes is consistent with that interpretation. This material is worthy of further work, both on site to establish the context of the finds and further work on the clay pipes, the glass lens and the iron finds. The lead shot should be cleaned and their diameters accurately measured with a micrometer.

## Costing

The iron and Roman pottery illustrations would cost £54.50 plus VAT and the Roman pottery thin-section and chemical analysis would together cost £42 plus VAT. Further study of the clay tobacco pipes and iron finds from 5005 might take 4 hours, £84 plus VAT.

## Acknowledgments

I am grateful to Martin Pegler of the Royal Armouries, Leeds, for his comments on the finds from context 5005.

Appendix

Context	REFNO	Description	Trench	Cname	Form	Nosh	NoV	Weight	Part	Action	Use	Condition	class
4007				YATG01	J	1	1	28	B				ceramic
4001				YATS03		1	1	2	BS			VVABR	ceramic
4001	GIRTH			YATE01	BA3	1	1	38	R				ceramic
4001				YATB02	D	1	1	6	BS				ceramic
4001	D1	SHLDR; THIN SECTION;FRESH		YATG18?	B	1	1	52	R	DR	SOOTR		ceramic
4006				YATP00		1	1	3	BS			ABR	ceramic
5009				YATE05?	J/B	1	1	42	BS		SOOTEX		ceramic
4007				YATE01	J/B	1	1	28	BS				ceramic
3004	POSS SGAULISH			YATS00?		1	1	3	BS			VVABR	ceramic
4007	FRAG POSS FCLAY			YATN02?		1	1	6	BS			VABR	ceramic
4007	GIRTH			YATS02?	37	1	1	19	R			ABR	ceramic
4007	FTRG			YATS03	18/31-31	1	1	13	B			ABR	ceramic
4007	FTRG			YATS03	D	1	1	2	B			ABR	ceramic
4007				YATS03		1	1	1	BS			VABR	ceramic
4009				YATE01	J/K	1	1	3	BS				ceramic
4007	GIRTH; NEAT VESS FRESH			YATB02	JP1	1	1	19	R				ceramic
4007	CF MON 3747 CP 2B-3A			YATG01	FC?	2	1	35	R;H;BS				ceramic
TR1/US				YATE01		6	6	18	BS			VABR	ceramic
4001				YATE01		4	4	12	BS				ceramic
TR3/US	MEDIUM THICK			YATE01		4	4	25	BS			VABR	ceramic
4001	2C FAB			YATAP25	AP25	3	3	147	BS				ceramic
TR3/US	THINNISH			YATE01	J/K	3	3	4	BS			VABR	ceramic
4001				YATH01	J	2	1	29	BS				ceramic

Context	REFNO	Description	Trench	Cname	Form	Nosh	NoV	Weight	Part	Action	Use	Condition	class
4001				YATAP27	AP27	1	1	6	BS			VVABR	ceramic
4001				YATG01	K	2	1	3	BS				ceramic
4001	FE TRITS			YATM01	M	1	1	61	BS			ABR	ceramic
4001	FRAG EFAB			YATAP25	AP25	2	2	208	BS			VVABR	ceramic
4001				YATH01		2	2	14	BS			LEACH	ceramic
2003				YATB12	B/D	1	1	37	B			VABR	ceramic
2003				YATE02		1	1	2	BS			VABR	ceramic
3004	1-M2 FAB			YATAP25	AP25	1	1	195	BS			VVABR	ceramic
4001				YATG02	J	2	2	12	BS				ceramic
4001	SMOOTHED NR E8			YATE01	F/J	2	1	40	BS				ceramic
TR2/US	1 SH POSTRO;MACHINING			ZZZ									ceramic
4009	CP1-3			ZDATE									ceramic
4009	E1 ONLY			ZZZ									ceramic
5009	CP1-3?			ZDATE									ceramic
5009	E5? ONLY; DEF RO PROB 2C+			ZZZ									ceramic
TR1/US	CP4/POSTRO			ZDATE									ceramic
4007	SOME E2C			ZZZ									ceramic
TR2/US	RO/POSTRO			ZDATE									ceramic
TR4/US	CLEANING			ZZZ									ceramic
TR3/US	CP1-3/POSTRO			ZDATE									ceramic
TR3/US	MIX; 1SH LI -EROM;SEV SHS POSTRO;MACHINING			ZZZ									ceramic
TR4/US	CP1-3			ZDATE									ceramic
TR5/US	CP1-3/POSTRO			ZDATE									ceramic
TR1/US				YATB12		1	1	5	BS			ABR	ceramic
4001	THICK			YATAA?	AA?	2	2	35	BS				ceramic

Context	REFNO	Description	Trench	Cname	Form	Nosh	NoV	Weight	Part	Action	Use	Condition	class
TR1/US		MACHING;MIX SOME 2C;POSTRO SHS		ZZZ									ceramic
TR5/US		THICK NO TRITS; COARSE FAB		YATM03?	M?	1	1	17	BS				ceramic
4007		CP2B+		ZDATE									ceramic
TR5/US		1 SH PMED;MACHINING		ZZZ									ceramic
TR3/US		LFAB		YATAP25	AP25	1	1	26	BS			VABR	ceramic
TR3/US		FLANGE		YATN01	BF;HM	1	1	7	BS				ceramic
TR2/US		?RO		YATG00		1	1	3	BS				ceramic
TR4/US				YATG01		1	1	1	BS			ABR	ceramic
TR1/US				YATS03		1	1	1	BS			VABR	ceramic
2003		CP4/POSTRO		ZDATE									ceramic
2003		1 SH POSTRO		ZZZ									ceramic
3004		CPL1-2		ZDATE									ceramic
4001		CP4		ZDATE									ceramic
4001		MIX DATES SOME EARLY		ZZZ									ceramic
4006		RO		ZDATE									ceramic
4006		P0 ONLY		ZZZ									ceramic
TR4/US				YATE01		1	1	4	BS			VABR	ceramic
U/S			1	HUM	JUG/JAR	2	2	20	BS				CERAMIC
U/S			1	DUTR	JAR	1	1	5	R				CERAMIC
U/S			1	RYEDALE	BOWL	1	1	8	B				CERAMIC
U/S			1	TIL		1	1	17	BS				CBM
U/S			1	M/PMTIL	FLAT	1	1	22					CBM
U/S		NIBBED	1	MOD	FLAT	1	1	30					CBM
1007			1	TIL	BRICK	1	1	64	BS				CBM
U/S			1	M/PMTIL	CURV	1	1	88					CBM

Context REFNO	Description	Trench	Cname	Form	Nosh	NoV	Weight	Part	Action	Use	Condition	class
2003		2	STONE	COKE	3	1	1					STONE
2003		2	HUM	JUG/JAR	1	1	10			BURNT SUBSTANCE INT		CERAMIC
2003		2	LIMESTONE	PEBBLE	1	1	6					NAT
2003		2	M/PMTIL	FLAT	1	1	22					CBM
3001	BLOB OF CLAY THUMBED EXT FOR HANDLE	2	RYEDALE	HANDLED BOWL	1	1	39	R				CERAMIC
2003		2	TIL		1	1	17	BS				CBM
2009		2	TIL		2	2	16	BS				CBM
U/S		3	M/PMTIL	FLAT	1	1	12					CBM
U/S		3	M/PMTIL	FLAT	1	1	37					CBM
U/S		3	SANDSTONE	PEBBLE	1	1	19					NAT
3006	STAMPED 'LBM'	3	MOD	BRICK	1	1	285					CBM
U/S		3	BEVO	JUG	1	1	3	BS				CERAMIC
U/S		3	M/PMTIL	FLAT	1	1	21					CBM
4020	HANDLE SCAR	4	YORK	JUG	1	1	13	BS				CERAMIC
4009		4	TIL		1	1	26	BS				CBM
4020		4	STAXT	JAR	1	1	34	R	DR		ABR	CERAMIC
4020		4	HUM	JUG	1	1	8	BS				CERAMIC
4005		4	YG	JAR	1	1	3	BS				CERAMIC
4005		4	BRANSBY	JUG	1	1	3	BS				CERAMIC
U/S	SMALL HOLE; STAMPED 'DUTCH CUTTY'	4	PIPECLAY	PIPE	1	1	11	BOWL	PH			CTP
4001		4	IRON	WASTE	33	33	1249					IRON
4020		4	YG	JAR	2	2	7	BS			ABR	CERAMIC
U/S		5	TIL		1	1	15	BS				CBM



Context REFNO	Description	Trench	Cname	Form	Nosh	NoV	Weight	Part	Action	Use	Condition	class
5003		5	M/PMTIL	FLAT	1	1	11					CBM
5003		5	TIL		3	3	11	BS				CBM
5005		5	TIL		1	1	6	BS				CBM
5006	SQUARE PEG HOLE	5	M/PMTIL	FLAT	1	1	122					CBM
5003		5	STONE	COKE	1	1	1					STONE
U/S	SMALL HOLE; MOULDED DEC; SPUR	5	PIPECLAY	PIPE	1	1	3	BOWL	PH			CTP
U/S	SMALL HOLE; HEEL	5	PIPECLAY	PIPE	1	1	5	BOWL				CTP
5005	LARGE HOLES	5	PIPECLAY	PIPE	12	11	25	STEMS				CTP
5005		5	PIPECLAY	PIPE	1	1	6	BOWL				CTP
5005	LARGE HOLE; STAMP ON HEEL 'H'	5	PIPECLAY	PIPE	1	1	8	BOWL	PH			CTP
5003		5	IRON	WASTE	1	1	1					IRON
5003	XRAY OSA02 EV14 PL2	5	IRON	NAIL	1	1	0	BS				IRON
5005	XRAY OSA02 EV14 PL1 AND PL2;CIRCULAR MAKERS MARK	5	IRON	AXE	1	1	0	BS				IRON
5005	LARGE HOLE; HEEL	5	PIPECLAY	PIPE	1	1	7	BOWL	PH			CTP