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STEPPINGLEY TO AYLESBURY NATURAL GAS PIPELINE

ARCHAEOLOGICAL WATCHING BRIEF 1997

Volume 2: Appendices

Network Archaeology Ltd

for

Murphy Pipelines Ltd

on behalf of

Transco
(now part of National Grid)

Report No. 234
December 1999

revised and edited
March 2007



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900mm HIGH PRESSURE NATURAL GAS PIPELINE

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Appendix 1

Flint

David Bonner and Robin Holgate

The Flint
David Bonner and Robin Holgate

Summary

The investigations identified six main flint scatters dating from the Late Neolithic to (Late) Bronze Age. All of these sites are from elevated locations, mostly at the northeast end of the pipeline. Four of the scatters are the result of probable settlement, whilst two appear to indicate activity areas. The remainder of the flint is from isolated locations along the length of the pipeline, but is considered to be highly significant in terms of the exploitation of the areas which are today the Aylesbury Vale and South Bedfordshire.

Introduction

Three hundred and twenty-two knapped flints weighing 4,311g were submitted for analysis. These include 51 tools, 28 cores and 243 waste flakes.

This report discusses the flint by site. The majority of the material comes from six surface scatters (*Sites 17, 30, 33, 34, 36 and 37*), and from five areas of ?prehistoric deposits (*Sites 4, 17, 18, 19 and 21*). Within each section observations have been made regarding the choice of raw materials, the condition, the morphology of the assemblage, and the date range.

A significant number of flints come from residual/ unstratified contexts at later period sites (*Sites 4, 7, 9, 11, 12, 13, 15, 20, 22, 26, 28, 31 and 32*). These receive brief individual discussion. The remaining flint being small groups or isolated finds from a wide provenance, are discussed collectively as *Background Activity*. There is an overall concluding comment.

Site 5

Two ditches and two pits were found in Plot 16. One of the ditches (226) contained a single cutting flake of probable Neolithic/Bronze Age date. Although the flint is relatively fresh, it could be residual, and cannot therefore be used to date the feature with any confidence.

Site 7

A large Roman site was investigated in Plot 23, and the fills of two ditches (359 and 395) each produced a residual flint. These included a Neolithic/Bronze Age waste flake, and a Mesolithic snapped blade.

Site 9

A large number of pits in Plot 33 is probably a specialist activity area within a larger Roman settlement. A single unstratified waste flake of probable Neolithic/Bronze Age date was recovered from the stripped easement surface.

Site 11

This site in Plots 49/50 was part of a small Roman ?settlement. Sixteen flints were found, most coming from the stripped easement surface, and some from residual feature contexts. The flints included a range of tools (scrapers and notched flakes) dating to the (Late) Neolithic/Bronze Age. One notched flake is Mesolithic/Early Neolithic. A single gun flint was also found.

Site 12

A series of ditches and pits representing a small Iron Age settlement were found in Plot 54. A single unstratified waste flake of probable Neolithic/Bronze Age date was recovered from the stripped easement surface.

Site 13

This site in Plot 63 is represented by a Bronze Age urn (616), the fill contents of which included a single axe trimming flake of Mesolithic or Neolithic date (Fig 49, no. 3). Its presence within the urn indicates that the flake was residual. There are no contemporary finds in the vicinity to account for the flake, which appears to be a stray find.

Site 15

A series of ditches representing a small Iron Age ?field system was found in Plot 65. A single prehistoric waste flake was recovered from the fill of one ditch (668).

Site 17

Four ditches and two soil layers containing late Neolithic/Early Bronze Age and Iron Age/Roman finds were found over a five hundred metre length in Plots 71/72. One of the ditches contained three waste flakes, whilst a further thirty-two flints were collected from the stripped easement surface. The site is located on the southwest facing brow of a hill over Gault Clay, to the northwest of Mentmore.

Raw Materials

Macroscopic analysis on the basis of colour, hue, quality and finish has identified five main categories of flint type (in order of frequency):

- Mid yellow-brown semi-translucent material with occasional opaque mottles and a dusky or semi-gloss finish (34%)
- Mid brown-grey opaque material with grey cherty mottles and a matt finish (26%)
- Mid honey-brown semi-translucent material with occasional opaque mottles and a dusky or semi-gloss finish (20%)
- Dark black-brown opaque material with a semi-gloss finish (11%)
- Indeterminable material, usually with a high level of patination, or sometimes burnt (9%)

Thick, well-preserved cortex on 69% of corticated pieces indicates that the majority of the flint is from a primary source, presumably the Chilterns, five kilometres to the southeast. Thin, eroded cortex indicates that some of the flint is derived. The most likely source of this material is Quaternary Drift; the terrace deposits of the River Ouzel to the north, small patches of Head, Sand & Gravel (for instance, at Mentmore) and Boulder Clay, mostly lying to the northwest.

Condition of Flint

The assemblage is relatively consistent in terms of abrasion; most examples are moderately worn. Eighteen percent of flakes are broken, suggesting a low to moderate level of agricultural land use. There are three patinated pieces, the significance of which is uncertain.

Morphology of the Flint Assemblage

The flints have been divided into tools, cores and flakes (Tables 1-3).

Tools

Tools have been distinguished from the debitage by macroscopic examination for 'retouch', the deliberate alteration of the flint edge. Of six tools, one is a cutting flakes, another is a notched flake, and the remainder are flakes with miscellaneous retouch (Table 1).

Some of the tools exhibit evidence of hard hammer production and semi-invasive retouch. They date to the Late Bronze Age.

Cores

A single small core weighing 25g was found (Table 2). It does not exhibit any diagnostic traits, but is likely also to be Late Bronze Age.

Flakes

There are twenty-five waste flakes. The flakes have been subdivided into primary, secondary and tertiary flakes on the basis of the degree of cortication of the dorsal surface (Table 3). All except one primary flake are secondary.

Metrical analysis, involving the measuring of length and breadth was undertaken:

Breadth/length ratios	Number of complete flints	% total
0.4-0.6	2	8%
0.6-0.8	3	13%
0.8-1.0	8	33%
>1.0	11	46%

This distribution of flake size accords most closely with those of Late Neolithic/Bronze Age industries. This result correlates with the macroscopic examination of the flaking characteristics.

Discussion

The small group of flint from Plots 71/71 appears to represent a distinct Late Bronze Age assemblage. The presence of a single core and only one primary flake indicates that little of the material relates to core procurement and roughing out activities but more probably it is the result of settlement. This theory is further supported by the existence of at least four cut features, and the coincidence of Late Neolithic/Early Bronze Age domestic pottery and flint in Ditch 753. However, if the dating for both the pottery and flint is accepted, there is a discrepancy in that the pottery appears to be slightly older than the flint scatter. This could be accounted for by the fact that the three flints found in Ditch 753 showed no diagnostic traits, and could therefore be contemporary with the Late Neolithic/Early Bronze Age pottery, whilst the remaining flints of Late Bronze Age date could represent a later phase of activity at the site.

The location of the site on the brow of a hill, and the intensive farming regime in this area, means that other archaeological deposits at the site may have already been destroyed, and this could (in part) account for the presence of the flint scatter. A smaller number of flints were found down slope of the main flint scatter, and this lesser concentration is probably the result of hillwash; a layer of colluvium was found here.

Site 18

A series of ditches and pits were found in Plots 79/80. Some of the features contained pottery ranging in date from the Late Bronze Age to the Mid-Late Iron Age. One pit (822) dated by pottery to the Mid-Late Iron Age also contained a ?residual prehistoric waste flake.

Site 19

This site in Plot 96 is represented by a series of ditches and pits beneath a deep layer of alluvium on the northeast bank of the River Ouzel near the village of Billington. One ditch (1015) contained a single waste flake with no diagnostic traits. The proximity of two layers containing Mid-Late Bronze Age pottery at the same level in the stratigraphic sequence suggests that the flint is likely to date from this period.

Site 20

A group of six knapped flints were found in Plot 99, in the vicinity of two undated pits. The flints include a tool and a core of Mesolithic/Early Neolithic date (Fig 49, no. 9) and four undiagnostic waste flakes.

Site 21

A series of ditches and pits were found in Plots 101/102, over Gault Clay to the south of Billington. One of the ditches (1115) contained four flints and also a mix of Early Neolithic and Late Bronze Age pottery. A further two flints were recovered from the stripped easement surface. Two other features produced pottery ranging from Early Neolithic to Late Iron Age.

Raw Materials

Four main categories of flint type have been identified (in order of frequency):

- Mid honey-brown semi-translucent material with occasional opaque mottles and a dusky or semi-gloss finish
- Dark black-brown opaque material with a semi-gloss finish
- Mid yellow-brown cherty material with a matt finish
- Indeterminable material, with a high level of patination

Thick, well-preserved cortex on all but one flint indicates that the majority of the flint is from a primary source, presumably the Chilterns, four kilometres to the southeast. Thin, eroded cortex indicates that the core is derived. The most likely source of this piece is Quaternary Drift; the terrace deposits of the River Ouzel to the northwest, small patches of Head, Sand & Gravel, and Boulder Clay, mostly lying to the northwest.

Condition of Flint

The assemblage is relatively consistent in terms of abrasion; most examples show low to moderately wear. One flake only is broken, suggesting a low level of agricultural land use. There is one patinated piece, the significance of which is uncertain.

Morphology of the Flint Assemblage

The flints have been divided into tools, cores and flakes (Tables 1-3).

Tools

There is a single tool, a long patinated flake produced by soft hammer technique. It has miscellaneous retouch on its proximal end, and is of Mesolithic/Early Neolithic date (Table 1).

Cores

A single small core weighing 26g was found (Table 2). It exhibits a series of broad irregular flake scars, and is likely to be Late Bronze Age. The core is from Ditch 1114.

Flakes

There are four waste flakes, one of which is primary and the remainder secondary, although they retain a lot of cortex (Table 3). The flakes are all squat-shaped, and therefore most likely to date between the Late Neolithic and Late Bronze Age. Two of the flakes are from Ditch 1114.

Metrical analysis was not undertaken due to the small size of the assemblage.

Discussion

The small group of flint from Plots 101/102 does not represent an homogenous group. At least two periods are represented, which broadly accord with the two ceramic phases. The unstratified Mesolithic/Early Neolithic flint tool together with (?residual) Early Neolithic pottery from two features represents the earliest phase at the site. The probable Late Neolithic/Bronze Age flints form a later phase of activity, represented by ?residual Late Bronze Age pottery. This material was mixed with later pottery, up to the Late Iron Age.

Site 22

A large Roman settlement in Plot 113, produced a group of eleven flints. Most of the flint came from securely dated Roman deposits (Layer 1319, Ditch 1364, Gully 2734, and Recut 2779 of Ditch 2776), and a small quantity was recovered from the stripped easement surface. The flints include five tools, one core and five waste flakes of mostly Neolithic/Bronze Age date. There are two unstratified pounders (SFs 5194 (Fig 49, no. 12), 5207) which could have been used at the Roman site, but could equally well be later prehistoric. A notched flake, from Context 1365, is Mesolithic (Fig. 49, no. 14). A small quantity of Late Bronze Age pottery was also found at the site. The pottery and flint are residual, but together indicate a low level of local prehistoric activity.

Site 26

Two flints were found on the stripped easement surface, in the vicinity of six undated ditches in Plot 121. The flints include a tool and a waste flake of Late Neolithic/Bronze Age date.

Site 28

A large Roman settlement in Plots 125/126, produced a group of eleven flints. Most of them were recovered from the stripped easement surface, and a small quantity came from securely dated Roman deposits (Ditch 1611, Well 2601 and Ditch 2667). The flints include four tools (Fig 49, no. 2), one core and six waste flakes of mostly Late Neolithic/Early Bronze Age date. One tool and one waste flake dates to the Mesolithic/Early Neolithic. A single sherd of Late Bronze Age Early Iron Age pottery was also found at the site. The pottery and flint are residual, but together indicate a low level of local prehistoric activity.

Site 30

Sixteen knapped flints were found along a one hundred metre length of the stripped easement in Plot 131, on the southeast brow of a hill to the south of Tebworth. The site lies over unmapped ?Head deposits which cap the Gault Clay.

Raw Materials

Three main categories of flint type have been identified (in order of frequency):

- Mid to dark grey-brown semi-translucent material with occasional opaque mottles and a dusky or semi-gloss finish (56%)
- Mid honey-grey opaque material with cherty mottles and a matt finish (38%)
- Indeterminable material, with a high level of patination (6%)

Thick, well-preserved cortex is present on only a few of the flints, indicating that most are derived. This is surprising considering the close proximity of the chalk escarpments of the Chilterns. The most likely source of the derived flint is Quaternary Drift; the terrace deposits of the River Ouzel to the west, and small patches of Head, Sand & Gravel, and Boulder Clay, mostly lying to the north.

Condition of Flint

The assemblage is relatively consistent in terms of abrasion; most examples show low to moderately wear. None of the flakes are broken, suggesting a low level of agricultural landuse. There is one patinated piece, the significance of which is uncertain.

Morphology of the Flint Assemblage

The flints have been divided into tools, cores and flakes (Tables 1-3).

Tools

There are two tools, both flakes with miscellaneous retouch. One may be a side scraper or cutting flake. The tools probably date to the Late Bronze Age (Table 1).

Cores

Three small cores with an average weight of 27g were found (Table 2). They exhibit a series of broad irregular flake scars, and are likely to be Late Bronze Age. Their exploitation is moderate to high. All three cores are from a derived source and could have been obtained locally.

Flakes

There are eleven waste flakes, one of which is primary, one is tertiary, and the remainder secondary (Table 3). Metrical analysis, involving the measuring of length and breadth was undertaken:

Breadth/length ratios	Number of complete flints	% total
0.4-0.6	0	0
0.6-0.8	4	36%
0.8-1.0	1	9%
>1.0	6	55%

This distribution of flake size accords most closely with those of Bronze Age industries. More specifically, based on the predominance of squat-shaped flakes, and the flaking characteristics, the flints are probably Late Bronze Age.

Discussion

The flint from Plot 131 is a homogenous group dating to the Late Bronze Age. The activities represented by the assemblage are uncertain. The presence of three (?local) cores indicates possible core procurement activities, and this theory is not disputed by the debitage (waste flakes). However, the flints could equally well be the result of settlement.

Site 31

This site in Plot 134 consisted of a series of Roman quarry pits. Eight flints (two cores and six waste flakes), dating to the Late Neolithic/Bronze Age were recovered from seven pits and also from the stripped easement surface.

Site 32

A series of parallel ditches, possibly forming a water-meadow were found in Plots 141/142. Three flints (one core and two waste flakes), dating to the Late Neolithic/Bronze Age were found from the stripped easement surface. The flints are probably background from Site 33.

Site 33

A scatter of twenty-six knapped flints was recovered from the stripped easement surface in Plot 143. The site is located over Head deposits (?and Boulder Clay) on the southwest slope of a low hill to the northeast of Tebworth.

Raw Materials

Four main categories of flint type have been identified (in order of frequency):

- Mid to dark brown-grey semi-translucent to opaque material with grey cherty mottles and a semi-gloss finish (58%)
- Pale to mid yellow brown semi-translucent material with occasional opaque mottles and a dusky or semi-gloss finish (27%)
- Indeterminable material, with a high level of patination, or burnt (11%)
- Pale to mid white grey chert (4%)

None of the flints retain well-preserved cortex, and at least half of the assemblage is certainly derived. This is surprising considering the close proximity (3km) of the chalk escarpments of the Chilterns. The most likely source of the derived flint is Quaternary Drift; local deposits of Head, Boulder Clay, and glacial Sand & Gravel.

Condition of Flint

The assemblage is relatively consistent in terms of abrasion; most examples show low to moderately wear. Over one half of the flakes are broken, suggesting a high level of agricultural landuse. There is one partially patinated and two burnt flints, the significance of which is uncertain.

Morphology of the Flint Assemblage

The flints have been divided into tools, cores and flakes (Tables 1-3).

Tools

There are three tools, a scraper, a notched flake, and a flake with miscellaneous retouch, possibly a second notched flake (Fig 49. no. 8). All the tools exhibit hard hammer manufacture and date to the Late Neolithic/Bronze Age (Table 1).

Cores

Four small cores with an average weight of 24g were found (Table 2). They exhibit a series of mostly broad irregular flake scars, and are likely to be Late Neolithic/Bronze Age. One core, of discoidal form can be assigned to a more restricted period in the ?Late Neolithic. Their exploitation is moderate to high. All of the cores are from a derived source and could have been obtained locally.

Flakes

There are nineteen waste flakes, and a single shattered piece. Most of the flakes are secondary but there are also a few primary and tertiary flakes (Table 3). Metrical analysis, involving the measuring of length and breadth was undertaken:

Breadth/length ratios	Number of complete flints	% total
0.4-0.6	1	11%
0.6-0.8	3	33%
0.8-1.0	1	11%
>1.0	4	45%

This distribution of flake size accords most closely with those of Bronze Age industries; more specifically, the predominance of squat-shaped flakes, and the flaking characteristics, suggest that the flints are probably Late Bronze Age.

Discussion

The flint assemblage in Plot 143 exhibits similar characteristics to the assemblage in Plot 131. There is a similar breakdown of tools, cores and flakes. Excepting one possibly Late Neolithic core, the remainder are Late Neolithic/Bronze Age, although the flakes indicate a more restricted date in the Late Bronze Age.

The activities represented by the assemblage are uncertain. The presence of four (?local) cores indicates possible core procurement activities, and this theory is not disputed by the debitage. However, the flints could equally well be the result of settlement.

Sites 34 and 35

These sites in Plots 154 and 155 are represented by a scatter of thirty-eight knapped flints found across the stripped easement surface, and additionally four residual flints within a ?post-Medieval deposit. The area is

located over glacial Sand & Gravel (?and Boulder Clay) on the top and northeast slope of a low hill to the north of Toddington.

Raw Materials

Four main categories of flint type have been identified (in order of frequency):

- Mid to dark brown-grey to grey-brown semi-translucent material with grey or olive cherty mottles and a semi-gloss finish (40%)
- Indeterminable material, with a high level of patination, or burnt (31%)
- Pale to mid yellow brown semi-translucent material with occasional opaque mottles and a dusky or semi-gloss finish (24%)
- Pale red-yellow chert (5%)

Only a few flints retain well-preserved cortex, and at least one third of the assemblage is certainly derived. This is surprising considering the close proximity (3km) of the chalk escarpments of the Chilterns. The most likely source of the derived flint is Quaternary Drift; local deposits of glacial Sand & Gravel, Boulder Clay and Head.

Condition of Flint

The assemblage is relatively consistent in terms of abrasion; most examples show low to moderately wear. Only 16% of the flakes are broken, suggesting a low level of agricultural landuse. Almost one third of the assemblage exhibits some degree of patination. Generally, this is found on the diagnostically earlier material. Its significance is uncertain.

Morphology of the Flint Assemblage

The flints have been divided into tools, cores and flakes (Tables 1-3).

Tools

There are seven tools, a tranchet axe (Fig. 49, no. 11), three scrapers (Fig. 49, nos. 7, 10), a notched flake, a cutting flake and a flake with miscellaneous retouch (possibly a scraper). The tranchet axe exhibits bifacial, acute invasive retouch and dates to the Late Mesolithic. Two of the scrapers date broadly to the Late Neolithic/Bronze Age, whilst acute, semi-invasive retouch of the third indicates a more restricted date range in the Late Neolithic/Early Bronze Age. The cutting flake shows heavy use and is the same date as the scrapers (Table 1). The remaining tools are unremarkable.

Cores

There is only one core weighing 60g (Table 2). It has a series of broad irregular hard hammer flake scars, and dates to the Late Neolithic/Bronze Age.

Flakes

There are seventeen waste flakes, and a single shattered piece. Most of the flakes are secondary but there are also a few primary and tertiary flakes (Table 3). Metrical analysis, involving the measuring of length and breadth was undertaken:

Breadth/length ratios	Number of complete flints	% total
0.4-0.6	6	20%
0.6-0.8	7	23%
0.8-1.0	4	13%
>1.0	13	44%

This distribution of flake size accords most closely with those of Late Neolithic/Bronze Age industries. This accords with the macroscopic examination.

Discussion

The flints from Plots 154/155 form a coherent Late Neolithic/Bronze Age assemblage. The range of artefact types shows slight evidence of (?local) core procurement and roughing out, as well as possible finishing activities. Together this could represent a small short-lived local settlement. The exact location of this possible site is uncertain. Most of the flint was found on the top of the hill, but many others were recovered downslide, from the surface of a layer of colluvium. This hillwash may account for the downslide spread of flint.

There are additionally a small number of Mesolithic artefacts, including a tranchet axe. These finds indicate a low but significant level of earlier prehistoric activity in the area.

Site 36

A scatter of sixty-two flints was recovered from the stripped easement in Plots 156-158. The majority come from a five hundred metre length in Plots 157-158. The site is located over glacial Sand & Gravel (?and Boulder Clay) on the northeast slope of a low hill to the north of Toddington.

Raw Materials

Four main categories of flint type have been identified (in order of frequency):

- Mid grey-brown opaque material with pale grey cherty mottles and a semi-gloss or matt finish (41%)
- Mid to dark brown-grey semi-translucent material with occasional opaque mottles and a dusky or semi-gloss finish (34%)
- Pale honey-brown material with occasional grey opaque mottles (13%)
- Indeterminable material, with a high level of patination (12%)

At least 85% of the assemblage is derived flint, and many pebble fragments are present. It is likely that all of the flint was obtained from Quaternary Drift; local deposits of glacial Sand & Gravel, Boulder Clay and Head.

Condition of Flint

The assemblage is relatively consistent in terms of abrasion; most examples show low to moderately wear, and only 7% of the flakes are broken, suggesting a low level of agricultural landuse. A handful of flints exhibits some degree of patination, but its significance at this site is uncertain.

Morphology of the Flint Assemblage

The flints have been divided into tools, cores and flakes (Tables 1-3).

Tools

There are five tools, a barbed and tanged arrowhead (Fig. 49, no. 4), a scraper, a borer and two flakes with miscellaneous retouch. The Bronze Age arrowhead exhibits bifacial, invasive pressure flaking. It retains some cortex, and one barb is broken. The borer utilises a deep flake scar and a large bulb of percussion to provide extra grip, and also incorporates blunting retouch along one edge to protect the hand. The scraper and other tools are unremarkable.

Cores

There are seven cores (Fig 49, no. 6) with an average weight of 49g (Table 2). Four of the cores were found in isolation in Plot 156. All six cores have broad (and some narrow) irregular hard hammer flake scars, and date to the Late Neolithic/Bronze Age.

Flakes

There are forty-seven waste flakes, the majority of which are hard hammer struck. There are additionally three blades (Table 3). Metrical analysis, involving the measuring of length and breadth was undertaken:

Breadth/length ratios	Number of complete flints	% total
0.4-0.6	4	12%
0.6-0.8	5	15%
0.8-1.0	12	35%
>1.0	13	38%

This distribution of flake size accords most closely with those of Bronze Age industries. This broadly accords with the macroscopic examination, which identified a large number of squat-shaped flakes. More specifically, the assemblage may be Late Bronze Age. The three blades are Mesolithic.

Discussion

The flints from Plots 156-158 form a coherent (?Late) Bronze Age assemblage. The range of artefact types shows evidence of (?local) core procurement and ?roughing out. These activities do not in themselves indicate settlement at the site. All of the cores are derived. The fact that most of them come from one part of the scatter

(Plot 156 - the top of a low hill) indicates that there are intra-site activity areas. The blades indicate that Mesolithic hunter-gatherers exploited the area.

Site 37

Thirty flints were recovered from the stripped easement surface of Plots 163-166, and a further five came from the fills of a series of ancient tree-throws. The site lies over Woburn Sands on the southwest slope of the Woburn Ridge, near Tingrith. An excavation, in advance of the construction watching brief, recovered thousands of Mesolithic flints. A detailed post-excavation programme of analysis is underway, and the results will be published elsewhere. For this reason, the watching brief surface finds are not listed in the quantification tables at the back of this report.

In short, the watching brief recovered four tools (two scrapers, a cutting flake and a denticulate), six cores and eighteen waste flakes (including one rejuvenation flake). Most of the flints are patinated. All are probably Mesolithic.

Those flints found in the tree-throws (2306, 2308, 2310, and 2314) also appear to be Mesolithic. Whether these flints are in a residual context is uncertain.

Background Activity

The remaining flint was found over twenty-eight different fields, along the twenty-six kilometre length of the pipeline route and represents background indications of mostly Late Neolithic/Bronze Age, and some Mesolithic/Neolithic activity.

Background Mesolithic and/or Early Neolithic activity is apparent in Plots 11, 23, 47, 50, 55 (Fig 49, no. 1), 57, 63, 71, 99, 102, 113, 126, 134, 143, 154-156 and 165. Surprisingly most of this activity is found in low lying clay areas (Amphill Clay, Kimmeridge Clay and Gault Clay) in the Aylesbury Vale, with significant, but lesser activity on higher land further north-east (Woburn Sand, Upper Greensand, glacial Sand & Gravel, Head and Boulder Clay). The most significant early prehistoric find is the tranchet axe (Site 34), which probably reflects exploitation of the surrounding clay areas, by Mesolithic people known to be living within the Woburn Sands area.

Background Late Neolithic/Early Bronze Age activity is apparent in Plots 43, 125, 144 and 155. These areas are mostly found at the northeast end of the pipeline, over Upper Greensand, Head and Boulder Clay, but also over low-lying Kimmeridge Clay. The most significant finds include a plano-convex knife, other tools, a core and waste flakes at Site 28. A second knife was found in Plot 144 (Fig. 49, no. 6).

Background Late Neolithic/Bronze Age activity is apparent in Plots 16, 23, 32-33, 50, 54, 105-106, 113, 121-122, 130, 132-135, 141, 145, 149-150 and 161. These areas are mostly found over clay (Amphill Clay, Kimmeridge Clay, Gault Clay and Boulder Clay) with some areas over Upper Greensand and Head. The flints include a typical range of tools, cores and waste flakes.

Background Late Bronze Age activity is apparent in Plots 78 and 102. These areas are both over Gault Clay in the Aylesbury Vale. The flints include a single tool and core, and a number of waste flakes.

Conclusion

The flint shows variation in distribution along the pipeline. The vast majority comes from six surface scatters, five of which are at the northeast end of the pipeline. These sites overlie Woburn Sands and Drift deposits (glacial Sand & Gravel, Head and Boulder Clay). One scatter near Mentmore lies over Gault. Of the remaining flint, a significant amount comes from clay areas within the Aylesbury Vale.

The Mesolithic scatter (Site 37) on Woburn ridge is a previously known site, in an area of considerable earlier prehistoric activity. However, the Late Neolithic and Bronze Age scatters were unsuspected. Three of these sites (17, 30 and 33) could be (Late) Bronze Age settlements on the brow and southeast, or southwest, slopes of low clay hills. Two other sites (34 and 36) dating to the Late Neolithic/Bronze Age were found on the northeast slopes of low sandy hills, and are more likely to represent core procurement areas.

The total flint recovered from the course of the pipeline is relatively high, and together with quantities of prehistoric pottery indicate a significant level of prehistoric activity along the pipeline. These sites demonstrate

that the area that is today the Aylesbury Vale and South Bedfordshire was exploited and settled throughout the Mesolithic, Neolithic and Bronze Age periods.

Table 1. Tool Quantification Table

Site	Plot	Ctxt	Cl	Pat	Notes	Date
-	11	200	Misc. tool	P	Blade with misc. retouch	Meso
5	16	227	Cutting flake	PP		Neo/BA
-	43	504	Cutting flake		Hard hammer, bifacial retouch, cortex backing	Neo/BA (?Beaker)
-	48	509	Misc. tool			Preh.
11	50	511	Notched flake			Meso/EN
11	50	511	Notched flake	PP	Abrupt retouch on bulbar end	Neo/BA
11	50	511	Gun Flint		SF 5,012	Post-Med
11	50	511	Scraper		SF 5,263	?LN/BA
11	50	511	Scraper		SF 5,264	?LN/BA
11	50	511	Notched flake		SF 5,265, bifacial retouch	Preh
11	50	542	End scraper		Large flake	Neo/BA
17	71	703	Cutting flake	PP	semi-invasive retouch, broken	?LMeso/EN
17	72	704	Notched flake		Semi-invasive retouch, hard hammer	LBA
17	72	704	Misc. tool		Bi-facial retouch	
17	72	704	Misc. tool		Abrupt retouch along one edge with cortex remaining	
17	72	704	Misc. tool			
-	78	802	Misc. tool			LBA
20	99	1100	Misc. tool	P	Abrupt retouch through patination	Meso/EN
21	102	1103	Misc. tool	P	soft hammer	Meso/EN
22	113	1306	Misc. tool		Abrupt retouch, large flake	LN/BA
22	113	1306	Pounder		SF 5,194, 254g, coarse flaking, heavy use	?IA
22	113	1306	Pounder		SF 5,207, 341g coarse flaking, heavy use	?IA
22	113	1319	Misc. tool		Pebble fragment	Preh
22	113	1365	Notched flake		Soft hammer	?Meso
26	121	1604	Misc. tool	P	Retouch through patination	LN/BA
-	122	1605	Notched flake	PP	Two small notches	LN/BA
28	125	1608	Knife	P	Plano-convex knife, invasive retouch	LN/EBA
28	125	1608	Scraper	P	Semi-invasive retouch, hard hammer	
28	125	1612	Misc. tool	PP	Possible scraper	
28	126	2621	Misc. tool		Semi-invasive retouch through patination, possible cutting edge	Meso/EN
30	131	1703	Misc. tool		Abrupt retouch along two edges	LBA
30	131	1703	Misc. tool		Possible cutting flake	
-	133	1705	Misc. tool		Abrupt retouch to produce a pseudo notch on thick flake	Preh
33	143	1901	Misc. tool		Two small ?notches, hard hammer prodn	LN/BA
33	143	1901	Scraper		burnt, hard hammer prodn	
33	143	1901	Notched flake		Hard hammer prodn	
-	144	1902	Knife		Semi-invasive retouch	?EBA
-	147	1905	End scraper			Preh
-	147	1905	Notched flake	PP		
34	154	2006	?Cutting flake	PP	Acute retouch on ventral side, heavy edge wear	LN/BA
34	154	2006	Scraper		Non-flake, heavy edge wear	
34	155	2007	End-scraper		Semi-invasive	LN/EBA
35	155	2007	Scraper		Non-flake	Preh
35	155	2007	Tranchet axe		SF 5,251, bifacial retouch	Mesolithic
36	157	2100	Scraper			Preh
36	157	2100	Misc. tool		Large flake with blunting retouch on bulbar end, and small side notch	
36	157	2100	Misc. tool		Abrupt retouch along one edge	
36	158	2101	Misc. tool		Borer, broken	Preh
36	158	2101	Arrowhead		SF 5,262, barbed and tanged	BA
37	165	2315	Cutting flake	PP	SF 5,273, tiny pressure flaking on ventral side	Meso

Table 2. Core Quantification Table

Site	Plot	Context	Wt	Plats	Expl	Note	Date
-	36	406	15g	1	H	Fire-fractured	Preh
-	55	601	10g	1	M		?Meso
17	72	704	25g	1	M		LBA
20	99	1100	156g	1	M	Pat	Meso/EN
21	102	1115	26g	2	M	Fire-fractured	?LBA

Site	Plot	Context	Wt	Plats	Expl	Note	Date
22	113	1306	56g	1	M	P.pat	LN/BA
28	125	1608	8g	-	H	Core fragment	LN/EBA
30	131	1703	19g	3	M		LBA
30	131	1703	32g	2	H		
30	131	1703	29g	3	H		
31	134	1706	64g	2	M	Hard hammer prodn	LN/BA
31	134	1757	25g	3	M	Hard hammer prodn	LN/BA
-	135	1800	40g	3	H	Hard hammer prodn	LN/BA
-	135	1800	25g	2	L	Hard hammer prodn	
32	141	1806	21g	2	M	Hard hammer prodn, pat	LN/BA
33	143	1901	32g	3	M		LN/BA
33	143	1901	27g	3	H		
33	143	1901	18g	4	H		
33	143	1901	17g	2	H	Discoidal	?LN
-	146	1904	86g	4	H	Hard hammer	Preh
34	154	2006	60g	2	M	Hard hammer	LN/BA
36	156	2008	54g	2	H	Opposing platforms, pat	Meso
36	156	2008	46g	2	H	Pat	LN/BA
36	156	2008	36g	1	H		
36	156	2008	37g	4	H		
36	156	2008	40g	3	H		
36	157	2100	33g	2	M		preh
36	158	2101	48g	1	M		LN/BA

[Pl ats= no. platforms: Expl = exploitation: H = high;; Pat = patination

Table 3. Flake Quantification Table

Site	Plot	Ctxt	Cl	Bkn	Pat	Notes	Date
7	23	360	S	-	-	-	Neo/BA
7	23	398	S	-	-	Snapped blade	?Meso
-	32	402	S	-	PP	-	Neo/BA
9	33	403	T	-	-	-	Neo/BA
-	46	507	-	Y	-	Shattered piece	Preh
-	47	508	S	-	P	Crested blade	Meso/EN
11	50	511	T	Y	-	-	Preh
11	50	511	S	-	-	-	
11	50	511	S	-	-	-	
11	50	517	S	-	PP	-	Preh
11	50	535	S	-	-	-	
11	50	541	S	-	-	-	
11	50	542	S	-	P	-	
11	50	561	T	-	-	-	
11	50	564	S	-	-	Chalk source	
-	51	512	S	-	-	-	Preh
12	54	600	S	Y	PP	-	Neo/BA
-	57	603	S	-	-	Blade, soft hammer	Meso
13	63	617	T	-	P	Axe trimming flake	Meso/Neo
15	65	669	S	Y	PP	-	Preh
17	71	703	S	-	-	-	Preh
17	71	703	S	-	-	-	
17	71	703	S	-	-	-	
17	71	703	S	Y	-	-	
17	71	703	S	-	-	-	
17	71	703	S	-	-	-	
17	71	703	S	-	PP	-	
17	72	704	P	-	-	-	LBA
17	72	704	S	-	-	-	
17	72	704	S	-	-	-	
17	72	704	S	Y	-	-	
17	72	704	S	-	-	-	
17	72	704	S	Y	-	-	
17	72	704	S	-	-	-	
17	72	704	S	-	-	-	
17	72	704	S	-	-	-	

Site	Plot	Ctxt	Cl	Bkn	Pat	Notes	Date
17	72	704	S	Y	-	-	
17	72	704	S	-	-	-	
17	72	704	S	-	-	-	
17	72	704	S	Y	-	-	
17	72	704	S	-	-	-	
17	72	704	S	-	-	-	
17	72	704	S	-	-	-	
17	72	704	S	-	-	-	
17	72	704	S	-	PP	-	
17	71	754	-	-	PP	Shattered piece	Preh
17	71	754	S	Y	-	-	
17	71	754	S	-	P	-	
-	77	801	S	-	-	-	Preh
-	77	801	S	-	-	-	Preh
-	78	802	S	Y	-	-	Preh
-	78	802	S	-	-	-	Preh
18	79	803	S	-	-	-	Preh
-	80	823	S	-	-	-	Preh
19	96	1016	S	-	-	-	Preh
20	99	1100	S	-	P	-	Preh
20	99	1100	S	-	PP	-	Preh
20	99	1100	S	-	PP	-	
20	99	1100	S	y	P	-	
20	99	1100	S	Y	-	-	LN/BA
21	102	1115	P	Y	-	-	Preh
21	102	1115	S	-	-	-	
21	102	1115	S	-	-	-	
-	105	1202	S	-	-	-	Neo/BA
-	105	1202	T	-	-	-	
-	106	1203	T	-	P	-	
-	106	1203	T	-	-	-	
22	113	1306	S	-	PP	Chalk source	LN/BA
22	113	1306	S	-	P	Chalk source	
22	113	1319	S	-	PP	-	
22	113	1371	S	-	-	Hard hammer	
22	113	2735	S	-	PP	Hard hammer	
22	113	2778	S	-	PP	Hard hammer	
26	121	1604	S	Y	PP	-	LN/BA
28	125	1632	S	-	-	Hard hammer	LN/EBA
28	125	1633	S	-	-	-	Preh
28	126	2600	S	-	PP	Hard hammer	LN/BA
28	126	2600	S	-	P	-	
28	126	2600	S	-	-	-	
28	126	2600	T	-	-	-	
28	126	2621	S	-	-	-	Preh
28	126	2670	S	-	P	Hard hammer	Meso/EN
-	130	1702	S	-	-	-	LN/BA
30	131	1703	P	-	P	-	LBA
30	131	1703	S	-	-	-	
30	131	1703	S	-	-	-	
30	131	1703	S	-	PP	-	
30	131	1703	S	-	-	-	
30	131	1703	S	-	-	-	
30	131	1703	S	-	PP	-	
30	131	1703	S	-	-	-	
30	131	1703	S	-	-	-	
30	131	1703	S	-	-	-	
30	131	1703	T	-	-	-	
-	132	1704	P	-	-	-	LN/BA
-	133	1705	S	-	-	-	LN/BA
-	133	1705	S	-	-	-	
-	133	1705	S	Y	-	-	
-	133	1705	S	-	-	-	
-	133	1705	S	-	-	-	

Site	Plot	Ctxt	Cl	Bkn	Pat	Notes	Date
-	133	1705	S	-	P		
31	134	1706	P	Y	PP		LN/BA
31	134	1706	S	-	-		
31	134	1706	S	-	-		
31	134	1706	S	-	-		
31	134	1706	S	-	PP		
-	130	1732	S	-	P		LN/BA
-	130	1732	S	-	PP		
-	130	1732	S	Y	-		
31	134	1739	S	-	-	Hard hammer	LN/BA
31	134	1739	-	-	-	Shattered piece	
31	134	1741	S	-	-		LN/BA
31	134	1743	S	Y	-	Hard hammer	LN/BA
31	134	1751	S	-	-		LN/BA
31	134	1757	S	-	-	Hard hammer	LN/BA
31	134	1761	T	-	-		Meso
-	135	1800	S	-	-	Hard hammer	LN/BA
32	141	1806	S	-	-	Hard hammer	LN/BA
32	141	1806	S	-	P	Hard hammer	
-	135	1808	-	-	-		Preh
-	135	1808	-	-	-		
33	143	1901	P	-	-	Hard hammer	LN/BA (?LBA)
33	143	1901	P	-	-		
33	143	1901	P	Y	-		
33	143	1901	S	-	-		
33	143	1901	S	-	-		
33	143	1901	S	Y	-		
33	143	1901	S	Y	-		
33	143	1901	S	Y	-		
33	143	1901	S	-	-		
33	143	1901	S	-	-		
33	143	1901	S	Y	-		
33	143	1901	S	Y	-		
33	143	1901	S	-	-		
33	143	1901	S	Y	-		
33	143	1901	S	Y	-		
33	143	1901	S	-	-		
33	143	1901	S	Y	-		
33	143	1901	S	Y	-		
33	143	1901	T	-	-		
33	143	1901	T	-	-		
33	143	1901	T	Y	-		
33	143	1901	-	-	-	Shattered piece	Preh
33	143	1901	S	Y	P	Blade	Meso
-	144	1902	P	-	-		Preh
-	144	1902	S	-	-		
-	145	1903	S	-	PP	Hard hammer	LN/BA
-	145	1903	S	-	-		
-	146	1904	T	-	PP		
-	147	1905	S	-	-		
-	149	2001	S	-	PP	Hard hammer	LN/BA
-	150	2002	S	-	PP	Hard hammer	LN/BA
34	154	2006	P	-	-	Hard hammer	LN/BA
34	154	2006	P	-	-		
34	154	2006	P	Y	P		
34	154	2006	S	-	P		
34	154	2006	S	-	-		
34	154	2006	S	Y	-		
34	154	2006	S	Y	-		
34	154	2006	S	Y	-		
34	154	2006	S	-	-		
34	154	2006	S	-	PP		
34	154	2006	S	-	-		
34	154	2006	S	-	PP		
34	154	2006	S	-	P		
34	154	2006	S	-	-		
34	154	2006	S	Y	-		

Site	Plot	Ctxt	Cl	Bkn	Pat	Notes	Date
34	154	2006	S	-	P		
34	154	2006	S	-	-		
34	154	2006	S	-	-		
34	154	2006	S	-	-		
34	154	2006	T	-	P		
34	154	2006	T	-	P		
34	154	2006	T	-	-		
34	154	2006	S	-	PP	Blades	Meso
34	154	2006	S	-	PP		
35	155	2007	S	-	P		Preh
35	155	2007	S	-	-		
35	155	2007	S	-	-		
35	155	2007	S	-	-		
35	155	2007	S	-	-		
35	155	2007	S	Y	-	Blade	
35	155	2012	S	-	-	Hard hammer	LN/BA
35	155	2012	S	-	-		
35	155	2012	S	-	-	Blade	Meso
36	156	2008	S	-	-	Hard hammer	LN/BA (?Late Bronze Age)
36	156	2008	S	Y	-		
36	156	2008	S	-	-		
36	156	2008	S	-	-		
36	156	2008	S	-	-		
36	156	2008	S	-	P		
36	156	2008	S	Y	-		
36	156	2008	S	-	-		
36	156	2008	S	-	-		
36	156	2008	S	-	-		
36	157	2100	P	-	-	Hard hammer	LN/BA
36	157	2100	S	-	-		
36	157	2100	S	-	-		
36	157	2100	S	-	-		
36	157	2100	S	-	-		
36	157	2100	S	-	-		
36	157	2100	S	-	-		
36	157	2100	S	-	-		
36	157	2100	S	-	-		
36	157	2100	S	-	P		
36	157	2100	S	-	-		
36	157	2100	T	-	-		
36	157	2100	T	-	-		
36	158	2101	P	-	-		
36	158	2101	P	-	-		
36	158	2101	S	-	-		
36	158	2101	S	-	-		
36	158	2101	S	-	-		
36	158	2101	S	-	-		
36	158	2101	S	-	PP		
36	158	2101	S	-	-		
36	158	2101	S	-	-		
36	158	2101	S	-	-		
36	158	2101	S	-	-		
36	158	2101	S	-	-		
36	158	2101	S	-	-		
36	158	2101	S	Y	-		
36	158	2101	S	-	-		
36	158	2101	S	-	-		
36	158	2101	S	-	-		
36	158	2101	S	Y	-		
36	158	2101	S	-	-		
36	158	2101	S	-	-		
36	158	2101	S	-	-		
36	158	2101	S	Y	-		
36	158	2101	S	-	-		

Site	Plot	Ctxt	Cl	Bkn	Pat	Notes	Date
36	158	2101	T	-	-		
36	158	2101	T	-	-		
36	158	2101	P	-	PP	Blades	Meso
36	158	2101	S	-	-		
36	158	2101	S	-	-		
-	161	2202	S	-	-	Hard hammer	LN/BA
37	163	2301	S	Y	-	Hard hammer	LN/BA
37	163	2301	S	-	-		
37	165	2307	S	-	-		Preh
37	165	2309	T	-	P	Soft hammer, blade	Meso
37	165	2311	S	-	P	Crested blade	Meso
37	165	2315	S	-	-		Preh
37	165	2315	S	-	-	Hard hammer	

[Cl = class: P = primary, S = secondary, T = Tertiary; Bkn = broken; P = patination]

Appendix 2

Prehistoric pottery

Tessa Machling with D. F. Williams

Prehistoric Pottery
by Tessa Machling

Introduction

The pottery assemblage consists of 436 sherds weighing 11,421g. A large proportion of this pottery came from just two vessels (155 sherds weighing 10,012g). The assemblage quality is generally poor, with most of the sherds being small and abraded. Of the total assemblage just over 24% by number show any diagnostic traits (e.g. rims, bases and decorated sherds) and in consequence, it is difficult to assign definite form types to many of the sherds. As there has been little published material from this area, however, identification and conclusions reached from a study of the assemblage are nonetheless important in at least a regional context.

The assemblage was analysed and recorded following recommended guidelines for the analysis of prehistoric pottery (PCRG 1992). All sherds were assigned a fabric type after macroscopic examination using a hand lens (x10 and x20 power), and the sherds were then counted and weighed to the nearest whole gramme. Surface treatment, evidence of manufacturing technology, decoration etc. were also noted. Thin section analysis was carried out on one sherd from urn 616, in an attempt to establish a provenance for the vessel (see below, page 10).

Description of pottery fabrics

In total, 15 fabric types were identified grouped into four dominant inclusion types: shelly limestone (Group C), grog (Group G), quartz (Group Q) and flint (Group F). Table 1 shows the quantity and percentage of each fabric type present. In the descriptions below, the terms used to describe the size of inclusions are defined as follows: very fine (< 0.1mm), fine (0.1-0.25mm), medium (0.25-0.5mm), coarse (0.5-1mm), very coarse (1mm+). Terms used to describe the frequency of inclusions, based on the density charts devised by Terry and Chilingar (1955), are defined thus: rare (1-3%), sparse (3-10%), moderate (10-20%), common (20-30%), very common (30-40%), abundant (40%+). A full description of the fabric series is given following Table 1.

Table 1: Pottery Fabric Totals

Fabric	No. Sherds	Weight (g)	% of total (No.)	% of total (Wt.)
<i>Group C: Shelly Limestone fabrics</i>				
C1	6	50	1.38	0.42
C2	3	10	0.69	0.08
Total	9	60	2.07	0.50
<i>Group G: Grog fabrics</i>				
G1	13	24	2.98	0.20
G2	74	234	16.97	1.97
G3	72	1414	16.51	11.93
Total	159	1672	36.46	14.10
<i>Group Q: Quartz fabrics</i>				
Q1	43	293	9.86	2.47
Q2	6	28	1.38	0.24
Q3	20	94	4.59	0.79
Q4	11	41	2.52	0.35
Total	80	456	18.35	3.85
<i>Group F: Flint fabrics</i>				
F1	8	30	1.83	0.25
F2	32	158	7.34	1.33
F3	17	61	3.90	0.51
F4	24	174	5.50	1.47
F5	2	10	0.46	0.08
F6	105	8800	24.08	74.22
Total	188	9233	43.11	77.86
Overall Totals	436	11,421g	-	-

Group C: Shelly limestone fabrics

C1 A soft to hard fabric with sparse amounts of fine to very coarse (4mm) shelly limestone and rare amounts of fine to coarse flint. Sparse amounts of medium quartz sand and probable glauconite are also present. Rare amounts of very fine mica can be seen. This coarse fabric is associated with thick walled vessels (10mm) which often show signs of finger smoothing on the exterior. This fabric would appear to be of Middle to Late Bronze Age date. This fabric is similar to fabric 1 from Pennyland, Milton Keynes (Knight 1993), which is dated to the Late Bronze Age on that site.

C2 A hard, unoxidised fabric with moderate amounts of fine to coarse grade shelly limestone and sparse amounts of medium to coarse grade flint. Sparse amounts of fine to medium grade quartz sand and glauconite are also present. Rare amounts of very fine mica can be seen. This fine fabric is associated with thin walled vessels, and would appear to be of a Late Bronze Age date. This interpretation is supported by the presence of a similar fabric, fabric 2, from Pennyland, Milton Keynes which is also dated to the Late Bronze Age (Knight 1993).

Group F: Flint fabrics

F1 A soft, soapy fabric with sparse amounts of fine to very coarse (5mm) grade flint and grog. Rare amounts of very fine mica are also present. Only eight sherds of this fabric were recovered. One rim sherd from context 1113 would seem to be from an Early Neolithic round based bowl (see fig 51, no. 2), but the similarity of this fabric to fabric F6 might suggest a later Neolithic/Early Bronze Age date for some of the other sherds.

F2 A hard, irregularly fired fabric with sparse to moderate amounts of fine to very coarse (5mm) grade flint and medium grade quartz sand and probable glauconite. Rare amounts of very fine mica can also be seen. This fabric is associated with thick walled (c.10mm) Deverel Rimbury type vessels and would therefore be dated to the Middle to Late Bronze Age.

F3 A hard, unoxidised fabric with sparse amounts of fine to very coarse (3mm) grade flint. Sparse to moderate amounts of medium grade quartz sand and mica are also present. Sparse amounts of very fine grade mica can also be seen. This fabric probably dates to the Late Bronze Age. This fabric can be paralleled with fabric 3 from Hartigans, Milton Keynes (Knight 1993) which is here to dated to the Late Bronze Age/Early Iron Age.

F4 A hard, irregularly fired fabric with moderate amounts of medium to coarse grade flint and sparse amounts of fine to medium grade quartz sand. Rare amounts of very fine grade mica can also be seen. This fabric is reasonably fine and is associated with thinner walled vessels. This fabric probably dates to the Late Bronze Age.

F5 A fine, hard, unoxidised fabric with moderate to common amounts of medium to coarse grade flint. Moderate amounts of fine to medium grade quartz sand are also present. Sparse amounts of very fine grade mica can be seen. This fabric is associated with thin walled vessels (5mm) and shows evidence of a smoothed, possibly burnished exterior surface. It is therefore dated to the Late Bronze/Early Iron Age.

F6 A hard, irregularly fired fabric with common to very common amounts of medium to very coarse (10mm) grade flint. Sparse amounts of medium to coarse grade quartz sand and grog are also present. Sparse amounts of very fine grade mica can also be seen. This fabric type is represented only by the decorated urn from context 616 (see fig 50, no 1), and is likely to be of Early/Middle Bronze Age date.

Group G: Grog fabrics

G1 A hard fired, smooth fabric with sparse to moderate amounts of fine to coarse grog and rare amounts of fine quartz sand and mica. This fabric is associated with reasonably thick walled vessels, but would appear to be of Middle to Late Iron Age in date.

G2 A hard fabric with sparse to moderate amounts of fine to medium grog. Moderate amounts of medium grade quartz sand are also present. Rare amounts of very fine grade mica can also be seen. This fabric is often thin walled and is probably Middle to Late Iron Age in date.

G3 An irregularly fired fabric, with sparse to moderate amounts of fine to very coarse (3mm) grog and fine to medium grade quartz sand. Sparse amounts of very fine grade mica are also present. This fabric is very fine and often shows burnishing on the exterior surface of the sherds. This fabric is broadly dated to the Late Iron Age and many sherds, although indistinguishable by form, are of Belgic vessel fabric types.

Group Q: Quartz sand fabrics

Q1 A hard fabric with sparse to moderate amounts of fine to medium grade quartz sand and sparse probable glauconite. Sparse amounts of very fine mica are also present. This fabric is associated with moderately thick walled vessels (c. 7-8mm) and would appear to date from the Late Bronze Age to the Early Iron Age. However, the indistinct sandy nature of the fabric might suggest that its use continues into later periods.

Q2 A generally unoxidised, hard fabric with common to very common amounts of medium grade quartz sand and moderate amounts of medium grade probable glauconite. Sparse amounts of very fine grade mica are also present. This fabric is reasonably fine and is likely to be of Middle to Late Iron Age in date.

Q3 An unoxidised, hard fabric with sparse to moderate amounts of fine to medium grade quartz sand and sparse, fine to medium grade probable glauconite. Rare to sparse amounts of fine to coarse grade iron oxide are also present. One sherd in this fabric shows evidence of a coil break, and is therefore of a probable Late Bronze Age to Early Iron Age date.

Q4 A hard, unoxidised fabric with sparse amounts of very fine to medium grade quartz sand and mica. This fabric is very fine and the sherds are often burnished on the exterior. This fabric probably dates from the Middle to Late Iron Age.

Comparative fabrics and dating

Comparisons with other sites in the vicinity can be broadly made. Walton (Evans 1989) and Coldharbour Farm, Aylesbury (Farley 1990) show a similar range of fabric types, although direct comparison was not possible as precise fabric descriptions were not included in either of the above reports. The Vicarage Garden, Bierton excavations (Knight 1986) also recovered a range of grog, sand, shell and flint tempered fabrics, which would appear to be comparable to the later Iron Age fabrics found on the Steppingley to Aylesbury pipeline sites. Pennyland, Milton Keynes (Knight 1993) and Bancroft (Knight 1994) also show a comparable range of fabric types for the Bronze Age and Iron Age.

Farley (1990) has noted that the shell fabrics from Coldharbour Farm may provide a Middle Iron Age fabric tradition but, from the present gas pipeline sites, the nature of the sherds recovered would suggest a previous use of shell in the Late Bronze Age. This is supported by the discovery of Early/Middle and Late Bronze Age shelly fabrics at Pennyland in Milton Keynes (Knight 1993). Parallels for the Deverel Rimbury material are rare, but a recently excavated site at Bierton has produced a number of coarse, flint gritted urns from this tradition (Farley *pers comm*), which would probably parallel fabric F1. Coarse, thick walled flint gritted pottery of the Deverel Rimbury tradition was also found on the Chalgrove to Didcot gas pipeline (Timby, 1995).

The fabrics found represent periods from the Neolithic to the Late Iron Age. Fabric F1 is probably earlier Neolithic and fabric F6 represents Early/Middle Bronze vessels. Fabrics C1 and F2 represent the Mid- to Late Bronze Age and fabrics C2, F3 and F4 are of Late Bronze Age date. Fabrics Q1, Q3 and F5 are of the Late Bronze Age/Early Iron Age transition period; fabrics G1, G2, Q2 and Q4 are of Mid- and or Late Iron Age date. The latest Iron Age is represented by fabric G3. It is possible that many of these date ranges may overlap, particularly for the Late Bronze Age and Early Iron Age. The numbers of sherds in each fabric are evenly spread from the Bronze Age through to the Late Iron Age, with only a few earlier sherds present.

Resources for the pottery

It is generally accepted that if suitable resources can be found within 7-10km of a site, the pottery is assumed very likely to be of local production (Arnold 1985). Clays that derive from outside this area can be treated as non-local.

The presence of probable glauconite and mica in many of the fabrics would suggest a fairly localised utilisation of clay resources, most probably from the Gault clays just south of Leighton Buzzard. The fossil shell inclusions probably derive from the Vale of Aylesbury Mesozoic clays (Farley 1990). Flint fabrics are likely to derive from the Upper Chalk to the east of the pipeline.

Vessel forms

Diagnostic form sherds make up 24% of the assemblage (5.5% bases, 5.5% rims and 13.3% decorated). However, this apparently high figure is again biased by the presence of the two partially complete vessels from contexts 616 and 2315, and it was possible to identify only a very few other form types. Of

these types, it is difficult to assign detailed descriptions to the forms, and it is often only possible to give a generalised description (e.g. bowl, jar etc.). Numbers of vessels are impossible to estimate and it would be difficult, and misleading, to give approximations. An illustrated type series was deemed inappropriate for the purposes of this report, but parallel forms from other series have been given where possible. Table 2 shows the identifiable forms present. Vessel numbers are based on numbers of rims present.

The Neolithic is represented by a single finger-fixed rim from a probable round based bowl. The Early Bronze Age is represented by the possible biconical urn recovered from context 616. This urn, due to its unusual form and decoration, is discussed in detail below. The presence of probable Deverel Rimbury urns is attested only by the coarse and thick nature of some sherds. The later Bronze Age and earlier Iron Age is more convincingly represented, however, by the presence of slack and sharp shouldered and ovoid jars. A few round bodied and S-profile bowls can also be seen. A straight sided 'scored' jar, typical of the Breedon on the Hill assemblage from Leicestershire (Kenyon 1950), is suggestive of Middle/Late Iron Age activity. The Late Iron Age is best represented, by a number of bead rimmed, round bodied bowls and a few fine Belgic jars.

Table 2: Vessel Forms

General Form Type	Period	Specific Form Type	Illust.	Published example	Approximate No. Vessels
URN	EBA	Biconical	no. 1	-	1
JAR	LBA	Ovoid	not illust.	Rams Hill, Ellison (1975) Fig 3:5, 9	2
	LBA/EIA	Slack Shouldered	no. 3	Rams Hill, Ellison (1975) Fig. 3:5, 19	2
	LBA/EIA	Sharp Shouldered	not illust.	Rams Hill, Ellison (1975) Fig. 3:5, 14	1
	MIA/LIA	Straight Sided Coarse Ware	no. 4	Pennyland, Knight (1993) Form 5, Rim 5	1
	LIA	Belgic Fine Ware Jars	no. 8	Thompson (1982) Form B1 or B5	1
BOWL	E - MID NEO.	Round Based Bowl	no. 2	-	1
	LBA/EIA	Round Bodied	not illust	Bancroft, Knight (1994) Fig. 203, 38	2
	LIA	S-Profile, Round Bodied	no. 6	Bierton, Knight (1986) Fig. 13, 20	3
	LIA	Bead Rim, Round Bodies	no. 6	Bierton, Knight (1986) Fig. 13, 11	5

Surface Treatments and Decoration

A number of different surface treatments are identifiable on the sherds examined. The abraded nature of much of the pottery, however, meant that occurrences of surviving surface treatments are rare (less than 3% of the assemblage) and it is impossible to estimate the number of sherds within the assemblage which originally possessed such treatments. The range of surface treatments includes finger smoothing, grass wiping and burnishing.

Finger smoothing occurs on only four sherds and is associated only with the coarser fabrics and thicker walled jars of the Late Bronze Age. Grass wiping is only present on one sherd from the assemblage, suggesting that this practice was not common in this area. Burnishing can be seen on eight sherds, and is solely associated with Late Iron Age bowls. Evidence of residues was not found on any of the sherds, suggesting that soil conditions were not conducive to preservation.

Decorated sherds account for 13.3% of the total assemblage, but this percentage is inflated due to the presence of the two vessels from contexts 616 and 2315. The majority of the decorated sherds from the pipeline have been illustrated (Figs 50, 51). The decoration of the vessels can be divided into five

distinct categories; these decorative techniques are summarized in Table 3 below. Within each technique are a number of different motifs or styles of decoration.

The most commonly occurring form of decoration is finger impression with or without a cordon. This Bronze Age technique is seen in the Early/Middle Bronze Age possible biconical urn of context 616, through to the Deverel Rimbury sherds from context 717, and on to the Late Bronze Age example within context 2602.

The Iron Age is typified by combed decoration, usually associated with burnished bowls, e.g. sherds from contexts 709, 717 and 733. Scored decoration, typical of the tradition found on a site at Breedon on the Hill, Leicestershire, (Kenyon 1950), was present on one vessel found in context 2315. A stabbed sherd from context 633 is most likely of Late Bronze Age/Early Iron Age date.

Table 3: Decorative techniques used on pottery

Decoration Type	Motifs	Fabrics/context	Illustrated Examples
Applied cordon	Linear horizontal	F2/1037 F6/616	no. 1
	Linear vertical	F6/616	no. 1
Fingertip Impressions	On horizontal cordon	F6/616	no. 1
	On vertical cordon	F6/616	no. 1
	Linear horizontal below rim	F6/616	no. 1
	On rim top exterior edge	F4/2602	no. 3
	On upper vessel body	G3/717	no. 7
Combed	Irregular, horizontal lines	G3/709	no. 6
		G2/733	no. 5
		G3/717	no. 7
Scoring	Vertical, irregular lines	G3/sf 5272, 2315	no. 4
Stabbed (probable)	Single	Q3/633	Not Illustrated

The distribution of the pottery

Prehistoric pottery was found at 23 sites along the route of the pipeline. Very few well stratified contexts were discovered and much of the material comes from single fill features. The small quantities of pottery present from each individual feature, and the lack of stratigraphy, only allows for provisional dating in many cases.

Site 9

Two sherds of fabric C2 pottery were found in pit fill 432. This pottery is dated to the Late Bronze Age.

Site 12

Eighty sherds of pottery were recovered from seven contexts. Context 638, the primary fill of Ditch 623, contained sherds of fabrics G1 and G2, and is therefore dated to the Mid- to Late Iron Age. This context is cut by another ditch (620) which again contained Mid- to Late Iron Age sherds of fabric G2 in its fill, (context 621). Pit fill 627 also contained sherds of fabric G2, together with ditch fills 645 and 656. The fill (633) of another ditch at site 12 contained sherds of fabric Q3, and pit fill 637 contained a number of sherds of fabric Q1, Q4 and F4. These fabric types dated each feature to the Late Bronze Age/Early Iron Age. Two very small sherds of grog fabrics G1 and G2 are probably intrusive.

Site 13

Two datable features were located at this site. Within pit fill 616 a possible Biconical Urn from the Early Bronze Age was recovered (see below), and a gully (619) contained four sherds of fabric G1, suggesting a Mid- to Late Iron Age date.

Site 14

Ditch fill 660 contained one base sherd of probable Late Neolithic/Early Bronze Age date

The possible Biconical Urn from context 616 (see Fig. 50, no 1)

This urn was found just to the south of the village of Rowsham, Buckinghamshire. It had been sunk upright into the ground, in a pit apparently dug specifically for this purpose. A large section of the rim and upper wall had fallen into the pot and then the vessel had apparently been filled with a homogenous material. No cremated bone or charcoal was found within the vessel, suggesting that the vessel did not represent a cremation. There was also no evidence of internal residues on the pot (e.g. calcium carbonate). Two small abraded sherds were found within the vessel fill (context 617) and these probably derive from the vessel. No other features were found in the vicinity.

Although the middle section of the pot has been lost, probably due to ploughing of the land, the surviving base (to a height of 320mm) and rim section allow for a profile to be reconstructed (see Fig. 50, no 1). The vessel is slightly ovoid in form (although probably the widest part of the pot occurs at the shoulder), and has a flat, plain rim and with no apparent angle on the shoulder. The urn is decorated on the upper third with a horizontal finger-impressed cordon. From this cordon, at 4-6 places around the pot, vertical finger-impressed cordons continue up to the rim. A horizontal line of finger impressions, without a cordon, runs just below the rim and around the circumference of the vessel.

The author could find no exact parallels for such a vessel, either in the locality or further afield. However, Anne Woodward (*pers comm*) has suggested the following:

'Whilst fingertip-impressed cordons are an embellishment found commonly amongst various classes of Early and Middle Bronze Age ceramics, the occurrence of finger-tipped cordons running vertically between a 'shoulder' cordon and vessel rim is extremely rare. Applied cordon horseshoe devices, reminiscent of similar motifs and the raised horseshoe handles found on Biconical Urns, are known amongst some Middle Bronze Age ceramic traditions. One may mention particularly the 'squared' horseshoe cordons of the Ardleigh Group in Essex and also a few more curvaceous examples from the lower Thames, e.g. Ashford (Barrett 1973, Fig 1.1).

However, vertical intermediate cordons are not found amongst the Middle Bronze Age assemblages of the lower Thames or Wessex, nor indeed amongst the slightly earlier Barrel Urn series. The clearest parallels are found within the Biconical Urn repertoire, with notable examples deriving from Shalcombe Down, Isle of Wight (Dunning 1931, pl VI) and Iffley, Oxon (VCH, pl VIId). However, on the Shalcombe Down vessel two such cordons flank an elongated horizontal plastic handle, and in the Iffley case the vertical cordon is associated also with fingertip-impressed cordon horseshoes.

The decorative scheme of the pipeline urn does not seem to possess the complexity of those usually associated with the Biconical Urn series; nor does the vessel profile appear to present a particularly biconical aspect. On the other hand, the coarse flint tempered fabric, which also contains sand and grog, would be typical of this class of urn. Whilst the vessel cannot be assigned a firm attribution to the Biconical Series, a date around the Early to Middle Bronze Age seems to be the most likely.'

This vessel is, therefore, important within a local and a regional context, and may suggest that this area of England has a previously unknown potting tradition, which encompasses the traits of both the Biconical Urn and the Deverel Rimbury Traditions. Further discoveries in the area will be necessary to elucidate this problem.

Site 15

Three contexts contained prehistoric pottery at site 65. Ditch fill 672 and 676 contained Late Bronze Age pottery, represented by fabrics F2 and C2. Ditch fill 678 contained Late Bronze Age/Early Iron Age pottery, fabric Q3. This would suggest that any activity in this area is predominantly of an early 1st millennium BC date.

Site 16

At this site Mid- to Late Bronze Age pottery was identified within context 700, but as this material was unstratified, the sherds offer only a broad date range for activity within the vicinity. Seven ditches were recorded as each containing datable pottery, however. Context 709 contained a mix of material from the later Bronze Age through to the Late Iron Age, suggesting that the feature has been heavily disturbed. Within this feature, several sherds of fabric G3 were found with combed decoration (see Fig 51, no. 6, 709). Ditch fills, 713, 727 and 733 contained pottery of fabrics Q4, G1, G3, and G2, suggesting a Mid- to Late Iron Age date. Context 715 contained quartz fabrics, typical of the Late Bronze Age/Early Iron

Age. Context 717 was again of a mixed nature, with pottery of a similar range to context 709. This feature also contained comb decorated sherds (see Fig. 51, no.7, 717). Context 719 contained several sherds of fabric C1, representing a Mid- to Late Bronze Age date.

Site 17

Two contexts containing pottery were located at site 17, pit fill 756 and ditch fill, 754. Context 754 contained pottery of a Late Neolithic/Early Bronze Age date and Mid- to Late Iron Age sherds. Context 756 contained pottery of fabric type G2, suggesting that the ditch had been cut through an earlier, possibly Neolithic ditch fill, 754.

Site 18

This site revealed seven separate contexts containing pottery. Context 810 contained 20 sherds of Late Bronze Age pottery, including a sherd from a pinch based vessel. Context 817 contained material of a Late Bronze Age/Early Iron Age date. This feature was stratigraphically set below context 815, which contained pottery of fabric type G2, dating to the Mid- to Late Bronze Age. Ditch fills 812 and 831, and pit fill 823 are date to the Mid- to Late Iron Age. Ditch fill 827 contained pottery of a Late Iron Age date including Belgic vessel (Fig. 51, no. 8, 827).

Site 19

This site contained two layers, contexts 1037 and 1038, which contained very highly fired pottery of the Mid- to Late Bronze Age. The fact that all the sherds from these layers have been highly fired, irrespective of fabric type, suggests that the sherds had been re-fired, possibly within a bonfire. The presence of charcoal in these layers would support this interpretation.

Site 21

Three features containing pottery were located at this site. Context 1111, a pit fill, contained mixed material from the Late Bronze Age to the Late Iron Age. Context 1113, a ditch fill, contained a single rim from a probable Early Neolithic round based bowl (Fig. 51, no .2, 1113). A further pit, context 1115, also contained four small sherds of Early Neolithic pottery, along with sherds of the Late Bronze Age, fabrics F3 and F4. The mixture of ceramic material would suggest Early Neolithic activity which was then disturbed by Late Bronze Age features.

Site 22

Context 2756, a gully fill, contained one sherd of fabric F4. Posthole fill 2860 contained one sherd of fabric F2 and context 1365 contained a single sherd of fabric F4 pottery. Despite the small number of sherds recovered, the fabric types are all representative of the Late Bronze Age, and suggest that the three features may all be of this period.

Site 24

One sherd of Late Bronze Age pottery, fabric F4, was found in ditch fill 1505.

Site 28

One large rim sherd from a slack shouldered jar, fabric F4, was found in an upper fill (2602) of a possible well (Fig. 51, no. 3, 2602). This sherd is decorated with fingertip impressions along the outer rim edge and is dated to the Late Bronze Age/Early Iron Age. The presence of this sherd in an upper fill of what was apparently a well, would suggest that it is residual.

Site 32

Two ditch fills containing pottery were found at this site. Context 1848 contained one sherd of fabric Q3, suggesting a Late Bronze Age/Early Iron Age date for the ditch. Context 1850 contained pottery of a Mid- to Late Iron Age date. Colluvium, context 1808, was found to contain mixed pottery from the Late Bronze Age to the Late Iron Age.

Site 34

Late Bronze Age and Mid- to Late Iron Age pottery was found in an unstratified context, 2006.

Site 37

Fifty sherds, of fabric type G3, were recovered from a single vessel and found in a tree-throw hole, context 2315. The heavy rimmed vessel (Fig. 51, no. 4, 2315) is decorated with rough vertical 'scores',

typical of the Midlands Scored ware (e.g. Breedon on the Hill, Leics, Kenyon 1950), and is therefore datable to the Middle Iron Age. Late Bronze Age pottery of fabric type F3 was found in an unstratified context, 2304.

Site 38

Three contexts containing pottery were found at site 169/170. Context 2408, a colluvium deposit, contained pottery of the Mid- to Late Iron Age. Context 2409, a possible grave, contained one very small sherd of fabric Q3 suggesting a Late Bronze Age/Early Iron Age date. Two sherds of Late Bronze Age and Late Iron Age date were found in an unstratified context, 2414.

Summary

Although the ceramic assemblage is small and many of the sherds are severely abraded, the material comprises a number of interesting, decorated sherds and noteworthy forms. This area of Britain, although it contains a reasonable number of Late Iron Age sites, has to date produced little material from the Neolithic to the Late Bronze Age/Early Iron Age transition period. This assemblage suggests that ceramic material of this date range, at least along the route of the pipeline, is not as uncommon in Aylesbury Vale and South Bedfordshire as was once thought. The paucity of ceramic data for the Neolithic and Late Bronze Age/Early Iron Age transition period within the area was most likely the result of a lack of previous investigation.

Although the nature of the assemblage has not allowed for clear cut dating, there are several main periods which have been identified ceramically; the Early Neolithic, the later Neolithic/Early Bronze Age, the Early/Middle Bronze Age, the Mid-/Late Bronze Age, the Late Bronze Age/Early Iron Age and the Mid- and later Iron Age. Some of these identifiable periods are confined to a specific locality; for example, construction section 10 (site 19), which produced only Mid- to Late Bronze Age pottery. The majority of sites, however, show multi-period activity within an area.

The recovery of ceramics from the western end of the pipeline was very poor; only two sherds were recovered from construction section three. This suggests a limited amount of previous activity within the area. Construction sections five, six, seven and eight have the highest concentration of ceramics recovered and the dating of the pottery from this area would suggest a prolonged period of probable occupation from the Neolithic through to the Late Iron Age. It is interesting to note that many of areas of prehistoric activity appear to be concentrated at localities where Gault Clay is predominant. This may be no coincidence, and the reason for these concentrations of activity may be a reflection of a choice in potting clays.

The value of the assemblage, although hampered by a general lack of comparable assemblages (of any period) within the area, is an important addition to the ceramic database for the area. The presence of the apparently unique urn 616 alone suggests that further investigation into the ceramic patterning within this part of the country could be most enlightening.

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A Petrological Note on a Bronze Age Vessel From Rowsham, Buckinghamshire

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

Site 13, (Construction Section 6, Plot 63)

The plain, curved body sherd examined, is thick, 14 mm at the widest extent, and is in a fairly hard, rough fabric, with a light reddish-brown outer surface and part core [between Munsell 2.5YR 5/4 and 6/6], and a dark grey inner surface and part core [5YR 4/1]. In the hand-specimen, plentiful angular fragments of white and light grey flint can be seen protruding through both surfaces and a fresh fracture, giving it a distinctive visual appearance. The flint is of variable size, the majority of pieces falling below 2 mm in diameter although with a few larger pieces ranging to over 4 mm.

A small slice was detached from the sherd and this was made into a thin section and then studied under a petrological microscope. This showed a fairly fine textured anisotropic clay matrix containing silt-sized grains of quartz, a few slightly larger grains of quartz, some flecks of mica and a little opaque iron oxide. Some lenses of clay and air pocket voids can be made out, which suggests that the clay as a whole was probably poorly wedged. The dominant, non-plastic inclusions, as noted in the hand-specimen, are fragments of flint scattered at random throughout the clay matrix, taking up an estimated 10%-15% of the ground mass. The general angularity of the flint suggests that most pieces had been deliberately crushed and added to the clay as a form of temper by the potter.

The use of such abundant flint temper in what is a comparatively fine, silty clay matrix suggests that there may have been a shortage of quartz sand in the clays available to the potter. The find-site at Rowsham is situated in an area of Jurassic Kimmeridge Clay and Portland Beds, not far from Upper Cretaceous Gault and with a large area of Chalk some five miles to the south-east [Geological Survey 1" Map of England, sheet no. 238]. There are small patches of glacial gravel containing flints near Rowsham which might perhaps account for the flint content of the vessel [Sherlock, 1922]. However, if a Jurassic clay was used, one might expect some calcareous material to be present and this is lacking. The same would also hold true for the nearby Gault clays which are said to be marly [*ibid.*]. This seems to suggest that the vessel may not have been made in the area of the find-site. The clay-with-flints which overlie the chalk formations to the south-east of Rowsham are a possibility, as some of these are said to be silty [*ibid.*]. However, it is difficult to predict likely sources when dealing with such common inclusions.

Appendix 3

Roman pottery

B J Precious with Alan Vince

Roman Pottery
by B J Precious

Introduction

The Roman pottery assemblage from the Steppingley to Aylesbury Pipeline has been recorded according to the guidelines recommended by the Study Group for Roman Pottery (SGRP). Standard computer codes developed by the City of Lincoln Archaeology Unit have been used to analyse the fabrics, forms, decoration, number of vessels, drawing status, and sherd joins, using the number of sherds as a statistic. As the pipeline extends through Bedfordshire and Buckinghamshire it is not surprising that a significant proportion of the fabrics recovered from the sites are the same as those mentioned in the definitive study of Roman and Belgic pottery from excavations in Milton Keynes area by Marney, 1989, 174-194. Where appropriate, there is a concordance for those fabric codes which relate to the above publication.

Although the total assemblage of Roman ceramics is large (5717 sherds), the amounts recovered from the majority of the individual construction sections (CS) is remarkably small (see Table 1, below). It is not possible to compare and analyse the smallest groups of Roman pottery as the statistics are not viable. Consequently, they are only mentioned briefly, although the full information is contained in the site archive. Sites 22 and 28 in Construction Sections 13 and 16 produced the only large assemblages, 2566 and 1683 sherds respectively, and are discussed individually in detail. Sites 7, 8, 9 and 11 in Sections 3-5, consisted of moderate to small sized groups of Roman pottery. Although the total number of sherds is barely statistically viable there is sufficient evidence to warrant a summary of the material. The latter two groups form the basis of a general discussion of the distribution of the Roman pottery in relation to the geographical positions of the sites. However, the assemblage as a whole is valuable, as are all pipeline groups, as they provide evidence for the distribution of Roman fabrics over a wide topographical area, in particular distinctive locally produced wares and the products of nationally recognised kiln centres.

The illustrations have been selected for their dating and intrinsic value. They are included as a catalogue within the discussion for each section arranged alphabetically by fabric group and, within these, according the following form types: amphorae, flagons, beakers, jars, bowls, dishes and other types.

Construction section	Sherds	%
0	125	2.19
1	5	0.09
2	2	0.03
3	591	10.34
4	344	6.02
5	286	5.00
6	11	0.19
7	10	0.17
8	8	0.14
9	1	0.02
10	4	0.07
11	4	0.07
13	2566	44.88
14	1	0.02
16	1683	29.44
17	29	0.51
19	2	0.03
20	14	0.24
21	31	0.54
Total	5717	100

Table 1: The Roman pottery from the individual sites as a percentage of the total assemblage, by sherd count.

Summary of the Roman pottery assemblages from Construction Sections 0-2, 6-11, 14-15, 17-21 (Sites 1, 2, 3, 5, 17, 20, 21, 24, 31, 32 and 33)

With the exception of CS0/Sites 1-3 (125 sherds), the total assemblage for these sections/sites consists of only 93 Roman sherds. Table 3, below, shows that there is little Roman pottery of diagnostic date; what there is consists mainly of body sherds of locally made greywares, the majority of which were either abraded or occurred in very small quantities. Therefore the date-ranges are necessarily broad. These extend from the prehistoric to the post-medieval period with no apparent relationship between any of the sites. The earliest material consists of a flint-tempered sherd dating to the prehistoric period from CS 15, and a probably hand-made, grog-tempered sherd which occurred with scraps of shell-tempered vessels from CS1 of late Iron Age or early Roman date.

Stratified Roman pottery was excavated from CS 2 and 17/Sites 5, 29 and 31. Although relatively insubstantial, the dating of the pottery ranges from a sherd of probable, first century material to mid to late second century wares. The earliest Roman ware is a sherd of first century samian likely to have come from South Gaul from CS11, followed by a less certain sherd of possible first to early second century greyware from CS14 and an equally uncertain sherd of oxidised ware of probable second century date from CS2. A sherd of mid to late second century samian from Central Gaul is the only securely datable fragment and occurred at CS19/Site 33. CS21 produced 31 sherds of Roman pottery, the largest assemblage from these smaller sites. Although the fabrics are mainly undiagnostic, locally produced greywares, the presence of lid-seated jars suggests a later Roman emphasis for the dating of this site - towards the third to fourth centuries.

The remaining sections, CS6-8, 10 and 20, produced small groups of pottery of mixed dates consisting of Roman and post-Roman wares. There is no evidence for early Roman pottery. Most of the wares date to at least the second century, with a few sherds of third century date, and undiagnostic fragments which can only be broadly dated to the Roman period.

Construction section 0, produced a slightly more substantial assemblage, consisting of 125 sherds. However, 39 sherds of the total came from a single vessel, a curved-rimmed bowl in Orange ware (ORAN - Drawing 1). Table 2, below, suggests that the area was occupied from the later first to the mid third and possibly the fourth centuries. However, the evidence is scant as the groups are small and the larger contexts, 3, 8, 14, and 15, consist of Roman pottery of mixed dates with later sherds of abraded Oxfordshire colour-coated wares (OXRC), occurring alongside earlier wares. Consequently, the bulk of the pottery is dated by these sherds to the later Roman period. Second century wares appear to be common but this is due to the presence of the smashed single vessel mentioned above. Several sherd joins between contexts 3 and 8 suggest that they may have been contemporary.

Section	Context	Join	Sherds	Date range
0	003	8	5	2 nd century/post-Roman
0	005		1	Late 1 st to 2 nd
0	006		2	Roman, prob. 2 nd or later
0	008	3	48	3 rd century or later
0	010		5	Late 1 st to 2 nd
0	011		40	2 nd century or later
0	014		12	2 nd century or later
0	015		8	Mid-3 rd to 4 th century
0	020		4	Roman

Table 2: The date-ranges of the Roman pottery from CS0/Sites 1 and 2 by sherd count

Section	Context	Sherds	Date range
1	114	5	Iron Age-Roman
2	209	1	Roman
2	231	1	Roman
6	603	1	Roman?
6	605	1	Roman?
6	606	7	Medieval or post-medieval
6	608	1	2 nd -4 th century
6	609	3	Roman, prob. 2 nd century
6	610	1	At least 2 nd century
6	611	1	Medieval or post-medieval
6	612	2	Medieval or post-medieval
6	614	4	Roman, prob. 2 nd century
6	658	1	Post-medieval

Section	Context	Sherds	Date range
7	703	1	Roman?
7	703	1	Medieval or post-medieval
7	704	6	At least 2nd century
7	704	9	Medieval
7	705	1	Medieval
8	801	2	at least 3rd century
8	801	1	Post-medieval
8	802	4	At least 2nd century
8	802	1	Post-medieval
8	803	1	Roman
8	804	1	Roman
8	807	1	Medieval or post-medieval
8	808	1	Post-medieval
9	902	1	Roman
9	902	2	Post-medieval
10	1003	1	Roman
10	1004	3	2 nd -3rd century
10	1005	1	Post-medieval
10	1006	4	Medieval or post-medieval
11	1100	1	Roman
11	1102	2	Roman
11	1103	1	1st century?
14	1400	1	1 st - early 2nd century
15	1505	1	Prehistoric
19	1901	1	Roman?
19	1905	1	Mid- to late 2 nd century
20	2000	1	At least 2nd century
20	2006	2	Roman
20	2006	2	Post-medieval
20	2007	1	At least 2nd century
20	2008	8	At least 2nd century
20	2008	2	Medieval
20	2012	2	Roman?
21	2100	14	At least 3rd century
21	2100	17	3 rd -4 th century
21	2101	1	Post-Roman?

Table 3: The date-ranges of the Roman pottery from the individual sites by sherd count

Catalogue

Four vessels have been illustrated from this group, all of which came from section CS0 (Drawings 1-4).

1 A curved-rimmed wide-necked bowl in an orange fabric (ORAN - Marney group 40) which is similar in style to Marney, 1989 fig 12 no 53, dated to the mid to late second century - Site 1, Context 011.

2 A narrow necked jar in a granular, unsourced oxidised fabric (OX) with unusual, rectangular, stabbed decoration at the neck. No parallel has been located for this vessel which came from a context with pottery of mixed dates and dated by the latest sherd to the mid third century or later, - Site 1, Context 008.

3 An Oxfordshire red colour-coated (OXRC) bowl in the style of samian form Dr38, dated from the mid third to the fourth century - Site 1, Context 015.

4 In the same fabric as no 2, but the colour-coating has been completely destroyed by abrasion. The dish is in the style of samian form Dr35, and dated from the mid third to the fourth century - Site 1, Context 008.

Summary of the Roman pottery assemblages from Construction Sections 3-5/Sites 5, 6, 7, 8, 9, 10 and 11

This group consists of small to moderate sized assemblages of Roman pottery, the largest being from CS3 - 585 sherds, followed by 344 sherds from CS4, and 286 from CS5. The dating is demonstrated by Tables 4, 7 and 10 below, which shows that the groups from the latter two sections are too small to provide much more than broad dating in a number of cases. However, they are more reliable than the groups mentioned in the previous summary.

Construction Section 3/Sites 6, 7 and 8

A relatively high proportion of the pottery from this site is abraded, in particular the colour-coated wares. The slipped surfaces of these vessels are frequently virtually worn away with only traces of colour remaining. This is probably due to the soil conditions but may also indicate redistribution of the material. There is only one incidence of a sherd link across the site between contexts 304 and 344.

Dating (See Table 4, below)

Despite the moderate size of the assemblage from this site, the majority of the contexts produced only small groups of pottery; therefore in most cases the dating is necessarily broad. There is no evidence for early Roman occupation in this area, although a small percentage can be broadly dated to the second century, including a curved-rimmed bowl in a oxidised fabric with minimal grog-tempering (OXGR - Drawing 10) which ranges in date from the later first to the mid second century. Pottery dated to at least the mid or mid to late third century into the fourth, including sherds of Nene Valley colour-coated beakers and a flask (Drawing 9), accounts for almost 19% of the assemblage. However, the bulk of the material consists of fourth century pottery which includes 72 sherds found together with post-Roman wares. These groups may be later in date as they contain late shell-tempered products from the Harrold kilns in Bedfordshire (SMSH), including an unusual variant with a stabbed upper rim (Drawing 14) and a coarse jar with an undercut rim which is very similar to those commonly termed Portchester 'D' ware (COAR - Drawing 5), which is generally dated from the mid to late fourth century. The largest single context (2509, Site 7) produced the latest material and is dated to the mid to late fourth century by the presence of late Oxfordshire (OXRC and MOOXR) and South Midlands shell-tempered wares (SMSH), but it also contains a small proportion of pottery of earlier date suggesting that the material may have been redeposited.

Date range	Sherds	%
Late first to mid-second century	2	0.34
First to second century	1	0.17
At least second century	29	4.96
Late second to third century	3	0.51
At least mid-second century	6	1.03
Mid-second to fourth century	8	1.37
Mid-second to third century	16	2.74
Second-fourth century	4	0.68
Third to fourth century	9	1.54
Third century	6	1.03
Third? century	5	0.85
At least third century	14	2.39
At least mid-third century	21	3.59
Mid-third to fourth century	37	6.32
Mid- to late third to fourth century	28	4.79
Late third to fourth century	52	8.89
Fourth century	112	19.15
Mid- to late fourth century	102	17.44
Roman	9	1.54
At least third century/post-Roman	19	3.25
Mid- to late third to fourth century/post-Roman	26	4.44
Fourth century/post-Roman	72	12.31
Roman/post-Roman	1	0.17
Roman/post-Roman?	3	0.51
Total	585	100

Table 4: The date-ranges of the Roman pottery from Construction Section 3 (CS3)/Sites 6, 7 and 8 as a percentage of sherd count

Function and Status (See Tables 5 and 6, below)

Apart from a single sherd of abraded Dressel 20 amphora (DR20), there are no imported wares from this site. Given the late Roman date for the bulk of the assemblage, this is not surprising. However, sherds of imported, mid to late second century samian wares are frequently found on higher status or non-rural sites of this date, which suggests that CS5 is probably of moderate status.

Locally made greywares (GREY), together with grey-brown sub-variants (GYBN) form the majority of the assemblage. Other local products, mainly oxidised wares (OX) and those with distinctive orange-

coloured surfaces (ORAN) are also moderately common, as are miscellaneous, grog-tempered wares (GROG).

Another grog-tempered product, in a soft, pink fabric (PIGR), which is commonly found in the South Midlands area, forms a small but distinctive proportion of the assemblage. South Midlands shell-tempered wares (SM SH), also manufactured locally (probably at the Harrold kilns in Bedfordshire) are moderately well-represented at this site.

Romano-British wares which were produced at centres further afield suggest that the occupants of this site had access to markets or distributors which were trading in these products. These include a small amount of BB1 from the Dorset area, sherds of Oxfordshire mortaria in both cream and colour-coated fabrics (MOOX and MOOXR), together with a small proportion of Nene Valley grey (NVGW) and colour-coated wares (NVCC). In addition there is a single sherd from a flagon in Verulamium region white ware (VRW), a fabric which was manufactured in the St Albans area from the mid-first to the mid to late second century.

Un sourced wares including mainly abraded sherds of colour-coated wares (CC) and fine and coarse cream wares (CR and CRSA), together with coarse and fine tempered greywares (COAR and GFIN) make up the remainder of the assemblage.

Fabric	Sherds
BB1	5
CC	13
COAR	4
CR	8
CRSA	11
DR20	1
GFIN	12
GREY	209
GROG	75
GRSH	1
GYBN	17
MOOX	9
MOOX?	1
MOOXR	2
NVCC	6
NVGW	7
ORAN	18
OX	83
OXGR	1
OXPA?	1
OXRC	11
PIGR	27
SHEL	4
SM SH	58
VRW	1

Table 5: The Roman pottery fabrics from Construction Section 3 (CS3)/Sites 6, 7 and 8 by sherd count

Table 6, below, suggests that, overall, this is a moderate status, domestic site with few fine table wares and drinking vessels. The latter occur as beakers in a wide range of fabrics including NVCC, NVGW, CC, GREY and GFIN. Vessels used exclusively at the table are mainly represented by un sourced colour-coated wares (CC), some of which may be abraded products of the Oxfordshire kilns, and definite vessels from this manufacturing area (OXRC). These include plates and bowls in the style of samian forms Dr31 and Dr38. There is also a fine red-painted open vessel in a parchment fabric, also likely to have been manufactured at the Oxfordshire kilns (OXPA - Drawing 11). Less high quality table wares consist of NVGW bowls and jars and a jar or beaker in a fine grey ware (GFIN).

Liquid holders are sparse but consist of a range of products including: a disk-necked flagon in CC; a flask in NVCC (Drawing 6); a cup-mouthed flagon, a flask and a narrow-necked jar in greyware; together with a flagon in VRW.

Vessels used exclusively in the kitchen are moderately represented. These are mainly shell-tempered products of the Harrold kilns (SM SH), predominately jars, but also include cooking pots in BB1 and GREY, coarseware jars (COAR; Drawing 5) and a grog-tempered jar and bowl. Mortaria were also mainly used in the kitchen and those from this site are bead and flanged types which were all made at

the Oxfordshire kilns (MOOX). There is also an example of a wall-sided mortarium in OXRC, which was more likely to have been used at the table. Storage vessels are a distinctive feature at this site and consist of large jars and storage vessels in SMSH, GROG and PIGR, three of which have been illustrated (PIGR, JS - Drawing 12; SMSH, JS - Drawing 14; GROG, JS - Drawing 8).

However, the bulk of the assemblage consists of low-status vessels which could have been used in the kitchen and then transported to the table. These are mainly greyware jars and bowls, for example a low-bead and flanged vessel (Drawing 7) and wide-mouthed types, together with miscellaneous oxidised products including wide-mouthed and flanged bowls together with curved, undercut and everted rimmed jars.

Type	Sherds	%
Untyped	221	37.78
Amphorae	1	0.17
Liquid holders	8	1.37
Drinking	19	3.25
Table wares	33	5.64
Table/kitchen	159	27.18
Kitchen	68	11.62
Mortaria	12	2.05
Storage	64	10.94

Table 6: The function of the Roman pottery from Section 3 (CS3)/Sites 6, 7 and 8 as a percentage of the sherd count

Catalogue

- 5 A jar with an undercut rim in a coarse quartz tempered fabric (COAR) from a fourth century context and very similar to late fourth century jars noted at Portchester - Site 7, Context 2511.
- 6 A near complete, flanged bowl with a groove beneath the rim in a fine, grey fabric with few inclusions (GREY) from a context dated from the early to mid second century - Site 7, Context 363.
- 7 A bowl with a low-bead and flange in a grey ware fabric with fine angular quartz in a silty matrix (GREY) from a mid to late fourth century context - Site 7, Context 2509.
- 8 A large grog-tempered (GROG) storage jar from a third century or later context associated with post-Roman pottery - Site 7, Context 378.
- 9 A Nene Valley colour-coated flask in a late fabric (NVCC) with cream painted decoration of mid third or later date - Site 7, Context 2513.
- 10 A curved-rimmed, wide-necked bowl in an oxidised fabric with minimal grog-tempering (OXGR), of probable later first to mid second century date - Site 7, Context 342.
- 11 A probable Oxfordshire parchment (OXPA?) open vessel with red painted decoration on the interior surface from a fourth century context - Site 7, Context 2520.
- 12 A narrow-necked storage jar in a soft, pink grog-tempered fabric (PIGR - Marney group 2) paralleled in Marney, fig27 no 2, from a fourth century context - Site 7, Context 2520.
- 13 A handmade jar with a simple curved rim and a low shoulder in South Midlands shell-tempered ware (SMSH - Marney group 1), of probable second century date - Site 7, Context 364.
- 14 A storage jar in South Midlands shell-tempered ware (SMSH) with an unusual decoration stabbed on the top of the rim from a fourth century context - Site 7, Context 329.

Construction Section 4/Site 9

This site, again, consists of mainly small groups of pottery with the exception of context 403, which accounts for 208 of the total of 344 sherds. There are no sherd joins from this area and, with the exception of several burnt, grog-tempered cooking vessels, the material is in relatively good condition.

Dating (See Table 7, below)

In contrast to CS3/sites 6, 7 and 8, there is evidence of late Iron Age occupation on the site although it is minimal, consisting of a two handmade sherds from the same vessel in a coarse, native fabric with rilled decoration, which may date from the late Iron Age into at least the Conquest period. Early Roman occupation is attested by sherds of handmade, early grog-tempered wares, in particular a fragment from a jar in the belgic tradition with an upright rim. Later first to early second century wares are moderately

common again consisting of early grog-tempered wares which continue to be made into the second century. Some of these fabrics may well be related to Marney fabric group 46. These early Roman wares include native styles cooking pots such as Drawing 18 (NAT) and Drawing 16 (GYBN), both with slashed rims, and a wide-mouthed bowl in a pink fabric (Drawing 20, PINK).

Evidence for occupation broadly dated to the third century is slightly more common, based on the presence of Nene Valley grey ware (NVGW), for example a wide-mouthed jar as illustrated by Drawing 19. In common with CS3, above, the majority of the ceramics are dated from the late third into the fourth century, based on the presence of late Oxfordshire mortaria (MOOX and MOOXR). However, this comes from a single context, 403, which produced a large assemblage, but which consists of pottery of mixed dates including a fineware bowl with compass-scribed decoration (LOND - Drawing 17), which is generally ascribed an early to mid second century date, together with sherds of samian ware imported during the mid to late second century.

Date range	Sherds	%
Iron Age to at least mid-first century	2	0.58
Mid to late first century?	8	2.33
Late first to early second century	10	2.91
At least late first century	7	2.03
Late first to second century	29	8.43
First to second century	8	2.33
Early to middle second century	8	2.33
At least second century	5	1.45
Third century	45	13.08
Late third to fourth century	208	60.47
Roman	12	3.78
Roman/post-Roman	1	0.29
Total	344	100

Table 7: The date-ranges of the Roman pottery from Construction Section 4 (CS4)/Site 9 as a percentage of sherd count

Function and Status (See Tables 8 and 9, below)

The presence of both imported Dressel 20 amphorae and sherds of Central Gaulish samian, including a mould-decorated bowl (Dr37), suggests that the occupants of this area were of moderately high status. However, locally produced greywares and variants (GYBN) form the bulk of the assemblage. The evidence of a high proportion of grog-tempered products (GROG), which were also locally made, possibly at the Caldecote kilns, and a few sherds of native style wares (NAT) demonstrates the earlier occupation date of this site. Soft pink grog-tempered wares (PIGR), probably a continuation of the earlier industry, and oxidised wares (OX) which were also manufactured locally form a distinctive portion of the assemblage. It is worth noting that shell-tempered wares (SMSh) are virtually absent from this area.

Products which were transported from other parts of the country are comparatively rare and occur in almost equal quantities. These consist of BB1 from Dorset, mortaria from the Oxfordshire kilns (MOOX and MOOXR) and a small proportion of Nene Valley wares, mainly greywares (NVGW and NVGWC), together with a single example of a colour-coated beaker (NVCC). Sherds of the greyware product (VRG) from the Verulamium kilns are also present. There is also a possible sherd which may have been produced at the Highgate Wood kilns on the outskirts of London, but similar fine, silty fabrics have also been noted among the local greywares, an example being the London type (LOND) bowl, Marney fabric group 15.

The functional analysis from this small assemblage is more restricted than those from other sections. There are no amphorae or liquid holders, and the table wares are minimal. The latter include the only imported fabric from the site, SAMCG, unsourced abraded colour-coated wares and late Nene Valley products. Drinking vessels are quite well-represented, but are mainly utilitarian types.

Fabric	Sherds
BB1?	4
CC	1
COAR	2
CR	6
CRSA	2
DR20	2

Fabric	Sherds
FINE	3
GFIN	12
GREY	157
GROG	44
GYBN	20
HWC?	1
LOND	1
MOOX	4
MOOXR	1
NAT	4
NVCC	1
NVGW	3
NVGWC	1
ORAN	2
OX	31
OXRC	2
PIGR	27
PINK	3
SAMCG	6
SMSH	1
VRG	3

Table 8: The Roman pottery fabrics from Construction Section 4 (CS4)/site 9 by sherd count

In common with most sites, table to kitchen wares form the majority of this assemblage consisting mainly of greywares including several grooved-rimmed, flanged and wide-mouthed bowls and several curved-rimmed jars. These are locally made oxidised wares, of mostly, untyped forms, but also a jar with an undercut rim. Unlike CS3 (above), fine table wares and, in particular, drinking vessels form a higher proportion of the assemblage, which is indicative of a site of higher status. Liquid holders are also slightly more common and may be linked with the higher amount of beakers. The latter consist of fine ware and fine, greyware beakers as well as a colour-coated Nene Valley vessel and a samian cup.

Kitchen wares are also more common, mainly grog-tempered jars and a plain-rimmed dish (Drawing 15), and native tradition cooking pots as well as examples in BB1 from a probable Dorset source. Storage vessels are less common than at CS3, but the mortaria are equally represented and from the same source.

Type	Sherds	%
Untyped	132	54.09
Amphorae	2	0.81
Liquid holders	10	4.09
Drinking	19	7.78
Table wares	14	5.74
Table/kitchen	72	29.51
Kitchen	61	25
Mortaria	5	2.05
Storage	29	11.89

Table 9: The function of the Roman pottery from Construction Section 4 (CS4)/Site 9 as a percentage of the sherd count

Catalogue

15 A ?handmade, grog-tempered (GROG) plain-rimmed dish from a context dated from the later third to the fourth century but containing several examples of later first to second century wares. A similar vessel is illustrated in Marney, 1989 fig 34, no 14 where it is predominantly dated from the mid first to the early second century - Site 9, Context 403.

16 A handmade, native style cooking pot with a slashed rim in a grey sandy fabric with distinctive brown surfaces (GYBN) identical in form to that illustrated in Marney, 1989, fig 34, no 2 which is in a shell and grog-tempered fabric, unstratified but likely to be of mid first to early second century date - Site 9, Context 436.

17 A fine greyware in a black silty fabric manufactured in the style of samian form Dr37 with a compass-scribed decoration and burnished surfaces (LOND). Virtually identical forms and fabrics have

been noted in the Nene Valley (Howe et al, 1980, fig 2, no 23) where it is dated to the first quarter of the second century - Site 9, Context 403.

18 As 16 above, but in a coarse sandy, native tradition fabric - Site 9, Context 459.

19 A wide-mouthed jar in Nene Valley greyware (NVGW) from a third century context - Site 9, Context 461.

20 A wide-mouthed bowl in a fine pink fabric (PINK as Marney group 18), from a late first to second century context. The rim is similar to that illustrated in Marney, 1989, fig 43, no 8.- Site 9, Context 432.

Construction Section 5/Sites 10 and 11

This section produced the smallest assemblage within this group of sites, 286 sherds. The majority of the contexts produced small amounts of pottery which frequently consisted of very small, undiagnostic sherds. In addition, a high proportion of the Roman ceramics were found associated with post-Roman wares, 130 sherds, which suggests that much of the Roman material was redeposited. This amount includes context 511, which produced the largest amount of material, 91 sherds. Consequently, there is little secure dating for this area. Several sherd links (contexts 524-541; 539-540; and 542-561) emphasise the redistribution of much of the pottery.

Dating (See Table 10, below)

There is scant evidence for early Roman occupation which consists of five sherds from context 531 (Site 10) in a handmade, coarse native tradition fabric one of which had rilled decoration on the exterior dating from the late Iron Age period into the mid to late first century. Later first to early second century wares are equally scarce but securely diagnostic including a fine greyware beaker in a micaceous fabric (GMIC) with barbotine decoration and a sherd of Verulamium region white ware (VRW). Slightly more common are wares of broadly third century date including fragments of greyware plain-rimmed dishes.

Oxfordshire mortaria (MOOX) provide evidence for more substantial mid third to fourth century occupation, and a jar with an undercut rim in SMSH for a later third to fourth century presence. The bulk of the assemblage consists of pottery of mixed date, but dated by the latest sherds, Oxfordshire colour-coated mortaria (MOOXR) to the fourth century. However, these groups were also associated with post-Roman pottery.

Date range	Sherds	%
Iron Age to mid- to late first century	5	1.75
Late first to early second century	4	1.40
First to at least second century	6	2.10
At least second century	3	1.05
Mid-second to third century	1	0.35
Second-fourth century	25	8.74
Third century	11	3.85
Third? century	6	2.10
At least third century	13	4.55
Mid-third to fourth century	59	20.63
Late third to fourth century	15	5.24
Roman	8	2.80
Second century/post-Roman	12	4.20
At least second century/post-Roman	10	3.50
Late first to second century/post-Roman?	6	2.10
Fourth century/post-Roman	102	35.66
Total	286	100.00

Table 10: The date-ranges of the Roman pottery from Construction Section 5 (CS5)/Sites 10 and 11 as a percentage of sherd count

Function and Status (See Tables 11 and 12, below)

There is a single sherd of imported samian from Central Gaul of undiagnostic form and very few other fine, table wares but a predominance of locally produced coarse wares suggesting that the occupants of this area were of relatively low status. The bulk of the locally manufactured pottery consists of greyware (GREY) sherds, together with oxidised products (OX) and grog-tempered vessels (GROG). However, the distinctive pink, grog-tempered ware (PIGR) noted on other sites is rare as are shell-tempered wares (SHEL and SMSH). Early, native tradition fabrics (NAT) are also uncommon as are fine grey (GFIN) and micaceous greywares (GMIC). The latter denote the lower status of the site the

occupants using more utilitarian table wares rather than fine, colour-coated examples. Apart from a sherd of coarse tempered cream ware (CRSA), this category is absent from this section.

Wares transported from other production areas are also uncommon with Oxfordshire products being most well-represented, followed by two sherds from the Nene Valley manufacturing sites and a single sherd from the Verulamium kilns located in the St Albans area.

Fabric	Sherds
CC	4
CRSA	1
GFIN	7
GMIC	3
GREY	116
GROG	45
GRSH	1
GYBN	6
MOOX	7
MOOXR	3
MORT	3
NAT	5
NVCC	2
OX	72
PIGR	1
SAMCG	1
SHEL	3
SMSH	5
VRW	1

Table 11: The Roman pottery fabrics from Construction Section 5 (CS5)/Sites 10 and 11 by sherd count

The emphasis of this assemblage lies with the preparation and cooking of food. This is borne out, to a certain extent, by the relatively high presence of mortaria. However, with such a small assemblage the statistical evidence is restricted. Most of the kitchen wares are grog-tempered vessels including an unusual form with a pierced base which may have served as a strainer (Drawing 23). Greyware cooking pots and shell-tempered plain-rimmed dishes are also evident (see Drawing 24). Storage vessels are represented by several large jars in GROG and storage vessels in the same fabric, for example Drawing 22. Table to kitchen wares, the bulk of the assemblage, include several curved-rimmed jars, wide-mouthed bowls and plain-rimmed dishes in locally made grey wares. Undiagnostic sherds of oxidised ware represent the remnants of other vessels which would have been used for the same purpose.

Type	Sherds	%
Untyped	92	22.15
Drinking	18	5.39
Table wares	8	2.99
Table/kitchen	93	22.50
Kitchen	33	11.53
Mortaria	13	4.54
Storage	29	10.13

Table 12:- The function of the Roman pottery from Construction Section 5 (CS5)/Sites 10 and 11 as a percentage of the sherd count

Catalogue

21 A fine grey ware plain-rimmed bowl (GREY) which has been heavily burnt of probable mid second to early third century date - Site 11, Context 524.

22 A wheel-finished, large storage jar with a constricted neck in a grog-tempered fabric (GROG). The rim is very similar to that illustrated in Marney, 1989, fig 40, no 51 from the Caldecote kiln II, dated from the late first to the mid second century. - Site 11, Context 555.

23 The base of a probably handmade jar which has been pierced after firing and may have served as a strainer from a context containing post-Roman wares. A similar vessel is noted in Marney, 1989 (fig 37,

no 84) in a local Belgic grog-tempered fabric (BEGR - group 46) of mid to late first century date. - Site 11, Context 510.

24a A small, plain-rimmed dish in South Midlands shell-tempered ware (SMSh) with slight rilling on the exterior surface, similar to that illustrated in Marney, 1989, fig 26, no 39, which she suggests is largely fourth century in date. - Site 11, Context 520.

Summary of the Roman pottery assemblages from Construction Sections 13 and 16/Sites 22, 23, 25, 26, 27, 28

These two sections account for the bulk of the Roman pottery from the length of the pipeline, in particular CS13/Site 22 which produced 2566 sherds. Section 16 consists of 1683 sherds, including scraps from samples, and 1666 excluding the latter. The sections are relatively closely associated geographically but produced assemblages of different dates. Nevertheless there is some continuity of fabrics and forms.

Construction Section 13/Sites 22 and 23

This large assemblage consists of 153 individual contexts. Despite the large size there are only five contexts with over 90 sherds, all from site 22 (1306: 225 sherds; 2730:163 sherds; 273: 168 sherds; 2753: 132 sherds; 2760: 90 sherds) and 17 with over 30 sherds. The remaining groups are very small and the fragments are frequently abraded. In addition several of the contexts, including the largest group, 1306, contain redistributed material. Although 1306 is dated by the latest sherds from the later third to the early fourth century, it also includes a single sherd of post-medieval pottery as well as sherds of earlier Roman pottery. There are several sherd links (six groups) which provide further evidence for the redistribution of material, for example 2730 with 2731, 2732, 2760, and 2761. These groups are also of similar date suggesting that these layers were contemporary.

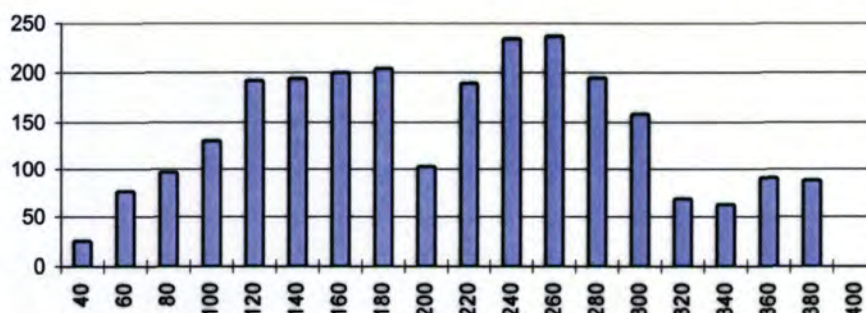
Dating (See Chart 1, below)

On order to present an overall view of the dating for this large assemblage the dates of each of the contexts have been refined to individual date spans and the totals presented as a value of the total sherd count. The following chart (Chart 1) shows that the occupation of this area ranges from the Late Iron Age to the end of the Roman period with bimodal peaks during the mid to late second and mid to late third centuries. In addition there are three sherds of flint-tempered ware from contexts 1365, 2756 and 2860, which suggests that the area was also occupied during the Prehistoric period. Evidence for the early late Iron Age to early Roman date is provided by sherds of handmade, grog-tempered ware in the Belgic tradition (BEGR - Marney group 46), and local shell-tempered wares (SHEL) for example the illustrated native-style cooking pots (BEGR - Drawings 24 and 25; SHEL - Drawing 84). There is also a high proportion of other handmade grog-tempered wares (GROG) which may fit into the BEGR category including a sherd with scored decoration (Drawing 55).

Evidence for the early Romanization of this area is provided by sherds of South Gaulish samian which was imported during the first century from South Gaul. The total is small but includes a sherd from a mould-decorated bowl, almost certainly form Dr29, which is usually dated to the pre-Flavian period. Samian ware from Central Gaul which was imported from the early to the late second century provides externally dated evidence for occupation during this period.

Chart 1

Plotdate of the Roman pottery from CS13 (sherd values)



There are numerous examples of channel-rimmed jars (JCHR) in locally produced grog, sand and shell-tempered wares. The early examples have sharply tooled channels whereas the later types, occurring

into the mid to late second century, tend to have more rounded rims and the channel is barely represented (Marney, 1989, p58).

Mid to late third century wares include examples of wide-mouthed bowls in GREY, for example: Drawings 38, 39; and 40. There is also an example with a twisted rim which may be a 'second' in a sandy, grey-brown variant (GYBN - Drawing 61). Other forms of this date include two fine examples of Nene Valley colour-coated beakers (NVCC - Drawings 69 and 68).

Wares which provide evidence for very late Roman occupation are represented by sherds from a roller-stamped Oxfordshire colour-coated bowl (OXRC - Drawing 82) and fragments of a jar with an undercut rim in Portchester 'D' ware (PORD - Drawing 83).

Function and Status (See Tables 13 and 14, below)

In contrast to the previous sites this assemblage produced a higher proportion of imported wares. This may be due to the relatively smaller size of the groups. Nevertheless the presence of more amphorae, Dressel 20 (DR20) and a Gauloise wine amphora (GAU4), together with a larger incidence of samian ware suggests that this area was occupied by a population of moderately high status.

Romano-British imported products also appear to be more highly represented, in particular products of the Nene Valley kilns. However, this is due to the numerous fragments from two single vessels, the colour-coated beakers mentioned above. This is not the case with wares imported from the Oxfordshire kilns which are particularly well-represented (MOOX, MOOXR, OXPA, and OXRC), or those from the kilns at Verulamium (VRW). A small amount of material was transported from the south-west represented by sherds of BB1 from Dorset and fragments of a jars in Portchester 'D' ware.

Local wares continue to be the principle components of the assemblage, predominantly grey wares (GREY and GYBN), and then shell-tempered products of the Harrold kilns (SMSh). Native tradition wares (NAT) and grog-tempered wares (BEGR and GROG) reflect the early date of a high proportion of this assemblage, whilst later wares with this tempering (PIGR) are small in comparison. Other local wares include a substantial proportion of unsourced oxidised wares (OX) and fine grey table wares (GFIN).

Fabric	Sherds
BB1	3
BB2	2
BEGR	35
CALC	1
CASH	3
CC	65
COAR	11
CR	36
CRSA	11
DR20	4
FINE	6
FLIN	3
GAU4	1
GFIN	58
GLAZ	1
GREY	1056
GROG	130
GYBN	342
GYWQ	4
MHAD?	3
MOOX	2
MOOXR	2
MORT	1
NAT	13
NVCC	63
NVGW	4
ORAN	53
OX	259
OXPA	3
OXRC	24
OXWS	4
PIGR	12
PINK	1
PORD	5

Fabric	Sherds
RC?	1
SAMCG	23
SAMLN	3
SAMSG	11
SHEL	5
SMSH	257
VRW	42
TOTAL	2566

Table 13: The Roman pottery fabrics from Construction Section 13 (CS3)/Sites 22 and 23 by sherd count

The overall functional analysis for this section is also noticeably different to the previous sections, which reflects the dating of the assemblage and the status of the occupants from this area, in particular the much higher percentage of drinking vessels and, to a lesser extent, liquid holders. The latter reflects the early date of a much of the assemblage as flagons are less common in the later Roman period, as also a higher degree of Romanization. This is also the first section to produce evidence of wine imported from Southern Gaul. More unusual, is the comparative rarity of fine table wares and mortaria. One, unsourced, mortarium is notable for the maker's stamp imprinted on the flange which, because of abrasion, has not been identified (Drawing 67). The lack of these wares is mainly due to the high presence of locally produced wares which form the bulk of the kitchen and kitchen/table wares. The catalogue of illustrations (below) demonstrates the range of these utilitarian wares which include a high percentage of channel-rimmed jars, in a variety of fabrics, and a range of greyware and grey-brown products, including a number of wide-mouthed bowls.

Type	Sherds	%
Untyped	864	33.71
Amphorae	5	0.19
Drinking	253	9.87
Liquid holders	88	3.43
Table ware	88	3.43
Table/kitchen	711	27.74
Kitchen	436	17.01
Mortaria	19	0.74
Storage	99	3.86

Table 14: The function of the Roman pottery from Construction Section 13 (CS13)/Sites 22 and 23 as a percentage of the sherd count

Catalogue

24b A handmade, cooking pot in the Belgic style of Late Iron Age to early Roman date, but from a context broadly dated from the first to early second century, in a grog-tempered fabric (BEGR) - Site 22, Context 2930.

25 As above - Site 22, Context 2930.

26 A large jar in the same fabric as above - Site 22, Context 2930.

27 A wheel-made beaker with an everted rim and high shoulder with groups of barbotine dots arranged in a diamond pattern in a fine grey fabric (GFIN). This vessel type is of Flavian date but from a context containing pottery of mixed date and dated by the latest sherds to the mid to late second century - Site 22, Context 2753.

Nos 28 - 54 are all in greyware fabrics (GREY)

28 A greyware jar (GREY) with a defined, channel rim from a context dated from the early to mid second century - Site 22, Context 2787.

29 As above with a double channel rim - Site 22, Context 1363.

30 As No 28 from a mid to late second century context - Site 22, Context 2752.

31 As No 28 and paralleled in Marney, 1989, fig 39 no 25 from the Caldecote kilns - Site 22, Context 1315.

- 32 A high-shouldered necked jar featuring a cordon at the neck with burnishing on the rim and at the base from a context dated from the mid to late first to the early second century - Site 22, Context 1311.
- 33 A large example of the above with a low sloping shoulder from a context dated from the mid second to the early third century - Site 22, Context 3003.
- 34 A greyware necked jar with a high, burnished shoulder from a context dated from the first to the early second century - Site 22, Context 2926.
- 35 As above - Site 22, Context 2930.
- 36 As No 33 , but lacking the burnishing from an early to mid second century context - Site 22, Context 2759.
- 37 A necked jar with a cordon at the neck and a groove at the burnished shoulder in greyware from a mid to late second century context - Site 22, Context 2753.
- 38 - 40 Wide-mouthed jar/bowls, with high burnishing on Nos 38 and 39, from contexts dating from the early to mid third century, and similar to Marney, 1989 fig 30, no 4 - Site 22, Contexts 2731/2732/2760/2761.
- 41 A large jar with a grooved everted rim and grooves at the shoulder from a context dated from the early to mid third century - Site 22, Context 2769.
- 42 The base of a which was pierced pre-firing and may have served as a strainer from a context dated to the mid third century - Site 22, Context, 2731.
- 43 A small everted-rimmed jar which appears to have been handmade from a third century context - Site 22, Context 1335.
- 44 A deep flanged bowl from a context dated from the mid second to the early third century - Site 22, Context 3003.
- 45 A straight-sided flanged bowl from a contest dated from the later first to the mid second century - Site 22, Context 2997.
- 46 As No 44, above with burnishing on the edge of the rim - Site 22, Context 3003.
- 47 A round-rimmed, flanged bowl highly burnished on the exterior and interior in the style of wheel made black-burnished ware (BB2, Gillam type 225), from and early to mid third century context - Site 22, Context 2760.
- 48 A flat-rimmed bowl with vertical burnishing on the exterior from a context containing pottery of mixed dates and dated from the mid to late fourth century - Site 22, Context 1321.
- 49 A bowls with a low bead and flanged rim from an early to mid third century context - CS13, 2760.
- 50 As above with a burnished interior and exterior - Site 22, Context 1325.
- 51 As above - CS13, 1348.
- 52 A bead and flanged bowl from a context dated from the later third to the fourth century - Site 22, Context 1319.
- 53 As above - Site 22, Context 2730.
- 54 A triangular-rimmed dish in the style of black-burnished ware 2 (BB2) with a burnished decoration of intersecting arcs from a context dated from the mid to late second century - Site 22, Context 2752.
- 55 A flat fragment of a large grog-tempered jar (GROG) with scored decoration of Late Iron Age date - Site 22, Context 2854.
- 56 As above with incised decoration as Marney, 1989, fig 5 no 13 where it is dated from the mid to late first century - Site 22, Context 2756.
- Nos 57 - 66 are all in a greyware fabric with noticeable brown-grey surfaces
- 57 An unusual high-shoulder everted-rimmed jar with grooving at the shoulder from a context dated from the later third to the fourth century - Site 22, Context 1319.
- 58 A rounded-rimmed cooking pot from a third century context - Site 22, Context, 2730.

- 59** A channel-rimmed jar with a rounded rim and slight channelling from a context dated from the mid to late third century - Site 22, Context 2986.
- 60** A simple curved-rimmed jar with a prominent cordon at the neck and burnished at the rim and shoulder from a mid to late second century context - Site 22, Context 2753.
- 61** A wide-mouthed jar with a twisted rim (probably a waster) and burnished over the rim and shoulder from a mid to late second century context - Site 22, Contexts 2752/2753.
- 62** A reeded-rimmed bowl from a context dated from the early to mid second century - Site 22, Context 2702.
- 63** A flanged bowl with burnishing beneath the rim, dated as above - Site 22, Context 2702.
- 64** A bead and flanged bowl from a context dated from the later third to the fourth century - Site 22, Context 2933.
- 65** A low bead and flanged bowl, dated as above - Site 22, Context 1319.
- 66** A plain-rimmed dish with burnishing on the exterior from a third century context - Site 22, Context 1335.
- 67** An unsourced mortarium (MORT) with a low bead and flange stamped with a makers mark inside a cartouche (unidentified) from a mid second to third century context - Site 22, Context 2745.
- 68-69** Funnel rimmed, folded beakers in Nene Valley colour-coated ware (NVCC) of mid third century date - Site 22, Context 2731.
- 70** A jar with a bi-furcated rim in NVCC with rouletting at the lower edge from a fourth century context - Site 22, Context, 2935.
- 71** A plain-rimmed dish in NVCC from a context dated from the later third to the fourth century - Site 22, Context 1319.
- 72-78** are in locally produced oxidised fabrics
- 72** A crudely made flagon in the style of Hoffhiem flagons from a context dated from the first to early second century - Site 22, Context 2930.
- 73** Similar to above from a context dated from the early to mid second century - Site 22, Context 3011.
- 74** A disc-rimmed flagon from contexts dated from the early to mid third century - Site 22, Contexts 2731/2732 and 2760.
- 75** A cornice-rimmed beaker with rouletting on the low shoulder from a context dated from the later first to the mid second century - Site 22, Context 1997.
- 76** A curved-rimmed beaker with linear stabbed/combed rouletting delineated by grooved at the low shoulder from a third century context - Site 22, Context 1335.
- 77** A channel-rimmed jar with rilling at the shoulder from a context dated from the early to mid third century - Site 22, Context 1348.
- 78** A curved-rimmed bowl with cordons and grooves at the shoulder from a context broadly dated from the first to second century - Site 22, Context 2924.
- 79** An abraded example of a plain-rimmed bowl from a fourth century context: 2936
- 80** A red-painted bowl in Oxfordshire Parchment ware (OXPA - Young Type 24 -c AD 240 - 400) from a late third to fourth century context - Site 22, Context 2777.
- 81-82** in Oxfordshire red colour-coated ware
- 81** A bowl in the style of samian form Dr38 which has been pierced after firing from a context dated from the later third to the fourth century - Site 22, Context 2777.
- 82** An everted-rimmed bowl with demi-rossette, roller-stamped decoration from a mid fourth century context - Site 22, Context 2985.
- 83** A jar with an undercut rim in Portchester 'D' ware from a mid to late 4th century context - Site 22, Context 1321.

84 A simple, handmade cooking pot in native tradition in shell-tempered ware (SHEL) from a context dated from the Late Iron Age to, at least, the mid first century - Site 22, Context 2758.

85-90 are all in South Midlands shell-tempered ware (SMSh)

85 An everted-rimmed jar from an early to mid second century context - Site 22, Context 2702.

86 A fine, channel-rimmed jar with rilling at the shoulder with a pre-fired maker's mark below the rim. A similar example is noted in Marney, 1989 fig 24, no 6, where it is dated predominately to the second century - Site 22, Context 1348.

87 A curved-rimmed jar with a large cordon at the neck above a shoulder delineated by a groove from a context dated from the late second to the early third century - Site 22, Context 1325.

88 A simple curved-rimmed jar from contexts dated the early to mid third century - Site 22, Contexts 2731/2732 2760/2761.

89 A jar with an upright curved rim delineated on the body with a series of grooves from a context dated from the later first to the second century - Site 22, Context 2799.

90 A large reeded-rimmed bowl similar to Marney, 1989 fig 26, no 38, where the form is unprovenanced, but from a context dated here from the second to the fourth century - Site 22, Context 1359.

Construction Section 16/Sites 24, 25, 26, 27, 28

The assemblage from this section is quite different to that from CS13 and the majority of the other sections, especially in respect of the dating (see below) and, consequently reflects the function and status of the site. Although this section produced a large assemblage there are only nine contexts that produced over 40 sherds, with the largest being layers 1608 (202 sherds - mid to late third century), which produced an assemblage of mixed date including early Roman wares, and 2651 (157 sherds - mid first century). There are several sherd joins between 1608 and other contexts (1609, 1660, and 1671) which demonstrates the redistribution of the material. Other sherd links occur between 1668 and 2610, and 2600 with 2694. A number of the smaller contexts consist of flaked and fragmented sherds, which is mainly due to the friable nature of much of the early grog and shell-tempered wares.

Dating (see Chart 2, below)

It is clear from Chart 1, below that the dating emphasis for this section lies in the early Roman period. Some of the fabrics may be of Late Iron Age date, as the pottery tradition of early native wares extends into the mid first century, and possibly later (BEGR, GROG, and NAT), for example a butt-beaker in a grog-tempered fabric (GROG - Drawing 100). Other sherds which are more definitely Late Iron Age in date are illustrated by sherds of handmade jars with slashed/combed decoration in a coarse native tradition fabric (NAT - Drawings 120 and 118). Therefore it is likely that there was habitation in this area before the Conquest Period.

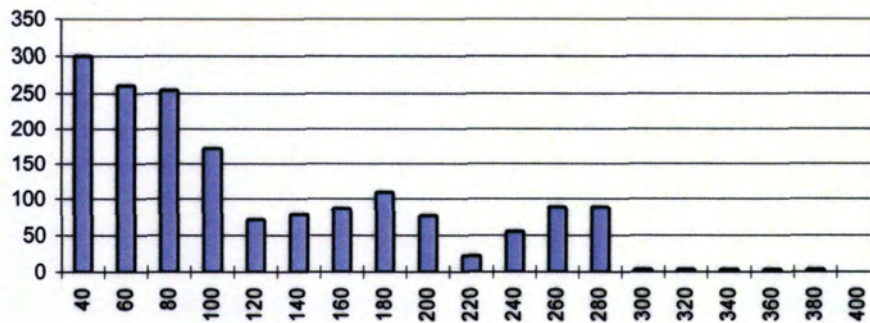
Externally datable evidence for early Roman occupation is provided by imported, South Gaulish samian ware (SAMSG) including sherds of cup form, Ritterling 9, which is pre-Flavian in date and rare after *ca* AD 60. There is also an early flagon from the Verulamium kilns (VRW, FHOFF - Drawing 135) which is also rare after *ca* AD 60. Sherds of second century samian from the Central Gaulish kilns (SAMCG) are more common than the first century import, and attest to occupation during the mid Roman period. Evidence for late Roman occupation is rare consisting of a few sherds of Nene Valley colour-coated ware (NVCC), three examples of mortaria from the Oxfordshire kilns (MOOX), and a single sherd of Much Hadham ware (MHAD).

Function and Status (See Tables 15 and 16, below)

Imported wares include fragments of Dressel 20, olive oil amphorae (DR20), a rim of an unsourced type (Drawing 91), and samian ware from South, Central and Eastern Gaul (SAMSG, SAMCG, and SAMEG). Although they are relatively uncommon, their presence suggests that the occupants of this area were of moderately high status and had access to markets or entrepreneurs supplying these goods.

Chart 2

Plotdate of the Roman Pottery from CS16 (sherd values)



Fabric	Sherds	%
AMPH	1	0.06
BBS	1	0.06
BEGR	18	1.07
CALC	1	0.06
CC	2	0.12
COAR	12	0.71
CR	16	0.95
DR20	10	0.59
FINE	5	0.30
GLAZ	29	1.72
GREY	518	30.78
GROG	394	23.41
GRSH	5	0.30
GYBN	104	6.18
HWC	4	0.24
LOXI	4	0.24
MHAD	1	0.06
MICA	1	0.06
MOCO?	1	0.06
MOOX	3	0.18
MORT	1	0.06
NAT	80	4.75
NVCC	2	0.12
NVCR	10	0.59
ORAN	10	0.59
OX	181	10.75
OXRC?	1	0.06
OXWS	2	0.12
PIGR	3	0.18
PINK	2	0.12
RC	3	0.18
SAMCG	27	1.60
SAMEG	3	0.18
SAMSG	8	0.50
SHEL	4	0.24
SMSH	150	8.91
VRG?	13	0.77
VRW	53	3.15
TOTAL	1683	100.00

Table 15: The Roman pottery fabrics from Construction Section 16 (CS16)/25, 26, 27 and 28 by sherd count

Romano-British wares that were transported from adjacent production areas include small quantities from the Nene Valley, Oxfordshire kilns, and a possible example from the Much Hadham kilns in Essex. These are later Roman products, but there is a notable increase in the presence of early to mid

Roman wares when compared to the assemblages from previous sections, namely vessels manufactured in the Verulamium area (St Albans), Verulamium Region White (VRW) and grey wares (VRG), together with an oxidised variant (LOXI). There are also a few examples of probable Highgate Wood 'C' ware, including a poppy-head beaker, although Marney 1989, p107 notes that similar products were made in the Upper Nene Valley area. Other fabrics of this date include a mortarium of possible Colchester origin and an abraded flange of an unsourced mortarium with a maker's stamp (see above). Two unusual sherds which also date to this period consist of a beaker in mica-dusted ware, which was too burnt to determine a source, and a fragment of abraded glazed ware, which could be a Roman fabric, but may conceivably be post-Roman in date.

The incidence of locally produced wares is also remarkably different to the assemblages from other sections with a far smaller proportion of greywares (GREY and GYBN) and a higher percentage of grog-tempered wares (BEGR, GROG, and GRSH). This reflects the early date of much of the assemblage. The later grog-tempered product (PIGR) is barely represented, but there is a substantial proportion of shell-tempered ware (SMSH), which ranges in date from the first to the fourth centuries. Local, oxidised wares are also well-represented.

Type	Sherds	%
Untyped	364	21.62
Amphorae	11	0.65
Liquid holder	66	3.92
Drinking	128	7.61
Table ware	42	2.5
Table/kitchen	394	23.41
Kitchen	610	36.24
Mortaria	6	0.35
Storage	62	3.68

Table 16: The function of the Roman pottery from Construction Section 16 (CS16)/Sites 25, 26, 27 and 28 as a percentage of the sherd count

With the exception of a rim from an unsourced amphora (Drawing 91), all the incidences of amphorae are vessels containing olive oil from Baetica. Liquid holders are quite well represented and are mainly early Roman forms, for example the Hoffheim flagon in VRW (Drawing 135), and also a late Roman type, a disc-necked example in NVCR (Drawing 121). There is a high percentage of drinking vessels, but this group includes 60 sherds from a butt-beaker in grog-tempered ware (GROG - Drawing 100). There is a wide range of this type of vessel including samian cups and poppy-head beakers with barbotine decoration in fine grey wares, a mica-dusted example and a high-shouldered everted rimmed beaker in cream ware (CR- Drawing 94) of Flavian date. These vessels would have mainly been used at the table. Other table wares consist mainly of imported samian ware, mainly bowls including a fine mould-decorated example. Other types include fine, greyware dishes and plates and colour-coated bowls and plates. This suggests that the inhabitants were wealthy enough to afford these products.

In comparison to the other sections, there is a higher percentage of kitchen wares from CS16. This is mainly due to the early nature of much of the pottery which was predominantly locally made, native tradition, grog and shell-tempered wares, for example cooking pots in BEGR (Drawing 92), GROG (Drawing 101), and an unusual example which was pierced at the neck before firing in a grog and shell-tempered fabric (Drawing 111). Channel-rimmed jars which would have been used for the same purpose are very well-represented, and occur in a variety of fabrics, for example Drawings 113, 114; and 115 in GYBN, and several examples in SMSH (Drawings 128-131). There are also two fine examples of large bead-rimmed bowls which are later Roman products in SMSH (Drawings 133-4).

The table to kitchen wares, on the other hand, are predominantly Romanized fabrics such as GREY, GYBN, and OX which mainly occur from the later first century. These include curved-rimmed and wide-mouthed jars and bowls in greyware, and jars and bowls in oxidised ware. Mortaria, which would also have been used in the kitchen, are rare, and mainly products from the Oxfordshire kilns. Storage vessels are slightly more common and are represented by large jars or storage jars mostly in grog and shell-tempered wares.

Catalogue

91 An unsourced amphora with a bead lip and collared rim in a fine greyish-cream fabric (AMPH) from a context dated from the late second to the mid third century - Site 27, Context 1608.

92 A bead rim jar with a slight channel on the interior rim, and diagonal slashed decoration on the exterior of the rim in a grog-tempered fabric (BEGR) from a mid to late first century deposit. The form is paralleled in Marney, 1989, fig 35 no 46 - Site 28, Context 1663.

93 An unusual channel-rimmed jar with a cordon at the neck in a coarse granular fabric (COAR) from context dated from the first to second century - Site 28, Context 1663 2617.

94 An everted-rimmed beaker with a high shoulder in a fine cream fabric (CR) from a layer dated from the later first to the early second century - Site 28, Context 2516.

95 A narrow-necked flask in a fine grey fabric (GFIN) with burnishing on the exterior and over the rim, and similar to Marney, 1989, fig 32, no 45, form a late first to early second century context - Site 28, Context 2660.

96 -100 are all in greyware fabrics (GREY)

96 An everted-rimmed beaker in a finer fabric (GREY), burnished on the exterior, from a first to second century context and similar to Marney, 1989, fig 31, no 24 - Site 28, Context 2622.

97 A finely tooled, channel-rimmed jar with a neat rim from a first to early second century context and similar to Marney, 1989, fig 31, no 55 where it is dated from the mid first to early second century - Site 28, Context 1620.

98 An almost complete profile of a channel-rimmed jar featuring a groove on the exterior of the rim from first to early second century context - Site 28, Context 1620.

99 A simple curved-rimmed jar burnished on the exterior and over the lip from a late first to early second century context - Site 28, Context 2660.

100 A most unusual jar with a bead lip and acute shoulder delineated by a pronounced cordon from a late first to second century context - Site 28, Context 2694.

101 - 110 are all in grog-tempered fabrics (GROG)

101a An almost complete profile of a fine butt-beaker with horizontal bands of vertical scored lines from a context dated from the late first to early second century and similar to Marney, fig 38, nos 15/16 from Caldecote kiln 1 where it is dated to the mid first century - Site 28, Context 1660.

101b A bead-rimmed cooking pot with slashed diagonal decoration on the exterior of the rim from a mid first to early second century context and similar to Marney, 1989, fig 34, no 2 where it is in a grog and shell-tempered fabric - Site 28, Context 2696.

102 A tall-rimmed cooking pot with burnishing at the neck and over the rim from an early to mid second century context - Site 28, Context 1612.

103 A channel-rimmed jar with a low sloping shoulder from a late first to early second century context and similar to Marney, 1989, fig 35, no 48 where it is dated from the mid first to early second century - Site 28, Context 1660.

104 A narrow-necked, curved-rimmed jar with a cordon at the neck and a groove on the interior of the rim from a context dated from the Late Iron Age period into the mid first century AD - Site 28, Context 1671.

105 A narrow-necked jar with a large cordon at the neck and groove at the shoulder from a mid first to the early second century context and similar to Marney, 1989, fig 36 no 61 where it is given the same date-range - Site 28, Context 1615.

106 As above from a mid first century deposit - Site 28, Context, 2651.

107 A small everted-rimmed bowl from a mid first century context and similar to Marney, 1989, fig 34, no 17 where it is dated from the first to second century - Site 28, Context 2651.

108 A channel-rimmed bowl with burnished lattice decoration towards the base from a first century deposit - Site 28, Context 2679.

109 A pedestal base from a Late Iron Age to mid first century deposit and similar to those from Caldecote kiln 1 (Marney, 1989, fig 38, nos 10-11) - Site 28, Context 1671.

110 A fragment of a jar with scored decoration in the tradition of Late Iron Age pottery from a mid first century context, - Site 28, Context 2651.

- 111 A cooking pot with a slight groove on the interior lip and a hole pierced pre-firing at the neck in a grog and shell-tempered fabric (GRSH) from a mid first century deposit - Site 28, Context 2651.
- 112-115 are in a sandy fabric with distinctive grey/brown surfaces (GYBN)
- 112 A fragment of an everted-rimmed beaker from an context dated from the Late Iron Age period into the mid first century AD - Site 28, Context 2668.
- 113 A channel-rimmed jar with a neat rim from a context dated to the mid first century - Site 28, Context 3197.
- 114 As above with a thickened rim, similar to Marney, 1989 fig 31, no 36 - Site 28, Context 2651.
- 115 As above from a context dated from the mid to late second to the early third century containing pottery of mixed dates - Site 28, Context 2600.
- 116-120 are in a sandy, native tradition fabric (NAT)
- 116 The rim of a butt-beaker from a context dated from the later first to the early second century - Site 28, Context 1660.
- 117 A native tradition cooking pot from a context dated from the later second to early third century, but containing pottery of mixed date - Site 28, Context 2600.
- 118 Sherds from a handmade jar with rough, combed decoration from a context dated to the mid to late first century - Site 28, Context 3196.
- 119 A fragment from a narrow-necked vessel with combed decoration from a context dated to the mid to late first century. The decoration is paralleled in Marney, 1989, fig 38, no 15, where it is dated to the mid first century - Site 28, Context 1692.
- 120 A sherd with roughly combed grooves from a context dated from the Late Iron Age period to the mid first century - Site 28, Context 3122.
- 121 A disc-necked flagon in Nene Valley Cream ware (NVCR) from a probable mid third century deposit - Site 28, Context 2625.
- 122-125 are in oxidised fabrics
- 122 A fragment from a ?handmade beaker with an everted rim from a context dated to the mid first century - Site 28, Context 2651.
- 123 A channel-rimmed jar with a bulbous rim from a context dated from the first to the early second century - Site 28, Context 1620.
- 124 A lid-seated bowl with a curved rim a wide bulbous body from a context dated to the mid first century - Site 28, Context 2651.
- 125 A fragment of a maker's stamp (unidentified) from a context containing later first to early second century pottery - Site 28, Context 3116.
- 126 - 134 are in South Midlands shell-tempered ware (SMSh)
- 126 A simple-rimmed cooking pot from a context dated from the late second to the early third century, but containing other pottery of mixed date. It is similar to Marney, 1989, fig 24 no 2 where it is dated from the mid first to the early second century - Site 28, Context 2600.
- 127 A cooking pot with a slight groove on the interior lip and diagonal slashed decoration on the exterior from a context dated from the mid to late third century, but containing pottery of mixed date. It is similar to Marney, 1989, fig 34 no 2 - Site 27, Context 1608.
- 128 A channel-rimmed jar with a hole pierced before firing at the neck from a mid first century context and similar to Marney, 1989, fig 24, no 5 where it is dated from the first to the early second century - Site 28, Context 2651.
- 129 A channel-rimmed jar from a context dated from the first to the early second century - Site 28, Context 1620.
- 130 As above from a context containing pottery of mixed date but dated by the latest sherds from the mid to late second to the early third century. It is similar to Marney, 1989, fig 24, no 2 where it is dated to the first century - Site 28, Context 2600.

131 A multiple grooved, channel-rimmed jar from a mid to late third century deposit containing pottery of mixed date and similar to Marney, 1989, fig 24, no 7, where it is dated to the first century - Site 28, Context 1608.

132 A flanged-rimmed bowl from the same context as the above, and similar to Marney, 1989, fig 26, no 33 where it is dated from the mid to late second century to the later third or fourth century - Site 28, Context 1608.

133 A large, bead-rimmed bowl from a context dated from the mid to late second to the early third century with pottery of mixed date. It is similar to Marney, 1989, fig 26, no 36 - Site 28, Contexts 2600/2694.

134 As above from a context dated to at least the mid second century - Site 28, Context 2694.

135 A Hoffhiem flagon with a twisted handle, and the rim appears to have been scuffed during firing from a context dated to the pre-Flavian period - Site 28, Context 1614.

136 The footring of a probable cup in Central Gaulish samian ware (SAMCG) with a potter's stamp (unidentified), from a context dated from the later third to the early fourth century containing pottery of mixed date - Site 22, Context 1306, SF 5077

137 As above from a context dated to the mid to late third century, containing pottery of mixed date - Site 28, Context 1608, SF 6014

Further Work

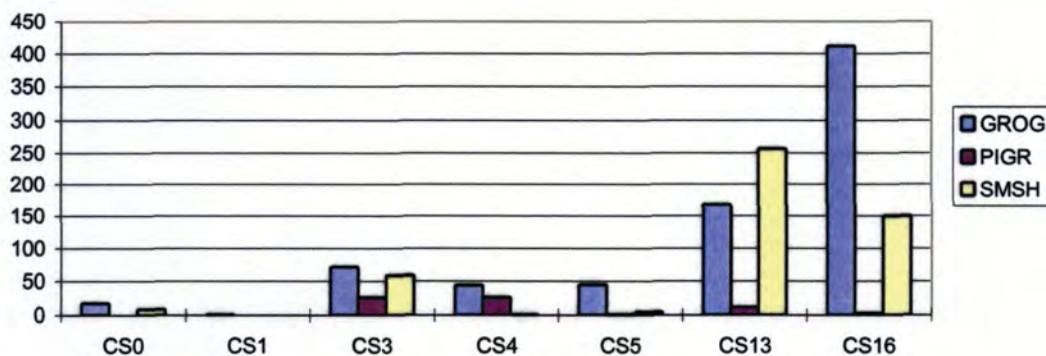
The above report gives a comprehensive overview of the dating, condition, status and function of the individual sections of the pipeline based on the excavated Roman assemblages. This includes a detailed study of the principal Belgic and Roman fabrics and forms together with appropriate illustrations. From the above, it can be seen that the assemblages cover the whole range of the Roman period and includes large body of material, of particular interest, which dates to the Conquest period (Construction Section 16). In view of this, it is suggested that further work on the local fabrics would be of benefit, in particular the grog (BEGR and GROG) and shell-tempered wares (SHEL and SSMH), together with those of native tradition (NAT).

The samian ware, in particular the stamped vessels, and the stamped mortaria should be viewed by specialists in order to refine the dating and source of these fabrics.

As mentioned in the introduction, the assemblage as a whole is valuable, as are all pipeline groups, as they provide evidence for the distribution of Roman fabrics over a wide topographical area, in particular distinctive locally produced wares and the products of nationally recognised kiln centres. Charts 3 and 4, below illustrate the potential of the material from SAY97. Clearly the larger sites produced more material, and the totals are also influenced by the date range of the pottery. Nevertheless, it seems that PIGR has a more westerly distribution and SSMH is more common on sites towards the east of the pipeline.

Chart 3

Distribution of Main Local Wares from SAY97 by sherd count

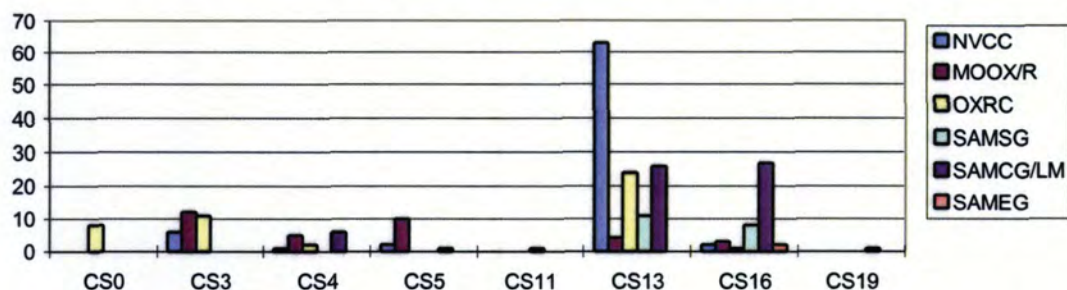


The nationally distributed finewares are likely to be indicative of status, in particular samian imported from the continent (SAMCG/LM, SAMEG and SAMSG). The proportions also reflect the size and date

of the assemblages. However, they are excellent indicators of the area over which production centres and/or entrepreneurs marketed and transported their goods.

Chart 4

Distribution of the Main Finewares from SAY97 by sherd count



References

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Abbreviations used in the text

NRFRC The National Roman Fabric Ref Collection

Tomber, R & Dore J, 1998

FABRIC

Fabric Expansion

- AMPH Unsourced amphorae
- BB1 Black burnished ware 1
- BB2 Black burnished ware 2
- BBS Black burnished style
- BEGR Belgic grog-tempered ware
- CALC Miscellaneous calcite-gritted ware
- CASH Miscellaneous calcite/shell- gritted ware
- CC Miscellaneous colour-coated ware
- COAR Miscellaneous coarse-tempered ware
- CR Cream ware
- CRSA Cream sandy ware
- DR20 Dressel 20 amphorae
- FINE Miscellaneous fine ware
- FLIN Flint-tempered ware
- GAU4 Gauloise 4 amphorae
- GFIN Fine greyware
- GLAZ Glazed ware
- GMIC Fine grey micaceous ware

References

- NRFRC DOR BB 1
- NRFRC BB 2
- Marney, 1989 46
- NRFRC BAT AM 1 & BAT AM 2
- NRFRC GAL AM 1

GREY	Greyware	
GROG	Grog-tempered ware	Marney 46
GRSH	Grog and shell-tempered ware	Marney 45
GYBN	Greyware with distinctive grey/brown surfaces	
GYWQ	Greyware with distinctive white quartz	Marney 28
HWC	Highgate Wood 'C	
LOND	London-type ware	Marney 15
LOXI	Local oxidised ware	Davies et al, 1994 p34
MHAD	Much Hadham ware	NRFC HAD OX
MICA	Mica-dusted ware	Marney 34b/c
MOCO?	?Colchester mortaria	NRFC COL WH
MOOX	Oxfordshire mortaria	NRFC OXF WH
MOOXR	Red-slipped Oxfordshire mortaria	NRFC OXF RS
MORT	Un sourced mortaria	
NAT	Native traditon ware	Silty matrix with grog and organics
NVCC	Nene Valley colour-coated ware	NRFC LNV CC
NVCR	Nene Valley cream ware	
NVGW	Nene Valley greyware	
NVGWC	Nene Valley greyware	Coarse variant
ORAN	Orange ware	Marney 41
OX	Miscellaneous oxidised ware	
OXGR	Oxidised grog-tempered ware	
OXPA	Oxfordshire parchment ware	NRFC OXF PA
OXRC	Oxfordshire red colour-coated ware	NRFC OXF RS
OXWS	Oxfordshire white-slipped ware	NRFC OXF WS
PIGR	Soft pink grog-tempered ware	Marney 2
PINK	Pink ware	
PORD	Portchester 'D' ware	OVW WH
RC	Miscellaneous rough-cast ware	
SAMCG	Central Gaulish samian ware	NRFC LEZ SA 1
SAMEG	East Gaulish samian ware	NRFC RHZ SA & TRA SA
SAMLM	Les Martes de Veyre samian ware	NRFC LMV SA
SAMSG	South Gaulish samian ware	NRFC LGF SA
SHEL	Miscellaneous shell-tempered ware	
SMSH	South Midlands shell-tempered ware	Marney 1
VRG	Verulamium region greyware	
VRW	Verulamium region white ware	NRFC VER WH
FORM	Form Expansion	
18	Samian plate form Dr18	
18R	Samian plate form Dr18 with rouletting	
18/31-31	Samian plate form Dr18/31 or Dr31	
18/31	Samian plate form Dr18/31	
31	Samian plate form Dr31	
27	Samian cup form Dr27	
33	Samian cup form Dr33	
RT9	Samian cup form Ritterling 9	
35	Samian bowl form Dr35	
35/36	Samian bowl form Dr35/36	
29	Samian mould-decorated bowl form Dr29	
37	Samian mould-decroated bowl form Dr37	
45	Samian mortaria form DR45	
A	Amphorae	
B	Bowl	
B31	Bowl imitating samian form Dr31	
B35	Bowl imitating samian form Dr35	

B36	Bowl imitating samian form Dr36
B37	Bowl imitating samian form Dr37
B38	Bowl imitating samian form Dr38
BBR	Bead-rimmed bowl
BCAR	Carinated bowl
BCHR	Channel-rimmed bowl
BCUR	Curved-rimmed bowl
BD	Bowl or dish
BEV	Everted-rimmed bowl
BFB	Bead and flanged bowl
BFBL	Low bead and flanged bowl
BFL	Flanged bowl
BG225	Bowl as Gillam type G225
BGR	Grooved-rimmed bowl
BHEM	Hemispherical bowl
BK	Beaker
BKBB	Butt-beaker
BKBR	Bead-rimmed beaker
BKCOR	Cornice-rimmed beaker
BKCR	Curved-rimmed beaker
BKEV	Everted-rimmed beaker
BKFN	Funnel-necked beaker
BKFO	Folded beaker
BKFOF	Funnel-rimmed folded beaker
BKFOS	Folded beaker with scale decoration
BKFP	Plain-rimmed folded beaker
BKPH	Poppy-head beaker
BKPR	Plain-rimmed beaker
BLS	Lid-seated bowl
BNK	Necked bowl
BPR	Plain-rimmed bowl
BRR	Reeded-rimmed bowl
BTR	Triangular-rimmed bowl
BWM	Wide-mouthed bowl
C	Cup
CD	Cup or dish
CLSD	Closed form
CP	Cooking pot
CPN	Native tradition cooking pot
D	Dish
DFL	Flanged dish
DGR	Grooved-rimmed dish
DPR	Plain rimmed dish
DTR	Triangular-rimmed dish
F	Flagon
FC	Cup-mouthed flagon
FCR	Collared-rimmed flagon
FDN	Disc-necked flagon
FDR	Disc-rimmed flagon
FHOF	Hoffhiem flagon
FS	Flask
J	Jar
JB	Jar or bowl
JBCAR	Carinated jar or bowl
JBCUR	Curved-rimmed jar or bowl
JBK	Jar or beaker

JBKCUR	Curved-rimmed jar or beaker
JBKEV	Everted-rimmed jar or beaker
JBL	Large jar or bowl
JBR	Bead-rimmed jar
JCAR	Carinated jar
JCHR	Channel-rimmed jar
JCUR	Curved-rimmed jar
JEV	Everted-rimmed jar
JL	Large jar
JLS	Lid-seated jar
JMR	Moulded-rimmed jar
JNN	Narrow-necked jar
JS	Storage jar
JUP	Jar with upright rim
JUR	Jar with undercut rim
JWM	Wide-mouthed jar
L	Lid
LBX	Castor box lid
M	Mortaria
M45	Mortaria as samian form Dr45
MB	Mortaria or bowl
MBF	Bead and flanged mortaria
MHK	Hook-flanged rim mortaria
MWS	Wall-sided mortaria
OPEN	Open form
P	Plate
PGB	Gallo-belgic style plate
PPR	Pompeian red-ware style plate
SJ	Storage jar
STR	Strainer
Z	Other unusual form
TYPE	Decoration expansion
B	Burnishing
BAD	Barbotine dot decoration
BAS	Barbotine scroll decoration
BASC	Barbotine scale decoration
BIAP	Burnished pointed intersecting arcs
BVL	Vertical burnishing
BWL	Burnished wavy lines
COL	Combed straight lines
CPS	Compass-scribed decoration
FF	Finger-frilling
GRA	Graffito
HM	Handmade
HM/WF	Handmade or wheel finished
INC	Incised decoration
LA	Burnished acute lattice decoration
LML	Burnished multiple lines
NAME	Maker's stamp
PA	Painted decoration
PAL	Painted line decoration
PCIR	Painted circle decoration
PS	Painted stripes
PO	Painted: other
RCC	Rough-cast clay decoration

RDS	Roller-stamped decoration
RIB	Ribbed decoration
RIL	Rilled decoration
RIV	Rivet
ROUL	Rouletted line
ROUZ	Rouletted zone
SL	Scored lines
SLA	Slashed decoration
STAB	Stabbed decoration
STA	Stamped decoration
STCO	Stamped and combed decoration
STDR	Stamped demi-rosette
SWL	Scored wavy lines
WM	Wheel made

APPENDIX 3
Roman Pottery

Sect.	Cntx	Fabric	Form	Dec	No Vess	Dwg no	Comments	Join	Sherds
0	10	GREY					BS		1
0	10	GROG					BS		1
0	10	OX					BS		1
0	10	OX	BK				SCRAP		1
0	10	SMSH					BS		1
0	10	ZDATE					LI-2		0
0	10	ZZZ					SCRAPPY		0
0	11	GROG					BS ABR		1
0	11	ORAN	BCUR		1	1	RIMS BSS OBV RED FE ABR SURFS LOW SHLDR		39
0	11	ZDATE					2+		0
0	11	ZZZ					SMASH VESS		0
0	14	GREY					BSS SOME ABR		5
0	14	GYBN					BS		1
0	14	PINK					BS FINE		1
0	14	SHEL	CPN?	HM?			BSS SCRAPS		5
0	14	ZDATE					2+		0
0	14	ZZZ					MIX? SOME ABR		0
0	15	CR	F7				BS		1
0	15	GREY	J				BASE		1
0	15	GYBN			1		BASES J		2
0	15	OXRC	B38		1	3	RIMS GIRTH VABR CC LOST		4
0	15	ZDATE					M3-4		0
0	15	ZZZ					MIX? OXRC VABR		0
0	20	GROG		HM?	1		BS SCRAP J		2
0	20	GROG	J		1		BASAL BS BS J WM		2
0	20	ZDATE					RO		0
0	3	CRSA					BS		1
0	3	GROG					BS ABR	8	1
0	3	GROG	JS				BS	8	1
0	3	GROG	JS				RIM		1
0	3	OX					BASE	8	1
0	3	ZDATE					2?/POSTRO		0
0	3	ZZZ					3 SHS MPOT		0
0	5	GROG	BG225				RIM OBV RED FE		1
0	5	ZDATE					LI-2		0
0	6	GREY			1		BSS		2
0	6	ZDATE					RO		0
0	6	ZZZ					PROB 2+		0
0	8	CRSA	J		1		BASES BS J CF FINE VRW		6
0	8	GFIN	B		1		BASE ABR		6
0	8	GREY					BSS		7
0	8	GREY	BWM				RIM		1
0	8	GREY	JCAR				BS		1
0	8	GREY	JCUR		1		RIM FRAGS J		2
0	8	GROG					SCRAP		1
0	8	GROG			1		BSS	3	3
0	8	GROG	J				BS		1
0	8	GROG	JS		1		BSS	3	3
0	8	GYBN	J				BS		1
0	8	OX					BSS SCRAP		2
0	8	OX	JNN	STA	1	2	BSS J RECTANG STA		2
0	8	OXRC?	B35		1	4	RIM BASE BS ABR	3	4
0	8	SMSH	CP?		1		RIM FRAGS SCRAPS		8
0	8	ZDATE					3C+		0
0	8	ZZZ					MIX BWM; ?OXRC LATER SMSH ?M1		0
1	114	GROG		HM?			BS		1
1	114	SHEL					BS SCRAP		1
1	114	SHEL			1		BSS SCRAPS		3
1	114	ZDATE					IA-RO		0
1	114	ZZZ					SCRAPPY		0
2	209	OX					BS		1
2	209	ZDATE					RO		0
2	231	OX					SCRAP		1
2	231	ZDATE					RO		0
3	304	BB1?	CP				RIM V BURNT		1
3	304	CC?	B				BS RED WASH		1
3	304	CR	B				BS ABR		1
3	304	CR	JWM				RIM SOFT FAB MIN GROG	344	1
3	304	GREY					BSS BASES		22
3	304	GREY	BTR				RIM FRAG		1
3	304	GREY	JCUR				RIM		1
3	304	GREY	JWM		4		RIM FRAGS		5
3	304	GROG					BSS		18

APPENDIX 3
Roman Pottery

Sect.	Cntx	Fabric	Form	Dec	No Vess	Dwg no	Comments	Join	Sherds
3	304	GROG	JL				BSS		2
3	304	GROG	JS				BASE		1
3	304	GYBN	J		1		BASES J FE PROM		2
3	304	NVCC	BK	ROUL			BS		1
3	304	ORAN					BSS		9
3	304	OX	BHEM				RIM SHLDR ABR ?OXRC		1
3	304	OX	BWM				RIM VABR		1
3	304	OX	BWM				RIM W CALC GROG		1
3	304	OXRC	B	ROUZ			BS VABR CC LOST		1
3	304	OXRC	B31				RIM VABR CC LOST		1
3	304	SHEL?	JCUR				RIM FRAG SHE LEACHED		1
3	304	ZDATE					4/POSTRO		0
3	304	ZZZ					MIX 10 SHS MED PMED		0
3	306	ZDATE					SOME ABR		0
3	306	ZZZ					PMED		0
3	306	ZZZ					2 SHS PMED		0
3	307	OX					BS VABR		1
3	307	ZDATE					RO/POSTRO		0
3	307	ZZZ					1 SH PMED		0
3	312	GFIN	BK				BS		1
3	312	GFIN	JBK				BS		1
3	312	GREY					BSS		2
3	312	GROG	JL				FLAKE		1
3	312	MOOX	MBF		1		RIM FLANGE FRAGS M22		3
3	312	NVCC	BK				FRESH		1
3	312	OX					BS LFAB		1
3	312	OX	B?				BS VABR		1
3	312	OX					BASE VABR		1
3	312	SMSH					BS		1
3	312	ZDATE					M3-4		0
3	312	ZZZ					MOST SHS ABR EX MOOX		0
3	313	OX					MIX?		0
3	313	ZDATE					BS SCRAPVABR		1
3	317	CR	BFL				RO		0
3	317	CRSA					RIM O.2 Q		1
3	317	GYBN					BS BURNT EXT		1
3	317	OX					BS		1
3	317	OX					BSS		2
3	317	SMSH	JL				BS		1
3	317	ZDATE					M2+		0
3	319	SMSH					SCRAP		1
3	319	ZDATE					RO		0
3	323	GREY					BS		1
3	323	ZDATE					2+		0
3	326	ZDATE					MED+		0
3	326	ZZZ					13 SHS MED PMED		0
3	328	GREY					BSS ABR		2
3	328	GROG					BS COARSE Q		1
3	328	SHEL?					BS LEACHED ORGANICS		1
3	328	ZDATE					ABR		0
3	328	ZZZ					3?		0
3	328	ZZZ					SOME ABR		0
3	329	CC	B31				RIM LWR WALL CC LOST		1
3	329	CC	BK				BS		1
3	329	CC	BK		1		BSS		2
3	329	CC	CLSD	BASC ROUZ	1		BSS BARB SCALES ABR		2
3	329	CC	FDN				RIM UNUS		1
3	329	GREY					BSS		18
3	329	GREY	BWM				RIM NECK		1
3	329	GREY	DPR				RIM		1
3	329	GREY	DPR		1		RIM BASE PROF		4
3	329	GROG					BSS BASE		7
3	329	GROG	JS		17		BSS THICK		4
3	329	ORAN?	B31?		1		RIMS SANDY NO CC		2
3	329	OX					BSS		5
3	329	OX	JCUR				RIM NECK		1
3	329	OX	JEV		1		RIMS BSS SHLDR		3
3	329	OXRC	B38				BS BURNT		1
3	329	OXRC?	J	ROUZ			BS CC LOST		1
3	329	PIGR	JS		1		RIM BSS V LGE VESS		5
3	329	SMSH					BSS		4
3	329	SMSH	J	RIL			BSS		2
3	329	SMSH	JL				RIM		1
3	329	SMSH	JL				RIM FRAG		1

Sect.	Cntx	Fabric	Form	Dec	No Vess	Dwg no	Comments	Join	Sherds
3	329	SMSH	JL	STA		14	RIM NECK STABBED RIM		1
3	329	ZDATE					4C		
3	329	ZZZ					SOME ABR MOST FAIRLY FRESH		
3	334	CRSA			1		BSS		2
3	334	GREY			1		BSS SILTY FAB		3
3	334	ZDATE					2+		0
3	336	GROG					SCRAP		1
3	336	OX					BSS ABR		2
3	336	ZDATE					RO		0
3	336	ZZZ					VABR		0
3	338	GREY					BS		1
3	338	GREY	JCUR				RIM FRAG VABR		1
3	338	OX			1		FRAG		1
3	338	PIGR	JL				BSS		2
3	338	ZDATE					M2-3		0
3	340	CRSA					BS		1
3	340	GFIN	JBK		1		BSS		2
3	340	GREY					BSS		3
3	340	GREY	B				BASE		1
3	340	OX					BS		1
3	340	SMSH					BS ?MED RED BN		1
3	340	SMSH	JEV				RIM FRAG		1
3	340	ZDATE					2+		0
3	340	ZZZ					SOME ABR		0
3	342	GROG					BS		1
3	342	OXGR	BCUR			10	RIM GIRTH FIRED OXID MIN GROG		1
3	342	ZDATE					L1-M2		
3	342	ZZZ					FRESH		
3	344	CR	JWM		1		RIMS SOFT FAB W GROG	304	2
3	344	CRSA	CLSD		1		BASES J		3
3	344	GREY					BSS BURNT		3
3	344	GREY					BSS		5
3	344	GREY	B				BASE		1
3	344	GREY	DPR	B			RIM LWR WALL		1
3	344	GROG					BSS 1 VABR		2
3	344	NVCC	BKFN				RIM FRAG LFAB		1
3	344	NVGW	CLSD				BS		1
3	344	OX					BSS ABR		5
3	344	OX	BWM				RIM		1
3	344	PIGR	JL				BS		1
3	344	SMSH					BSS		2
3	344	ZDATE					ML3-4		0
3	344	ZZZ					SOME ABR MIX? DATE ON NVCC		0
3	346	CR					BS 0.2 Q BURNT		1
3	346	GREY					BSS		3
3	346	GRSH					BS SHEL LEACHED		1
3	346	MOOX	M				BASE DARKER FAB		1
3	346	NVGW					BS		1
3	346	PIGR			1		SCRAPS		2
3	346	ZDATE					M3-4		0
3	346	ZZZ					SOME SCRAPPY SHS MIX?		0
3	350	CR					BS		1
3	350	GREY					BS		1
3	350	GREY	BK				BS		1
3	350	GYBN	BWM				RIM		1
3	350	ORAN					BS BLK SPECKS ?OXFORD ABR		1
3	350	ZDATE					3+		0
3	350	ZZZ					SOME ABR		0
3	354	OX					BSS		3
3	354	PIGR	JL				BS		1
3	354	ZDATE					M2-4		0
3	354	ZZZ					SCRAPPY		0
3	358	GREY					BSS		2
3	358	OX					BS VABR		1
3	358	ZDATE					2+		0
3	358	ZZZ					SCRAPPY ABR		0
3	360	BB1	DPR	B			RIM UNDEC DISTORT DFIS? FRESH		1
3	360	GFIN	BK		2		BSS		2
3	360	GREY					BSS ABR		5
3	360	GROG					BS		1

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Sect.	Cntx	Fabric	Form	Dec	No Vess	Dwg no	Comments	Join	Sherds
3	360	GROG	JL				BS ABR		1
3	360	ORAN	J				BS ABR		1
3	360	OX					BS		1
3	360	OX					SCRAPS ABR		5
3	360	OX	JCUR				RIM SHLDR BURNT ON RIM		1
3	360	SMSH					BSS PALE BN		2
3	360	SMSH			1		BSS BLK		3
3	360	ZDATE					L3-4		0
3	360	ZZZ					SOME ABR		0
3	363	GREY	BFL		1	6	RIM BASE PROF NR COMP		5
3	363	ZZZ					FINE GY FAB FEW INC		
3	363	ZDATE					SMASH FRESH		
3	364	SMSH	JCUR	HM?		13	EM2		
3	364	ZZZ					RIM SHLDR		1
3	364	ZDATE					FRESH		
3	366	VRW	F				2C?		
3	366	ZDATE					BS VABR		1
3	368	GREY	J				I-2C		0
3	368	ZDATE					BASE SMALL Q 0.2 STRING		
3	372	ZDATE					ABR		1
3	372	ZZZ					M2-3		0
3	374	GREY					MED		0
3	374	GYBN					1 SH MED		0
3	374	ORAN					BS		2
3	374	OX	JL		1		BS ABR		1
3	374	ZDATE					BS VABR		1
3	374	ZZZ					RIM BS J ABR		2
3	376	GREY					3C		0
3	376	OX					SOME ABR		0
3	376	ZDATE					BS		1
3	378	GREY					BS		1
3	378	GREY			1		2+		0
3	378	GREY					BSS ABR		5
3	378	GREY	JB		1		BSS J W CALC ?MED		2
3	378	GROG	JS		1	8	BSS SCRAPS		4
3	378	GROG?					BSS ABR		2
3	378	ZDATE					RIMS BSS		4
3	387	JB					BSS ORGANICS FRESH		2
3	387	ZDATE					3+/POSTRO		0
3	390	GREY					BS VABR		1
3	390	ZDATE					RO		0
3	392	GFIN	BK	ROUZ	1		BS		1
3	392	GREY					2+		0
3	392	GYBN					BS		2
3	392	ZDATE					BSS		4
3	392	ZZZ					BS		1
3	394	ZDATE					2+		0
3	394	ZZZ					SCRAPPY		0
3	396	BB1	CP				MED+		0
3	396	DR20	A				13 SHS MED PMED		0
3	396	GREY	BCUR				BS FINE VAR		1
3	396	GREY					BS ABR		1
3	396	GYBN		RIL			BSS		5
3	396	PIGR					RIM		1
3	396	ZDATE					BS		1
3	396	ZZZ					BS ABR		1
3	398	GROG					M2-3		0
3	398	ZDATE					SOME ABR		0
3	2500	OX					BS BURNT		1
3	2500	SHEL		SWL			RO		0
3	2500	ZDATE					BSS		2
3	2508	OX	B				BS ?MED		1
3	2508	ZDATE					RO/POSTRO?		0
3	2509	CC	B?				RIM CRUDE		1
3	2509	CC	BRR				RO		0
3	2509	CC	J		1		BS		1
3	2509	CC?					RIM FRAG ?NVCC VABR		1
3	2509	CR	JBK				BSS CC ONLY INT		2
3	2509	GREY					BS BURNT ABR		1
3	2509	GREY					BS		1
3	2509	GREY	B				BSS FINER FABRIC BASE		8
3	2509	GREY					BSS		15
3	2509	GREY	BFBL			7	BASE		1
3	2509	GREY					RIM GIRTH CF BB1 SILTIER MATRIX		1

APPENDIX 3
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Sect.	Cntx	Fabric	Form	Dec	No Vess	Dwg no	Comments	Join	Sherds
3	2509	GREY	JB				BASE		1
3	2509	GREY	JCUR				RIM SHLDR		1
3	2509	GREY	JCUR		2		RIMS		2
3	2509	GREY	JUR				RIM NECK		1
3	2509	GROG					BASES MIN GROG AS ABOVE		2
3	2509	GROG					BSS SOME MIN GROG FINE		6
3	2509	GROG	JCUR				BUFF FAB		1
3	2509	GROG	JCUR				RIM FRAG		1
3	2509	GROG	JS		3		RIM		1
3	2509	GYBN					BSS THICK		6
3	2509	MOOX	M				BSS		4
3	2509	MOOX	MBF				BS		1
3	2509	MOOX	MBF				RIM FRAG		1
3	2509	MOOX	MBF				RIM		1
3	2509	MOOXR					BS		1
3	2509	MOOXR?	MWS				RIM CC LOST EXT		1
3	2509	NVGW	BFL				RIM FRAG		1
3	2509	ORAN					BSS		3
3	2509	OX					BSS BUFF FINE		6
3	2509	OX	BFL		1		BSS VABR		2
3	2509	OXRC	J	ROUZ			BS ABR		1
3	2509	PIGR	J				BSS THIN WALL		3
3	2509	PIGR	JS		1		BSS THICK		3
3	2509	SMSH					BSS BASE		13
3	2509	SMSH	J	RIL	2		BSS		3
3	2509	SMSH	JCUR		2		RIM FRAGS		2
3	2509	SMSH	JL				BS THICK		1
3	2509	SMSH	JL				RIM		1
3	2509	SMSH	JL				RIM		1
3	2509	SMSH	JS				RIM		1
3	2509	ZDATE					ML4		
3	2509	ZZZ					MIX DATES SOME ABR		
3	2510	CRSA	BK?		1		BSS		2
3	2510	GREY					BSS		6
3	2510	GREY	FS				NECK		1
3	2510	GREY	JBL				BASE		1
3	2510	GROG					BS		1
3	2510	GROG	BWM				RIM FRAG DK WASH?		1
3	2510	GROG	JS				BS		1
3	2510	GYBN	BRR				RIM V LGE VESS		1
3	2510	OX					CAULDRON?		
3	2510	OX	BCAR	ROUZ			BSS		3
3	2510	OX	JCUR				BS ?OXFORD		1
3	2510	OX	JCUR				RIM FRAG		1
3	2510	OX	JCUR				RIM NECK		1
3	2510	OX	JL		1		BASE BS W MIN GROG		2
3	2510	OX	JUR		1		RIMS NECK		2
3	2510	OXRC?	B38				RIM GIRTH ORANGE FAB		1
3	2510	SHEL					CF OXFORD CC LOST		
3	2510	ZDATE					BS ?RPOT		1
3	2510	ZZZ					M3-4/POSTRO		0
3	2511	COAR	JUR	RIL	1	5	SOME ABR 1 SH MED POT		0
3	2511	NVGW	BD		1		RIM NECK V COARSE		3
3	2511	OX					BURNT CF PORD		
3	2511	PIGR	J				BASE FLAKE ABR		1
3	2511	ZDATE					BS		1
3	2511	ZZZ					BS THIN WALL		1
3	2511	ZZZ					4C		0
3	2511	ZZZ					SOME ABR PROB L4		0
3	2512	BB1	CP				BS		1
3	2512	GREY	JBK				BS		1
3	2512	NVGW	CLSD				BS		1
3	2512	OX					BSS		2
3	2512	OX	B		1		BSS SOFT FINE		3
3	2512	OX	J				BASE GREY CORE		1
3	2512	OXRC	BFL?				SCRAPS		3
3	2512	PIGR	JL				BS		1
3	2512	PIGR	JL				BS		1
3	2512	SMSH					BSS		2
3	2512	ZDATE					M3-4		0
3	2512	ZZZ					MOST FRESH		0
3	2513	GREY		LA			BSS		6
3	2513	GREY					BS		1
3	2513	GROG					BS		1

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Sect.	Cntx	Fabric	Form	Dec	No Vess	Dwg no	Comments	Join	Sherds
3	2513	JL			1		BSS		3
3	2513	NVCC	FS	PA		9	RIM BS CR PA LFAB		2
3	2513	OX					BS		1
3	2513	OX			1		BSS VABR ORANGE		3
3	2513	PIGR					BS THIN WALL		1
3	2513	ZDATE			1		M3+		0
3	2513	ZZZ					SOME ABR		0
3	2514	GREY	BWM				RIM ABR NECKED		1
3	2514	SMSH			1		BSS J VABR		2
3	2514	ZDATE					M3+		0
3	2515	GREY	BFB				RIMFLANGE		1
3	2515	GREY	JL				BS THICK		1
3	2515	OX	J				BASE		1
3	2515	SMSH	J				BASE BS		2
3	2515	ZDATE					L3-4		0
3	2516	GREY					BS		1
3	2516	GREY	BWM				RIM FRAG		1
3	2516	GREY	JBK				BS		1
3	2516	ZDATE					3+		0
3	2517	GFIN					BS		1
3	2517	GFIN	BKFN				RIM FRAG		1
3	2517	GREY					BSS BASE		5
3	2517	GREY	CP	LA			BS		1
3	2517	GREY	FC				RIM FRAG HANDLE		1
3	2517	GREY	FS				BS		1
3	2517	GREY	JBKCUR				RIM FRAG		1
3	2517	GROG					BSS ABR		3
3	2517	GROG	JCUR				RIM ABR		1
3	2517	GYBN			1		BSS		2
3	2517	NVCC	BKFN				RIM NECK LT BN FAB		1
3	2517	OX	JL				BS THICK		1
3	2517	SMSH	J	RIL	1		BSS BASE		4
3	2517	SMSH	JUR				RIM FRAG		1
3	2517	ZDATE					L3-4		0
3	2517	ZZZ					MOST FRESH		0
3	2518	GREY	B				BSS ABR		2
3	2518	GYBN					BS		1
3	2518	MOOX?	MBF				RIM FRAG ABR		1
3	2518	ORAN	B				FTM ABR		1
3	2518	OX					BS ABR		1
3	2518	ZDATE					3+		0
3	2518	ZZZ					MOST SHS ABR		0
3	2519	GFIN	JBK				BS		1
3	2519	GREY			1		BSS		2
3	2519	GREY					BSS		5
3	2519	GREY	BBR				RIM		1
3	2519	GREY	JNN				RIM NECK ORANGE CORE		1
3	2519	GROG					BS VABR		1
3	2519	GYBN					BSS		2
3	2519	MOOX	MBF				RIM FLANGE BURNT M22		1
3	2519	OXRC	B?	ROUL			BS CC LOST		1
3	2519	OXRC	B?	STA STR			BS VABR		1
3	2519	PIGR	JS		1		BSS FRESH		4
3	2519	SMSH					BASE		1
3	2519	ZDATE					4C		
3	2519	ZZZ					MOST FRESH EX OXRC		
3	2520	GREY					PROB ML4		
3	2520	GREY					BSS FINE SILTY		3
3	2520	GREY	B				BSS		3
3	2520	GREY	CP	LA			BASE		1
3	2520	GREY		RIL			BS		1
3	2520	GREY					BS COARSE		1
3	2520	MOOX	M				BS		1
3	2520	NVGW	J				BS		1
3	2520	OXPA?	OPEN?	PAL		11	BS RED P		1
3	2520	PIGR	JS			12	RIM AS MARNEY F27 NO1		1
3	2520	SMSH					L2-3		
3	2520	SMSH					BSS		2
3	2520	SMSH	JUR				RIM FRAG		1
3	2520	ZDATE					4C		
3	2520	ZZZ					MOST FRESH		0
3	2521	BB1	CP				BS FRESH		1
3	2521	OX					BSS ABR		2
3	2521	OX	JBK				BS		1
3	2521	ZDATE					M2-4		0

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Sect.	Cntx	Fabric	Form	Dec	No Vess	Dwg no	Comments	Join	Sherds
3	2522	GREY					BS		1
3	2522	ZDATE					RO		0
3	2522	ZZZ					PROB 2+		0
3	2523	CRSA					BS		1
3	2523	GREY					BS		1
3	2523	ZDATE					2-4C		0
3	2524	COAR	J				BS W GROG		1
3	2524	GREY					BSS ABR		2
3	2524	GREY					BSS		2
3	2524	GREY	JCUR				RIM NECK BURNT		1
3	2524	OX					BSS		2
3	2524	OX	BK				BS CF OXFORD BLK SPECKS ABR		1
3	2524	ZDATE					3-4C		0
3	2524	ZZZ					SOME ABR BURNT		0
3	2525	GFIN	JBK				BS		1
3	2525	GREY					BS		1
3	2525	NVGW	BK	ROUL			BS ABR		1
3	2525	ZDATE					L2-3		0
3	2526	CRSA					BS		1
3	2526	GREY					BS		1
3	2526	ZDATE					2-4C		0
3	2527	ZDATE					PMED		0
3	2527	ZZZ					1 SH PMED		0
3	2530	ZDATE					PMED		0
3	2530	ZZZ					1 SH PMED		0
3	2531	GREY	J				BS		1
3	2531	ZDATE					3?		0
4	402	OX	J?				BS		1
4	402	ZDATE					RO?		0
4	403	CR	F		17		HANDLE 2R BSS		4
4	403	CR	JUR				RIM FRAG V UNDERCUT		1
4	403	CRSA	F				BSS		2
4	403	DR20	A		1		BSS		2
4	403	FINE	BK	ROUZ	1		BSS OXIDISED		1
4	403	FINE	BKEV		1		RIMS		2
4	403	GFIN	BK		1		BSS		3
4	403	GFIN	JBK				BSS		2
4	403	GFIN	JNN				RIM SHLDR		1
4	403	GREY					BASES		9
4	403	GREY					BS		1
4	403	GREY					BSS SOME SMALL ABR SHS		70
4	403	GREY	BD	HM?			BS ?BB1 TYPE		1
4	403	GREY	BEV				RIM GIRTH		1
4	403	GREY	BFL				RIM NECK		1
4	403	GREY	BFL		2		RIMS		2
4	403	GREY	BGR		1		RIMS LWR WALL		2
4	403	GREY	BWM				RIM FRAG		1
4	403	GREY	BWM				RIM FRAG		1
4	403	GREY	DGR				RIM NECK		1
4	403	GREY	DGR				RIM		1
4	403	GREY	FS				RIM FRAG		1
4	403	GREY	FS				RIM HANDLE		2
4	403	GREY	JCUR				RIM MIN GROG		1
4	403	GREY	JCUR				RIM		1
4	403	GREY	JCUR		2		RIM FRAGS		2
4	403	GREY	JCUR		2		RIMS COARSE		2
4	403	GREY	JCUR		2		RIMS		2
4	403	GREY	JCUR	HM?			RIM		1
4	403	GROG					BSS		6
4	403	GROG		HM			BSS BURNT		2
4	403	GROG		RIL HM?			BS		1
4	403	GROG	CLSD	HM			BASE		1
4	403	GROG	DPR	HM		15	RIM LWR WALL		1
4	403	GROG	JL				BS		1
4	403	GROG	JL	SLA			BS DIAGONAL SLASH		1
4	403	GROG	JS				BSS THICK		3
4	403	GYBN					BSS BASE		5
4	403	GYBN	JCUR				RIM FRAG		1
4	403	GYBN	JCUR				RIM FRAG		1
4	403	HWC?	JCUR				RIM		1
4	403	LOND	B37	CPS ROUZ		17	RIM LWR WALL		1
4	403	MOOX	MBF		1		RIM BSS BURNT ON RIM M17 240-300		3

Sect.	Cntr	Fabric	Form	Dec	No Vess	Dwg no	Comments	Join	Sherds
4	403	MOOX	MBF?				FLANGE FRAG		1
4	403	MOOXR	M				BASE		1
4	403	NVCC	BK				BASE		1
4	403	NVGW	B				BS		1
4	403	NVGWC	J				BS		1
4	403	OX					BSS		16
4	403	OX	JL				BSS MIN GROG		2
4	403	OX	JS				RIM FRAG		1
4	403	OX	JUR				RIM FRAG		1
4	403	OX	JUR				RIM		1
4	403	OXRC	B31		1		RIMS CC LOST		2
4	403	PIGR	J		1		BSS		10
4	403	PIGR	JS		1		BSS THICK BASE		14
4	403	SAMCG	31?		2		BS FLAKE		2
4	403	SAMCG		33			BS		1
4	403	SAMCG		37	1		BS OVOLO		2
4	403	SAMCG	C?				FLAKE		1
4	403	SMSH					BS		1
4	403	ZDATE					L3-4		
4	403	ZZZ					MIX DATES SOME CONQ? M2C SOME ABR		
4	404	GREY			1		SMALL SHS		2
4	404	ZDATE					BSS FRESH		0
4	404	ZZZ					RO		0
4	404	ZZZ					PROB 2+		0
4	405	OX					BS		1
4	405	ZDATE					RO/POSTRO		0
4	405	ZZZ					1 SH MPOT		0
4	407	OX					BS		1
4	407	ZDATE					RO?		0
4	409	NAT		HM? RIL	1		BSS		2
4	409	ZDATE					IA-M1+		0
4	412	GYBN	JL		1		BSS		3
4	412	ZDATE					RO		0
4	418	GFIN	JBK				BS PINK CORE		1
4	418	GREY					SCRAP		1
4	418	GROG					SCRAP		1
4	418	GROG			1		BSS		2
4	418	ZDATE					LI+		0
4	432	GFIN	JBK				BSS		1
4	432	GREY					BS		1
4	432	GREY	B				BS		1
4	432	GREY	B	BIAP			BS FRESH		1
4	432	GROG		HM	1		BSS ?PREROM		2
4	432	GROG	J		2		BSS ABR		3
4	432	GROG	JL				BS FLAT		1
4	432	PINK	JBK		1		BSS J		2
4	432	PINK	BWM			20	RIM SHLDR		1
4	432	ZDATE					3C		0
4	432	ZZZ					MIX? SHS PREROM?		0
4	436	COAR	JNN	HM?			RIM MIN GROG IA TYPE?		1
4	436	GFIN	BK?				BS		1
4	436	GREY					BSS		8
4	436	GREY	J		1		BSS GROOVED		7
4	436	GYBN	CPN	SL		16	SLASHED RIM		1
4	436	PIGR	JL				RIM PLAIN CURVED		1
4	436	ZDATE					LI-2		0
4	436	ZZZ					MIX		0
4	438	GREY					BSS		2
4	438	GYBN					BS		1
4	438	VRG					BSS		2
4	438	ZDATE					1-2C		0
4	442	CR					BS BURNT		1
4	442	ORAN					BS		1
4	442	ZDATE					1-2C		0
4	456	GROG					BSS		4
4	456	GROG	JUP		1		RIM BSS		3
4	456	GYBN					BS MIN GROG		1
4	456	ZDATE					ML1?		0
4	457	GREY					BS		1
4	457	GREY	BKBR				RIM		1
4	457	GROG					BSS ABR		3
4	457	GROG		RIL	1		BSS		3
4	457	GYBN					BASE BS		2
4	457	ZDATE					LI-2		0
4	457	ZZZ					MIX?		0

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Sect.	Cntx	Fabric	Form	Dec	No Vess	Dwg no	Comments	Join	Sherds
4	458	COAR					BS RED BN		1
4	458	OX					BS HIGH FIRED		1
4	458	OX					BS		1
4	458	ZDATE					RO		0
4	458	ZZZ					PROB LROM		0
4	459	GFIN					BS		1
4	459	GREY					BSS		5
4	459	GROG		SL?			BS		1
4	459	GYBN					BSS		2
4	459	NAT	CPN	SL		18	RIM SHLDR SLASHED RIM		1
4	459	ZDATE					L1-E2		0
4	460	BB1?	CP	B	1		RIM FRAG BSS		4
4	460	GFIN	BBR?				RIM FRAG		1
4	460	GREY					BS		1
4	460	NAT		HM?			BS		1
4	460	OX					BS		1
4	460	ZDATE					EM2		0
4	461	GREY					BSS		2
4	461	GREY	J				BASE		1
4	461	GYBN					BS		1
4	461	NVGW	JWM			19	RIM SHLDR		1
4	461	OX	BK				BS		1
4	461	ZDATE					3C		0
4	462	GROG					BS FRESH		1
4	462	PIGR	JCUR				RIM		1
4	462	ZDATE					L1+		0
4	463	GFIN	BK				BS		1
4	463	GREY					BSS BASES		13
4	463	GREY	BGR				RIM NECK		1
4	463	GREY	J		1		BSS J FINE SILTY		2
4	463	GREY	JCUR				RIM FAB CF FINE VRW		1
4	463	GREY	JWM				RIM NECK FINE SILTY		1
4	463	GROG					BS		1
4	463	GROG	J				BS BURNT		1
4	463	NVGW	JCUR?				RIM FRAG		1
4	463	ORAN					BS MIN GROG		1
4	463	OX					BS		1
4	463	OX	JL	RIL			BS BURNT OVER CRACK		1
4	463	VRG					BS		1
4	463	ZDATE					3C		0
4	463	ZZZ					SOME BURNT		0
4	469	GROG					BASE		1
4	469	ZDATE					1-2C		0
4	471	CC	B				BS SAM COPY SHOW BD		1
4	471	GREY					BS		1
4	471	GYBN					BS		1
4	471	OX	BK				BS		1
4	471	PIGR	JL				BS		1
4	471	ZDATE					2+		0
4	475	GREY					BS		1
4	475	GROG					BS		1
4	475	GYBN					BS		1
4	475	ZDATE					RO		0
5	500	GREY					BS		1
5	500	GYBN					BS		1
5	500	OX					BS ABR		1
5	500	OX					BS		1
5	500	ZDATE					RO		0
5	500	ZZZ					PROB 2+		0
5	501	OX					BSS		2
5	501	ZDATE					2+/POSTRO		0
5	501	ZZZ					5 SHS MED PMED CBM		0
5	503	ZDATE					MED?		0
5	503	ZZZ					1 SH MPOT?		0
5	507	ZDATE					PMED		0
5	507	ZZZ					1 SH PMED		0
5	509	ZDATE					MED+		0
5	509	ZZZ					2SH MED PMED		0
5	510	GREY					BS		1
5	510	GROG	STR?	HM?	1	23	BASES BSS PIERCED HOLES		11
5	510	ZDATE					TRIPLE LIA POSTC		0
5	510	ZZZ					MIX DATES LIA RO PROB 2		0
5	511	CC	B				1 SH MPOT		0
							FTRG CC LOST		1

Sect.	Cntx	Fabric	Form	Dec	No Vess	Dwg no	Comments	Join	Sherds
5	511	CC	B?				BS VABR		1
5	511	GREY					BSS MOST ABR SCRAPS		34
5	511	GREY	BWM				RIM FRAG		1
5	511	GREY	CP				RIM FRAG		1
5	511	GREY	JCUR		2		RIM FRAGS		2
5	511	GROG	JL				BSS ABR		8
5	511	GYBN	JCUR				RIM FRAG		1
5	511	MOOX	MBF				RIM FLANGE FRESH		1
5	511	MOOXR	M				FLANGE CC LOST		1
5	511	MOOXR	MBF				FLANGE VABR		1
5	511	NVCC	CLSD				BS WHT FAB ABR		1
5	511	OX					BSS SCRAPS RIM FRAG ABR		38
5	511	ZDATE					4/POSTRO		0
5	511	ZZZ					MIX DATES SCRAPS VABR		0
5	512	CRSA					MPOT POT CBM		1
5	512	GREY					BS		2
5	512	GREY	BWM				BSS		1
5	512	GROG	JL				RIM		1
5	512	GROG	JS				BS		1
5	512	GROG	JS				BASE		1
5	512	MOOXR?	M				BS CC LOST NOT EXTR		1
5	512	NVCC	DPR				RIM ABR		1
5	512	OX					BSS		2
5	512	OX	JUR?				RIM FRAG		1
5	512	ZDATE					4/POSTRO		0
5	512	ZZZ					MIX 5 SHS MED PMED		0
5	513	ZDATE					MED		0
5	513	ZZZ					1 SH MPOT		0
5	514	ZDATE					PMED		0
5	514	ZZZ					1 SH PMED		0
5	515	GMIC	BK	BAD	1		BSS		3
5	515	GREY					BS		1
5	515	ZDATE					L1-E2		0
5	517	GFIN					BSS		2
5	517	GFIN	BK				BS		1
5	517	OX					BS		1
5	517	SMSH					BS		1
5	517	VRW					BS SCRAP		1
5	517	ZDATE					L1-2+		0
5	517	ZZZ					SCRAPPY		0
5	520	GREY					BSS		4
5	520	GROG					BS		1
5	520	GROG	JL				BS		1
5	520	OX					BSS		4
5	520	SMSH	DPR	RIL		24a	RIM BS		2
5	520	ZDATE					2-4C		0
5	520	ZZZ					SCRAPPY		0
5	524	GREY?	BPR			21	RIM GIRTH VBURNT FINE	541	1
5	524	ZDATE					SILTY GROOVES EXT		0
5	524	ZZZ					M2-3		0
5	526	GREY					V BURNT		0
5	526	ZDATE					BS ABR		1
5	531	NAT		HM	1		RO?		0
5	531	NAT		RIL WM			BSS BURNT MIN GROG		4
5	531	ZDATE					SILTY		1
5	535	GREY					BS MIN GROG		0
5	535	GROG	JL		1		IA -ML1		2
5	535	OX					BSS ABR		3
5	535	ZDATE					BSS		3
5	535	ZZZ					BSS SCRAPS ABR		0
5	537	GREY					2+/POSTRO		0
5	537	GREY	BK				MIX 3 SHS MED PMED CBM		0
5	537	GRSH		HM?	1		BS ABR		1
5	537	ZDATE					SCRAP		1
5	537	ZZZ					FRAG BS IA-EROM		1
5	538	GFIN	JBK		1		2+		0
5	538	GROG	JL				MIX		2
5	538	GYBN	BK		1		BSS		1
5	538	SHEL	J				BS		2
5	538	ZDATE					BS ?RPOT RIM		1
5	538	ZZZ					L1-2+/POSTRO?		0
5	539	GREY					SCRAPPY		0
5	539	GREY					BSS SILTY FINE		11
5	539	GREY					BSS		6

Sect.	Cntx	Fabric	Form	Dec	No Vess	Dwg no	Comments	Join	Sherds
5	539	GREY	B		1		BASES		2
5	539	GREY	BKPR				RIM		1
5	539	GREY	JCUR				RIM NECK		1
5	539	GREY	JCUR		1		RIMS SILTY FINE		4
5	539	GYBN	DPR				RIM BASE PROF		1
5	539	GYBN	JUR				RIM SHLDR		1
5	539	MOOX	M				BS BURNT NOT EXTR	540	1
5	539	MOOX	M		1		RIMS FLANG BKN NOT EXTR SAME IN	540	3
5	539	OX					BSS SCRAPS RIM FRAG		6
5	539	OX	J				RIM FRAG		1
5	539	PIGR					BS FLAKE		1
5	539	ZDATE					M3-4		0
5	539	ZZZ					SCRAPPY SOME RIMS		0
5	540	CC?	BK				BS BURNT		1
5	540	GREY					BSS FINE SILTY		4
5	540	GREY					BSS		9
5	540	GREY	DPR				RIM GIRTH		1
5	540	GREY	JCUR				RIM SHLDR SILTY FINE		1
5	540	GROG	J				BASE MIN GROG		1
5	540	MOOX	MBF		1		RIM BS V BURNT EXTR	539	2
5	540	OX	BK?				BS THIN WALL		1
5	540	ZDATE					M3-4		0
5	540	ZZZ					SOME BURNT		0
5	541	CC?					BS VABR		1
5	541	GREY					BSS		5
5	541	GREY	B				BASE		1
5	541	GREY	JCUR				RIM		1
5	541	GREY?	DPR				RIM GIRTH V BURNT FINE SILTY GROOVES EXT	524	1
5	541	GROG	JB				BASAL BS		1
5	541	OX					BS		1
5	541	ZDATE					3C		0
5	541	ZZZ					SOME SCRAPPY SHS SOME BURNT		0
5	542	GFIN	JBK				BS FLAKE		2
5	542	GROG					SCRAP		1
5	542	GROG	JL				BSS SCRAP SAME IN	561	2
5	542	MORT	MBF		1		RIMS BSS UNUS TG OXID		3
5	542	SAMCG					FLAKE		1
5	542	ZDATE					3+		0
5	546	GROG	J				RIM FRAG		1
5	546	OX					BSS ABR		2
5	546	ZDATE					RO		0
5	546	ZZZ					SCRAPPY		0
5	555	GREY					BS		1
5	555	GROG	JS		1		BSS V LGE VESS		3
5	555	GROG	JS		1	22	RIMS BSS		8
5	555	SMSH					SCRAP		1
5	555	ZDATE					2-4C		0
5	555	ZZZ					LGE SHS		0
5	556	GREY	JCUR		1		RIM SCRAPS		3
5	556	OX					SCRAP		1
5	556	ZDATE					3+		0
5	560	GREY					BSS FINE SILTY		4
5	560	GREY					BSS		3
5	560	GREY	CP?				RIM FRAG		1
5	560	GREY	J				BASE 50%		1
5	560	OX					SCRAPS		3
5	560	SHEL	J				RIM FRAG BS EROM?		2
5	560	SMSH	JUR				RIM		1
5	560	ZDATE					L3-4		0
5	560	ZZZ					MIX? SOME SCRAPPY SHS		0
5	561	GREY					BS		1
5	561	GROG	JL				BS SAME IN	542	1
5	561	OX	BK?				SCRAPS		4
5	561	ZDATE					3?		0
6	603	OX					BS VABR		1
6	603	ZDATE					RO?		0
6	605	OX					BS VABR		1
6	605	ZDATE					RO?		0
6	606	ZDATE					MED+		0
6	606	ZZZ					7 SHS MED PMED		0
6	608	OX	JCUR				RIM		1
6	608	ZDATE					2-4C		0

Sect.	Cntx	Fabric	Form	Dec	No Vess	Dwg no	Comments	Join	Sherds
6	609	GYBN					BS		1
6	609	OX					BSS		2
6	609	ZDATE					RO		0
6	609	ZZZ					PROB 2+		0
6	610	CR	JB				BASE		1
6	610	ZDATE					2+		0
6	611	ZDATE					MED+		0
6	611	ZZZ					1 SH MED PMED		0
6	612	ZDATE					MED+		0
6	612	ZZZ					2SHS MED PMED		0
6	614	GYBN					BS		1
6	614	OX					BS SCRAP		2
6	614	OX	JWM				RIM FRAG VABR		1
6	614	ZDATE					RO		0
6	614	ZZZ					ALL VABR PROB 2+		0
6	658	ZDATE					PMED		0
6	658	ZZZ					1 SH PMED		0
7	703	GREY					BS VABR ?RO		1
7	703	ZDATE					MED+		0
7	703	ZZZ					6SHS MED PMED		0
7	704	GREY					BS		1
7	704	GREY					BSS ABR		2
7	704	GREY					BSS		2
7	704	NAT		HM			BSS		3
7	704	OX	J				RIM RO?		1
7	704	ZDATE					2+/POSTRO		0
7	704	ZZZ					1 SH MED MIX		0
7	705	ZDATE					MED		0
7	705	ZZZ					1 SH MED		0
8	801	GREY					BS ABR		1
8	801	GREY	BWM				RIM FRAG		1
8	801	ZDATE					3+/POSTRO		0
8	801	ZZZ					1 SH PMED		0
8	802	GFIN	BK				BS		1
8	802	GREY					BS		1
8	802	GREY	J				BASE ABR FINE SILTY		1
8	802	GYBN		HM?			BS ABR RO?		1
8	802	ZDATE					2+/POSTRO?		0
8	802	ZZZ					1 SH PMED?		0
8	803	GREY					BS ABR		1
8	803	ZDATE					RO		0
8	804	GREY					BS VABR		1
8	804	ZDATE					RO		0
8	807	ZDATE					MED+		0
8	807	ZZZ					1 SH MED PMED		0
8	808	ZDATE					PMED		0
8	808	ZZZ					1 SH PMED		0
9	902	GREY					BS		1
9	902	ZDATE					RO/POSTRO		0
9	902	ZZZ					2 SHS MED		0
10	1003	GREY					BS ABR		1
10	1003	ZDATE					RO		0
10	1004	GREY	CP				RIM		1
10	1004	ORAN					BSS ABR		2
10	1004	ZDATE					2-3C		0
10	1005	ZDATE					PMED		0
10	1005	ZZZ					1 SH PMED		0
10	1006	ZDATE					MED+		0
10	1006	ZZZ					4 SHS MED PMED		0
11	1100	GREY					SCRAP		1
11	1100	ZDATE					RO		0
11	1102	GREY					BASAL BS		1
11	1102	OX					BS ABR		1
11	1102	ZDATE					RO		0
11	1103	SAMSG?	BD				FTRG VABR		1
11	1103	ZDATE					1C		0
11	1103	ZZZ					SAM ONLY		0
13	1300	SHEL					BS ABR		1
13	1300	ZDATE					RO		0
13	1306	CR					BSS ABR		4
13	1306	CRSA	JCUR				RIMS BSS		11
13	1306	GFIN	BK				BS		1
13	1306	GFIN	BKEV?				RIM FRAG		1
13	1306	GLAZ					BS ?MPOT		1
13	1306	GREY					BSS BASES		72

APPENDIX 3
Roman Pottery

Sect.	Cntx	Fabric	Form	Dec	No Vess	Dwg no	Comments	Join	Sherds
13	1306	GREY	BFL				RIM LWR WALL		1
13	1306	GREY	BFL		1	46	RIM BS	3003	2
13	1306	GREY	BTR		2		RIM FRAGS		2
13	1306	GREY	DPR		3		RIM FRAGS		3
13	1306	GREY	JCUR				RIM		1
13	1306	GROG					BSS		16
13	1306	GROG	JL				BASE		1
13	1306	GROG	JL		4		BSS		8
13	1306	GROG	JL	RIL			BS		1
13	1306	GROG	Z				BS FLAT PIERCED UNUS		1
13	1306	GYBN					BSS BASES		27
13	1306	GYBN	JCHR				RIM		1
13	1306	GYBN	JCUR		1		RIMS		3
13	1306	GYBN	JUR				RIM		1
13	1306	MHAD?					BSS		2
13	1306	MOOX	M				BS ABR		1
13	1306	MORT	M				RIM LIP UNUS OXID FINE ?RT12		1
13	1306	NVCC	BKFN				RIM E FAB		1
13	1306	NVCC	BKFO	ROUZ			BS ORANGE FAB		1
13	1306	NVCC	BKPOS				BS ORANGE FAB		1
13	1306	NVCC	LBX	ROUZ			RIM		1
13	1306	ORAN					BSS MOST ABR		13
13	1306	ORAN	BFL		2		RIMS		2
13	1306	OX					BSS		3
13	1306	OX					BSS		7
13	1306	RC?	BK				BS		1
13	1306	SAMCG	27?	NAME		136	FTRG STAMP EDDIL? VABR UNUS SF5077		1
13	1306	SAMCG		31			RIM LWR WALL		1
13	1306	SMSH					BSS BASES		18
13	1306	SMSH					BSS		3
13	1306	SMSH		RIL			BS		1
13	1306	SMSH	CPN				RIM SHLDR ALMOST JCHR		1
13	1306	SMSH	DPR		1		RIMS		2
13	1306	SMSH	JL				BS		1
13	1306	VRW					BSS		3
13	1306	ZDATE					L3-E4		1
13	1306	ZZZ					1 SH PMED MIX DATES FEW ABR SHS		1
13	1311	GREY					BSS		6
13	1311	GREY	JCUR	B	1	32	RIMS BSS BASE		6
13	1311	GROG					BS		1
13	1311	GYBN					BSS ABR		9
13	1311	ZDATE					ML1-E2		0
13	1311	ZZZ					SOME SMASH VESS		0
13	1313	GREY					BS		1
13	1313	OX	JBK				FTM		1
13	1313	ZDATE					2+		0
13	1315	GREY					BSS W GROOVE CORDON		2
13	1315	GREY					BSS		4
13	1315	GREY	JB				RIM FRAG		1
13	1315	GREY	JCHR			31	RIM CF CALDECOTTE FIG 39 25		1
13	1315	GREY	JL				BS THICK		1
13	1315	GYBN	JL				BS THICK		1
13	1315	OX					BS BN		1
13	1315	SAMSG	35/36				RIM		1
13	1315	SMSH					BS		1
13	1315	ZDATE					EM2		0
13	1315	ZZZ					SMALL SH FRESH		0
13	1317	GREY					BS <7016>		1
13	1317	GROG	J?				RIM FRAG <7016>		1
13	1317	GYBN	J				BS		1
13	1317	ZDATE					RO		0
13	1317	ZZZ					CHIP SAMPLE <7016>		0
13	1319	CC	CLSD		1		NSS ABR CC LOST		2
13	1319	GREY	BFB		5	52	RIM		1
13	1319	GREY	JEV				RIM FRAG SHOULDER		1
13	1319	GROG	SJ	SWL	1		BSS SOME THICK		5
13	1319	GYBN					BSS SCRAPPY ABR		11
13	1319	GYBN					BSS		9
13	1319	GYBN	BFBL		5	65	RIM GIRTH		1
13	1319	GYBN	BFL				RIM GIRTH		1
13	1319	GYBN	BG255?				RIM FRAG		1

APPENDIX 3
Roman Pottery

Sect.	Cntx	Fabric	Form	Dec	No Vess	Dwg no	Comments	Join	Sherds
13	1319	GYBN	J	SWL	1		BSS		3
13	1319	GYBN	JCUR				RIM FRAG		1
13	1319	GYBN	JCUR				RIM FRAG		1
13	1319	GYBN	JCUR				RIM		1
13	1319	GYBN	JEV			57	RIM SHOULDER GROOVED		1
13	1319	GYBN	JMR				RIM FRAG GROOVED		1
13	1319	MOOXR	M				ALMOST BI FURC		1
13	1319	NVCC	DPR		1	71	BASE FRAG CC LOST		1
13	1319	NVGW	JB		1		RIM BASE BUFF FAB FRESH		1
13	1319	OX					BASES BSS		3
13	1319	OX					BS SCRAP		2
13	1319	OX					BSS ABR		4
13	1319	OX	BFL		1		RIMS GIRTH J		2
13	1319	OXRC	B31		1		RIM WALL SURFACE LOST		3
13	1319	OXRC	B38		1		BSS		3
13	1319	OXRC	BHEM	ROUZ	1		RIM AND FLANGE FRAG		2
13	1319	SAMSG	C?				BURNT		1
13	1319	SHEL	JCUR				RIM		1
13	1319	SMSH			1		FLAKE		1
13	1319	SMSH			1		RIM BLACK		1
13	1319	ZDATE					BSS BN		2
13	1319	ZZZ					BSS GREY		6
13	1320	GREY					L3-N4		0
13	1320	GREY	JUR?				MANY SMALL SCRAPPY		0
13	1320	OX					SHS		3
13	1320	OX	JS				BSS		1
13	1320	SMSH	JB				RIM ALMOST JUR		1
13	1320	SMSH	JBK				BS BLACK EXT		1
13	1320	SMSH	JS		1		BS SAME IN	2815	1
13	1320	SMSH	JS		1		RIM FRAG		1
13	1320	ZDATE					BS THIN WALL		1
13	1320	ZZZ					BSS THICK		3
13	1321	BB2	DPR				RIM NECK JUR SAME IN	1321	5
13	1321	FINE?	B36?				3+		0
13	1321	GREY					SOME LGE SHS FRESH		0
13	1321	GREY					RIM FINE VAR POSS LOCAL		1
13	1321	GREY					BSS V BURNT ABR OXRC		1
13	1321	GREY					BSS BURNT		3
13	1321	GREY					BSS DK GREY		7
13	1321	GREY					BSS GREY SILTY FAB		2
13	1321	GREY					BSS MED GY		4
13	1321	GREY	BFL	BVL		48	RIM BSS BASES		6
13	1321	GREY	J				BSS GREY SILTY FAB		2
13	1321	GREY	JL		1		RIM BSS GREY SILTY FAB		2
13	1321	GREY	JL	RIB?			BS		1
13	1321	GREY	JNN				RIM FRAG		1
13	1321	GREY	JS		1		RIM BSS GREY SILTY FAB		7
13	1321	GROG	J		1		BSS		4
13	1321	GROG	JS				BS		1
13	1321	GYBN					BSS		2
13	1321	NVCC	BK	PS			BS DIAGONAL LT BN FAB		1
13	1321	NVGW?	DPR				RIM BASE		1
13	1321	OX					SCRAPS		3
13	1321	OXRC	B38?		1		BSS		3
13	1321	PORD	JUR		1	83	RIM BSS BASES FRESH		5
13	1321	SAMCG	M45		1		RIMS BSS J ABR		6
13	1321	SMSH					BS		1
13	1321	SMSH					BSS DK GREY		3
13	1321	SMSH	DPR				RIM FRAG		1
13	1321	SMSH	J				BASAL BS		1
13	1321	SMSH	J				BASE DK GREY		1
13	1321	SMSH	JS		1		RIMS J BN SAME IN	1320	3
13	1321	ZDATE					ML4		0
13	1321	ZZZ					MOST FRESH 1 RSD FLUE DATE OXRC + 11		0
13	1322	GREY					SHS 44 CHPS <7014>		0
13	1322	GREY					BS PIERCED HOLE WALL		1
13	1322	GREY		RIL			BSS		2
13	1322	GREY					BS		1
13	1322	GREY	JBK				FTM 100%		1
13	1322	GROG					BS		1
13	1322	OX	JCUR				RIM BS		2
13	1322	SMSH	JL				BS		1
13	1322	VRW?					BASE BURNT		1
13	1322	ZDATE					LI-2+		0
13	1325	GREY					BASE		1

APPENDIX 3
Roman Pottery

Sect.	Catx	Fabric	Form	Dec	No Vess	Dwg no	Comments	Join	Sherds
13	1325	GREY					BSS		9
13	1325	GREY			1		BSS RED BN CORE		3
13	1325	GREY			1		BSS		3
13	1325	GREY	B				BASE		1
13	1325	GREY	BFBL			50	RIM		1
13	1325	GREY	J		1		BSS		3
13	1325	GREY	JCHR				RIM FRAG		1
13	1325	GREY	JCUR		1		RIMS		2
13	1325	GREY	JNN		1		RIMS		2
13	1325	GYBN					BASE		1
13	1325	GYBN	B				BS		1
13	1325	ORAN	DPR				RIM FRAG		1
13	1325	SMSH					BSS		2
13	1325	SMSH	JCUR				RIM		1
13	1325	SMSH	JCUR			87	RIM SHOULDER CORDON		1
13	1325	ZDATE					ML2		0
13	1325	ZZZ					MOST SHS WORN WATER		0
13	1326	GREY					BSS		2
13	1326	GYBN			1		BSS		2
13	1326	GYBN	JWM				RIM FRAG		1
13	1326	OX					BSS RED BN		2
13	1326	OX	JB		1		BASES J BS ABR		3
13	1326	OXWS	F				HANDLE 2R SLIP LOST		1
13	1326	ZDATE					2-3C		0
13	1326	ZZZ					SMALL SHS WORN		0
13	1330	GREY					SCRAPS		2
13	1330	ZDATE					RO		0
13	1332	BEGR			1		BSS ABR		2
13	1332	CR					BS SCRAP		1
13	1332	GFIN	BKCUR				RIM		1
13	1332	GREY					BSS SOME ABR		8
13	1332	GREY			1		BSS BLK		5
13	1332	GREY	B				BASE		1
13	1332	OX					SCRAP		1
13	1332	SMSH	JL		1		BS		3
13	1332	ZDATE					L1-2		0
13	1332	ZZZ					SMALL SHS SOME ABR 1		0
13	1335	CC	JBK				FRAG CBM		1
13	1335	CR	F				BASE OXRC CC LOST		1
13	1335	GREY					HANDLE 2R GREY CORE		1
13	1335	GREY	BEV			43	BSS		8
13	1335	GREY	JCHR				RIM		1
13	1335	GREY	JCHR				RIM FRAG		1
13	1335	GYBN	DPR		1	66	RIM BASE PROF SILTY BLK EXT INT BASAL		6
13	1335	GYBN	F?				AREA THEN RED BN		1
13	1335	OX					BS HANDLE SCRAP		1
13	1335	OX	BKCR	STCO		76	BS		1
13	1335	SMSH	J				RIM GIRTH BURNT		1
13	1335	SMSH	J		1		BS GREY		1
13	1335	ZDATE					BSS W GROOVE RED BN		4
13	1335	ZZZ						3	0
13	1335	ZZZ					SMALLISH SHS OXRC		0
13	1337	GREY					VABR MIX DATES		0
13	1337	GREY					BS FLAKE		2
13	1337	OX					BS		1
13	1337	SMSH					BS		1
13	1337	ZDATE					RO		0
13	1340	GREY					BSS		3
13	1340	GREY	DPR				RIM EARLIER TYPE		1
13	1340	GREY	J				BS COARSE		1
13	1340	GREY	JCUR		1		RIM BS SHLDR		2
13	1340	GYBN			1		BSS ABR		3
13	1340	SMSH					BSS		2
13	1340	ZDATE					L1-2		0
13	1342	GREY					BS		1
13	1342	GROG?					BSS		3
13	1342	ZDATE					RO		0
13	1343	GREY					BS		1
13	1343	GROG?					BS		1
13	1343	ZDATE					RO		0
13	1348	DR20	A				BS EARLY FAB ABR		1
13	1348	GREY					BSS SOME ABR SMALL		18
13	1348	GREY	BFBL			51	RIM		1
13	1348	GREY	BTR				RIM		1
13	1348	GREY	JCUR		1		RIMS BSS CORDON AT		4

APPENDIX 3
Roman Pottery

Sect.	Cntx	Fabric	Form	Dec	No Vess	Dwg no	Comments	Join	Sherds
							NECK ABR		
13	1348	GROG					BS		1
13	1348	GROG	JL				BS		1
13	1348	GROG	JL		1		BSS GROG		4
13	1348	GYBN					BSS		3
13	1348	GYBN	JCUR				RIM		1
13	1348	OX JCHR			1	77	RIMS		2
13	1348	SMSH	JCHR	RIL GRAF?	1	86	RIMS PRE FIRING V FAINT		2
13	1348	VRW					RIL		1
13	1348	VRW	J?		1		BS		1
13	1348	VRW	J?	SWL			BASE BSS SHINING BURNT		12
13	1348	ZDATE					EXT		1
13	1348	ZDATE					BS		1
13	1348	ZZZ					EM3		0
							SOME SMASH MIN ABR SMALL SHS MIX		0
							BFB LATER SOME EM2		0
13	1349	FINE	BKEV				BSS RIM PALE BUFF FAB		1
13	1349	FIN					LOW SHLDR		1
13	1349	GFIN					BS ?NVGW		1
13	1349	GREY					BSS		22
13	1349	GROG	J		1		BSS BURNT		5
13	1349	GYBN					BSS		3
13	1349	OX					BS		1
13	1349	OX			1		BSS		8
13	1349	OX	F				HANDLE 4R ABR		1
13	1349	SMSH	J		1		BSS		7
13	1349	ZDATE					L1-2		0
13	1349	ZZZ					MOST FRESH SOME BURNT		0
13	1350	DR20	A				FLAKE EFAB NOT EXTR		1
13	1350	FINE	FCR				RIM FRAG		1
13	1350	GREY					BSS		4
13	1350	SMSH					BS		1
13	1350	VRW					BS		1
13	1350	ZDATE					2?		0
13	1356	GREY					BSS		3
13	1356	OX					BS		1
13	1356	ZDATE					2+		0
13	1359	GREY					BS		1
13	1359	SMSH					BS		1
13	1359	SMSH	BRR			90	RIM		1
13	1359	ZDATE					2C		0
13	1359	ZZZ					FRESH MEDIUM SHS		0
13	1361	GREY					BS		1
13	1361	MHAD?					BS BLK SPECKS		1
13	1361	ZDATE					M3+?		0
13	1363	DR20	A				BS ABR INT E FAB		1
13	1363	GREY					BSS		6
13	1363	GREY	B?				BASE		1
13	1363	GREY	J		1		BSS BLK SURFS		7
13	1363	GREY	JCHR	RIL	1	29	RIMS BSS		4
13	1363	GREY	JCUR				RIM		1
13	1363	GREY	JCUR		1		RIM BSS NECK ORGANICS		3
13	1363	GROG					SMALL VESS		1
13	1363	GYBN					BS		1
13	1363	GYBN					BSS MED GREY		7
13	1363	GYBN					BSS SCRAPPY		7
13	1363	OX					BS		1
13	1363	OX					BSS		2
13	1363	ZDATE					EM2		0
13	1363	ZZZ					MOST FRESH LGISH SHS		0
13	1365	CC?	JCUR				RIM CR FAB DK WASH?		1
13	1365	CR	BK	PCIR			BS RED P		1
13	1365	FLIN		HM			BS PREHIST		1
13	1365	GFIN	BK		1		BSS		3
13	1365	GREY					BSS BASE		8
13	1365	GREY					BSS BURNT		2
13	1365	GREY					BSS		5
13	1365	GREY			1		BSS FLAKED INT		5
13	1365	GREY	J				BS SHOULDER HIGH		1
13	1365	GREY	JB	LA			BS		1
13	1365	GREY	JCUR				RIM		1
13	1365	GREY	JCUR		1		RIM FRAG		2
13	1365	GREY	JEV		1		RIM BS HIGH SHOULDER		2
13	1365	GYBN					BSS		2
13	1365	GYBN					BSS		3

APPENDIX 3
Roman Pottery

Sect.	Cntx	Fabric	Form	Dec	No Vess	Dwg no	Comments	Join	Sherds
13	1365	GYBN					BSS		9
13	1365	GYBN			1		BSS BASE		5
13	1365	GYBN	JB	SWL			BS		1
13	1365	OX	L?				BS		1
13	1365	SAMSG	29?				BS DEC		1
13	1365	SAMSG		33			BS		1
13	1365	VRW	F				HANDLE 3R BLK BUFF FAB		1
13	1365	VRW	F?				BS		1
13	1365	ZDATE					LIEM2		0
13	1365	ZZZ					FRESH MIX DATES IC SAM 1 PREHIST? 14 CHPS SAMPLE <7018>		0
13	1367	GFIN	BK				BS		1
13	1367	GREY					BSS		6
13	1367	GYBN					BSS MOST 1 VESS		6
13	1367	ZDATE					L1-2+		0
13	1367	ZZZ					1 LGE SHS MOST SMALL WORN BUT MIN ABR		0
13	1369	GFIN	BK		1		BSS ABR		2
13	1369	GREY	JCUR		1		RIM BS		2
13	1369	GYBN					BSS		4
13	1369	ZDATE					L1-2		0
13	1369	ZZZ					SMALL UNDIAGONOSTIC GROUP MOST FRESH		0
13	1371	GREY			1		BSS COARSE		2
13	1371	ZDATE					RO		0
13	1376	CALC					MICROFOSSILS		1
13	1376	COAR	JL		1		BSS SCRAPS		3
13	1376	GREY					BS		1
13	1376	GYBN					BSS		3
13	1376	OX					BS		1
13	1376	OX	BFL				RIM		1
13	1376	OX	DPR				RIM		1
13	1376	ZDATE					2+		0
13	1377	COAR			1		FRAGS		4
13	1377	GREY					BSS		3
13	1377	GREY	JCUR				RIM		1
13	1377	GROG					BS		1
13	1377	OX					BS ?CBM		1
13	1377	OX			1		BSS ABR		6
13	1377	SMSH					BS ABR		1
13	1377	ZDATE					2+		0
13	1377	ZZZ					SCRAPPY ABR		0
13	1379	GFIN					BS		1
13	1379	GREY					BSS		8
13	1379	GROG					BSS		2
13	1379	OX	JBK				BS		1
13	1379	SAMSG					FLAKE		1
13	1379	SMSH	JCHR		1		RIM FRAG SMALL VESS		1
13	1379	ZDATE					L1-2		0
13	1381	GREY					BS		1
13	1381	GREY	JCHR		1		RIMS		2
13	1381	ZDATE					M2+		0
13	1381	ZZZ					WORN SURFS		0
13	1383	GFIN	BK		1		BASES J SCOTED		2
13	1383	GREY					BS SCRAPPY SHS SOME ABR		8
13	1383	GYBN					BSS SCRAPPY ABR		4
13	1383	OX					BS		1
13	1383	SAMSG		18	1		RIMS BS		2
13	1383	SAMSG	35/36				BS		1
13	1383	VRW	F?		2		BSS		2
13	1383	ZDATE					M1-E2		0
13	1383	ZZZ					SOME SCRAPPY ABR GREY SHS FRESH		0
13	1386	CR					BS ABR		1
13	1386	GREY					BSS		2
13	1386	OX	B				BASE SOOT		1
13	1386	ZDATE					2+		0
13	1386	ZZZ					SCRAPPY		0
13	1387	GFIN	BK				BS		1
13	1387	GREY					BSS		3
13	1387	OX	B				RIM FRAG COARSE		1
13	1387	ZDATE					2-3C		0
13	1389	GREY	J		1		BASE J		4
13	1389	SAMCG	35/36		1		RIMS J ABR		2

Sect.	Cntx	Fabric	Form	Dec	No Vess	Dwg no	Comments	Join	Sherds
13	1389	ZDATE					ML2+		0
13	1389	ZZZ					2 CHIPS SAMPLE <7009>		
13	1392	BEGR?					BS ORGANIC GROG INC		1
13	1392	GYBN					BS		1
13	1392	GYWQ					BS		1
13	1392	SAMSG	18				BS		1
13	1392	SMSH			1		BS		1
13	1392	SMSH	JEV				RIM FRAG SMALL VESS BLK EXT		1
13	1392	ZDATE					L1E2		0
13	1392	ZZZ					SMALL SHS SAM ABR		0
13	1394	CR					BS ABR		1
13	1394	GFIN	JBK				BS		1
13	1394	GREY					BSS		4
13	1394	GREY	JCUR				RIM		1
13	1394	GROG					RIM FRAG		1
13	1394	GROG	J	RIL			BS ABR		1
13	1394	OX					SCRAP		1
13	1394	ZDATE					2+		0
13	1399	GROG?	J		1		BSS MIN GROG LEACHED		2
13	1399	VRW					SCRAP		1
13	1399	ZDATE					1-2C		0
13	2702	BB2	B	LA			BS PROB LOCAL		1
13	2702	GREY			1		BS SOOT		2
13	2702	GREY	B				BS		1
13	2702	GYBN					BS		1
13	2702	GYBN	BFL			63	RIM GIRTH		1
13	2702	GYBN	BRR			62	RIM		1
13	2702	ORAN					BS		1
13	2702	SMSH					BS BASE		2
13	2702	SMSH	JEV			85	AS RIM JCHR NO INT GROOVE		1
13	2702	ZDATE					HEAN 120-200		0
13	2702	ZZZ					SOME BURNT		0
13	2710	GREY					BS		1
13	2710	GYBN	J				BS		1
13	2710	ZDATE					2+		0
13	2712	GREY					BASE		1
13	2712	GREY			1		BSS		2
13	2712	OX					BASE FRAG		2
13	2712	ZDATE					2+		0
13	2721	GREY					BSS		6
13	2721	GYBN					BSS		2
13	2721	SMSH	JCHR				RIM FRAG BS		4
13	2721	ZDATE					L1-2		0
13	2723	GREY					BS		1
13	2723	GREY	JBK		1		BSS		6
13	2723	ORAN					BS		1
13	2723	SMSH					BS		1
13	2723	ZDATE					2+		0
13	2725	GFIN	BK	RIL			BS		1
13	2725	GREY					BSS BASE		3
13	2725	SMSH	J				BS		1
13	2725	ZDATE					2+		0
13	2728	GREY					BS ABR		1
13	2728	GROG					BS ABR		1
13	2728	ORAN	JCUR		1		RIMS BSS SCRAPS VABR		12
13	2728	SMSH					BS		1
13	2728	ZDATE					2+		0
13	2728	ZZZ					MOST ABRADED		0
13	2730	CC	BK		1		BSS SCRAPPY RED SILTY OXFORD?		45
13	2730	CR					BSS SMALL SHS		3
13	2730	GFIN	BKCR				RIM		1
13	2730	GREY					BSS BASES SMALL SHS BLK SURFS		17
13	2730	GREY					BSS SMALL SHS		12
13	2730	GREY	BD				BASE		1
13	2730	GREY	BFB			53	RIM GIRTH SMALL VESS FINE SILTY FAB		1
13	2730	GREY	BK				BS		1
13	2730	GREY	CP				RIM FRAG		1
13	2730	GREY	JBK		1		BSS THIN WALL		23
13	2730	GREY	JBK	ROUZ			BS		1
13	2730	GROG					BSS		4

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Sect.	Cntx	Fabric	Form	Dec	No Vess	Dwg no	Comments	Join	Sherds
13	2730	GYBN					BSS MIN GROG		4
13	2730	GYBN					BSS MOST 1 VESS		21
13	2730	GYBN					BSS		3
13	2730	GYBN		RIL	1		BS		1
13	2730	GYBN	CPN		1	58	RIM BASE		2
13	2730	NVCC	BKFO				BS ABR WHT FAB CC LOST		1
13	2730	OX			1		BSS	2731	5
13	2730	OX					BS		1
13	2730	OX					SCRAP CBM?		1
13	2730	PIGR	J?				BASE BSS		5
13	2730	SAMCG	35/36				RIM FRESH		1
13	2730	SMSH			1		BSS		4
13	2730	SMSH	J		2		BS BASES		4
13	2730	ZDATE					3C		0
13	2730	ZZZ					SMALL SHS SOME ABR MIX		0
13	2731	BBI	CP				DATES		2
13	2731	BBI	CP				BASE BS		2
13	2731	GREY					BSS		14
13	2731	GREY	BTR		1		RIM FRAG		2
13	2731	GREY	JCUR				RIM FRAG SMALL VESS		1
13	2731	GREY	BWM		1	40	BSS COARSER FAB	2732/2760/2761	34
13	2731	GREY	BWM		1	39	RIM BSS PALE CORE	2732/2760	10
13	2731	GREY	STR			42	BASE		1
13	2731	GROG					BS		1
13	2731	GYBN		SL			BS POORLY SCORED LINES		1
13	2731	NVCC	BK	BAD			BS BN FAB		1
13	2731	NVCC	BKFOF	ROUZ	1	68	RIM BASE LT BN FAB		36
13	2731	NVCC	BKFOF	ROUZ	1	69	RIM LWR WALL LT BN FAB		12
13	2731	OX					BS		1
13	2731	OX	F?		1		BSS EXT SURFS ABR	2730	8
13	2731	OX	FDR		1	74	BASE 100% BS	2760/2732	23
13	2731	OXWS					BS		1
13	2731	PIGR	JS		1		BSS SAME IN	2760/2761	2
13	2731	SMSH					BSS		3
13	2731	SMSH	J				BASE	2732/2730	1
13	2731	SMSH	JCUR				RIM BURNT? SAME FORM		1
13	2731	SMSH	JCUR		1	88	AS DRAWN VESS		1
13	2731	SMSH	JCUR		1	88	RIM BSS	2732/2760/2761	13
13	2731	ZDATE					M3		0
13	2731	ZZZ					SMASH VESS SMALLER SHS THAN 2760 3		0
13	2732	GFIN	BFB				FRAGS FIRED CLAY		1
13	2732	GREY					RIM SILTY FAB BLK SPECS		1
13	2732	GREY					OXFORD		12
13	2732	GREY	BKCR				BSS		1
13	2732	GREY	JCUR				RIM FRAG		1
13	2732	GREY	JCUR				RIM		1
13	2732	GREY	BWM		1	39	BS GREY CORE	2731/2761/2760	1
13	2732	GREY	BWM		1	40	BSS COARSE	2731/2760/1	10
13	2732	GYBN					BS SCRAP		1
13	2732	OX	FDR			74	BSS	2760/2731	2
13	2732	SMSH					BSS	2731/2730?	2
13	2732	SMSH	JCUR		1	88	BSS	2731/2761/2760	3
13	2732	ZDATE					M3		0
13	2732	ZZZ					GENERALLY SMALLER BSS		0
13	2733	SMSH	J		1		MINIMUM RIMS		20
13	2733	ZDATE					BSS BASES HEAVY SOOTED		0
13	2733	ZZZ					2?		0
13	2733	ZZZ					SMASH 1 VES		0
13	2735	SMSH					FRAGMENTARY		1
13	2735	ZDATE					BS		0
13	2738	GREY					RO		1
13	2738	GYBN	JCUR		1		BS		6
13	2738	OX					RIMS BSS ABR		1
13	2738	PIGR					BS VABR		1
13	2738	ZDATE					BS ABR		1
13	2738	ZZZ					2-3C		0
13	2739	GREY					MOST ABRADED		0
13	2739	GROG					BSS		2
13	2739	ZDATE					BS		1
13	2741	GREY	J				RO		0
13	2741	OX					BSS		2
13	2741	ZDATE					SCRAP		1
13	2745	GREY					RO		0
13	2745	GREY	JWM				BS		1
13	2745	GREY	JWM				RIM ABR SIM IN	2747	1

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Sect.	Cntx	Fabric	Form	Dec	No Vess	Dwg no	Comments	Join	Sherds
13	2745	VRW?	MHK	NAME	1	67	RIM BSS FLAKES VABR STAMP ?MELVO MELUS SF5104 95-135		
13	2745	ZDATE					M2-3		0
13	2745	ZZZ					MORT HAS CARTOUCHE		
13	2747	GREY	JCUR		1		RIMS BS		3
13	2747	GYBN					BSS		2
13	2747	ZDATE					2+		0
13	2750	GYBN					BSS		2
13	2750	ZDATE					RO		0
13	2751	GREY					BSS		2
13	2751	GREY	J		1		BSS 2 GROOVES		5
13	2751	GREY	J	LA			BS LA ON SHOULDER		1
13	2751	GREY	JCUR				RIM FRAG		1
13	2751	GYBN	J				BS NECK ORANGE BN STREAKS		1
13	2751	ORAN	CD		1		RIMS SCRAPS DISH OR CUP? LAMPH POSS DR27 CUP ABR EXT		3
13	2751	OX	J				BS		1
13	2751	SAMCG	D		1		BSS FLAKES		4
13	2751	ZDATE					ML2		0
13	2751	ZZZ					ABR SOME LGE SHS SOME SCRAPS 29 CHIPS <7015>		0
13	2752	CC	F?				BS CR W GREY WASH	2753	1
13	2752	CR					BS N VALLEY		1
13	2752	GFIN	BK				BS ABR		1
13	2752	GREY	DTR	BIAP		54	RIM BASE PROF PROF FRESH		1
13	2752	GREY	J				BS SHOULDER		1
13	2752	GREY	J?		2		BSS FRESH MED SHS		7
13	2752	GREY	JCHR		1		RIM J WORN		2
13	2752	GREY	JCHR		1	30	RIM SHOULDER		3
13	2752	GREY	JCUR				RIM		1
13	2752	GYBN	JWM		1	61	RIMS BS TWISTED WASTER?	2753	4
13	2752	OX					BS RED BN BURNT		1
13	2752	VRW					BSS	2753	2
13	2752	ZDATE					ML2		0
13	2752	ZZZ					MOST FRESH SHS SOME ABR WORN 7 CHIPS SAMPLE <7017>		0
13	2753	CC	F?				BASES BSS J GREY WASH	2752	4
13	2753	GFIN	BKCOR	BAD	1	27	BSS RIM SGROUPS ROSETTE?		15
13	2753	GFIN	BKFP	BAD	1		BSS		2
13	2753	GREY					BSS SOME ABR		42
13	2753	GREY					BSS		2
13	2753	GREY	BFL		1		RIM BASE BSS FRAGS		16
13	2753	GREY	BK		2		BSS		2
13	2753	GREY	JCHR				RIM NECK		1
13	2753	GREY	JCUR				RIM FRAG ABR		1
13	2753	GREY	JCUR				RIM		1
13	2753	GREY	JCUR				RIM		1
13	2753	GREY	JCUR			37	RIM SHOULDER		1
13	2753	GYBN					BSS ABR		5
13	2753	GYBN	B		1		BASES		2
13	2753	GYBN	JCUR			60	RIM SHOULDER CORDON		1
13	2753	GYBN	JWM		1	61	RIMS BSS DISTORT WASTER?	2752	23
13	2753	OX					BS CF VRW DK PINK		1
13	2753	OX					SCRAP		1
13	2753	SAMCG	D				BSS SOME FLAKED		4
13	2753	SMSH			1		BS PALE BN		1
13	2753	SMSH	J		2		BSS BN BLK		3
13	2753	SMSH	JS	RIL			BS PALE BN		1
13	2753	VRW	F		1		BSS	2752	2
13	2753	ZDATE					ML2		0
13	2753	ZZZ					SOME ABR SMALL SHS SOME SMASH 1 CHP SAMPLE <7013>		0
13	2754	GFIN					BS		1
13	2754	GREY					BSS		15
13	2754	GREY	JCUR		1		RIM BS J		2
13	2754	GROG	JS				BS NECK		1
13	2754	GYBN					BSS SCRAPS		6
13	2754	GYBN	JWM?				RIMS BSS		7
13	2754	GYWQ					BSS		3
13	2754	OX					SCRAPS		6

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Sect.	Cntx	Fabric	Form	Dec	No Vess	Dwg no	Comments	Join	Sherds
13	2754	SAMCG			1		FLAKES		2
13	2754	SMSH					BSS		2
13	2754	SMSH	JL				RIM OWNED		1
13	2754	ZDATE					ML2-3		0
13	2754	ZZZ					SOME SMALL SCRAPPY		0
13	2756	FLIN					SHS MIN ABR		0
13	2756	GREY	J		1		BS PREHIST		1
13	2756	GREY	J		1		BSS SILTY		2
13	2756	GROG	JS	INC		56	BS SF5105 CF MARNEY FIG5		
13	2756	VRW	JBKCUR				NO13 ML1		
13	2756	ZDATE					RIM FRAG		1
13	2756	ZZZ					1-M2		0
13	2756	ZZZ					1 SH FLINT PREHIST		0
13	2758	BEGR					BSS		2
13	2758	BEGR	J				BS GROOVED POORLY		1
13	2758	SAMSG		35			MADE		
13	2758	SHEL	CPN			84	BS ABR		1
13	2758	ZDATE					RIM SHOULDER		1
13	2758	ZZZ					40-100		0
13	2758	ZZZ					SAM ABR REST FRESHISH		0
13	2759	BEGR?					BS		1
13	2759	CR	F		1		BASES J BSS N VALLEY		5
13	2759	GREY					FRESH		
13	2759	GREY			1		BS SOFT SILTY FAB		1
13	2759	GREY	JCUR		1	36	BSS		2
13	2759	GREY	JCUR		1	36	RIM BSS		16
13	2759	SHEL					BS		1
13	2759	ZDATE					EM2		0
13	2759	ZZZ					MOST FRESH 1 SMALL		0
13	2759	ZZZ					VESS		0
13	2760	GREY					BSS		2
13	2760	GREY	BFBL		1	49	RIM BASE PROF BS WORN		3
13	2760	GREY	BKFO		1		SURFS		
13	2760	GREY	BG225		1	47	BSS FIRE SILTY FAB		7
13	2760	GREY	JCUR				RIM BASE PROF	2731	2
13	2760	GREY	JL			41	RIM FRAG		1
13	2760	GREY	JWM		1	40	RIM SHOULDER		1
13	2760	GREY	JWM		1	38	RIM BASE AS ABOVE	2732/2761/2731	16
13	2760	GREY	JWM		1	38	COARSER		
13	2760	GREY	JWM		1	39	RIM BS J BSS	2761	4
13	2760	GREY	JWM		1	39	RIM BSS BASES SURFS	2732/2731	24
13	2760	NVCC	BK				WORN		
13	2760	OX	FDR		1	74	BS FRESH LT BN FAB		1
13	2760	PIGR	JS				RIM 100% HANDLE BSS	2732/2731	15
13	2760	SMSH	JCUR		1	88	BS SAME IN	2731/2761	1
13	2760	ZDATE					RIMS BASES SAME IN	2732/2761	13
13	2760	ZZZ					EM3		0
13	2760	ZZZ					LGE FRESH SHS SOME WORN MANY SMASH		0
13	2760	ZZZ					4 CHPS <7000>		0
13	2761	GREY					BSS		4
13	2761	GREY	BFBL			49	BASAL BS UNABRADED	2760	1
13	2761	GREY	JWM			39	BS PALE CORE	2731/2732/2760	1
13	2761	GREY	JWM			40	RIM J BSS COARSE	2731/2732/1760	4
13	2761	GREY	JWM			38	RIMS BS	2760	1
13	2761	OX			1		BSS J GROOVED PALE IN		2
13	2761	OXWS	BK	PCIR?			GREY EXT VRW		
13	2761	PIGR			1		BS RED PAINT CIRCLE		1
13	2761	SMSH	JCUR		1	88	BASE BS SAME IN	2731/2761	2
13	2761	ZDATE					BSS	2731/2732/2760	10
13	2761	ZZZ					EM3		0
13	2761	ZZZ					FRESH LGE SHS ABR 1		0
13	2761	ZZZ					FRAG SHELTY TILE		0
13	2763	GREY					BSS SCRAPS		5
13	2763	ORAN					BSS SCRAPS		6
13	2763	SMSH					BS		1
13	2763	ZDATE					2+		0
13	2765	GREY					BSS		2
13	2765	GROG					BSS		2
13	2765	OX					BS		1
13	2765	ZDATE					RO		0
13	2767	COAR					BS		1
13	2767	GREY	BKEV				RIM FRAG		1
13	2767	GREY	J				BS SHLDR PITTED		1
13	2767	GROG	J				BASE ORGANICS		1
13	2767	GYBN	J				BS CORDON		1

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Sect.	Cntx	Fabric	Form	Dec	No Vess	Dwg no	Comments	Join	Sherds
13	2767	ORAN					SCRAP		1
13	2767	ZDATE					L1-2+		0
13	2771	GREY					BSS		3
13	2771	ZDATE					RO		0
13	2773	GREY	J				BS		1
13	2773	ORAN					SCRAP		1
13	2773	ZDATE					RO		0
13	2775	GYBN	JBK		1		BASES 100% BSS		7
13	2775	ZDATE					2-3C		0
13	2777	CASH	JS		1		BSS THICK RIM		3
13	2777	COAR					CALC/SHELL		1
13	2777	FINE	BK	PCIR	1		BS		2
13	2777	GREY					BSS CC LOST		4
13	2777	GREY					BSS SCRAPPY SOME		7
13	2777	GREY					BURNT		2
13	2777	GREY		BVL			BSS SOME SURFS LOST		1
13	2777	GREY	BFB				BSS BURNT		1
13	2777	GREY	DPR				RIM EXT SLIP		1
13	2777	GREY	DPR	LA?			RIM		1
13	2777	GREY	J		1		RIM BASE PROF DEEPER		1
13	2777	GREY	J?		1		DISH		3
13	2777	GREY	JCUR				BASES J		13
13	2777	GROG	B?				BSS FRESH		1
13	2777	GROG	J?				RIM		1
13	2777	GROG	JS		1		RIM FRAG		1
13	2777	GYBN					RIM FRAG		2
13	2777	MOOXR	MWS				BSS THICK FRESH		2
13	2777	ORAN			1		BSS SCRAPPY		1
13	2777	OX					RIM GIRTH YC97		3
13	2777	OX					BSS SANDY OXRC?		3
13	2777	OX					BSS SOME ABR		3
13	2777	OXPA	BCAR	PS PO	1	80	BSS		3
13	2777	OXRC					RIM BSS RED P YOUNG D24		2
13	2777	OXRC	B36				240-400		2
13	2777	OXRC	B38		1	81	BSS CC LOST		1
13	2777	OXWS	BFB				RIM VABR SLIP LOST		5
13	2777	SAMCG	33?				RIMS BSS V BURNT PROF		1
13	2777	SMSH	JCUR				PIERCED BASE		1
13	2777	SMSH	JS	FF?			RIM GIRTH		1
13	2777	VRW	JBK				BS ABR BURNT		3
13	2777	ZDATE					BSS		1
13	2777	ZZZ					RIM		1
13	2778	DR20	A				RIM FRAG		1
13	2778	GREY	JL				BS		0
13	2778	GREY					L3-4		0
13	2778	GROG					SOME ABR SCRAPPY SHS		0
13	2778	GYBN					SOME BURNT PROB 4		1
13	2778	OX					SCRAP NOT EXTR		11
13	2778	SAMSG	D				BSS		1
13	2778	SMSH					BS		1
13	2778	ZDATE					BSS		2
13	2778	ZZZ					BSS W CALC		2
13	2781	GREY	J				BSS ABR		13
13	2781	GROG					FLAKE		1
13	2781	GROG					BSS		2
13	2781	SMSH	J				L1-2		0
13	2781	ZDATE					SCRAPPY MOST ABR 2		0
13	2783	GREY					CHIPS SAMPLE <7019>		0
13	2783	GREY	J				BASE BSS		3
13	2783	GROG					BS		1
13	2783	OX			1		BS		1
13	2783	ZDATE			1		BASE		1
13	2783	ZZZ					2+		0
13	2784	GFIN	BK				BSS SCRAPS		6
13	2784	GREY					BASE		1
13	2784	ZDATE					BSS FROM SAMPLE <7020>		2
13	2786	BB1	BFB				BSS ABR		3
13	2786	CR					2+		0
13	2786	CR					SOME ABRATED 2 CHIPS		0
13	2786	CR					SAMPLE <7020>		0
13	2786	CR					BS		1
13	2786	CR					BS ABR		1
13	2786	CR					L1-2		0
13	2786	CR					RIM FRAG SMALL VESS		1
13	2786	CR					BSS BLK EXT		1

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Sect.	Cntx	Fabric	Form	Dec	No Vess	Dwg no	Comments	Join	Sherds
13	2786	CR	F?		1		BSS		2
13	2786	GREY					BS CORDON		1
13	2786	GREY					BSS GREY		3
13	2786	GREY					BSS		3
13	2786	GREY					BSSBLK		4
13	2786	GROG					BS		1
13	2786	GYBN					BS		1
13	2786	GYBN					BSS DK SURFS		2
13	2786	GYBN	B?				BASE		1
13	2786	GYBN	JCHR				RIM FRAG		1
13	2786	GYBN	JCHR			59	RIM SHLDR		1
13	2786	GYBN	JWM				RIM FRAG		1
13	2786	NAT		HM?			BS ABR		1
13	2786	NVCC	BK	BAS?			SMALL SCRAPS LT BN FAB		3
13	2786	OX					BS		1
13	2786	OX					BS		1
13	2786	OX	DPR				RIM		1
13	2786	PIGR					BS		1
13	2786	SMSH	J				BASE		1
13	2786	SMSH	J		1		BS		2
13	2786	SMSH	JB				THICKENED RIMFRAG		1
13	2786	SMSH	JCUR				NECK		1
13	2786	SMSH	JCUR				RIM NECK		1
13	2786	SMSH	JCUR		1		RIM SHOULDER ABR		2
13	2786	SMSH	JS				BSS THICK		2
13	2786	ZDATE					ML3		0
13	2786	ZZZ					MAINLY SMALL SHS SOME		0
13	2787	GREY					ABR		35
13	2787	GREY	BFL				BSS		1
13	2787	GREY	JCHR		1	28	RIM		3
13	2787	GREY	JCUR				RIMS BS SHLDR		1
13	2787	GROG	JL				RIM		1
13	2787	GYBN					BASE		1
13	2787	OX					BSS		3
13	2787	OX			1		BS		1
13	2787	SMSH			1		BSS MIN GROG VABR		2
13	2787	ZDATE					BSS		2
13	2787	ZZZ					EM2		0
13	2791	CR	BK				MOST FRESH		0
13	2791	GREY					BASE WORN? HOLE IN		1
13	2791	GREY					CENTRE BASE		8
13	2791	GREY			1		BSS		2
13	2791	GREY	JBKCUR				BSS ABR FLAKED		1
13	2791	GYBN	J		1		RIM THIN WALL		4
13	2791	ZDATE					BSS		0
13	2793	GREY			1		L1-2		2
13	2793	GREY	J				BSS		4
13	2793	GYBN			1		SCRAPS		8
13	2793	OX	BK	ROUZ	1		BSS SCRAPS		3
13	2793	ZDATE					2-E3		0
13	2793	ZZZ					SOME SCRAPPY SHS		0
13	2795	GYBN					BS		1
13	2795	OX					SCRAPS COARSE		2
13	2795	OX					SCRAPS		4
13	2795	ZDATE					RO		0
13	2799	GREY					BS		1
13	2799	OX					FLAKES		2
13	2799	SMSH	JCUR		1	89	RIM BSS		6
13	2799	ZDATE					L1-2		0
13	2800	GREY					BSS		5
13	2800	NAT	JL				BS ORGANICS MIN GROG		1
13	2800	SMSH					ABR		1
13	2800	ZDATE					BS		0
13	2801	GROG	JL		1		RO		2
13	2801	ZDATE					BSS ABR INT		0
13	2802	GFIN	BK				RO		1
13	2802	GYBN					BS		1
13	2802	GYBN					BS		1
13	2802	OX	J				SCRAP		1
13	2802	ZDATE					BASE LGE SH GREY CORE		1
13	2802	ZZZ					COARSE		0
13	2802	GREY					2+		1
13	2809	GREY					LGE SH ABR		2
13	2809	GREY					SCRAPS		2

Sect.	Cntx	Fabric	Form	Dec	No Vess	Dwg no	Comments	Join	Sherds
13	2809	GROG					SCRAP		1
13	2809	ZDATE					RO		0
13	2812	GROG		HM?	1		BSS ORGANICS		2
13	2812	ZDATE					RO		0
13	2813	GREY					BS		1
13	2813	ZDATE					RO		0
13	2815	GYBN					BSS		3
13	2815	GYBN	J				BS		1
13	2815	OX	JS		1		BSS THICK SAME IN	1320	8
13	2815	ZDATE					2+		0
13	2815	ZZZ					MAINLY FRESH STORAGE JARS		0
13	2820S	VRW					BS		1
13	2820S	ZDATE					1-2C+		
13	2820S	ZZZ					SAMPLE <7007> + 1 TINY CHP		
13	2820s	GYBN					BS		1
13	2824	GFIN	JBK				BS		1
13	2824	ZDATE					L1-2		0
13	2829	SMSH	JCUR				RIM FRAG		1
13	2829	ZDATE					2+		0
13	2830	GREY					BS		1
13	2830	ZDATE					RO		0
13	2835	CR	F		1		BSS		2
13	2835	GREY	BFL		1		RIMS BS GIRTH FINE		2
13	2835	GREY	DPR				RIM FRAG		1
13	2835	GREY	DPR				RIM FRAG		1
13	2835	GREY	J		1		BSS		2
13	2835	GYBN					BSS SCRAPS		3
13	2835	OX					BS		1
13	2835	OX	BFL				RIM GIRTH SOOT ON RIM		1
13	2835	OX	BK				BS		1
13	2835	OX	BKCOR				RIM BS		2
13	2835	SMSH	J		1		BSS		2
13	2835	ZDATE					M2E3		0
13	2835	ZZZ					FRESH MOSTLY MEDI SIZE		0
13	2843	GREY					BS		1
13	2843	SMSH		RIL			BS		1
13	2843	SMSH	JCUR				RIM FRAG FINE VESS		1
13	2843	ZDATE					L1-2+		0
13	2844	GAU4	A				BS ABR		1
13	2844	ZDATE					1-3C		0
13	2847	SMSH			1		RIM NECK BSS		5
13	2847	ZDATE					2-3?		0
13	2847	ZZZ					FRESH		0
13	2849	GFIN	JBK				BS		1
13	2849	GREY			1		BSS		2
13	2849	GYBN			1		BSS		2
13	2849	ZDATE					L1-2+		0
13	2853	OX					BS BURNT		1
13	2853	OX	JL		1		BSS ABR		3
13	2853	ZDATE					RO		0
13	2854	GROG	JL	COL		55	BSS FLAT SHS		2
13	2854	ZDATE					LIA-M1		0
13	2856	GREY	J		1		BASES FRAGMENT		6
13	2856	ZDATE					RO		0
13	2860	FLIN		HM			BS		1
13	2860	ZDATE					PREHIST?		0
13	2873	GREY					BS		1
13	2873	ZDATE					L1-2		0
13	2876S	GYBN					BSS		2
13	2876S	ZDATE					RO		
13	2876S	ZZZ					SAMPLE <7004>		
13	2880S	GROG					CHIP		1
13	2880S	ZDATE					RO		
13	2880S	ZZZ					SAMPLE <7003>		
13	2882	COAR			1		BSS		2
13	2882	ZDATE					RO		0
13	2889	ORAN					BSS		2
13	2889	ZDATE					RO		0
13	2899	NAT	J	HM	1		BSS CALC MICROFOSSILS		11
13	2899	ZDATE					IA-ML1		0
13	2920	GREY	JCUR				RIM NECK UPRIGHT		1
13	2920	ZDATE						2	0
13	2920	ZZZ					FRESH		0

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Sect.	Cntx	Fabric	Form	Dec	No Vess	Dwg no	Comments	Join	Sherds
13	2922	GREY					BSS		2
13	2922	GREY	JCUR	LA	1		RIM BSS CORDON AT NECK DK GREY COARSE		3
13	2922	ZDATE					EM2		0
13	2924	BEGR?					BS		1
13	2924	GREY					BS		1
13	2924	OX			1		BSS RED BN SCRAPS		2
13	2924	OX	BCUR		1	78	RIMS BS-SHLDR J ORGANICS		2
13	2924	SHEL	JS				BS THICK CALC/SHEL PALE BN		1
13	2924	SMSH	J				BS		1
13	2924	ZDATE					1-2C		0
13	2924	ZZZ					FRESH SMALL GROUP 1CHP SAMPLE <7005>		0
13	2926	BEGR?			1		BSS COARSE ORGANIC GROG		3
13	2926	GREY					BS		1
13	2926	GREY	JCUR		1	34	RIM BSS BLK WITH GROG		7
13	2926	OX			1		BSS SCRAPPY		3
13	2926	SMSH			1		BSS BLK		2
13	2926	SMSH	RIL		1		BSS		2
13	2926	ZDATE					1-E2		0
13	2926	ZZZ					SOME SMALL MOST FRESH		0
13	2927	GREY					BSS		4
13	2927	GROG					BSS ORGANICS		2
13	2927	GROG	JL	SL	1		BSS SCORED LINES LIA-M1 BSS BLK SPECKS ?MHAD		2
13	2927	ORAN					ABR		3
13	2927	OX					BSS		2
13	2927	OXRC	B36				RIM ABR CC LOST		1
13	2927	SMSH					BS		1
13	2927	ZDATE					M3-4		0
13	2927	ZZZ					MIX DATES		0
13	2929	GREY					BSS		2
13	2929	GROG					BS SAMPLE <7006>		1
13	2929	GROG			1		BSS		3
13	2929	GYBN					BS		1
13	2929	OX	BK	ROUZ	1		BSS		2
13	2929	SMSH					BS SCRAP		2
13	2929	VRW	MHK		1		FLANGE BSS CHPS SAMPLE <7006>		8
13	2929	ZDATE					M2-3		0
13	2929	ZZZ					INC SAMPLE <7006> 3 CHPS		0
13	2930	BEGR					BSS BEGR ORGANICS		7
13	2930	BEGR					BSS THICK		3
13	2930	BEGR			1		BSS BLK SURFS MIN GROG		11
13	2930	BEGR	CPN			25	RIM NECK		1
13	2930	BEGR	CPN			24b	RIM SHOULDER		1
13	2930	BEGR	JL			26	RIM		1
13	2930	GREY					BSS MED GREY		3
13	2930	GREY	JCUR				RIM FRAG		1
13	2930	GREY	JCUR		1	35	RIMS NECK HIGH SHOULDER		3
13	2930	GREY	PGB				RIM FRAG GALLO BELGIC		1
13	2930	GYBN					BSS SCRAPPY		6
13	2930	OX					BS DK WASH		1
13	2930	OX	FHOF		1	72	RIMS BSS BASE DK GREY CORE		9
13	2930	SMSH	JB				BASE		1
13	2930	ZDATE					1-E2		0
13	2930	ZZZ					MOST SMALL SHS SOME ABR		0
13	2931	CR	BK?		1		BSS THIN WALL OF NV		10
13	2931	GFIN	BK				BS		1
13	2931	GREY					BSS		1
13	2931	GREY			1		BSS GROOVE		3
13	2931	GREY	DPR				RIM		1
13	2931	GREY	DPR				OX FAB DK GREY WASH		1
13	2931	GREY	JB	SWL	1		BSS		2
13	2931	GREY	JCUR				RIM		1
13	2931	GROG					BSS SCRAPS		9
13	2931	GYBN					BSS		13
13	2931	GYBN			1		BSS		2
13	2931	GYBN		RIL			BS ABR		1

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Sect.	Cntx	Fabric	Form	Dec	No Vess	Dwg no	Comments	Join	Sherds
13	2931	OX					BSS		2
13	2931	SMSH			1		BSS		4
13	2931	ZDATE					L2-3		0
13	2931	ZZZ					MOST SMALL SHS MIN ABR		0
13	2933	GYBN	BFB			64	RIM GIRTH THICK SOOTED		1
13	2933	ZDATE					L3-4		0
13	2933	ZZZ					SURF ABRADED LGE SH		0
13	2935	GREY	JB				RIM FRAG		1
13	2935	GYBN					SCRAP		1
13	2935	NVCC	JNN	ROUZ	1	70	RIMS BS RPNV70 ABR		3
13	2935	ORAN					SCRAP		1
13	2935	OX					SCRAP		1
13	2935	ZDATE					4C		0
13	2935	ZZZ					SOME SCRAPPY SH NVCC		0
13	2936	CC	BD				ABR LGE SHS		1
13	2936	CC	BK				BASE CC LOST		1
13	2936	CC	BK	STCO			BASE CC LOST CC ALL SAME FAB BLK		1
13	2936	CC	BK				SPECKS AS OXFORD		1
13	2936	CC	BWM				BS CC LOST		1
13	2936	CC	BWM				RIM CC LOST		2
13	2936	GREY					BSS		6
13	2936	GREY	JCUR				RIM		1
13	2936	GROG					BS MIN GROG		1
13	2936	GROG					BSS BEGR		5
13	2936	GROG	JCUR				RIM FRAG		1
13	2936	GROG	JL	RIL			BS		1
13	2936	GROG	JS		1		RIMS J		2
13	2936	GYBN					BSS ABR		5
13	2936	GYBN			1		BSS ABR RED BN CORE		5
13	2936	OX					SCRAPS		2
13	2936	OX	BK				BSS THIN WALL		3
13	2936	OX	BPR			79	RIM		1
13	2936	OXRC					BS CC LOST		1
13	2936	OXRC		RDS			BS CC LOST		1
13	2936	OXRC	B36				RIM CC LOST		1
13	2936	OXRC?	BNK				RIM CC LOST BLK		1
13	2936	SMSH					BSS		5
13	2936	SMSH		RIL			BS		1
13	2936	ZDATE					4C		0
13	2936	ZZZ					MANY SMALL SHS MIX		0
13	2940	GREY			1		DATES		2
13	2940	ZDATE					BSS		0
13	2942	GREY					RO		0
13	2942	GREY	STR		1		BSS FLAKE		4
13	2942	GREY					BSS		3
13	2942	GYBN					SCRAP		1
13	2942	ZDATE					2+		0
13	2942	ZZZ					1 CHIP SAMPLE <7008>		0
13	2966	GFIN	J		1		BSS W MIN CALC SILTY		7
13	2966	ZDATE						2	0
13	2966	ZZZ					FRESH		0
13	2978	GREY					BSS		4
13	2978	GREY	DPR				RIM BASE		1
13	2978	OX	STR				SCRAS		2
13	2978	SAMCG					FLAKE		1
13	2978	SMSH					BS		1
13	2978	ZDATE					M2-3		0
13	2985	GREY					BASE		1
13	2985	GREY					BS		1
13	2985	GREY	JCUR				RIM		1
13	2985	GYBN	JCUR				RIM FRESH		1
13	2985	OXRC	B	STDR		82	RIM STAMPED DEMI		1
13	2985	ZDATE					ROSETTE VABR		0
13	2985	ZZZ					M4		0
13	2985	ZZZ					CC VABR GREY FRESH LGE		0
13	2986	GROG					SH		1
13	2986	OX					BS SCRAP		3
13	2986	ZDATE					BSS ORANGEY		0
13	2987	GROG					RO		2
13	2987	PINK					SCRAPS ?IA CORDON		1
13	2987	ZDATE					BS		0
13	2990	GREY					RO		1
13	2990	ZDATE					BS		0
13	2991	SMSH	J	RIL	1		RO		0
13	2991	SMSH					BSS		2

Sect.	Cntx	Fabric	Form	Dec	No Vess	Dwg no	Comments	Join	Sherds
13	2991	ZDATE					RO		0
13	2992	OX	J				BS		1
13	2992	ZDATE					RO		0
13	2993	GREY					BS		1
13	2993	ORAN					BS		1
13	2993	ZDATE					2+		0
13	2994	GROG					BS		1
13	2994	GROG	JL				BS		1
13	2994	SMSH	JCUR		1		RIM BSS		5
13	2994	ZDATE					2+		0
13	2995	GROG					BS		1
13	2995	ZDATE					RO		0
13	2997	CR					BS N VALLEY		1
13	2997	FINE	BK	ROUZ			BS OXID FAB EARLY		1
13	2997	GFIN			1		BSS SILTY FAB		2
13	2997	GFIN	BKEV?		1		RIM FRAG BSS		6
13	2997	GREY					BASE BSS		5
13	2997	GREY					BS		1
13	2997	GREY	BFL			45	RIM GIRTH		1
13	2997	GYBN					BSS		3
13	2997	GYBN			1		BSS BLK EXT BN INT		3
13	2997	OX	BKCOR	ROUZ		75	RIM BSS		3
13	2997	SMSH					BSS SCRAPPY		2
13	2997	VRW	F				HANDLE 3R		1
13	2997	ZDATE					LI-EM2		0
13	2997	ZZZ					SMALL SHS MIN ABR		0
13	2998	SMSH	JL				BS		1
13	2998	ZDATE					RO		0
13	2999	GREY					BSS		2
13	2999	ZDATE					RO		0
13	3000	GREY					BS		1
13	3000	ZDATE					RO		0
13	3001	SMSH	JCHR				RIM NECK UPRIGHT SLIGHT CHANNEL		1
13	3001	ZDATE					SOOT OVER RIM		
13	3001	ZZZ					LI-E2		0
13	3001	ZZZ					FRESH LGE SH		0
13	3002	CR					BS		1
13	3002	OX			1		BSS DK GREY CORE		3
13	3002	ZDATE					RO		0
13	3003	CC	BKPR	ROUZ	1		RIM BSS ?CGBL		5
13	3003	GREY			1		BSS ?ORGANIC TEMPERED		2
13	3003	GREY	B				BS		1
13	3003	GREY	BFL			44	RIM BASE PROF DK GREY		1
13	3003	GREY	BFL		1	46	SILTY W LARGE Q 0.5 SA	1306	4
13	3003	GREY	JBK				RIM BASE GREY		1
13	3003	GREY	JCUR				BS SAND W BN MARGINS		1
13	3003	GREY	JCUR		1	33	RIM GREY		25
13	3003	GYBN			1		RIM BSS BASE J		2
13	3003	OX					BSS BURNT		1
13	3003	OX					BS PALE		1
13	3003	OX					BSS PALE BUFF		1
13	3003	OX			1		BSS RED BN		2
13	3003	OX					BSS PITTED		6
13	3003	SMSH					BSS		2
13	3003	VRW?					BS		1
13	3003	ZDATE					M2E3		0
13	3003	ZZZ					3 SMASH VESS FRESH		0
13	3005	GFIN	BKPH?				RIM FRAG		1
13	3005	GREY			1		BSS		2
13	3005	OX					BSS		2
13	3005	SMSH					BSS		2
13	3005	ZDATE					LI-2+		0
13	3006	CC	BK				BS ?NV		1
13	3006	GREY					BSS		2
13	3006	ZDATE					M2+		0
13	3007	GREY					BSS		9
13	3007	GREY	B				BASE VABR		1
13	3007	GREY	DPR				RIM		1
13	3007	GREY	JCUR				RIM FRAG		1
13	3007	GROG	JL				BSS		2
13	3007	MOOX	M				BS		1
13	3007	OX		RIL	1		BSS		2
13	3007	SMSH					BSS		2
13	3007	ZDATE					M3+		0
13	3007	ZZZ					MIX?		0

APPENDIX 3
Roman Pottery

Sect.	Cntx	Fabric	Form	Dec	No Vess	Dwg no	Comments	Join	Sherds
13	3008	GREY					BSS		2
13	3008	GREY	BBR				RIM		1
13	3008	GROG	JL				BS		1
13	3008	ZDATE					2+?		0
13	3009	GREY					BSS		6
13	3009	OX					BS ABR		1
13	3009	ZDATE					RO		0
13	3010	GREY		SWL			BSS		11
13	3010	GREY					BS		1
13	3010	ORAN					BSS ABR		2
13	3010	OX					BS ABR		1
13	3010	OX	JCHR				RIM FRAG SHLDR MIN		1
13	3010	SMSH					GROG		1
13	3010	ZDATE					BS		1
13	3010	ZDATE					L1-2+		0
13	3011	OX	FHOF		1	73	RIMS BS SOAPY COARSE FAB ORANGEY		2
13	3011	SAMLM		35	17		FAB OF FIG 42.34MK		3
13	3011	ZDATE					RIM FTRGS SF5092 UNUS		3
13	3011	ZZZ					FAB		0
13	3011	ZZZ					M2-3		0
13	3017	VRW					1 VESS		0
13	3017	ZDATE					SCRAP ABR		1
13	3025	GREY					1-2C		0
13	3025	SMSH	JS				SCRAP		1
13	3025	ZDATE					RIM		1
13	3025	ZDATE					2-4C		0
13	3025	ZDATE					RO		0
13	3025	ZZZ					FRESH LGE SH		0
13	3042	OXRC	BCAR	STDR/RO			RIM AS YOUNG C83.5 ML4		1
13	3042	ZDATE					SF5114		1
13	3042	ZZZ					ML4		1
14	1400	GREY		HM?			OXRC ONLY		1
14	1400	ZDATE					BS COARSE MIN GROG		0
15	1505	ZDATE					1-E2?		0
15	1505	ZZZ					PREHIST		0
15	1505	ZZZ					1 SH FLINT TEMPER		0
16	1601	GREY			1		PREHIST		4
16	1601	ZDATE					RIM BSS		0
16	1601	ZZZ					RO?		0
16	1605	GYBN					UNUS FORM		0
16	1605	ZDATE					BS		1
16	1608	AMPH	A			91	RO		0
16	1608	CALC	J				RIM UNUS SALAZAN?		1
16	1608	CC	B				BS		1
16	1608	CC	BHEM				BS CC LOST		1
16	1608	DR20	A		1		RIM		1
16	1608	FINE	BK?				BS AND FLAKES		6
16	1608	GREY					BS		1
16	1608	GREY					BSS SAME SMALL		29
16	1608	GREY					SCRAPPY ABR		29
16	1608	GREY	BFL				BSS SOME ABR		1
16	1608	GREY	BTR				RIMS		1
16	1608	GREY	BTR				RIM FRAG		1
16	1608	GREY	BTR		1		RIM GIRTH ABR		1
16	1608	GREY	BTR		1		RIMS WALL BS PALE WASH		3
16	1608	GREY	BTR				RIMS		2
16	1608	GREY	BWM				RIM FRAG		1
16	1608	GREY	JCHR				RIM		1
16	1608	GREY	JCUR				RIM FRAG		1
16	1608	GREY	JCUR				RIM		1
16	1608	GROG					BS GROOVED		1
16	1608	GROG					BSS BASES		7
16	1608	GROG					BSS		2
16	1608	GROG					BSS		2
16	1608	GROG	JB				RIM FRAG		1
16	1608	GROG	JL				BS		1
16	1608	GROG	JL				BSS		6
16	1608	GROG	JL		1		BSS		3
16	1608	GROG	JL	SL			BS ORGANICS AS IN	1671	1
16	1608	GYBN					BS		1
16	1608	GYBN					BSS		3
16	1608	GYBN					BSS		7
16	1608	GYBN	B				BASE		1
16	1608	GYBN	JL				BS		1
16	1608	LOXI	L		1		RIMS J		2

APPENDIX 3
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Sect.	Cntx	Fabric	Form	Dec	No Vess	Dwg no	Comments	Join	Sherds
16	1608	MHAD	CLSD				BS		1
16	1608	MOOX	MBF				RIM FLANGE BURNT M10?	1609	1
16	1608	NAT		HM?	1		BSS J		2
16	1608	NAT		SL			BS		1
16	1608	NAT	CPN				RIM FRAG ORGANICS		1
16	1608	NVCC	BKFOS				BS INT BN FAB		1
16	1608	OX					BS		1
16	1608	OX					BSS SOME SCRAPPY ABR		11
16	1608	OX					BSS		4
16	1608	OX	JBK	ROUZ			BS BKBB? MIN GROG SAME	1660	1
16	1608	OXWS					IN		2
16	1608	OXWS					BSS		2
16	1608	PIGR					BS		1
16	1608	SAMCG	18/31-31				RIM		1
16	1608	SAMCG	18/31-31		1		FRAGS		3
16	1608	SAMCG	18/31-31		1		RIMS ABR		2
16	1608	SAMCG	31				RIM THIN WALL FRESH		1
16	1608	SAMCG	31	NAME			FTRG ABR JONI? SF 5277		1
16	1608	SAMCG	33				RIM THIN WALL		1
16	1608	SAMCG	33	NAME	1	137	FTRG COMP STAMP		7
16	1608	SAMCG	45				?TTTTVS SF 6014		1
16	1608	SAMCG	BD				BS WORN		1
16	1608	SAMCG	BD				FLAKED		1
16	1608	SAMCG	BD				FLAKED		1
16	1608	SAMEG?	31				RIM THIN WALL FRESH		1
16	1608	SAMSG	36/36	RIV			RIM BASE FRESH		1
16	1608	SAMSG					RIVETHOLE		1
16	1608	SMSH					BS		1
16	1608	SMSH					BSS SOME SCRAPPY		9
16	1608	SMSH					BSS		12
16	1608	SMSH	BTR			132	RIM NECK		1
16	1608	SMSH	CPN	SL		127	RIM SCORED DIAGONAL LINES ON RIM		1
16	1608	SMSH	JCHR		1		GROOVED TOP RIM		3
16	1608	SMSH	JCHR	RIL		131	RIMS		1
16	1608	SMSH	JS				RIM DOUBLE GROOVED		1
16	1608	SMSH	JS				RIM FRAG ABR		1
16	1608	SMSH	JS				RIM FRAG		1
16	1608	SMSH	JUP				RIM FRAG		1
16	1608	VRW	F?		1		BSS		3
16	1608	ZDATE					ML3		0
16	1608	ZZZ					MIX DATES EARLY		0
16	1608	ZZZ					SCORED GROG SHERD		0
16	1609	GREY	J				BASE		1
16	1609	MOOX	MB				RIM FLANGE BURNT	1608	1
16	1609	ZDATE					180-240		0
16	1609	ZZZ					FRESH		0
16	1610	GROG					BS		1
16	1610	GROG			1		BSS ABR		2
16	1610	ORAN					BS BLK SILTY ?OXFORD		1
16	1610	ZDATE					MHAD		0
16	1610	ZZZ					RO		0
16	1610	ZZZ					ABR		0
16	1611	SMSH	JCHR		1		RIMS BS		3
16	1611	ZDATE					ML1		0
16	1611	ZZZ			1		1 VESS FRESH		0
16	1612	GREY					BSS SMALL SHS		8
16	1612	GREY	CP?				BS		1
16	1612	GREY	J		1		BS BASE		2
16	1612	GROG		HM			BSS		2
16	1612	GROG					BS		1
16	1612	GROG	CPN			102	RIM		1
16	1612	GROG	JL				BS		1
16	1612	GROG	JL	HM			BS		1
16	1612	GYBN			1		BSS BN INT		6
16	1612	SAMCG?	BD				BS		1
16	1612	VRW	F		1		BSS		12
16	1612	ZDATE					EM2		0
16	1612	ZZZ					SOME SMALL SHS MOST		0
16	1612	ZZZ					FRESH		0
16	1613	CR					BS ABR		1
16	1613	GFIN	P				RIM		1
16	1613	GREY					BSS		2
16	1613	GROG					BS CALC		1
16	1613	GROG					BS		1
16	1613	VRW	F?		1		BSS		4

APPENDIX 3
Roman Pottery

Sect.	Cntx	Fabric	Form	Dec	No Vess	Dwg no	Comments	Join	Sherds
16	1613	ZDATE					ML1-E2		0
16	1614	OX		HM			BS LA FAINT RILLING		1
16	1614	VRW	FHOF		1	135	RIM 100% HANDLE 3R BSS		12
16	1614	ZDATE					50-70		0
16	1614	ZZZ					1 SMASH VESS 1 SHS LA		0
16	1615	GREY	JCUR	WM	1		PUB C 50-60		0
16	1615	GROG	JNN	WM	1	105	RIM FRAGS SCRAPS BS		4
16	1615	NAT	J	HM	1		RIM BSS SHOULDER W		9
16	1615	ZDATE					ORGANICS		3
16	1615	ZZZ					BASES BS FRESH		0
16	1617	GYBN					M1-E2		0
16	1617	GYBN	JCUR?				FRESH SHS MED-LGE		1
16	1617	ZDATE					BS		1
16	1617	ZZZ					RIM FRAG		0
16	1619	COAR					2+		0
16	1619	CR					FRESH		0
16	1619	GREY					BS ABR		1
16	1619	GREY	J	HM?			SCRAPS		2
16	1619	GROG		RIL			BSS FRAGS		21
16	1619	GROG	JCUR		1		BS ABR		1
16	1619	GYBN					BS ABR		1
16	1619	OX					RIM BSS		4
16	1619	OX					BS		1
16	1619	OX	JCUR				SCRAPS		2
16	1619	SMSH					BS		1
16	1619	ZDATE					RIM FRAG		1
16	1619	ZZZ					BSS		3
16	1619	ZZZ					ML1-E2		0
16	1619	ZZZ					INC SCRAPPY SMALL SHS		0
16	1620	GREY					SAMPLE <8013> 8 CHIPS		0
16	1620	GREY	JCHR			97	BSS		3
16	1620	GREY	JCHR		1	98	RIM SHOULDER HEAVY		1
16	1620	GREY	JL				SOOT		1
16	1620	GREY	JUP?				RIMS BSS PROF		31
16	1620	GROG	JL				BS THICK		1
16	1620	GYBN					RIM FRAG		1
16	1620	OX	JCHR			123	BS THICK		1
16	1620	SMSH					BS		1
16	1620	SMSH	JCHR	1		129	RIM SHOULDER		1
16	1620	ZDATE					BSS		2
16	1620	ZZZ					BS		1
16	1622	SAMSG	RT9				RIM NECK		1
16	1622	ZDATE					1-E2		0
16	1622	ZZZ					INTERESTING GROUP		0
16	1623	GREY	B?	BWL			MOST 1 SMASH VESS		0
16	1623	GREY	J		1		RIM GIRTH		1
16	1623	GREY	JWN	BVL	1		PREF		0
16	1623	GROG	JL	HM			SAM ONLY FRESH RARE		0
16	1623	OX					AFTER AD 66		0
16	1623	ZDATE					BS BWL ON INT		1
16	1623	ZZZ					BSS LGE FRESH SHS		9
16	1625	GREY					BSS LGE SHS		8
16	1625	GREY	JCHR				BASE SOOT		1
16	1625	GREY	JCUR				BS		1
16	1625	GREY	JL				2-3C		0
16	1625	ZDATE					MIX? LGE FRESH SHS		0
16	1627	CR					BSS SCRAPS		5
16	1627	GFIN	BK	ROUZ			RIM FRAG		1
16	1627	GFIN	BKBB	ROUZ			RIM FRAG		1
16	1627	GREY					BASE BS ABR		2
16	1627	GREY					2-3C		0
16	1627	GREY	B				SCRAP		1
16	1627	GREY	J				BSS SANDWICH SAME FAB		2
16	1627	GREY	J				BS SHOULDER SANDWICH		1
16	1627	GREY	J				SAME FAB		1
16	1627	GREY	JB	BVL	1		BSS		12
16	1627	GROG	JL		1		BS		1
16	1627	GYBN					BS BURNISHED EXT		1
16	1627	GYBN					BS SHOULDER		1
16	1627	SAMSG	27?				BS		1
16	1627	SAMSG					BSS		3
16	1627	SAMSG					BSS PALE BN BLK CORE		4
16	1627	SAMSG					BS SOOT		1
16	1627	SAMSG					BS		1
16	1627	SAMSG					FRAG		1

APPENDIX 3
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Sect.	Cntx	Fabric	Form	Dec	No Vess	Dwg no	Comments	Join	Sherds
16	1627	SAMSG	RT9?				RIM WHITE UNDERSLIP		1
16	1627	VRW					BSS		3
16	1627	VRW		1			NECK HANDLE SCAR		1
16	1627	ZDATE					1-E2		0
16	1627	ZZZ					SMALL-MEDIUM SHS FRESHISH		0
16	1630	GFIN	DGR				RIM GRITH EROM		1
16	1630	GREY					BSS		3
16	1630	GREY		B			BS BURNISHED EXT		1
16	1630	GREY	J				BASE		1
16	1630	NAT					SCRAP COARSE		1
16	1630	NAT		HM SL			BS ?HORIZ SL		1
16	1630	ZDATE					LI-E2		0
16	1630	ZZZ					SMALL SHS SOME WORN		0
16	1632	CR	BK?				BS V THIN WALLED		1
16	1632	CX	PPR				RIM SILTY FAB SOOT		1
16	1632	DR20	A				SCRAP NOT EXT		1
16	1632	GREY					BS		1
16	1632	GREY					BSS		3
16	1632	GREY	JCHR				RIM		1
16	1632	GYBN					BS		1
16	1632	OX					BSS		2
16	1632	OX	BK	ROUZ			BS ?BKBB		1
16	1632	VRG?	F?		1		BSS SCRAPS GREYWASH OR SOOTED		13
16	1632	VRW	BK?				BS THIN WALLED		1
16	1632	ZDATE					LI-E2		0
16	1632	ZZZ					SCRAPPY SMALL SHS		0
16	1639	GREY					BS FLAKED		1
16	1639	ZDATE					RO		0
16	1640	SMSH	J		1		BSS		2
16	1640	ZDATE					RO		0
16	1641	GREY	J	LA			BS		1
16	1641	GROG	JB		1		BSS		2
16	1641	OX					BSS		2
16	1641	ZDATE					EM2?		0
16	1642	GREY					BSS		7
16	1642	GREY		CPS			BS COARSE FAB		1
16	1642	GROG					BS		1
16	1642	SMSH		RIL			BS		1
16	1642	ZDATE					2C		0
16	1643	BBS	B	LA			BASE		1
16	1643	GYBN	J				BS		1
16	1643	ZDATE					120-200		0
16	1643	ZZZ					FRESH		0
16	1644	GREY					BSS		3
16	1644	OX					SCRAPS		3
16	1644	ZDATE					RO		0
16	1644	ZZZ					V SCRAPPY BNT FRESH		0
16	1645	SMSH	J				BS		1
16	1645	ZDATE					RO		0
16	1645	ZZZ					PROB 1-2		0
16	1646	GREY	BTR				RIM FRAG		1
16	1646	ZDATE					M2E3		0
16	1647	GROG					BS		1
16	1647	MORT	M				BS ?MOOX GRITTY FAB V THIN WALL		1
16	1647	ZDATE					RO		0
16	1647	ZZZ					3C?		0
16	1651	GROG		HM SL			BS HORIZ SL FRESH		1
16	1651	GROG		HM SL			BS VERTICAL SL FRESH		1
16	1651	GROG		HM			BS ABR ORGANICS		1
16	1651	GROG		HM			BS FRESH		1
16	1651	GROG		HM			BSS ABR ORGANICS		3
16	1651	GROG		HM	1		V ABRATED SHS ORGANICS		3
16	1651	GROG	J	HM	1		BASE BS J ORGANICS FRESH		2
16	1651	GROG	JCUR	HM	1		RIM FRAGS J BS CURVED PROFILE		3
16	1651	NAT		HM			BS SILTY FAB		1
16	1651	ZDATE					L1A-M1		0
16	1651	ZZZ					SOME FRESH SHS SOME ABR MIA? POSSIBLY INTO EROM		0
16	1653	GYBN					BS SCRAPS FRIABLE		1

Sect.	Cntx	Fabric	Form	Dec	No Vess	Dwg no	Comments	Join	Sherds
16	1653	ZDATE					RO		0
16	1655	GROG					BS ORGANICS		1
16	1655	ZDATE					RO		0
16	1660	GREY					BSS		4
16	1660	GREY	BK	ROUZ			BS		1
16	1660	GROG					ORANGE BROWN SAME IN	1608?	0
16	1660	GROG		HM SL			BS RIM		1
16	1660	GROG		HM SL			BS VERTICAL SL		1
16	1660	GROG		HM?			BSS SCRAPS		5
16	1660	GROG	B				BASAL BS		1
16	1660	GROG	JCHR	HM	1	103	RIMS GIRTH 1C? BSS J		20
16	1660	GROG	BKBB	HM SL	1	101a	BSS RIMS VERTICAL SCORED BASE		60
16	1660	NAT	BKBB			116	RIM		1
16	1660	ORAN	J				BASE MIN GROG		1
16	1660	RC	BK	RCC			BS POSS CGCC OR KOLN/NV		1
16	1660	SMSH					SCRAP		1
16	1660	ZDATE					L1-E2?		0
16	1660	ZZZ					MIX SOME EROM RC LATE AS EM2 FRAGS SMASH VESSELS		0
16	1661	GROG	JUP				RIM FRAG		1
16	1661	ZDATE					1-E2		0
16	1663	BEGR	CPN	HM SL	1	92	RIMS BSS BASE SL DIAG OXID INT		17
16	1663	ZZZ					SMASH FRESH		
16	1663S	GROG?					50-70		
16	1663S	ZDATE					CHIP SAMPLE <8014>		1
16	1663S	ZZZ					RO		
16	1665	GROG		HM?			1 TINY CHIP CC?		
16	1665	GYBN					BS		1
16	1665	NVCC	BK				BS		1
16	1665	OX					SCRAP WHITE FAB		1
16	1665	ZDATE					BS		1
16	1665	ZZZ					L2-3		0
16	1667	GROG					SCRAPPY MIX ?		0
16	1667	NAT					SCRAP		1
16	1667	ZDATE					BS		1
16	1667	ZZZ					M1+		0
16	1667	ZZZ					SCRAPPY FRESH		0
16	1668	GROG					FLAKE		1
16	1668	GROG		HM RIL	1		BSS ABR		3
16	1668	NAT		COL			BS FINE SILTY LGE SH FRESH SAME TYPE IN	2610	1
16	1668	NAT		HM			BSS ABR		3
16	1668	OX					SCRAP		1
16	1668	OX	J	HM?			BS		1
16	1668	ZDATE					M1		0
16	1671	GROG	J	HM/WF		109	PEDESTAL BASE SLOW WHEEL? ORGAINCS		1
16	1671	GROG	JCUR		1	104	RIM SHOULDER BSS GALLO BELGIC MANY OF FIG 16/76		3
16	1671	GROG	JL	HM SL	1		BSS THICK VERTICAL SL		4
16	1671	NAT					BS NECK		
16	1671	ZDATE					SCRAP ABR		1
16	1671	ZZZ					L1A-M1		0
16	1671	ZZZ					LGE FRESH SHS GALLO BELGIC FORMS		0
16	1672	GREY					BS		1
16	1672	ZDATE					MLI		0
16	1672	ZZZ					FRESH		0
16	1680	GROG					BS		1
16	1680	ZDATE					RO		0
16	1685	GROG	J		1		BSS BASE		14
16	1685	ZDATE					1-2C		0
16	1685	ZZZ					SMASH 1 VESS		0
16	1692	NAT		COL	1	119	BSS ORGANICS		4
16	1692	OX	BK?				FLAKES		3
16	1692	SMSH	JCHR		1		RIM FRAG BSS		7
16	1692	ZDATE					MLI		0
16	1693	GROG					BS ORGANICS		1
16	1693	GROG					BS SCRAP		1
16	1693	OX			1		BSS V THIN WALL V MICACEOUS ?IMPORTED FLAGON SILTY FAB 1C?		18
16	1693	ZDATE							0

APPENDIX 3
Roman Pottery

Sect.	Cntx	Fabric	Form	Dec	No Vess	Dwg no	Comments	Join	Sherds
16	1693	ZZZ					SMALL VESS FRESH		0
16	2600	GFIN	JBK				BSS		2
16	2600	GLAZ					BS ?MPOT		1
16	2600	GREY					BSS SOME ABR		9
16	2600	GREY	BWM				RIM FRAG EVERTED RIM		1
16	2600	GREY	DFL				RIM FRAG-BONE ABR		1
16	2600	GREY	J				BONE 100% ABR		1
16	2600	GROG					BSS		7
16	2600	GROG			1		BSS ORANGE BN EXT		5
16	2600	GROG	JB				BS BURNT		1
16	2600	GROG	JCUR				RIM		1
16	2600	GROG	JL				BS ORANGE BN		1
16	2600	GROG	JL				BS		1
16	2600	GROG	JS				BS ABR		1
16	2600	GYBN					BSS		9
16	2600	GYBN	JCHR		1	115	RIMS BSS ABR BURNT		5
16	2600	GYBN	JUP				RIM		1
16	2600	MOCO?	MWS				RIM BURNT		1
16	2600	NAT		HM			QUARTZ/QUARTZITE		1
16	2600	NAT		HM?			BSS BLACK RIM GROG		2
16	2600	NAT	CPN			117	BS FIRE SILTY FAB BURNT		1
16	2600	ORAN					RIM NECK		1
16	2600	ORAN	JB				BSS SANDY FAB ABR		6
16	2600	ORAN	JCUR				RIM FRAG		1
16	2600	ORAN	JCUR				RIM FRAG ABR		1
16	2600	OX					BS ABR		1
16	2600	OX	JCAR?		1		BSS		5
16	2600	OX	JL	SWL			BS		1
16	2600	PIGR					BS		1
16	2600	SAMCG		37	1		RIM BS J		2
16	2600	SMSH					BSS		8
16	2600	SMSH	BFL				RIM FRAG		1
16	2600	SMSH	BRR			133	RIM GIRTH VABR FRESH	2694	1
16	2600	SMSH	CPN			126	RIM BLACK		1
16	2600	SMSH	JCHR				RIM FRAG ABR		1
16	2600	SMSH	JCHR				RIM FRAG NECK		1
16	2600	SMSH	JCHR			130	RIM SHOULDER ORANGE		1
16	2600	SMSH	JL				BN		1
16	2600	SMSH	JL	RIL			BS		1
16	2600	VRW	F				BS		1
16	2600	ZDATE					HANDLE 3R		1
16	2600	ZDATE					ML2-E3		0
16	2600	ZZZ					SOME SMALL ABR SHS REDEPOS? MIX		0
16	2602	GREY					DATES 1 SHS GLZ MPOT?		0
16	2602	GREY					SCRAPS		4
16	2602	GROG					BS		1
16	2602	ZDATE					RO		0
16	2602	ZZZ					SCRAPPY		0
16	2604	GREY					BSS		4
16	2604	GROG					BSS		3
16	2604	GYBN	JCUR		1		RIM FRAGS		3
16	2604	OX					BSS		2
16	2604	VRW					BS BASE		2
16	2604	ZDATE					2+		0
16	2604	ZZZ					2 CHIPS SAMPLE <8009>; 1		
16	2606	GREY					CHP <8016>; 2 CHPS <8017>		
16	2606	GREY					BSS		6
16	2606	GROG					BSS SCRAPS		4
16	2606	GRSH	JBK				BS		1
16	2606	GYBN					BSS		4
16	2606	GYBN					SCRAP		1
16	2606	NAT		HM?			BSS SILTY FAB		3
16	2606	SAMSG		27			RIM ABR		1
16	2606	ZDATE					1-E2		0
16	2607	GREY					BS		1
16	2607	ZDATE					RO		0
16	2609	GREY					BS PIERCED		1
16	2609	GREY					BS		1
16	2609	GYBN	J				BS GROOVED		1
16	2609	SMSH	J	RIL			BS		1
16	2609	ZDATE					M1-E2		0
16	2609	ZZZ					LGE SHS 5 CHIPS SAMPLE		0
16	2610	COAR					<8000>		0
16	2610	GREY					BS		1
16	2610	GREY					BS		1

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Roman Pottery

Sect.	Cntx	Fabric	Form	Dec	No Vess	Dwg no	Comments	Join	Sherds
16	2610	GREY					BSS SCRAPPY		5
16	2610	NAT		COL			BS FINE SILTY SAME TYPE IN	1668	1
16	2610	ZDATE					ML1+		0
16	2610	ZZZ					2 CHIPS FROM SAMPLE <8001>		
16	2614	COAR		HM?	1		BASAL BSS FRAGS COARSE GRITTY FAB		6
16	2614	COAR	J	HM?	1		BSS V BURNT LOOK COARSE GRITTY FAB		1
16	2614	CR	BKEV		1	94	RIM BSS 3B TYPE		3
16	2614	DR20	A				BS EFAB		1
16	2614	DR20	A		1		BSS SCRAP E FAB ABR		2
16	2614	GREY					BSS		20
16	2614	GREY					BSS		3
16	2614	GREY	JCHR				RIM FRAG		1
16	2614	GREY	JCUR				RIM FRAG		1
16	2614	GREY	JUR				RIM FRAG		1
16	2614	GROG			1		BSS		4
16	2614	GYBN	J	STA	1		BSS STABBED DEC ON HIGH SHOULDER		9
16	2614	GYBN	JCUR				RIM NECK		1
16	2614	LOXI	L				RIM SOOT ON EDGE		1
16	2614	NAT		SL			BS FRAG		1
16	2614	OX					BS MIN GROG		1
16	2614	OX					BSS		2
16	2614	SAMSG?	BD				FRAG BURNT		1
16	2614	VRW	F?				BS		1
16	2614	VRW	F?				BS		1
16	2614	ZDATE					LIE2		0
16	2614	ZZZ					FRESH INC 7 CHIPS SAMPLE <8006>		0
16	2615	CR	BRR				RIM BURNT		1
16	2615	GREY			1		BSS SOOT		2
16	2615	GREY	J				BASE		1
16	2615	GREY	JCUR				RIM		1
16	2615	GROG	J				BS		1
16	2615	GYBN					BS		1
16	2615	HWC	BKPH	BAD			BS		1
16	2615	HWC	JCUR				RIM		1
16	2615	MICA	BK				BS V BURNT		1
16	2615	VRW					SCRAP		1
16	2615	VRW	B?		2		BSS		2
16	2615	ZDATE					EM2		0
16	2615	ZZZ					MED SHS FRESHISH 1CHIP SAMPLE <8007>		0
16	2617	COAR	JCHR			93	RIM SHLDR WHT SLIP ON GREY UNUS		1
16	2617	ZDATE					1-2C		0
16	2618	GREY			1		BSS BASES COARSE MIN GROG		4
16	2618	GROG	BKEV				RIM FRAG		1
16	2618	NAT	JL				BS THICK ORGANICS		1
16	2618	ZDATE					1-2C		0
16	2621	GREY					BS		1
16	2621	GROG					BS		1
16	2621	GYBN					BS		1
16	2621	OX					BS		1
16	2621	SMSH					BS		1
16	2621	ZDATE					1-2C		0
16	2621	ZZZ					SCRAPS		0
16	2622	GREY					BSS		2
16	2622	GREY	JBKEV			96	RIM SHLDR		1
16	2622	GROG					BS		1
16	2622	GROG	JS				BS		2
16	2622	GYBN					BS		1
16	2622	PIGR?					BS		1
16	2622	SMSH					BS		1
16	2622	ZDATE					1-2C		0
16	2622	ZZZ					SCRAPPY BUT FRESH		0
16	2624	GREY		B			BS FRESH		1
16	2624	GREY	J				BS		1
16	2624	GREY	JBK				BS		1
16	2624	GREY	JCUR				RIM		1
16	2624	SAMEG		31			RIM BASE FRESH		1

APPENDIX 3
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Sect.	Cntx	Fabric	Form	Dec	No Vess	Dwg no	Comments	Join	Sherds
16	2624	SMSH					BS		1
16	2624	SMSH		RIL	1		BSS		5
16	2624	SMSH	J				BASES		2
16	2624	ZDATE					L2-E3		0
16	2624	ZZZ					SAME ONLY FRESH		0
16	2625	GREY					BS BURNT		1
16	2625	GREY					BSS		13
16	2625	GREY	BTR				RIM GIRTH		1
16	2625	GREY	BTR				RIM GIRTH		1
16	2625	GREY	BTR		1		RIM GIRTH BASE		2
16	2625	GREY	CP				RIM SHOULDER HEAVY		1
16	2625	GREY	CP		1		SOOT		2
16	2625	GYBN					RIMS FRAGS J		2
16	2625	MOOX	M				BSS		2
16	2625	NVCR	FDN		1	121	BS BURNT		1
16	2625	OX					RIM NECK BSS FAB AS NV		10
16	2625	OX	JEV?		1		BS		1
16	2625	SAMCG	18/31?				RIM FRAG BSS SCRAPS SILTY FAB BLK		3
16	2625	SAMCG	18/31?				SPECS OF OXFORD		1
16	2625	SMSH	J		1		FRAG ABR ?		1
16	2625	ZDATE					FRAG ABR		1
16	2625	ZZZ					BASES BSS		10
16	2629S	GYBN					L2-M3		0
16	2629S	ZDATE					MIX DATES SOME SMASH		0
16	2629S	ZZZ					BS		1
16	2630	GROG					RO		1
16	2630	OX					SAMPLE <8002> INC 1 CHIP		5
16	2630	OX	BKBB				SHEL		4
16	2630	SHEL					BSS		1
16	2630	ZDATE					SCRAPS		1
16	2630	ZZZ					BS		1
16	2643	HWC	BK	BAD?			SCRAP		1
16	2643	ZDATE					ML1		0
16	2643	GREY					12 CHIPS SAMPLE <8003>		1
16	2643	GROG					BS		0
16	2643	GROG	J	RIL			L1M2		0
16	2643	NAT	JUP	HM?			BS		1
16	2643	OX					BSS		2
16	2643	ZDATE					BS MIN GROG		1
16	2645	GFIN					RIM		1
16	2645	GREY	BK				BS		1
16	2645	GROG	JCUR				1-E2		0
16	2645	GROG					RIM UPRIGHT CAM TYPE		1
16	2645	GYBN					RIM		1
16	2645	GYBN					BSS SCRAPS		12
16	2645	NAT			1		BSS FRIABLE		6
16	2645	OX					BS		1
16	2645	OX					BS		1
16	2645	SMSH	J		1		BSS FRIABLE		16
16	2645	ZDATE					SCRAPS ABR		7
16	2645	ZZZ					BSS RIMS SCRAPS FRIABLE		26
16	2650	GFIN					BSS		5
16	2650	GROG					IC		0
16	2650	GROG					V FRIABLE SMALL SCRAPS		0
16	2650	GYBN			1		BSS V FIRE SILTY FAB		2
16	2650	GYBN					BS VABR		1
16	2650	NAT					BS		1
16	2650	OX					BS		1
16	2650	OX					BS UNSIMILAR LATE 1A		1
16	2650	SMSH				110	RIM W MADE WIDE		1
16	2650	ZDATE					MOUTHED CPN		1
16	2651	GFIN					BS MIN SHELL		1
16	2651	GROG	BEV			107	RIMS BSS SOME SCRAPS		32
16	2651	GROG	JB	HM?			FRIABLE SURFACES LOST		4
16	2651	GROG	JNN		1	106	RIM BSS PIERCED MIN		4
16	2651	GRSH	CPN	HM	1	111	GROG		10
16	2651	GYBN					SCRAPS SOME GROG		3
16	2651	GYBN					BSS		3
16	2651	GYBN	JCHR		1	114	RIMS GIRTH BSS		4
16	2651	NAT					BS SANDY		1
16	2651	NAT	B	RIL	1		BSS WIDE RILLS MIN GROG		2
16	2651	NAT	CPN?		1		ELSE SILTY		2
16	2651	NAT	JB	HM			RIM J PIERCED		2
16	2651	NAT					BS PIERCED? HOLE GROG		1
16	2651	NAT					ORGANICS		1

Sect.	Cntx	Fabric	Form	Dec	No Vess	Dwg no	Comments	Join	Sherds
16	2651	NAT	JB	HM	1		BSS BLACK		10
16	2651	OX			1		BSS		2
16	2651	OX	BKEV	HM	1	122	RIM BS		2
16	2651	OX	JB				BASE		1
16	2651	OX	BLS	HM	1	124	RIMS BSS VABR FRAIBLE		37
16	2651	SHEL	BK	RIL HM			SCRAPS		
16	2651	SMSH	JCHR		1	128	BS		1
16	2651	ZDATE					RIMS BSS SCRAPS BLK		37
16	2651	ZZZ					SMALL NEAT VESSEL		
16	2651	ZZZ					M1		0
16	2651	ZZZ					SOME SMASH VESSELS MOST V FRIABLE		0
16	2651	ZZZ					SMALL SHS SOME LIA		0
16	2653	GREY					BS		1
16	2653	ZDATE					RO		0
16	2655	CR	BK		1		BSS		2
16	2655	GREY					BS ABR		1
16	2655	GREY		HM?			BS GRITTY		1
16	2655	GREY	J	HM?			BS SCORED EXT GALLO		1
16	2655	HWC?	JBK				BELGIC		1
16	2655	OX	J	HM?	1		BS		1
16	2655	SAMSG					BSS		3
16	2655	ZDATE		18			RIM BASE		1
16	2655	ZZZ					70-100		0
16	2655	ZZZ					MOST FRESH		0
16	2657	CR					BS		1
16	2657	CR			1		BSS GREY EXT WASH		3
16	2657	GFIN	BK				BS		1
16	2657	GFIN	BK	ROUZ			BS		1
16	2657	GREY					BSS SOME ABR SMALL SHS		13
16	2657	GREY	B				BS		1
16	2657	GREY	J	SL			BS 2E FORM HIGHGATE?		1
16	2657	GREY	JBCUR				RIM FRAG		1
16	2657	GREY	JCUR				RIM FRAG		1
16	2657	GROG	JL		2		BSS		7
16	2657	GYBN					BSS		2
16	2657	LOX1	L				RIM FRAG		1
16	2657	OX					BS		1
16	2657	OX	JL				RIM NECK MIN GROG		1
16	2657	PINK					BS GREY EXT WASH		1
16	2657	PINK					BS		1
16	2657	SAMCG	BD				FLAKES		1
16	2657	SMSH					BASE BSS		3
16	2657	SMSH	CPN				RIM NECK		1
16	2657	SMSH	J		1		BSS		2
16	2657	ZDATE					ML2-E3		0
16	2657	ZZZ					SOME RIMS MOSTLY		0
16	2657	ZZZ					SMALL SHS MIN ABR		0
16	2658	GREY					BSS SCRAPS		4
16	2658	GREY	BD				BASE BB2 TYPE		1
16	2658	GREY	BTR				RIM GIRTH		1
16	2658	GROG					BS ORANGE		1
16	2658	GYBN					BS BURNT FIRING?		1
16	2658	GYBN	J				BS BASE		2
16	2658	SMSH					BSS		2
16	2658	VRW	F				BS BURNT		1
16	2658	ZDATE					ML2		0
16	2660	GFIN	FS		1	95	RIMS SHOULDER OF HWC		5
16	2660	GREY					FORM		
16	2660	GREY					BS		1
16	2660	GREY	CP?				BS		1
16	2660	GREY	J		1		BASE BSS		4
16	2660	GREY	J		1		BSS		4
16	2660	GREY	JCUR				RIM FRAG		1
16	2660	GREY	JCUR			99	RIM SHOULDER SILTY FAB		1
16	2660	GROG	JL				BS DK RED BN		1
16	2660	GROG	JL	SWL	1		BSS HM/WF PALE BN		4
16	2660	GYBN	J				BS		1
16	2660	SAMSG	18R				BASAL BS		1
16	2660	VRW	F?				BS		1
16	2660	ZDATE					LI-E2		0
16	2660	ZZZ					MEDI SIZED SHS FRESH		0
16	2661	GREY					BS		1
16	2661	ZDATE					RO		
16	2666	GFIN	J				BS ?NVGW		1
16	2666	OX					SCRAPS		2

APPENDIX 3
Roman Pottery

Sect.	Cntx	Fabric	Form	Dec	No Vess	Dwg no	Comments	Join	Sherds
16	2666	ZDATE					2?		0
16	2668	GYBN	BKEV	HM		112	RIM SHLDR		1
16	2668	ZDATE					L1A-M1		0
16	2670	FINE	BKFO		1		FLAKES		4
16	2670	GREY					BS		1
16	2670	GREY	BFL				RIM FRAG		1
16	2670	NAT					BSS FLAKED		3
16	2670	ZDATE					LIM2		0
16	2672	GROG					BSS		2
16	2672	OX					BS		1
16	2672	ZDATE					RO		0
16	2672	ZZZ					SCRAPPY ABR		0
16	2675	GROG					BSS SCRAPS		5
16	2675	OX			1		BASES		2
16	2675	ZDATE					RO		0
16	2679	BEGR?	BKBB	LML			BS SF6045 TRIPLE BURNISH LATTICE		1
16	2679	GREY	J		1		BSS SCRAPS		16
16	2679	GREY	JCUR		1		RIM FRAG BSS		16
16	2679	GROG	BCHR		1	108	RIM BSS		4
16	2679	GROG	JL				BS		1
16	2679	GROG	JUP		1		RIMS BSS SCRAPS FRIABLE		31
16	2679	NAT	JUP	WM			RIM ORGANICS GROG		1
16	2679	ZDATE					1C		0
16	2679	ZZZ					SCRAPPY FRIABLE SMASHED SMALL FRAGS		0
16	2684	GREY					BS		1
16	2684	ZDATE					RO		0
16	2684	ZZZ					PROB 1-2		0
16	2687	OX			1		BSS		3
16	2687	ZDATE					RO		0
16	2690	GREY					BS		1
16	2690	ZDATE					RO		0
16	2692	GREY					BSS		2
16	2692	GREY		RIL			BS SILTY FAB		1
16	2692	GREY	J				BASE		1
16	2692	GREY	J				FTM		1
16	2692	GREY	JCUR				RIM FRAG		1
16	2692	GROG					BSS		2
16	2692	GROG			1		SCRAPS ABR		2
16	2692	NAT		HM?			BS ABR		1
16	2692	NAT		SL HM			BS VERTICAL SCORING ABR		1
16	2692	SMSH	JS				RIM		1
16	2692	ZDATE					2C		0
16	2692	ZZZ					MIX SOME EARLY ROM MOST ABR		0
16	2694	GREY					BS		1
16	2694	GREY	JBR			100	RIM GIRTH GALLO BELGIC?		1
16	2694	GREY			1		BSS BLK SURFACES		5
16	2694	GREY	J?	LA			BS LA ON SHOULDER		1
16	2694	GREY	JCUR?				RIM FRAG		1
16	2694	GROG					BS		1
16	2694	OX	BK				BS		1
16	2694	SMSH	BRR		1	134	RIMS BSS MARNEY D63 ?ML2 SIMILAR IN	2600	4
16	2694	VRW	F?				FTM SCRAP		1
16	2694	ZDATE					L1-2		0
16	2694	ZZZ					SOME SMALL SHS 1 SMALL VESS		0
16	2696	GREY					BSS		4
16	2696	GREY		RIL			BS		1
16	2696	GREY	JCUR				RIM		1
16	2696	GROG					BS		1
16	2696	GROG	CPN	SL		101b	RIM SLASHED ON RIM		1
16	2696	GROG	JL				BS		1
16	2696	OX					BS		1
16	2696	ZDATE					M1-E2		0
16	2696	ZZZ					SCRAPPY		0
16	2697	GREY					BS		1
16	2697	GYBN	JWM				RIM FRAG		1
16	2697	ZDATE					2-3C		0
16	2697	ZZZ					FRESH		0
16	2861	GROG	JLS		1		RIMS J UPRIGHT RIM FAINT		2

APPENDIX 3
Roman Pottery

Sect.	Cntx	Fabric	Form	Dec	No Vess	Dwg no	Comments	Join	Sherds
							LID SEAT ORGANICS		
16	2861	NAT			1		BSS SCRAPS SILTY FAB		2
16	2861	ZDATE					ML1		0
16	2861	ZZZ					SMALL H841SCRAPPY EX RIMS		0
16	3107S	GREY	JCUR		1?		RIMS BSS CHIPS VFRAG		32
16	3107S	ZDATE					SAMPLE<8004>		
16	3107S	ZZZ					LI-2?		
16	3109	GFIN	P		1		V FRAGMENTED ONLY SHS		7
16	3109	ZDATE					COUNTED 43 CHIPS		0
16	3110	GREY					FTRG BSS SCRAPS TN TYPE		0
16	3110	GYBN					ML1-E2		2
16	3110	ZDATE					BSS		1
16	3110	ZZZ					BA ABR		0
16	3111	NAT	JL		1		RO		0
16	3111	OX					SCRAPPY		1
16	3111	SMSH					BS		3
16	3111	ZDATE					BSS		2
16	3112	GROG	JL				SCRAPS		0
16	3112	OX					RO		1
16	3112	ZDATE					BS ABR		1
16	3112	ZZZ					BS		0
16	3113	COAR	JL	HM	1		RO		0
16	3113	GROG					PROB LI-2		2
16	3113	GROG	JL	HM			RIMS		1
16	3113	ZDATE					BS		1
16	3115	GFIN					BS		0
16	3115	GREY					ML1		1
16	3115	GROG		HM?	1		BS		1
16	3115	GROG	BK				BSS		2
16	3115	OX					BSS		1
16	3115	SMSH					BS		1
16	3115	ZDATE					BS		0
16	3116	GFIN	BKPH	BAD			LI-E2		1
16	3116	GREY					BS		1
16	3116	GREY	BK?				SCRAPS		2
16	3116	OXRC?		NAME?		125	BS		1
16	3116	VRW					BS SFS278] . II C/[STAMP?		1
16	3116	VRW	BRR		1		UNUS SHOW V RIGBY		1
16	3116	ZDATE					BS BURNT OVER EDGE		2
16	3116	ZZZ					RIM BS SOOTED GREY EXT		0
16	3119	GREY					CR INT		0
16	3119	OX					LI-E2		0
16	3119	RC	BK	RCC	1		SCRAPPY BUT FRESH		4
16	3119	VRW					BSS SCRAPS		1
16	3119	ZDATE					BS		2
16	3119	ZZZ					BSS NV?		1
16	3120	GREY	JB		1		BS		0
16	3120	GROG			1		ML2		0
16	3120	ZDATE					SCRAPPY		0
16	3120	ZZZ					BS BASE		2
16	3122	NAT		HM COL		120	BSS		0
16	3122	ZDATE					1-2C		0
16	3123	GREY					SCRAPPY		2
16	3123	OX	BK				LIA-MI		2
16	3123	ZDATE					SCRAPS		1
16	3123	ZZZ					BS		0
16	3124	GREY	BWM				LI-2		0
16	3124	VRW?					SCRAPPY		0
16	3124	ZDATE					RIM FRAG ABR		1
16	3125	GREY					BS		1
16	3125	GROG					L2-3		0
16	3125	ZDATE					BS		1
16	3126	GREY					BSS		2
16	3126	GROG	J				RO		0
16	3126	ZDATE					SCRAP		1
16	3127	GFIN	BK				BS PLUS ORGANICS		1
16	3127	GREY					RO		0
16	3127	GREY					BASE		1
16	3127	GREY	B?				BS BASE		2
16	3127	GREY	JBKCUR				FLAKED ABR		1
16	3127	GREY					RIM FRAG GROOVE ON TOP		1
16	3127	GREY					RIM FRAG		1

APPENDIX 3
Roman Pottery

Sect.	Cntx	Fabric	Form	Dec	No Vess	Dwg no	Comments	Join	Sherds
16	3127	GREY	STR		1		BSS SEV PIERCED HOLES PRC COARSE MIN GROG		10
16	3127	GROG					SCRAPS BS RED BN		7
16	3127	SAMCG		33	1		BSS FRESH		2
16	3127	SMSH		RIL			BS FINE RIL		1
16	3127	ZDATE					ML2+		0
16	3127	ZZZ					SCRAPPY SHS FRESHISH		0
16	3128	GREY					BS		1
16	3128	GREY	JEV				RIM FRAG		1
16	3128	VRW					BS		1
16	3128	ZDATE					L1-2		0
16	3129	GREY					BSS		2
16	3129	ZDATE					RO		0
16	3130	GREY					BS		1
16	3130	ZDATE					RO		0
16	3132	GROG					BS SCRAP		1
16	3132	GROG		COL			BS		1
16	3132	SHEL			1		BSS V FLAT PIECES		1
16	3132	ZDATE					LIA-MI		0
16	3184	SMSH					BS		1
16	3184	ZDATE					RO		0
16	3184	ZZZ					PROB EARLY FRESH		0
16	3195	GREY					BS		1
16	3195	GROG					BSS		2
16	3195	GYBN					BSS		2
16	3195	ZDATE					RO		0
16	3196	GFIN					BS		1
16	3196	GREY		HM?			BS FLAKE BLK		2
16	3196	GREY		HM?			BS W CALC		1
16	3196	NAT	J	HM SL		118	BSS LIA		3
16	3196	OX	BKEV				RIM FRAG RO		1
16	3196	ZDATE					ML1		0
16	3196	ZZZ					SOME LIA AND RO		0
16	3197	GYBN	JCHR		1	113	RIM BSS MIN GROG CALC		4
16	3197	ZDATE					M1-E2		0
16	3197	ZZZ					SAMPLE <8015> 44 CHIPS 1 OX RIM JCUR?		
16	3201	GREY					BS GROOVED		1
16	3201	GREY					BS		1
16	3201	GREY					BSS		5
16	3201	GROG			1		BSS		3
16	3201	GYBN	J				BASE		1
16	3201	OX					BSS		3
16	3201	ZDATE					2?		0
16	3201	ZZZ					SCRAPPY SHS		0
16	3202	GREY					BS ORGANICS		1
16	3202	GREY	JCUR				BS		1
16	3202	GREY					RIM		1
16	3202	OX					BS ABR		1
16	3202	ZDATE					2?		0
16	3202	ZZZ					MAINLY FRESH		0
16	3203	GREY					BSS		5
16	3203	GREY	J		1		BSS ORGANICS		4
16	3203	GROG					BSS		3
16	3203	GROG		HM COL	1		BSS ABR		1
16	3203	GROG	JUP	HM B			RIM FRAG BASES FRESH BURNIS BASAL RIM		3
16	3203	NAT		HM COL	1		BSS		2
16	3203	SHEL					BS		1
16	3203	ZDATE					ML1		0
16	3203	ZZZ					SOME ABR SHS		0
17	1703	GREY					BS		1
17	1703	ZDATE					RO		0
17	1706	COAR		HM?			BS ORGANICS		1
17	1706	COAR	STR?	HM?			BS THICK PIERCED PRECO PART WAY		1
17	1706	FINE					FRAG TN?		1
17	1706	FLIN					BSS PREHIST?		2
17	1706	GREY					BSS ISH WM		4
17	1706	ZDATE					LIA-EROM		0
17	1706	ZZZ					SOME PREHIST		0
17	1725	GFIN	BK				BS		1
17	1725	ZDATE					1-E2		0
17	1732	SHEL					BS SCRAP		1
17	1732	ZDATE					RO?		0

APPENDIX 3
Roman Pottery

Sect.	Cntx	Fabric	Form	Dec	No Vess	Dwg no	Comments	Join	Sherds
17	1736	COAR		HM?			BS		1
17	1736	FINE	BBR		1		RIM FRAG V BURNT SILTY CF DR18		2
17	1736	ZDATE					1-2C		0
17	1739	COAR					BS PREHIST?		1
17	1739	FLIN					BS PREHIST?		1
17	1739	GREY					SCRAP ABR		1
17	1739	ZDATE					PREROM		0
17	1741	COAR	BPR				RIM		1
17	1741	FLIN					SCRAP		1
17	1741	NAT					SCRAP		1
17	1741	ZDATE					PREROM		0
17	1741	ZZZ					PREROM SHS		0
17	1743	ZDATE					PREROM		0
17	1743	ZZZ					PREROM SHS		0
17	1745	GREY	JB				BS SHLDR		1
17	1745	ZDATE					RO		0
17	1745	ZZZ					PROB 1-2		0
17	1748	ZDATE					PREROM		0
17	1748	ZZZ					1 SH REROM?		0
17	1751	ZDATE					PREROM?		0
17	1751	ZZZ					1 SH PREROM? SAME FAB		0
17	1753	ZDATE					AS REST		0
17	1753	ZZZ					PREROM		0
17	1757	NAT					SCRAP PREROM?		0
17	1757	OX	BK	ROUZ?			BS BURNT		1
17	1757	ZDATE					BS		1
17	1761	GREY	JB				IA-EROM		0
17	1761	NAT		B			BASAL FRAG		1
17	1761	ZDATE					BS V BURNT BURNISH EXT		1
17	1761	ZZZ					IA-RO		0
17	1765	CC	FS				BURNT		0
17	1765	CR					RIM FRAG BLK SPECKS		1
17	1765	ZDATE					MICS CF OXFORD RED CC?		1
17	1771	SHEL					RIM FRAG POSS MOOX		1
17	1771	ZDATE					M3-4?		0
19	1901	COAR					BS SSMH		1
19	1901	ZDATE					RO		0
19	1901	ZZZ					BS VABR ?RO		1
19	1905	SAMCG					RO?		0
19	1905	ZDATE					POSS PRE ROM		0
20	2000	GYBN					RIM FLAKE VABR		1
20	2000	ZDATE					ML2		0
20	2006	GREY					BS		1
20	2006	OX					2+		0
20	2006	ZDATE					BS ABR		1
20	2006	ZZZ					SCRAPVABR		1
20	2007	GREY	JBCAR				RO/POSTRO		0
20	2007	ZDATE					2 SHS PMED		0
20	2008	GREY					BS ABR		1
20	2008	GYBN					2+		0
20	2008	GYBN	BKCR				BS FRESH		1
20	2008	OX					BSS ABR		2
20	2008	ZDATE					RIM FRAG		1
20	2008	ZZZ					BSS		4
20	2012	OX			1		2+/POSTRO		0
20	2012	ZDATE					2SHS MED		0
20	2012	ZZZ					BSS VABR ?RO		2
21	2100	GREY					RO?		0
21	2100	GYBN	JL?				VABR		0
21	2100	OX					BSS ABR		7
21	2100	ZDATE					BSS ABR		5
21	2100	ZZZ					RIM VABR		1
21	2101	COAR	JLS		1		BS VABR		1
21	2101	GREY					3+?		0
21	2101	OX	JL				UNDIAGNOSTIC ABRADED		0
21	2101	GYBN					SHS		0
21	2101	OX					RIMS J VABR		2
21	2101	ZDATE	B				BSS VABR		7
21	2101	ZZZ					RIM FRAG VABR		1
21	2101	ZZZ					BSS VABR		4
21	2101	ZZZ					BSS VABR		2
21	2101	ZZZ					BSS VABR		2
21	2101	ZZZ					RIM THUMBED MED?		1
21	2101	ZZZ					3-4/POSTRO?		0
21	2101	ZZZ					MOST SHS VABR 1 SH ?MED		0

Petrological analysis of vessel from SAY97

Alan Vince

Introduction

A sample of a vessel provisionally identified as Anglo-Saxon from SAY97 (CS3 PL23 context 378) was submitted for petrological analysis. In thin-section the sample contained moderate subangular fragments of grog (deliberately added fired clay), moderate subangular quartz grains up to 0.3mm across and sparse rounded glauconite up to 0.2mm across. Some of the latter are well-preserved pellets with the characteristic "squashed pea" profile often found in glauconitic clays. The grog fragments vary in texture but are mostly isotropic, with quartz temper and a grey colour. Others are red-firing and contain quartz silt. The clay matrix consists of anisotropic clay with moderate angular quartz grains and sparse flakes of muscovite, both up to 0.1mm across.

Discussion

Grog is an unusual tempering material in Anglo-Saxon vessels, being much more common in Iron Age and, particularly, Romano-British vessels. The texture and colour of the grog fragments show that it was not produced by refiring and crushing the same clay as used to produce the pot but from other vessels (or daub, or fired building material), of various fabrics.

The glauconite, angular quartz silt and muscovite were probably present in the original parent clay. Such micaceous, silty, glauconitic clays are characteristic of the Cretaceous (and later) periods and in Buckinghamshire were probably obtained from the Gault clay at the base of the Chalk scarp.

Conclusion

It is highly likely that this vessel is of Iron Age or Romano-British date. The form, a shouldered jar with burnishing on the exterior, could be of any date within this period (there is a resurgence of grog-tempering in the late Roman period, especially in the south-east counties such as Hampshire, Kent and Sussex).

Appendix 4

Early medieval pottery

Alan Vince

Early to mid- Anglo-Saxon Pottery
by Alan Vince

Introduction

A small collection of potsherds, 16 in total, was submitted for identification. At least two vessels are present.

Vessel One

Thirteen sherds are from a handmade globular jar with vertical rounded rim and sagging base. The external surface shows signs of rough vertical smoothing. In their present condition, the sherds are a light brown colour on all surfaces and breaks. However, a few sherds have broken after burial and in these it can be seen that the core of the sherds is dark grey or black. The sherds have therefore been subjected to heating after breakage.

The fabric contains sparse polished quartz grains, up to 2.0 mm across with rare rounded fragments of chalk (7 mm across) and red iron-rich compound (3 mm across). Finer, sub angular quartz is present in moderate to abundant quantities.

Vessel Two

Three body sherds are from a vessel of unknown form. The internal surface of the largest sherd can be seen to be burnished and all three sherds have a smoother finish than vessel one. No inclusions are visible to the naked eye.

Discussion

Vessel One is almost certainly of early to mid Anglo-Saxon date. The polished quartz grains and chalk are typical of fabrics produced on or close to the Cretaceous deposits, which run diagonally through eastern and central England from the Yorkshire Wolds, through Lincolnshire down to Wiltshire and Dorset. Much of the early to mid Anglo-Saxon pottery from Bedford is of a similar appearance (Baler and Hassall 1979, 152-4, Fig 91). The burnished interior of Vessel Two is likewise a typical treatment on early to mid Anglo-Saxon pottery.

Bibliography

Baker, E & Hassall, J, 1979 Early Middle Saxon Pottery: Discussion in Baker, D, Baker, E, Hassall, J and Simco, A (eds) Excavations in Bedford 1967-1977. Bedfordshire Archaeological Council.

Appendix 5

Late Saxon, medieval and post-medieval pottery

Lucy Whittingham

Late Saxon, Medieval and Post-medieval Pottery*by Lucy Whittingham**edited by Catherine Holgate***Introduction**

One hundred and ninety sherds (2.47g) of medieval and post-medieval pottery were recovered from the route of this pipeline. Thirty-four sherds (290g) are from archaeological features at sites 7, 11 and 14, but the majority of the pottery (156 sherds, 2.2 kg) is surface collection and represents nothing further than a background spread of archaeological material in a rural environment. All of the sherds are small abraded samples, for example the rim fragments survive as 5% or less of their original diameter. There are no significant geographical clusters of pottery on the route and little difference in the types of pottery found from one end to the other.

The assemblage divides into 30% medieval and 70% post-medieval. The majority of the medieval pottery is in small undiagnostic sherds. Identification is therefore attempted here using fabric inclusions, but with no county fabric type series to consult attribution to a production site and compatibility in identifying medieval pottery in Buckinghamshire is difficult.

Fabric Descriptions*Early medieval quartz tempered*

A moderately tempered fabric with ill-sorted white and red-stained quartz (0.2 mm - 0.4 mm) in buff or dark grey/red fabrics. Two diagnostic wheel thrown sherds are small squared rims from jugs with tall straight-sided necks. One of the rims has thumb decoration. Some of the sherds have a green lead glaze. Three sherds have a finer clay matrix with sparsely tempered sub-angular quartz of less than 0.3 mm and one of these is quite micaceous. This fabric has the appearance of an early medieval ware, possibly of 12th to mid 13th-century date.

- 1 sherd, context 2529, plot 23
- 1 sherd context 405, plot 35
- 3 sherds context 609, plot 63
- 1 sherd context 612, plot 66
- 1 sherd context 614, plot 60
- 1 sherd context 703, plot 71
- 2 sherds context 704, plot 72.
- 1 sherd context 1306, plot 113
- 3 sherds context 2008, plot 156

Early medieval quartz and flint tempered

A moderately tempered fabric with ill-sorted sub-angular to sub-rounded quartz (0.2 mm - 0.6 mm) and occasional flint/chert. All of the sherds are a reduced grey/brown colour. Two wheel thrown cooking pots, represented by large everted rims with thickened edges, appear to be typical of this fabric, which is probably 12th or 13th-century in date.

- 1 sherd context 609, plot 63
- 1 cooking pot rim context 703, plot 71
- 3 cooking pot sherds context 704, plot 72.
- 1 sherd context 807, plot 83
- 1 sherd context 1006, plot 96
- 4 cooking pot sherds context 1601, plot 120

Early medieval quartz, flint and grog tempered

A moderately tempered fabric with ill sorted, sub-angular white quartz of 0.1 mm to 0.6 mm, occasional flint/chert and grog pellets. All of the sherds are from finely wheel thrown cooking pots. All have a dark grey core and dark red/brown surfaces. A similar fabric is described at the Motte in Weston Turville as late 11th to early 12th century (Hurman 1986)

- 1 sherd context 501, plot 40
- 1 sherd context 1006, plot 96

Late medieval orange sandy wares, mid-13th century

A moderately tempered oxidised fabric with fine to medium white sub-angular quartz (0.1mm to 0.3 mm). Cooking pots and large jugs are represented. Some sherds have a clear lead glaze.

- 1 cooking pot and 1 jug sherd context 304, section 3, plot 24
- 1 jug base, context 509, plot 48
- 1 jug ?rim context 511, plot 49
- 1 sherd context 603, plot 57
- 1 sherd context 605, plot 59

Brill/Boarstall Ware mid-13th to 15th century

This moderately tempered pink/buff fabric is represented by sherds from jugs with mottled copper green glazing.

- 1 sherd context 003, plot 3,
- 1 sherd context 307, plot 26
- 1 sherd context 304, plot 24
- 1 sherd context 405, plot 45
- 1 sherd context 510, plot 49
- 4 sherds context 511, plot 49
- 1 sherd context 512, plot 51
- 1 sherd context 606, plot 60
- 1 sherd context 705, plot 73

A pink/buff fine ware

A second pink/buff ware similar in colour to Brill/Boarstall has finer quartz inclusions and occasional white/grey grog temper. A thickened jar rim and strap handle are the only diagnostic sherds.

- 1 jar rim context 608, plot 62
- 1 sherd context 610, plot 64
- 3 sherds context 614, plot 60

St Neots type ware late 9th to late 11th century

Late 9th to late 11th-century St Neots type Ware is represented in this assemblage by four sherds. One decorated piece has an applied thumbbed cordon.

- 1 sherd context 2510, plot 23
- 1 sherd context 511, plot 49

Medieval Shelly Ware

Four hand-built sherds with abundant coarse shell and fossil limestone are a common 12th to early 13th century fabric at George Street in Aylesbury (Yeoman 1983) and typical of the late 11th to late 13th-century fabric type MC1 in the Milton Keynes type series (Mynard 1992).

- 1 sherd context 2510, plot 23
- 1 sherd context 511, plot 49
- 2 sherds context 538, plot 50

Limestone, flint and quartz tempered

Two wheel thrown sherds with moderate fossil limestone, occasional flint and quartz tempered are possible mid 12th to late 13th century products of the Olney Hyde kilns (Mynard 1984). One is the rim of a jug, the other a sherd from a jar with curvilinear combed decoration on the exterior surface. Both sherds have a pink/brown surface and pale grey core.

- 1 sherd context 2500, plot 23
- 1 sherd context 902, plot 87

Discussion

Late Saxon/Early Medieval

The organic/chaff tempered ware is of note as an indicator of late Saxon activity at Site 17 (context 704) and likewise the St Neots type Ware sherds represent late Saxon/early medieval activity at sites 7 and 11, and at plots 40 and 78 (contexts 2510, 511, 501 and 802).

Medieval

Of the total fifty-seven medieval sherds, the majority appear to be from early medieval (late 11th to 13th century) quartz tempered, quartz and flint tempered and shell tempered cooking pots and jugs. Later medieval wares are represented by orange sandy wares and mid 13th to 15th century Brill/Boarstall Ware.

A furrow (context 614) in Plot 60, contained two 12th to mid 13th-century sherds.

Post-medieval

Of the thirty-four sherds from archaeological features, twenty-nine sherds (202g) are from Site 7, Plot 23. These sherds are predominantly post-medieval, early 17th to 18th-century in date with the exception of one mid 12th to late 13th-century Olney Hyde type Ware sherd in context 2500.

A furrow at Site 11 (context 535) contained a mixed assemblage of post-medieval and Roman pottery.

Post-medieval wares in the entire assemblage include a 16th-century Cistercian type, a 17th-century White/Buff earthenware with yellow lead glazing and 17th to 18th-century Red Earthenwares with a continuous lead glaze, sometimes over slip decoration or with a black manganese glaze. The plain lead glazed vessels are by far the most common of the post-medieval material occurring in utilitarian flanged dishes, jars and shallow dishes. A large production site for such wares operated at Brill in north Buckinghamshire (Farley 1979) from the medieval period through to the mid 18th and 19th centuries. Numerous other Red Earthenware potteries operated locally in the Chilterns area in the 17th and 18th centuries and are as likely a source of some of the material found in this assemblage. Kiln material has been collected from Tylers Hill, Penn, Buckinghamshire (Hutchings and Farley 1989), at Emmanuel Church, Chesham, Buckinghamshire (Cauvain, S and P. 1979) and at Leyhill, Latimer, Buckinghamshire (Farley and Lawson 1990). Documentary evidence provides further evidence of potters in the Chilterns area at Leyhill, Latimer, Buckinghamshire and West Wycombe in the 17th century and at Coleshill and Hedgerley in the 18th century (Bucks County Museum Archaeological Group 1978). The early post-medieval Whiteware compares favourably with the early 17th-century products of a kiln at Potters Row, Great Missenden (Bucks County Museum Archaeological Group 1978).

Regional Comparisons

This assemblage is fairly typical of the county encompassing wares of a Late Saxon, early medieval and post-medieval date. As already stated the ability to link the sherds found in this assemblage into a county framework is limited by the lack of a centralised/comparative type series and limited publications to date. There are, however, some comparisons between this assemblage and others from the county of Buckinghamshire.

Organic/chaff tempered pottery has been found previously at Aylesbury (Dalwood et. al. 1989, fabric S8) and at Bierton (Whittingham 1997). St Neots type Ware occurs widely throughout the county and is a common type in Aylesbury (Dalwood et. al. 1989, fabric S7).

The early medieval quartz and flint tempered wares are less easy to parallel.

The medieval shelly and limestone tempered wares are again a common 12th to late 13th century fabric in the county as is mid 13th to 15th century Brill/Boarstall pottery.

The post-medieval wares are typical of early 17th and 18th century products and could be either from the Brill/Boarstall Post-medieval industry or from one of a number of Chiltern industries. Redwares and Blackwares were produced at both locations though the Whitewares are more likely to be a Chiltern product such as found at Potter's Row, Great Missenden (Bucks County Museum Archaeological Group 1978).

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Summary of Pottery Data

Site	Plot	Context	Count	Weight	Date	Comments
1	3	3	3	24g	med, post-med	1 sherd Brill/Boarstall mid 13th to 15thC 2 sherds post-med Redware 17th to 18thC
	9	102	2	70g	post-med	2 sherds post-med Redware 17th to 18thC
7	23	394	13	66g	post-med	11 sherds post-med Redware 17th to 18thC 2 sherds post-med Whiteware early 17thC
	25	306	2	18g	post-med	2 sherds post-med Redware 17th to 18thC
	26	307	2	18g	med, post-med	1 sherd Brill/Boarstall Ware mid 13th-15thC 1 sherd post-med Redware 17th to 18thC
7	23	304	10	152g	med, post-med	1 sherd Brill/Boarstall Ware mid 13th-15thC 2 sherds Late med orange sandy wares mid 13thC 4 sherds post-med Redware 17th to 18thC 3 sherds post-med Whiteware early 17thC
7	23	326	14	120g	post-med	13 sherds post-med Redware 17th to 18thC 1 sherd Cistercian-type Ware 16thC
7	23	372	1	2g	post-med	1 sherd post-med Whiteware early 17thC
7	23	2,529	11	202g	med, post-med	1 sherd Early medieval quartz tempered 12th to mid 13thC 9 sherds post-med Redware 17th to 18thC 1 sherd post-med Whiteware early 17thC
7	23	2,530	1	98g	post-med	1 sherd post-med Redware 17th to 18thC
7	23	2,527	1	34g	post-med	1 sherd post-med Redware 17th to 18thC
8	23	2,500	1	14g	med	1 sherd Olney Hyde type, mid 12th to late 13thC
7	23	2,510	2	36g	med	1 sherd St Neots type Ware, late 9th to late 11thC 1 sherd medieval shelly, late 11th to late 13thC
7	23	2,528	21	274g	post-med	20 sherds post-med Redware 17th to 18thC
	35	405	2	18g	med	1 sherd Brill mid 13th-15th century 1 sherd Early medieval quartz tempered 12th to mid 13thC
	40	501	3	48g	med, post-med	1 sherd St Neots type Ware, late 9th to late 11thC 1 sherd early medieval quartz, flint and grog tempered, late 11th to early 12thC 1 sherd post-med Redware 17th to 18thC
	43	503	1	10g	Roman	
	46	507	1	60g	post-med	1 sherd post-med Redware 17th to 18thC
	48	509	2	18g	med, post-med	1 sherd Late med orange sandy wares, mid 13thC - 1 sherd post-med Redware 17th to 18thC
11	49	510	1	4g	med	1 sherd Brill/Boarstall, mid 13th to 15thC

APPENDIX 5
Late Saxon, Medieval and Post-medieval Pottery

Site	Plot	Context	Count	Weight	Date	Comments
11	49	511	23	326g	med, post-med	1 sherd St Neots type Ware, late 9th to late 11thC 1 sherd medieval shelly, late 11th to late 13thC 4 sherds Brill/Boarstall, mid 13th to 15thC 1 sherd Late med orange sandy wares, mid 13thC 12 sherds post-med Redware 17th to 18thC 4 sherds transfer printed, early 19thC
	51	512	5	54g	med, post-med	1 sherd Brill/Boarstall, mid 13th to 15thC 4 sherds post-med Redware 17th to 18thC
	52	513	1	6g	post-med	1 sherd post-med Whiteware early 17thC
	53	514	1	14g	post-med	1 sherd post-med Redware 17th to 18thC
11	50	535	1	60g	post-med	1 sherd post-med Redware jar 17th to 18thC
11	50	538	2	16g	med	2 sherds medieval shelly, late 11th to late 13thC
	57	603	1	4g	med	1 sherd Late med orange sandy wares, mid 13thC
	59	605	1	2g	med	1 sherd Late med orange sandy wares, mid 13thC
	60	606	7	64g	med, post-med	1 jug Brill/Boarstall, mid 13th to 15thC 6 sherds post-med Redware flanged dish 17th to 18thC
	62	608	1	14g	med	1 jar, Pink/buff fine ware, ?mid 13thC
13, 14	63	609	4	8g	med	3 sherds Early medieval quartz tempered jug, 12th to mid 13thC 1 sherd Early medieval quartz and flint tempered cooking pot, 12th to 13thC
	64	610	1	6g	med	1 sherd, Pink/buff fine ware, ?mid 13thC
15	65	611	1	16g	post-med	1 sherd post-med Redware 17th to 18thC
	66	612	2	10g	med, post-med	1 sherd Early medieval quartz tempered jug, 12th to mid 13thC 1 sherd post-med Redware 17th to 18thC
	60	614	4	28g	med	3 sherds Pink/buff fine ware, ?mid 13thC 1 sherd Early medieval quartz tempered 12th to mid 13thC
14	63	658	1	12g	post-med	1 sherd post-med Redware 17th to 18thC
17	71	703	6	92g	med, post-med	1 sherd Early medieval quartz tempered 12th to mid 13thC 1 sherd Early medieval quartz and flint tempered cooking pot, 12th to 13thC 4 sherds post-med Redware 17th to 18thC
17	72	704	10	54g	med, post-med	3 sherds late Saxon chaff/organic temper, 6th to 8thC 2 sherds Early medieval quartz tempered 12th to mid 13thC 3 sherds Early medieval quartz and flint tempered cooking pot, 12th to 13thC 2 sherds post-med Redware 17th to 18thC
	73	705	1	4g	med	1 jug Brill/Boarstall, mid 13th to 15thC
	77	801	1	18g	post-med	1 sherd post-med Redware 17th to 18thC
	78	802	1	2g	med	1 sherd St Neots type Ware, late 9th to late 11thC
	78	808	1	28g	post-med	1 sherd post-med Redware 17th to 18thC
	83	807	1	30g	med	1 sherd Early medieval quartz tempered 12th to mid 13thC
	87	902	2	16g	med, post-med	1 sherd post-med Redware 17th to 18thC 1 sherd, jug rim, Olney Hyde type mid 12th to late 13thC
	95	1,005	1	26g	post-med	1 sherd post-med Redware jar 17th to 18thC
19	96	1,006	4	14g	med, post-med	2 sherds post-med Redware 17th to 18thC 1 sherd, Early medieval quartz, flint and grog tempered, late 11th to early 12thC 1 sherd Early medieval quartz and flint tempered, 12th to 13thC
22	113	1,306	2	78g	med, post-med	1 sherd Early medieval quartz tempered jug, 12th to mid 13thC 1 sherd post-med Redware dish 17th to 18thC
	120	1,601	4	70g	med	4 sherds Early medieval quartz and flint tempered cooking pot, 12th to 13thC
28	126	2,600	1	6g	post-med	1 sherd post-med Redware 17th to 18thC
28	127	1,608	1	4g	post-med	1 sherd post-med Redware 17th to 18thC
34	154	2,006	2	60g	post-med	1 sherd post-med Redware 17th to 18thC 1 sherd post-med Blackware 17th to 18thC
	156	2,008	3	42g	med	3 sherds Early medieval quartz tempered jug, 12th to mid 13thC
	158	2,101	1	2g	med	1 sherd Early medieval quartz tempered jug, 12th to mid 13thC

Appendix 6

Brick and tile

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Steppingley to Aylesbury Gas Pipeline Brick and Tile

Mark Allen

Summary

A small assemblage of brick and tile was recovered from a number of sites along the Steppingley to Aylesbury gas pipeline route. The majority of the material was found in features dating to the Romano-British period, most of it from Sites 22 and 28. The assemblage appears to be a fairly typical Romano-British tile assemblage. There is no evidence of re-use of material (e.g. mortar on broken surfaces) from any of the sites. Evidence for a Romano-British structure with a tiled roof can be seen at Sites 22 and 28, with only slight evidence for a hypocaust system at, or near to, Site 22. The variable nature of the fabrics and tile dimensions suggest fairly small-scale production and/or change of supplier/technique over time, using local clays. The remainder of the assemblage was either medieval or later in date (or updateable) and came from other sites along the route.

Introduction

A total of 179 fragments of Romano-British tile were recovered from four sites along the pipeline route, mainly from ditch fills, but a large number were unstratified. The material has been classified in terms of tile type and fabric (Tables 1 & 2). The term 'tile' is used generally throughout the text to refer to all brick and tile, except when the tile type 'brick' is being discussed. The following fabric analysis and tile identification is used exclusively for the Romano-British tile assemblage (Table 1). The Medieval & later tile will be covered at the end of the report (Table 4).

Fabrics

The identification of fabrics was carried out by eye, based on the following criteria:

Texture (smooth, fairly smooth, fairly coarse). Reflects nature of original clay body and of inclusions;

Hardness (soft, fairly hard, hard, very hard). Identified with use of finger nail. Reflects degree of baking and nature of original clay body and of inclusions;

Porosity (fairly dense/porous: occasional voids; dense: no or very occasional voids. Recognised in section. Reflects the quality and thoroughness of clay preparation;

Homogeneity (homogeneous: absence of clay folds and/or even distribution of inclusions; fairly homogeneous: occasional clay folds and/or some unevenness in distribution of inclusions; non-homogeneous: occasional/abundant clay folds and/or uneven distribution of inclusions). Recognised in section. Reflects quality and thoroughness of clay preparation;

Inclusions (quantity: very few, few, some; type: quartzite, calcareous, stone, ironstone, shell; size: range in mm). Recognised in section. Reflects nature of clay preparation and nature of original clay body;

Surface colour (orange, red, pink, brown, buff, grey). Reflects conditions of baking, nature of original clay body, and post-depositional processes.

Overall, ten fabrics were identified for the Romano-British material (Table 2): Fabrics 1-5 & 7 relate to Site 22; Fabrics 1-5 & 8-9 to Sites 27 & 28. Fabric 10 belongs to Site 11 exclusively. Tile that is later than Romano-British or was not dateable, has not been included in Table 1 but can be found in Table 4.

Within the ten fabrics identified for the Romano-British tile assemblage, three groups can be distinguished: four of the fabrics (1, 2, 5 and 10) are smooth, fairly dense or dense and contain very few inclusions; three (3, 8 and 9) are fairly smooth with varying densities and mainly very few inclusions; whilst the remaining three (4, 6 and 7) are fairly coarse, dense, hard and contain some inclusions (see Table 2).

The colour of the fabrics does not vary much, the majority being orange or different shades thereof (e.g. pink-orange, brown-orange etc.). Different shades of red, brown and grey are also present.

The majority of the tile fragments from the Romano-British assemblage (171 items, 95.5%) are from four fabrics (1-4), the most common being smooth, soapy Fabric 1, with 78 fragments (43.5%), followed by clayey Fabric 2 with 59 fragments (33.0%). Slightly sandy Fabric 3 has 24 fragments (13.4%), whilst sandy Fabric 4 has 10 fragments (5.5%).

Tile Categories

The Romano-British tile has been divided into six separate categories based on form:

Tegulae: roofing tile; **Brick**: flat tiles of any thickness normally used in the construction of floors in heated building systems, but also as bonding courses in walls and the construction of wall arches; **Tegulae/brick**: flat tiles of uncertain type, either *tegulae* or *brick*; **Imbrices**: curved roofing tile; **Box-flue tile**: used in heated building systems; **Unidentified**.

Site Assemblages

Site 11

One piece of Romano-British *brick*, 49 mm thick, was recovered from Site 11 (Table 1). It was from an unstratified context, is fairly abraded, and is of unknown function.

Site 22

Overall, 142 pieces of tile were recovered from Site 22 (Table 1). They came from a large number and variety of contexts across most of the site.

Due to its poor state of preservation only 47.5% (by number) of the tile has been identified. The majority of the assemblage consists of small fragments, the average weight for each piece being only 59.2g. If one considers the average weight of nearly six kilograms for a complete *tegula* (Brodrigg, 1979, 140), the majority of the fragments from Site 22, at perhaps only 1% of their original size, can be regarded as exceptionally small.

Thirty-six *tegulae* fragments have been identified from 18 contexts. Ten such tiles were recovered from ditch fills (1325, 1332, 1348, 2702, 2731, 2754, 2761, 2778, 2781 & 2931), six tile fragments from a rubbish deposit (2786), five tiles from layers (2710, 2730 & 2936) and one from a pit fill (2835). The remaining fourteen *tegulae* came from unstratified contexts. The *tegulae* vary considerably in thickness from unusually thin (10 mm) to a more typical 31 mm. The majority of the tiles are between 16 and 18 mm thick which, again, appears relatively thin for *tegulae*. Flanges can be seen on a number of the tiles though with a more uniform thickness (43 - 51 mm) and width (18 - 30 mm). Cut-offs can also be seen on five of the tiles, these are sections cut away from the top and bottom of the flange before firing to enable the tiles to slot into each other and thus form a solid and secure block.

Two *brick* fragments were found within two contexts, one was recovered from a ditch fill (2777) and the other from a layer (2936). Both are of similar thickness (34 & 36 mm respectively) which might suggest that they were of a similar function.

Fourteen tiles from thirteen contexts were identified as being either *tegula* or *brick*. Of these, four came from ditch fills (2777, 2829, 2927 & 2940), three from two layers (2936 & 2721) and one from the fill of a post-hole (2849). The remaining six fragments came from unstratified contexts. Their thickness ranges from 24 to 37 mm.

Fourteen *imbrices* were also identified from the assemblage. The majority of the tiles (10 items, 71.4% by number) did not come from a stratified context. Of the remaining four, two came from ditch fills (1319 & 1376) and the remaining two came from a layer (2936). Five of the tiles are 14 mm thick whilst the remainder vary from 10-17 mm.

Only one *box-flue* tile fragment was found. It came from the fill of a ditch (1321) which suggests that there was no heating system on site; but that there must be one somewhere reasonably nearby.

Very few of the tiles from Site 22 (9.9% by number) show evidence of grey cores, suggesting that firing conditions were reasonably good.

Overall, little can be said of the whole assemblage since less than half of the tiles have been identified. This is not uncommon for Romano-British tile assemblages, and could either be due to weathering for a long period of

time prior to burial, or from re-use of the material (although there is no direct evidence for this re-use, e.g. mortar on broken surfaces). The majority of identified tiles are *tegula* and *imbrices*, which indicates that a Romano-British structure with a tiled roof existed in the vicinity. The lack of *bricks* from Site 22 would normally indicate that construction work of a limited scale was occurring on site and that *bricks* and *box-flue* tiles were probably brought to Site 22 from elsewhere. The presence of a *boxtile* fragment at Site 22 suggests that a hypocaust system existed somewhere nearby.

Site 27

Two tile fragments were recovered from a layer at Site 27 (Table 1). Both tiles were unidentifiable, but their fabrics are consistent with those of the diagnostic Romano-British tiles from Site 28.

Site 28

A total of 37 tile fragments were identified in seven fabrics, and found in nine contexts.

Fourteen of the tiles (35.9% by number) have been identified due to their poor state of preservation. The average weight of each individual fragment was 52.8g, possibly less than 1% of the original weight of the tile. Six tiles have been identified as *tegulae* fragments, however five of these are from unstratified contexts, the stratified *tegula* was recovered from ditch fill 2604. The tiles are all fairly thin (13-22 mm), although the variation in thickness does not tell us a great deal other than they may be from different buildings, re-roofing of a single building, manufactured by several individuals or represent a long period of time and/or changing styles.

Three *bricks* were also identified, two from ditch fills 2600 & 3202, and the other from layer 2624. They are of a uniform thickness (35 - 37 mm) suggesting they may have had the same function. The *brick* from ditch fill 3202 has the remains of a possible makers mark consisting of two parallel grooves with another forming a 'T - shape' with one of the parallel grooves.

Three tile fragments were identified as being either *tegula* or *brick*.

The lack of identifiable tile suggests that the material may have weathered substantially or been re-used, although there is no evidence of reuse in the assemblage to support this. The presence of *tegula* at Site 28 suggests that a structure with a tiled roof existed nearby, however no *imbrex* tiles have been identified to support this. Very few *bricks* were found suggesting that few bricks were brought to the site from elsewhere. Also the complete lack of *box-flue* tile fragments from the site suggests that this was a fairly low status site and that any structure that existed in the vicinity did not contain a hypocaust system. Overall, the tiles were of reasonably good quality with only 5 tile fragments (13.5% of the assemblage) having grey cores.

Later Sites

Medieval and post-Medieval brick and tile fragments were recovered from a number of sites along the pipeline (Table 4).

Site 7 contained 6 tiles although only two were identifiable. One, from context 2528, is a medieval glazed floor tile waster which has some evidence of decoration on one surface. It is 22 mm thick and appears to have shattered during firing. The other tile, from context 2530, is a medieval or early post-medieval roof tile, is 13 mm thick and contains a nail hole and an imprint of a shoe. The tile has some green glaze on one side which probably came from a glazed tile within the kiln during firing.

Twenty one post-Roman tiles were recovered from Site 11 with only 7 identifiable fragments from 6 tiles. All were fragments of post-medieval land drain.

One non-Roman brick fragment came from an unstratified context at Site 22. It is probably post-medieval in date, measures 60 mm wide and 39 mm deep, and had been partially vitrified, probably by mistake, during firing.

At Site 34, a sample of unstratified bricks were recovered. All four are early post-medieval handmade bricks, 49 - 55 mm thick, and are wasters.

Seven bricks were recovered from Site 35, all were identifiable. Three bricks came from a layer (2018) and four from the fill of a shallow pit (2019). They are all early post-medieval handmade brick wasters measuring between 50 and 55 mm thick.

The brick fragments from Sites 34 & 35 are all wasters of a fairly uniform size which suggests that they were either deposited in a pit or from a waster heap from a nearby local small-scale brick works.

Mark Allen 04.08.98

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TABLE 1: Romano-British brick and tile by context

Site No	Cxxt	Con Sect	Con Plot	Description	Tile N	Max No. Tiles	No. Ident	Wt (g)	Wt Ident	Gen. Cond	No. Tegula	No. Brick	No. Teg/brick	No. Imbrex	No. Box tile	No. unident	Fabric Nos
22	511	5	49, 50	Unstratified	1	1	1	185	185	f	0	1	0	0	0	0	10
22	1306	13	113	Unstratified	1	1	1	30	30	f-g	0	0	1	0	0	0	2
22	1319	13	113	Ditch fill	2	2	1	115	110	f	0	0	0	1	0	1	1, 5
22	1320	13	113	Ditch fill	1	1	0	30	0	f-g	0	0	0	0	0	1	3
22	1321	13	113	Ditch fill	1	1	1	60	60	f	0	0	0	0	1	0	1
22	1325	13	113	Ditch fill	1	1	1	135	135	g	1	0	0	0	0	0	1
22	1332	13	113	Ditch fill	1	1	1	40	40	p-f	1	0	0	0	0	0	2
22	1348	13	113	Ditch fill	1	1	1	330	330	f	1	0	0	0	0	0	1
22	1349	13	113	Unstratified	2	2	0	95	0	p-f	0	0	0	0	0	2	1
22	1350	13	113	Ditch fill	1	1	0	5	0	p-f	0	0	0	0	0	1	2
22	1376	13	113	Ditch fill	1	1	1	45	45	g	0	0	0	1	0	0	1
22	1377	13	113	Ditch fill	1	1	1	15	0	f	0	0	0	0	0	1	1
22	1383	13	113	Gully fill	3	3	0	5	0	p-f	0	0	0	0	0	3	1
22	1399	13	113	Ditch fill	1	1	0	10	0	g	0	0	0	0	0	1	1
22	2702	13	113	Ditch fill	1	1	1	215	215	g	1	0	0	0	0	0	1
22	2707	13	113	Beam slot fill	1	1	0	15	0	p-f	0	0	0	0	0	1	3
22	2710	13	113	Layer	2	2	1	235	190	f-g	1	0	0	0	0	1	2
22	2721	13	113	Layer	1	1	1	115	115	f-g	0	0	1	0	0	0	1
22	2730	13	113	Layer	2	2	1	25	5	f	1	0	0	0	0	1	1
22	2731	13	113	Ditch fill	1	1	1	50	50	g	1	0	0	0	0	0	3
22	2752	13	113	Ditch fill	1	1	0	5	0	f	0	0	0	0	0	1	2
22	2753	13	113	Ditch fill	2	2	0	35	0	f-g	0	0	0	0	0	2	1, 2
22	2754	13	113	Ditch fill	2	2	1	205	150	f	1	0	0	0	0	1	1, 2
22	2756	13	113	Gully fill	1	1	0	5	0	p-f	0	0	0	0	0	1	2
22	2761	13	113	Ditch fill	1	1	1	65	65	p-f	1	0	0	0	0	0	5
22	2763	13	113	Ditch fill	1	1	0	5	0	p-f	0	0	0	0	0	1	2
22	2767	13	113	Furrow fill	9	9	0	75	0	f	0	0	0	0	0	9	2, 3
22	2771	13	113	Gully fill	1	1	0	35	0	f	0	0	0	0	0	1	2
22	2773	13	113	Treehole fill	1	1	0	10	0	f	0	0	0	0	0	1	1
22	2777	13	113	Ditch fill	2	2	2	210	210	f-g	0	1	1	0	0	0	1
22	2778	13	113	Ditch fill	1	1	1	405	405	g	1	0	0	0	0	0	1
22	2781	13	113	Ditch fill	1	1	1	85	85	g	1	0	0	0	0	0	1
22	2786	13	113	Rubbish deposit	6	1	6	450	450	f-g	6	0	0	0	0	0	4
22	2793	13	113	Gully fill	1	1	0	5	0	f	0	0	0	0	0	1	2
22	2799	13	113	Ditch fill	1	1	0	15	0	g	0	0	0	0	0	1	1

Site No	Cxxt	Con Sect	Con Plot	Description	Tile N	Max No. Tiles	No. Ident	Wt (g)	Wt Ident	Gen. Cond	No. Tegula	No. Brick	No. Teg/brick	No. Imbrex	No. Box tile	No. unident	Fabric Nos
11	511	5	49, 50	Unstratified	1	1	1	185	185	f	0	1	0	0	0	0	10
22	1306	13	113	Unstratified	1	1	1	30	30	f-g	0	0	1	0	0	0	2
22	2824	13	113	Gully fill	1	1	0	10	0	f-g	0	0	0	0	0	1	1
22	2829	13	113	Ditch fill	1	1	1	70	70	g	0	0	1	0	0	0	1
22	2835	13	113	Pit fill	9	9	1	175	130	f-g	1	0	0	0	0	7	1, 2, 3
22	2849	13	113	Post-hole fill	1	1	1	25	25	p-f	0	0	1	0	0	0	2
22	2889	13	113	Pit fill	1	1	0	5	0	p	0	0	0	0	0	1	2
22	2927	13	113	Ditch fill	1	1	1	40	40	f	0	0	1	0	0	0	3
22	2931	13	113	Ditch fill	1	1	1	75	75	f	1	0	0	0	0	0	2
22	2936	13	113	Layer over ditch	10	8	8	1,520	1,510	f	2	1	1	1	0	1	2, 3
22	2940	13	113	Ditch fill	1	1	1	40	40	f	0	0	1	0	0	0	1
22	2986	13	113	Unstratified	2	2	1	110	20	p-f	0	0	1	0	0	1	1, 4
22	2988	13	113	Unstratified	1	1	1	10	10	p-f	0	0	0	1	0	0	4
22	2989	13	113	Unstratified	1	1	0	65	0	f	0	0	0	0	0	1	1
22	2990	13	113	Unstratified	3	3	1	200	80	f-g	0	0	1	0	0	2	3, 6
22	2992	13	113	Unstratified	1	1	1	30	25	p-f	1	0	0	0	0	1	3
22	2994	13	113	Unstratified	1	1	0	15	0	f	0	0	0	0	0	1	1
22	2997	13	113	Unstratified	9	8	1	265	70	g	0	0	0	1	0	7	2
22	3003	13	113	Unstratified	6	6	3	915	825	f-g	1	0	1	1	0	1	1, 7
22	3010	13	113	Unstratified	1	1	1	115	115	g	0	0	1	0	0	0	1, 2
22	w/s	13	113	Unstratified	34	34	20	1,490	1,900	g	12	0	1	7	0	14	1, 2
27	3185	16	123	Layer	1	1	0	15	0	f	0	0	0	0	0	1	1, 3
28	1651	16	125	Ditch fill	1	1	1	95	95	p-f	0	0	1	0	0	0	2
28	2600	16	126	Unstratified	8	6	7	665	605	f	2	1	1	0	0	1	1, 2, 4, 8
28	2617	16	126	Ditch fill	19	19	1	860	330	p-f	0	0	1	0	0	17	1
28	2604	16	126	Ditch fill	1	1	1	80	80	f	1	0	0	0	0	0	2
28	2624	16	126	Layer	1	1	1	100	100	g	0	1	0	0	0	0	9
28	2666	16	126	Furrow fill	1	1	0	10	0	g	0	0	0	0	0	1	1
28	3110	16	125/ 126	Surface finds	3	3	0	55	0	f	0	0	0	0	0	3	1, 2
28	3202	16	126	Ditch fill	1	1	1	105	105	g	0	1	0	0	0	0	2
28	w/s	16	125/ 126	Unstratified	1	1	0	75	0	f	0	0	0	0	0	1	1

TABLE 2: Romano-British brick and tile: Fabrics

Fabric	Fabric Type	Texture	Hardness	Porosity	Homogeneity	No of Inclusions	Type of Inclusions	Size of Inclusions	Surface Colour
1	clayey	smooth	hard	dense	non-homogeneous/ f. homogeneous	very few	calcareous, ironstone, stone	0.5-5	Pink-orange, orange
2	slightly soapy	fairly smooth	fairly hard	fairly dense	homogeneous	few	quartzite, calcareous	0.5-1	Brown-orange, orange, pink-orange
3	sandy	fairly coarse	hard	dense	f. homogeneous	some	quartzite	0.5-1	Brown-red, red-orange, red
4	slightly soapy	smooth	hard	fairly dense	non-homogeneous	very few	stone, quartzite	0.5-3	Pink-brown, pink-orange
5	Slightly soapy	Fairly coarse	hard	very dense	non-homogeneous	some	shell	0.5-3	Buff-orange, grey
6	sandy	fairly coarse	hard	dense	f. homogeneous	some	calcareous, quartzite	0.5-2	orange
7	slightly soapy	fairly coarse	fairly hard	dense	f. homogeneous	some	quartzite, stone, calcareous	0.5-3	Pink-orange
8	slightly soapy	fairly smooth	hard	dense	f. homogeneous	some	quartzite, stone	0.5-2	Buff-orange
9	clayey	fairly smooth	very hard	very dense	non-homogeneous	very few	quartzite	0.5-2	grey
10	clayey	fairly coarse	hard	porous	f. homogeneous	few	ironstone	0.5-3	Pink-buff

TABLE 3: Romano-British brick and tile: Tile type by fabric

Fabric No	Tile Count	Count %	Weight (g)	Grey Core	No of Tegula	No of Brick	No. of Teg/Brick	No. of Imbrex	No. of Box-tile	No. of Unid	Contexts
1	78	43.5	5,090	11	22	1	8	7	1	39	1319, 1321, 1325, 1348, 1376, 1377, 1383, 1399, 2600, 2617, 2666, 2702, 2721, 2730, 2753, 2754, 2773, 2777, 2778, 2781, 2786, 2799, 2824, 2829, 2835, 2940, 2986, 2989, 2994, 3003, 3010, 3110, 3185, Site 22 u/s, Site 28 u/s
2	59	33	3,280	6	10	3	4	5	0	37	1306, 1332, 1350, 1651, 2600, 2604, 2710, 2752, 2753, 2754, 2756, 2763, 2767, 2771, 2793, 2835, 2849, 2889, 2931, 2936, 2997, 3010, 3110, 3202, Site 22 u/s
3	24	13.4	920	1	6	0	3	1	0	14	1320, 2702, 2707, 2731, 2767, 2835, 2927, 2936, 2990, 2992, 3185
4	10	5.5	340	0	3	0	1	1	0	5	1319, 2600, 2786, 2986, 2988
5	2	1.1	305	0	1	0	0	0	0	1	2600, 2761
6	2	1.1	75	0	0	0	0	0	0	2	2990
7	1	0.6	80	0	0	0	1	0	0	0	3003
8	1	0.6	225	0	0	0	0	0	0	1	2600
9	1	0.6	100	1	0	1	0	0	0	0	2624
10	1	0.6	185	0	0	1	0	0	0	0	511

TABLE 4: Post-Roman brick and tile by context

Site No	Context	Cons Sect	Cons Plot	Context Description	Tile count	Count Ident	Weight (g)	Weight Ident	Gen Cond	Comments
7	2528	3	23	Artefacts	2	1	295	290	g	Med floor tile waster with glaze and ?decoration
7	2530	3	23	Artefacts	4	2	370	130	g	Med/E. post-Med roof tile with nail hole, shoe print and glaze
11	511	5	49, 50	Unstratified	19	5	915	535	f-g	5 post-Med land drain fragments
11	532	5	49, 50	Unstratified	2	2	300	300	p-f	Post-Med land drain
22	2996	13	113, 114	Unstratified	1	1	230	230	g	?Post-Med vitrified brick
34	2007	20	154, 155	Unstratified	4	4	1,095		f-g	E. post-Med handmade brick wasters
35	2018	20	155	Burnt brick layer	3	3	2,660	2,660	f-g	E. post-Med handmade brick wasters
35	2019	20	155	Pit fill	4	4	4,140	4,140	f-g	E. post-Med handmade brick wasters

Appendix 7

Raw, baked and fired clay

Claire D Angus

**Steppingley to Aylesbury Gas Pipeline
Raw, Baked and Fired Clay**

Claire D Angus

Summary

A total of 1782 small fragments (23415g) of raw, baked and fired clay were recovered from a number of sites along the Steppingley to Aylesbury gas pipeline route. The majority of the material was found on two Romano-British sites, Sites 22 and 28, or in other features dating to the Romano-British period. In addition, six samples were recovered from two Late Bronze Age - Early Iron Age features; thirty-nine samples from Iron Age pits and ditches and six from a Medieval/Post-Medieval feature.

Much of the identifiable material from the assemblage consists of fragments relating to kilns, or domestic ovens. Both kiln furniture, for example fragments of fire bars and clay slabs, and kiln/oven structural material are represented. The presence of this material suggests that there was local manufacture of goods for domestic use, or perhaps for local trade. The existence of wattle impressions on a number of clay fragments indicates that a small percentage of the assemblage relates to domestic structures.

Introduction

An assemblage of clay material was recovered from fourteen sites along the pipeline route, dating to the Late Bronze Age/Early Iron Age, Romano-British, and Medieval/Post-Medieval periods. Although the majority of the material came from stratified features, a small quantity was retrieved from the easement surface. Most of the material came from two Romano-British sites, Sites 22 and 28.

The term 'clay material' is used as a generic term during the course of this discussion. Due to the delicate and fragmentary nature of the raw clay, this material cannot be counted; as a result, percentages for all the material types are given by weight rather than count. These weights are given to the nearest 5g.

Categories of Clay Material

The clay material has been categorised into three groups: *raw clay, baked clay and fired clay.*

Baked clay comprises 61% of the assemblage, and includes kiln furniture, kiln structural material and daub. The term 'daub' can be problematic as it may be used to describe both the tempered material used in the construction of domestic dwellings and that used to make kilns.

The terms 'daub' and 'kiln material' have been used during this discussion, but due to the fragmentary nature of the assemblage, in many cases, it is not possible to securely identify the fragments. In general, baked material with wattle impressions has been identified as daub, and the rest as kiln structural material.

The term 'fired clay' is used for samples which have been partially fired or burnt post-production, whether unintentionally or deliberately. The degree of firing varies greatly, depending on the source and longevity of the heat. A light grey colour, due to reduction, often indicates that the clay has been subject to prolonged exposure to a heat source, such as the sun, or the heat in a kiln.

Unbaked clay forms 12% of the whole assemblage, and is a soft, plastic, dark grey raw clay, containing occasional charcoal flecks, presumably contamination from the surrounding deposit (Fabric 5). This material is probably the raw clay which was used in the kilns or domestic ovens.

Summary of Fabrics

Nine fabrics were identified by visual inspection, based on the following criteria:

Colour (orange, red, buff, brown, grey). The colour reflects the conditions of baking, the nature of the raw clay, and subsequent post-depositional processes.

Texture (fairly smooth, fairly coarse, coarse). This reflects the nature of the raw clay and the various inclusions.

Hardness (soft, moderately hard, hard, very hard). This reflects the degree of baking, the nature of the raw clay and inclusions, and can be identified with the use of the finger nail.

Inclusions (quantity: none, rare, moderate, many; type: flint, quartzite, calcareous, sandstone; size: range in mm). This can be recognised in section and reflects the nature of the raw clay and its preparation.

Porosity (porous: abundant voids; fairly dense: occasional voids; dense: no, or very few voids). This reflects the quality and thoroughness of clay preparation, and can be recognised in section.

Homogeneity (homogeneous: absence of clay folds and an even distribution of inclusions; fairly homogeneous: occasional clay folds and some unevenness in distribution of inclusions; non-homogeneous: occasional/abundant clay folds and/or uneven distribution of inclusions). This reflects the thoroughness and quality of clay preparation and can be seen in section.

Each of the fabric types identified has been numbered from 1 to 9 (*Table 1*). Four of these fabric types (1, 3, 5 and 6) are found on Romano-British and earlier sites, suggesting that the same local, raw materials were used for a long period of time. Fabrics 2 and 4 were identified on both Romano-British and Medieval/Post-Medieval sites, also suggesting the adoption of the same raw materials. The remaining three fabrics (7, 8 and 9) were related to Romano-British sites only (*Table 2*).

Table 1 : Steppingley to Aylesbury Gas Pipeline - Baked and Unbaked Clay Fabrics

Fabric No.	Fabric Type	Surface Colour	Texture	Hardness	Inclusion Quantity	Inclusion Type	Inclusion Size	Porosity	Homogeneity
1	fairly soapy, shelly	orange/brown	fairly smooth	moderately hard	moderate	quartzite, calcareous, shells	0.1mm - 2mm	fairly dense	fairly homogeneous
2	sandy	red/orange	fairly coarse	soft	rare	quartzite	0.1mm - 0.2mm	fairly dense	homogeneous
3	soapy	buff orange/brown	smooth	soft	moderate	flint, iron stone, stones, quartzite	0.1mm - 8mm	fairly dense	fairly homogeneous
4	fairly soapy	brown	fairly smooth	moderately hard	many	calcareous, quartzite, flint	0.1mm - 5mm	dense	fairly homogeneous
5	raw clay	dark grey	plastic	soft	none	None	N/A	N/A	N/A
6	slightly soapy	red/brown	coarse	very hard	many	flint	0.1mm - 3mm	dense	homogeneous
7	slightly sandy	red/Brown	fairly coarse	hard	moderate	sandstone	0.1mm - 3mm	porous	non-homogeneous
8	sandy	pink/buff	coarse	hard	rare	flint, calcareous	0.1mm - 4mm	fairly dense	fairly homogeneous
9	sandy	buff orange/brown	fairly coarse	moderately hard	moderate	flint, iron stone, stones, quartzite	0.1mm - 8mm	fairly dense	fairly homogeneous

In general, the colours of the nine fabrics are fairly similar, all being shades of red, orange or brown. They were tempered with various materials such as straw, sand and flint, the size and type of these inclusions sometimes being the only way in which the fabrics differ. There are four soapy fabrics, 4 sandy fabrics and one fabric which is raw clay (Fabric 5).

Site Assemblages

The sites which produced the larger quantities of clay material will be discussed first, followed by a more general discussion of those which produced only small quantities of material.

The majority of the assemblage (52%) came from ditches or gullies, with 29% of the material retrieved from pits and postholes. Of the remaining 19%, 15% was retrieved from the surface of the easement, and was therefore unstratified. The rest was recovered from layers, hollows, tree throws, and a single furrow.

The deposition of most of the material appears to be incidental, with only one or two instances suggestive of a deliberate dump of material. Much of the material is abraded, suggesting that it remained on the surface for a while.

Table 2 : Steppingley to Aylesbury Gas Pipeline - Summary of Fabrics

Fabric No	Sites	Count	Weight (g)	% of ass'blage	Unid (g)	Daub (g)	Kiln furn'ture/ material (g)	Context Nos
1	1, 2, 7, 9, 11, 12, 21, 22	66	725	3	145	165	415	8, 20, 312, 321, 360, 379, 386, 390, 392, 398, 403, 418, 436, 438, 457, 469, 471, 515, 528, 546, 556, 621, 1113, 1359, 2723, 2771, 2830,
2	1, 11, 22, 35	15	75	0.31	75	0	0	15, 561, 2930, 2931, 2092
3	7, 9, 11, 12, 16, 22, 32	1254	12315	50.83	3365	3930	5650	321, 366, 378, 403, 540, 560, 627, 709, 719, 727, Unstrat, 1311, 1313, 1315, 1317, 1319, 1321, 1325, 1326, 1332, 1337, 1340, 1342, 1343, 1345, 1349, 1356, 1363, 1365, 1367, 1369, 1371, 1376, 1377, 1379, 1381, 1383, 1386, 1387, 1389, 1394, 1399, 2701, 2702, 2710, 2712, 2717, 2721, 2723, 2725, 2728, 2730, 2731, 2732, 2739, 2743, 2745, 2747, 2748, 2750, 2751, 2752, 2753, 2754, 2758, 2760, 2765, 2767, 2771, 2773, 2777, 2778, 2783, 2784, 2786, 2787, 2791, 2799, 2800, 2802, 2812, 2815, 2817, 2820, 2821, 2824, 2835, 2849, 2853, 2856, 2871, 2873, 2876, 2877, 2880, 2882, 2901, 2917, 2919, 2920, 2922, 2924, 2926, 2929, 2930, 2931, 2936, 2940, 2942, 2966, 2976, 2988, 2994, 2997, 2998, 2999, 3000, 3003, 3005, 3007, 3009, 3010, 1818
4	7, 18, 22, 28	44	960	3.96	125	10	825	328, 810, 1326, 2759, 3007, 3133
5	7, 12, 22, 28	N/A	2970	12.26	2970	0	0	378, 656, 2929, 1671, 1684/7
6	21, 22, 28	22	135	0.56	135	0	0	102, 1394, 2610,
7	22, 28	17	20	0.08	20	0	0	2,791, 1690, 2684
8	2, 231	2	15	0.06	15	0	0	2,835, 1703
9	28	362	7015	28.95	1705	480	4830	1608, 1612, 1619, 1620, 1622, 1623, 1627, 1630, 1632, 1633, 1651, 1653, 1660, 1663, 1667, 1668, 1671, 1672, 1692, 2600, 2609, 2610, 2614, 2615, 2617, 2618, 2625, 2650, 2651, 2657, 2692, 2694, 2696, 2697, 3107, 3111, 3120, 3126, 3133, 3201
TOTALS		1782	24230	100%	8550	4585	11720	

Site 7

Twenty-nine fragments of clay material were recovered from Site 7. The majority of these are small pieces and therefore unidentifiable. However, the presence of a number of baked clay fragments, including two with wattle impressions, suggests some of these unidentified pieces may have been daub, used in domestic structures.

In addition, Ditch 366 produced two fragments of a baked clay tile or slab, including a rounded corner piece, which would probably have been used in a kiln, possibly as a fire bar.

Site 9

The largest quantity of material retrieved from this site came from the easement surface, and is therefore unstratified (67%). It includes probable kiln furniture with evidence of post-production burning.

Baked clay showing evidence of incidental firing was retrieved from a number of stratified features. This material is thought to come from the walls of a kiln.

Site 11

Seven contexts produced a total of eleven fragments from this site, the majority of which cannot be identified. Those that are larger appear to be fragments of clay slabs or tiles, and are thought to be kiln furniture.

Site 22

This site produced the largest amount of clay material (44%) and includes fragments of a number of baked clay tiles/slabs.

Of the material recovered, 27% was either too small or irregular in shape to be identified. Both baked and fired clay are represented in this statistic.

Fifteen contexts contained examples of wall daub, thirteen of which included fragments with wattle impressions. The wattle indentations vary in diameter from 9mm to 22mm. Impressions of other organic material, such as straw, used as a temper for the daub, were also noted on a number of fragments. It is not known whether this daub would have formed part of the walls of a domestic building, or the structure of a kiln. The evidence of burning, mainly post-production, on many of these fragments however, suggests that this material could have formed part of the structure of a kiln, where it would have been subjected to heat.

The remaining 64% of the material from Site 22 is made up of clay slabs and fragments thereof. Some of the smaller fragments may either be pieces of larger slabs or from the smooth surface of a kiln structure.

A *tegula*-shaped piece of clay was recovered from context 2815 (unstratified). A similar fragment was found at Site 28. The *tile* found here was baked, but shows no signs of ever being used. It is possible that this tile was made as a *tegula*, became baked in the sun and was never fired, and therefore, was never used as a roof tile.

A number of fragments recovered from context 1306 were joined together to form part of a clay brick, approximately 101mm wide and 48mm thick (SF 5315). A large thumb print is evident on the smoother, upper surface of this slab. The side has narrow indentations, possibly resulting from straw or other organic material being pressed against it. The impression of charred organic remains can be seen in broken sections of the tile. This slab is baked and partially 'fired', suggesting it too may have been kiln furniture.

A larger, also fairly complete slab was recovered from Ditch 1363 (SF5219). This is regular in shape, with a rounded corner. It is approximately 49mm thick, and at least 140mm across. It also exhibits evidence of post-production burning. It is possible that this tile was used either as kiln furniture, or in the construction of a domestic building.

Site 28

Forty-three contexts, twenty ditches, fourteen pits, one posthole, one layer, and seven unstratified, produced 10065g of raw, baked and fired clay.

The unbaked material came from three contexts (Pits 1671, 1684 and 1687), and, in terms of fabric, is the same as that found at Site 12 (Fabric 5). This clay is raw and completely unbaked, and is therefore extremely soft and plastic. Its fragmentary and shapeless nature makes its function uncertain.

Among the remaining forty contexts, twenty-six contained small unidentified fragments, whose use cannot be determined. Three contexts, Ditch 2618 and two unstratified contexts 2600 and 3111, contained fragments of daub, one of which has a finger smear on it (Ditch 2618). Of these, twenty-two fragments are from Ditch 2618 and show evidence of firing. It is likely that this is kiln material, which has been subject to heat during firing within the kiln. No wattle impressions are evident, although there is evidence of the clay being tempered with

organic material on a number of the fragments. The rest of the material identified as daub on this site is unstratified.

Eleven contexts, seven ditches, three pits and one unstratified context, produced baked or fired tiles/slabs. A number of corner and edge pieces have been identified, and in some cases, four surfaces remain, enabling the thickness of the tile to be measured.

A *tegula*-shaped fragment, together with other pieces of flat 'tile-shaped' baked and fired clay, were recovered from context 1608 (unstratified surface finds). The *tegula*-like tile has not been fired in a kiln as is usual, it was probably sun baked, and then subject to more intense heat some time later. Consequently, it may never have been used as a roof tile, although it may have been used later for some other purpose. Most of the other flat tile-shaped pieces appear to have been baked rather than fired.

Another tile fragment worthy of note was recovered from Ditch 1623. Although it is relatively small, its irregularity and the poor quality of clay preparation suggest that it could have been part of a tile waster.

Of the other slabs of baked and fired clay, the average thickness is 27mm. The majority of corner pieces retrieved have rounded edges and corners, with flat, fairly smooth surfaces. Two of the surviving slabs are of fairly crude shape, not being completely square (Pits 1671 and 1672). It is possible that these are cheap tiles, which have not been fired, merely left to bake in the sun. In total this site produced 146 pieces of possible slabs, although the smaller fragments may not necessarily be related to the larger fragments.

One of the clay slabs recovered from Site 28 retained both of its original edges (SF 6031), allowing its original width and thickness to be identified. It measures 1020mm across, and has a depth range of 33mm to 42mm. Its surfaces are fairly flat and smooth, and despite the variable depth it seems quite well-formed. It was possibly a cheap tile, which was not fired.

Other Sites

The other nine sites produced a small quantity of clay material (3%). Of these, the fragments recovered from Sites 1, 12, 21, 31, 32 and 35 were all unidentifiable. The two fragments found at Site 2 have been identified as wall daub; one of the fragments having a finger smear. A piece of daub from site 16 possesses with a deep wattle impression measuring 14mm in diameter. Sites 16 and 18 yielded a small quantity of flat pieces of baked and fired clay, some of which may have been used either as cheap tiles or as kiln furniture.

Conclusions

The fragmentary nature of the clay material recovered from the Steppingley to Aylesbury gas pipeline route means that it has been difficult to determine the precise character of the fragments. Many have had to be categorised merely as 'unidentified fragments', as to interpret further would be purely speculative. Furthermore, of the material which can be more clearly identified, such as daub and fragments of slabs/tiles, its exact usage cannot be determined. Material which appears to be daub may have been used for domestic buildings or in the structure of a kiln. The interpretation of clay slabs is also difficult, as once again these could have been cheap tiles, or kiln furniture such as fire bars.

Although the material in this assemblage has not been deliberately fired, many of the fragments show evidence of some burning. Apart from the small percentage (12%) of raw clay (Fabric 5), the rest of the clay has become harder and more stable, due to baking, either in the heat of the sun, or during the firing process in a kiln. This firing all appears to be post-production, and often is not uniform throughout the entire piece.

The evidence suggests that at Sites 22 and 28, and possibly at some of the smaller sites, there were kilns and ovens to manufacture locally needed products. The kilns are considered to have been small-scale and for domestic/local use. It is also likely that some of this material came from ovens, again purely for domestic use.

The nature of the assemblage suggests that the clay deposits in the locality were being utilised for a number of purposes. It appears that the majority of the clay was being shaped and used at source, although, due to the existence of the same fabric at a number of sites (especially Fabrics 1, 2, 3, 7 and 9) there must have been some movement of material.

Steppingley to Aylesbury Gas Pipeline - Baked and Unbaked Clay by Context

Site	CS	Plot	Contxt	Context Desc.	Fab. No.	Wt. (g)	N	Wattle Diam	General Description
1	0	3	8	Ditch fill	1	5	1		Unid frag
1	0	3	15	Unstrat.	2	5	1		Unid. frag
2	0	6	20	Ditch fill	1	15	2		Daub;finger smear; 1 flat surface
7	3	23	312	Ditch fill	1	10	3		Post-production burning; daub
7	3	23	321	?Pit/Posthole fill	1	10	1		Unid frag
7	3	23	321		3	5	1	1cm	Daub; wattle impression
7	3	23	328	Ditch fill	4	10	1	0.9cm	Daub; wattle impression; impression of organic material
7	3	23	360	Ditch fill	1	5	1		Unid. frags
7	3	23	366	Ditch fill	3	5	2		Baked slab/tile, ?kiln furniture; 1 corner frag; 1 flat surface
7	3	23	378	Ditch fill	3	10	3		Unid. frags
7	3	23	378		5	5	1		Unid frag
7	3	23	379	Ditch fill	1	15	11		Unid. frags
7	3	23	386	Ditch fill	1	5	1		Unid. frag
7	3	23	390	Gully fill	1	5	1		Unid. frag
7	3	23	392	Gully fill	1	5	2		Unid. frags
7	3	23	398	Gully fill	1	5	1		Unid. frag
9	4	33	403	Unstrat.	1	305	13		Evidence of post-production burning; impressions of organic material; ?baked clay tiles/slabs; flat surfaces; ?kiln material/furniture
9	4	33	403		3	5	1		Unid. frag
9	4	33	418	Ditch fill	1	130	1		Daub;impressions of organic material
9	4	33	436	Pit fill	1	30	3		Unid. frag
9	4	33	438	Pit fill	1	10	3		Unid. frags
9	4	33	457	Unstrat.	1	50	2		?Tile/slab frags; rounded corner pieces; flat surfaces;?kiln furniture
9	4	33	469	Ditch fill	1	5	1		Unid. frag
9	4	33	471	Pit fill	1	5	1		Unid. frag
11	5	50	515	Unallocated	1	50	2		Tile/slab frags;?kiln furniture
11	0	50	528	Gully fill	1	10	1		?Tile/slab frags; ?kiln furniture
11	5	50	540	Unstrat.	3	10	1		Unid. frag
11	5	50	546	Gully fill	1	5	1		Unid. frag
11	5	50	556	Pit fill	1	5	1		Unid. frag
11	5	50	560	Pit fill	3	10	4		Unid. frags
11	5	50	561	Gully fill	2	5	1		Unid. frag
12	6	54	621	Ditch fill	1	10	3		Unid. frags
0	6	54	627	Pit fill	3	5	1		Unid. frag
12	6	54	656	Ditch fill	5	30	4		Unid. frags
16	7	68	709	?Pit/ditch fill	3	15	2		Tile/slab frags; ?kiln furniture
16	7	68	719	Ditch fill	3	20	1	1.4cm	Daub; deep wattle impression; impressions of organic material
16	7	68	727	Ditch fill	3	370	28		Tiles/slabs; ?kiln furniture; 1 frag has 4 edges, slab 3.7cm thick; corner piece frags
18	8	80	810	Pit fill	4	245	32		?Tile/slab; ?kiln material/furniture; corner pieces
21	11	101	1113	Ditch fill	1	10	5		Unid. frags
21	11	102	1115	Pit fill	6	15	1		Unid. frag
22	13		Unstrat.	Unstrat.	3	100	1		Unid. frag
22	13	113	Unstrat.	Unstrat.	3	5	19		?kiln material
22	13	113	1311	Gully fill	3	60	4		?Tile/slab; 1 rounded corner frag; impressions of organic material
22	13	113	1313	Ditch fill	3	25	1		?Tile/slab; ?kiln material/furniture; impressions of organic material
22	13	113	1315	Gully fill	3	610	31		Tile/slab, 4.9cm thick; ?kiln furniture
22	13	113	1317	Pit fill	3	10	1		Unid. frag
					3	95	23		Residue from sample 7016; Unid. frags
22	13	113	1319	Gully fill	3	10	2		Unid. frags
					3	15	2		Unid. frags
22	13	113	1321	Ditch fill	3	5	1		?finger smear; ?kiln material
					3	40	24		Residue from sample 7014; Unid. frags
22	13	113	1325	Ditch fill	3	185	10	1cm, 1.2cm	Daub; wattle impressions; impressions of organic material
22	13	113	1326	Ditch fill	3	60	3		Unid. frags
22	13	113	1326		4	10	1		Unid. frag
22	13	113	1332	Ditch fill	3	25	10		Unid. frags

APPENDIX 7
Raw, baked and fired clay

Site	CS	Plot	Contxt	Context Desc.	Fab. No.	Wt. (g)	N	Wattle Diam	General Description
22	13	113	1337	Ditch fill	3	30	2		1 flat surface; impression of organic material; ?kiln material
22	13	113	1340	Gully fill	3	70	4		Tile/slab; ?kiln furniture/ material; corner frags
22	13	113	1342	Pit fill	3	30	4		Unid. frags
22	13	113	1343	Pit fill	3	25	1		?Tile/ slab; ?kiln furniture/material; flat surfaces
22	13	113	1345	Posthole fill	3	30	12		Unid. frags; only partially baked
22	13	113	1349	Unstrat.	3	385	32		Tile/slab; finger smear; corner piece; flat surfaces; impression of organic material; ?kiln furniture/material
22	13	113	1349		3	110	3		?kiln furniture/material
22	13	113	1356	Pit fill	3	10	1		?Tile/slab; ?kiln material; weathered corner piece
22	13	113	1359	Gully fill	1	5	1	0.9cm	Daub; wattle impression
22	13	113	1363	Ditch fill	0	300 5	131	1.5cm	Daub; wattle impression; thumb imprint; slab frags incl. SF 5219, 2 slabs & frags
22	13	113	1365	Ditch fill	3	325	21		?Tile/slab; corner frags; 1 frag has 2 flat surfaces, 3.1cm thick; impression of organic material; ?kiln furniture/material
22	13	113	1365		3	105	4		flat surfaces; ?kiln furniture/material
22	13	113	1365		3	35	18		Residue from sample 7018; Unid. frags
22	13	113	1367	Pit fill	3	10	3		Unid. frags
22	13	113	1369	Gully fill	3	55	20		?Tile/slab frags; 1 corner piece; finger impression
22	13	113	1369		3	30	9		Unid. frags
22	13	113	1371	?Tree-bowl	3	55	15		Unid. frags
22	13	113	1376	Ditch fill	3	45	14		Unid. frags
22	13	113	1376		3	30	8		Unid. frags
22	13	113	1377	Ditch fill	3	25	12	1.2cm; 1.8cm	Daub; wattle impressions; evidence of organic material
22	13	113	1379	Ditch fill	3	25	6		Unid. frags
22	13	113	1381	Gully fill	3	10	3		Unid. frags
22	13	113	1383	Ditch fill	3	50	18		Unid. frags
22	13	113	1386	Ditch fill	3	35	14		Unid. frags
22	13	113	1387	Pit fill	3	75	10		Unid. frags
22	13	113	1387		3	10	2		Unid. frags
22	13	113	1389	Ditch fill	3	10	1		?Tile/slab frags; ?kiln furniture; corner piece
22	13	113	1389		3	5	3		Residue from sample 7009; Unid. frags
22	13	113	1394	Gully fill	3	40	5		Unid. frags
22	13	113	1394		6	100	18		Unid. frags
22	13	113	1399	Ditch fill	3	70	8		Daub; evidence of organic material
22	13	113	2701	Pit fill	3	5	1		Unid. frags
22	13	113	2702	Ditch fill	3	45	3		Daub; evidence of organic material
22	13	113	2710	Layer	3	5	1		Unid. frag
22	13	113	2712	Ditch fill	3	5	1		Unid. frag
22	13	113	2717	Ditch fill	3	135	3		Thin, smooth frag; folded over edge; crudely made; ?kiln material
22	13	113	2717		3	5	4		Residue from sample 7012; Unid. frags
22	13	113	2721	Layer	3	50	3	2.2cm	Daub; wattle impression
22	13	113	2723	Layer	1	5	1		Daub; Evidence of organic material; small slit made by stalk
22	13	113	2723		3	10	1		Unid. frag
22	13	113	2725	Ditch fill	3	5	3		Unid. frags
22	13	113	2728	Unallocated	3	10	0	1cm	Daub; wattle impression
22	13	113	2730	Ditch fill	3	75	10	0.9cm	Daub; wattle impression
22	13	113	2731	Ditch fill	3	5	2	1.1cm	Daub; wattle impression; hole (0.2cm diam) ?root/stalk hole
22	13	113	2732	Ditch fill	3	35	5		Unid. frags
22	13	113	2739	Pit fill	3	5	1		Unid. frag
22	13	113	2743	Gully fill	3	5	1		Unid. frag
22	13	113	2745	Gully fill	3	35	15		Unid. frags; evidence of organic material
22	13	113	2747	Ditch fill	3	90	4	1cm	Daub; wattle impression; ?Tile/slab; flat surfaces
22	13	113	2747		3	20	1		?kiln material
22	13	113	2748	Ditch fill	3	10	3		Unid. frags
22	13	113	2750	Gully fill	3	65	7		Tile/slab; 2.7cm thick; ?kiln furniture/material
22	13	113	2751	Ditch fill	3	60	4		?daub; ?finger smear
22	13	113	2751		3	25	19		Residue from sample 7015; Unid. frags
22	13	113	2752	Ditch fill	3	70	4		Tile/slab; corner frags; ?kiln furniture/material
22	13	113	2752		3	40	1		?kiln material
22	13	113	2752		3	10	12		Residue from sample 7017; Unid. frags
22	13	113	2753	Ditch fill	3	360	29		Tile/slab; evidence of organic material;?kiln material/furniture
22	13	113			3	5	2		Residue from sample 7013; Unid. frags
22	13	113	2754	Ditch fill	3	5	1		Unid. frag

APPENDIX 7
Raw, baked and fired clay

Site	CS	Plot	Contxt	Context Desc.	Fab. No.	Wt. (g)	N	Wattle Diam	General Description
22	13	113	2758	Ditch fill	3	30	6		Unid. frags; only partially baked
22	13	113	2759	Ditch fill	3	10	2		Unid. frags
					4	5	2		Unid. frags
22	13	113	2760	Pit fill	3	5	3		Residue from sample 7000; Unid. frags
22	13	113	2765	Gully fill	3	10	5		Unid. frags
22	13	113	2767	Furrow fill	3	5	1		Unid. frag
22	13	113	2767		3	5	1		Unid. frag
22	13	113	2771	Gully fill	1	5	2		Unid. frags
22	13	113	2773	Tree-bowl	3	5	3		Unid. frags
22	13	113	2777	Ditch fill	3	770	44		Tile/slab; ?kiln furniture/material; corner frags; flat surfaces
22	13	113	2778	Ditch fill	3	100	26		Tile/slab; corner frags; ?kiln furniture/material
22	13	113	2778		3	25	5		?kiln material
22	13	113	2778		3	5	3		Residue from sample 7019; Unid. frags
22	13	113	2783	Ditch fill	3	15	0		Unid. frags
22	13	113	2783		3	5	3		Residue from sample 7020; Unid. frags
22	13	113	2784	Ditch fill	3	5	2		Unid. frags
22	13	113	2786	Layer	3	125	6		Tile/slab; corner frags; flat surfaces; ?kiln furniture/material
22	13	113	2787	Layer	3	160	19	2.1cm	Daub; deep wattle impression
22	13	113	2791	Ditch fill	3	135	8		Unid. frags
22	13	113	2791		7	5	1		Unid. frag
22	13	113	2799	Ditch fill	3	50	2		?Tile/slab frags; flat surface; ?kiln furniture/material
22	13	113	2800	Ditch fill	3	10	3		Unid. frags
22	13	113	2800		3	5	1		Unid. frag
22	13	113	2802	Gully fill	3	5	1		Unid. frags
22	13	113	2812	?Gully fill	3	155	7		Unid. frags; only partially baked
22	13	113	2815	Unallocated	3	285	9		Baked clay tegula; height approx 6.3cm; flat frags
22	13	113	2817	Unallocated	3	5	1		Unid. frag
22	13	113	2820	Ditch fill	3	15	2		Unid. frags
22	13	113	2820		3	30	14		Residue from sample 7007; unid. frags
22	13	113	2821	Ditch fill	3	25	3		Unid. frags
22	13	113	2824	?Gully fill	3	25	5		Unid. frags
22	13	113	2830	Ditch fill	1	5	1		Unid. frag
22	13	113	2835	Pit fill	3	40	6		Unid. frags
22	13	113	2835		8	15	1		Unid. frag
22	13	113	2849	Pit fill	3	45	8		Unid. frags
22	13	113	2853	Posthole fill	3	15	5		Unid. frags
22	13	113	2856	Pit fill	3	30	4		Unid. frags
22	13	113	2871	Hollow	3	5	1		Unid. frag
22	13	113	2873	Hollow	3	30	2		Thumb impression; ?daub
22	13	113	2876	Pit fill	3	20	2		Tile/slab; thumb impression; 1 corner frag
22	13	113	2876		3	85	12		?kiln material
22	13	113	2876		3	50	24		Residue from sample 7004; Unid. frags
22	13	113	2877	Pit fill	3	35	26		Residue from sample 7001; Unid. frags
22	13	113	2880		3	10	11		Residue from sample 7003; Unid. frags
22	13	113	2882	Posthole fill	3	5	3		Unid. frags
22	13	113	2901	Posthole fill	3	0	1		Residue from sample 7002; Unid. frag
22	13	113	2917	Stakehole fill	3	35	4		Tile/slab frags; kiln furniture/material
22	13	113	2919	Stakehole fill	3	5	1		Unid. frag
22	13	113	2920	Stakehole fill	3	80	5	1cm	Daub; wattle impression
22	13	113	2922	Pit fill	3	180	23		?Tile/slab; flat surfaces; kiln furniture/material
22	13	113	2924	Ditch fill	3	10	1		Unid. frag
22	13	113	2926	Ditch fill	3	35	3		Unid. frags; evidence of organic material
22	13	113	2929	Ditch fill	3	85	10		Unid. frags; thumb impression
22	13	113	2929		5	30	5		Unid. frags
22	13	113	2929		3	20	17		Residue from sample 7006; Unid. frags
22	13	113	2930	Ditch fill	2	10	3		Unid. frags
22	13	113	2930		3	210	36		Unid. frags
22	13	113	2931	Ditch fill	2	20	4		Unid. frags
22	13	113	2931		3	140	32		Unid. frags
22	13	113	2936	Hollow	3	45	14		Unid. frags
22	13	113	2940	Ditch fill	3	5	1		Unid. frag
22	13	113	2942	Hollow	3	210	17		Unid. frags; evidence of organic material
22	13	113	2942		3	10	3		Unid. frags
22	13	113	2942		3	30	26		Residue from sample 7008; Unid. frags
22	13	113	2966	Hollow	3	25	18		Unid. frags

APPENDIX 7
Raw, baked and fired clay

Site	CS	Plot	Contxt	Context Desc.	Fab. No.	Wt. (g)	N	Wattle Diam	General Description
22	13	113	2976	Stakehole fill	3	5	3		Unid. frags
22	13	113	2988	Gully fill	3	50	2		Unid. frags; finger smear
22	13	113	2994	Unstrat.	3	5	1	1cm	Daub; wattle impression
22	13	113	2997	Unstrat.	3	195	5		Tile/slab; corner frag; flat surfaces; kiln furniture/material
22	13	113	2998	Unstrat.	3	5	1		Unid. frag
22	13	113	2999	Unstrat.	3	10	2		Unid. frags
22	13	113	3000	Unstrat.	2	10	1		Unid. frag
22	13	113	3003	Unstrat.	3	5	1		Unid. frags
22	13	113	3005	Unstrat.	3	10	1		Unid. frags
22	13	113	3007	Unstrat.	3	20	2		Tile/slab; corner piece; kiln material/furniture
22	13	113	3007		4	580	1		SF6031, clay slab, 10.2cm wide, 3.3-4.2cm thick; ?kiln furniture
22	13	113	3009	Unstrat.	3	55	4		?Daub; evidence of organic material
22	13	113	3010	Unstrat.	3	5	1		Unid. frag
28	16	125	1608	Unstrat.	9	605	20		Tegula like piece, 2.8cm thick; corner pieces; flat surfaces
28	16	125	1612	Ditch fill	9	5	1		Unid. frags
28	16	125	1619	Ditch fill	9	205	1		Tile/slab, 2.7cm thick; kiln furniture
28	16	125	1619		9	5	16		Residue from sample 8013; Unid. frags
28	16	125	1620	Ditch fill	9	5	2		Unid. frag
28	16	125	1622	Ditch fill	9	5	1		Unid. frag
28	16	125	1623	Ditch fill	9	40	1		?Tile/slab waster
28	16	125	1627	Pit fill	9	255	5		Unid. frags
28	16	125	1627		9	150	8		Unid. frags
28	16	125	1630	Ditch fill	9	15	2		Unid. frags
28	16	125	1630		9	5	1		Unid. frag
28	16	125	1632	Gully fill	9	30	6		Unid. frags
28	16	125	1633	Ditch fill	9	135	10		?Tile/slab; kiln furniture; flat surfaces; evidence of organic material; ?kiln material
28	16	125	1651	Ditch fill	9	133 0	37		SF6027 Tile/slab with rounded edges, 4cm thick, crudely made; ?kiln material
28	16	125	1653	Pit fill	9	15	18		Unid. frags
28	16	125	1660	Pit fill	9	920	45		Tile/slab; 2.7cm thick; corner pieces; ?kiln furniture/material
28	16	125	1663	Ditch fill	9	40	35		Residue from sample 8014; Unid. frags
28	16	125	1667	Pit fill	9	5	1		Unid. frag
28	16	125	1668	Pit fill	9	10	2		Unid. frags
28	16	125	1671	Pit fill	9	455	1		Tile/slab; 3cm thick, rounded corner, crude, mis-shapen; ?kiln furniture/material
28	16	125	1671		5	191 0	N/A		Unid. frags
28	16	125	1672	Pit fill	9	250	1		Tile/slab; 2.6cm thick; not completely square; ?kiln furniture
28	16	125	1684/7	Pit fill	5	995	N/A		Unid. frags
28	16	125	1690	Posthole fill	7	10	14		Unid. frags
28	16	125	1692	Pit fill	9	325	2		Unid. frags
28	16	126	2600	Unstrat.	9	60	2		Slab, finger smears, 3.3cm thick
28	16	126	2600		9	265	1		?Daub; evidence of organic material
28	16	126	2609	Pit fill	9	5	13		Residue from sample 8000
28	16	126	2610	Pit fill	6	20	3		Unid. frags
28	16	126	2610		9	50	1		Residue from sample 8001; Unid. frags
28	16	126	2614	Ditch fill	9	80	8		Unid. frags
28	16	126	2614		9	45	30		Residue from sample 8006; Unid. frags
28	16	126	2615	Ditch fill	9	450	3		?Tile/slab; finger smears
28	16	126	2615		9	25	25		Residue from sample 8007; Unid. frags
28	16	126	2617	Ditch fill	9	340	22		Unid. frags
28	16	126	2617		9	5	5		Residue from sample 8008; Unid. frags
28	16	126	2618	Ditch fill	9	170	22		?Daub; finger impressions; evidence of organic material
28	16	126	2625	Layer	9	95	2		Unid. frags
28	16	126	2650	Ditch fill	9	5	1		Unid. frag
28	16	126	2651	Unstrat.	9	25	1		Unid. frag
28	16	126	2657	Ditch fill	9	5	1		Unid. frag
28	16	126	2684	Pit fill	7	5	2		Unid. frags
28	16	126	2692	Ditch fill	9	5	1		Unid. frag
28	16	126	2694	Ditch fill	9	5	1		Unid. frag
28	16	126	2696	?Pit fill	9	75	5		Unid. frags
28	16	126	2697	Ditch fill	9	185	4		Tile/slab; 2cm thick; ?kiln material
28	16	126	3107	Pit fill	9	105	19		Residue from sample 8004; ?slab/tile; ?kiln material

APPENDIX 7
Raw, baked and fired clay

Site	CS	Plot	Contxt	Context Desc.	Fab. No.	Wt. (g)	N	Wattle Diam	General Description
28	16	126	3111	Unstrat.	9	45	1		Daub; evidence of organic material
28	16	126	3120	Unstrat.	9	60	1		Unid. frag
28	16	126	3126	Unstrat.	9	10	2		Unid. frags
28	16	126	3133	Unstrat.	4	110	7		Unid. frags
28	16	126	3201	Ditch fill	9	90	2		?Tile/slab; ?corner frag; ?kiln material
31	17	134	1703	Unstrat.	8	10	1		Unid. frag
32	18	141	1818	Ditch fill	3	5	3		Unid. frags
35	20	155	2092		2	35	6		Unid. frags

Appendix 8

The slag

Jane Cowgill

Slag
Jane Cowgill

Introduction

Twenty-four pieces of slag (610g) were recovered from sites 3, 7, 9, 22, and 28. The material was recovered from a variety of features including gullies, ditches and a pit and well which were mostly Romano-British in date.

Recording Methodology

The assemblage from the site has been entered onto the computer as a Microsoft Access file (Appendix A). The slag was visually examined and identified solely on morphological grounds, sometimes with the aid of a x10 binocular microscope. (For more detailed information see the glossary in Appendix B). A note of probable fuel type has been recorded when fragments were incorporated with the slag.

The Slag

Two types of slag are present: a small quantity of iron slag and an ambiguous type that cannot be definitely assigned to any particular industry. Five pieces of iron-smithing slag are from Sites 3, 22 and 28 and are all very abraded and possibly water rolled. This suggests that they have been subject to adverse conditions and may have been re-deposited a number of times (slag does not 'wear' easily). A single, small piece of tap slag (12g) is from an unstratified context on Site 9. It was produced during iron smelting in a bloomery furnace, but the abraded appearance of the piece and its small size implies that it has few or no archaeological implications.

The majority of the second type of slag was found on Site 22. The appearance of the slag is black, glassy and grainy with a mass of sand inclusions. Some of the slag has areas coloured variously mid to dark blue and a sludgy green. The majority of this slag is also abraded and some has vivianite on the surface suggesting that it was recovered from water-logged contexts. Although the appearance of the slag is very dissimilar to iron-smithing slag, the form of a number of pieces are reminiscent of classic smithing types, particularly the 'hearth bottom': there are two examples from Context 2675. There are also two possible tuyeres; these are generally only found associated with iron working. It is therefore possible that this is smithing slag which has either undergone some extreme degradation process or had been generated by some unusual smithing technique. The author has only seen seriously degraded slag from seasonally water-logged sites on alluvium and gravel and not from chalky soils, although, metallurgically, slag should be more stable within a chalky soil (*pers. comm.* Starley, D.). The other possibility is that it is Iron Age in date and was produced by an unusual smithing technique. there are a number of very unusual slags generated exclusively during the Iron Age and perhaps this in another example.

Discussion

The small amount of iron smelting and smithing slag found on sites 3, 7, 9, 22, and 28, do not necessarily indicate any local iron working, and may have been imported into the fields with other settlement waste during manuring activities. The unusual slag that was found at Site 22 (Contexts 2756 and 2765) appears to have been concentrated within, and in the vicinity of, the possible drip gully of an Iron Age hut. The quantity is again small (15 pieces; 386g) but could possibly represent local small-scale metallurgical activity. The remaining three pieces are from a ditch and pit in the western part of the same site and are not apparently significant.

APPENDIX A

Catalogue of the slag

SF	Context	Section	Plot	Type	No	Weight	Comments
5302	114	1	10	SSL	1	39	Abraded
5306	122	1	10	HB	1	89	Abraded; water rolled? Dense; few flint incl
5308	2513	3	23	IRON	1	90	Natural - discard
5310	398	3	23	IRON	1	21	Natural - discard
5311	403	4	33	TAP	1	12	Abraded; charcoal incl
5106	2756	13	113	SLAG	1	58	Thin; dense; abraded; mass small flint chips on surf at one end; charc incl
5106	2756	13	113	CIND	1	8	Mass smallflint chips incl; iron working??
5113	2765	13	113	TUY	1	86	Crescent shape; repaired? Small black glassy grainy 'hb'; abraded; vivianite on surf
5113	2765	13	113	SLAG	5	15	+ Hearthlining; 1xtuy? Black glassy grainywith mass sand incl; some mid blue - sludge green
5113	2765	13	113	SLAG	1	171	Hb form; black glassy graing with mass sand incl; very abraded; charc incl; base fawn/grey/brown
5113	2765	13	113	SLAG	2	7	Fragments; black glassy grainy with mass sand incl; abraded; flint incl
5113	2765	13	113	SLAG	4	49	Clink? Black glassy grainy with mass sand; light - dark blue and green glassy areas; some iron stain
5134	2876	13	113	SLAG	2	14	Slag soft; fawn/brown/grey; matt; large flint incl; totally degraded; lots iron stain
5169	2936	13	113	SLAG	1	2	2x large flints; black glassy but slightly matt; iron stain
5303	2743	13	113	SSL	1	33	Smashed; charc incl; abraded water rolled?
5313	1608	16	125	HB	1	17	Fragment; abraded; grey
5312	2672	16	126	SLAG	1	10	Glassy; flint + ?pot incl; soft; water rolled? Degraded; grey/brown/black

APPENDIX B

GLOSSARY OF IRON WORKING TERMS AND CODES

By Jane Cowgill ©

It is important to note that the slag generated by the same process form a continuum and that each type is not necessarily distinct from any other. There are, however, a number of types of slag that can confidently be assigned to a specific type of metal-working process and these are explained below followed by the more general forms and related debris. The codes used in the catalogue are in bold.

A wide range of factors concerning iron production and smithing are not yet understood and much misleading and over simplified information has been published. Fundamental aspects concerning the techniques, such as slag formation, is still poorly understood. Experimental archaeology and more informed excavations are gradually improving the situation.

It is recommended that the Historical Metallurgy Society Datasheets on metal-working are obtained from D Starley (Ancient Monuments Laboratory, English Heritage, Fortress House, 23 Savile Row, London) for the price of £1 made payable to Historical Metallurgy Society.

Unlike all other metals, before AD1500, iron was produced and worked only in the solid state; this technology is known as the Direct Process. The processes involved using this direct or bloomery technology are the extraction of the metal from the ore in a furnace, the compaction and purification of the metal to produce a bar during primary smithing and the working of the iron to an object in secondary smithing. Primary smithing is usually discussed with the smelting/ iron production because it is only after this stage that a saleable and workable piece of iron has been produced.

IRON PRODUCTION

Iron ores are commonly found throughout Britain, often in the form of iron oxide bog ores. For the early technologies to succeed it was essential that this ore was as rich as possible, over 70% iron oxide. (Iron slag commonly contains over 50% Fe). All ores were probably washed, bonfire roasted and crushed before being fed into the furnace. (McDonnell 1995a).

The basic furnace structure was a cylindrical shaft built of clay, between 1 and 2m high, with an internal diameter of 0.3 to 1m with an air hole through the furnace wall for the supply of the air draught (produced by bellows). At the base was an arch through the wall to allow the removal of the slag. Each furnace could have been reused for numerous smelts. The furnaces would have been covered by some sort of structure although the evidence seldom survives. When excavated the furnace remains can be very difficult to identify and often survive as little more than a reddened scoop in the ground (Crew 1995).

The most common form of fuel was charcoal (coal was never used for this technology) which was consumed in very large quantities (Crew 1991). The availability of this resource was probably the most important factor in determining the location of the smelting sites, available ores and clays for furnace building are usually more freely available.

To smelt iron the furnace has to be preheated and then the ore and further charcoal would be fed into it; the bellows meanwhile producing the draught. Two equally important operations occurred inside the furnace, the production of iron and the removal of the gangue (impurities within the ore etc) as liquated slag. The slag collected at the bottom of the furnace and was often tapped off into a pit or hollow in the ground (TAP); some of the slag sometimes solidified in the channel connecting the furnace to the pit (CHAN). At the end of a smelt some slag may remain inside the furnace and allowed to cool there, this is known as furnace slag; it often has the imprints of the large pieces of charcoal used as fuel (FURN). The iron formed as a bloom (thus the term bloomery) attached to the inside wall of the furnace just below the air hole. When the bloom reached a large enough size to impede the air hole the smelt stops and the soft spongy bloom, a mixture of slag and iron, is extracted for refining and smithing to make it into a workable bar. This initial working of the iron is the primary smithing stage but the slag produced are similar to those generated by secondary smithing. Blooms are extremely rare archaeological finds because they can always be re-smelted if they are failures or shatter while being worked. (Crew 1996.)

SECONDARY SMITHING

This is the term used to describe the manufacture or repair of objects. Although this can be undertaken almost anywhere, permanent forges were often built. The main features of a forge are the hearth, often built waist high, a bosh or water container, the anvil and a pair of bellows. There was usually a tuyere on the hearth to protect the bellows' nozzle from the heat of the fire. This often took the form of a perforated cylinder or plate of clay or even a reused piece of tile. The most common fuel was charcoal although from the Romano-British period coal was occasionally used.

Iron smiths had a range of irons available to them varying from pure ferritic iron (relatively soft), iron containing phosphorus (relatively harder) to steels (potentially very hard, but more brittle) and were also probably involved in re-cycling broken and damaged artefacts of varied iron composition (McDonnell 1988, McDonnell 1989). Steel is the best material for use in the production of cutting or working tools, since it can be heat treated to produce the optimum toughness.

Secondary smithing produces a range of waste products, slag being the most common. The classic form is a 'plano-convex accumulation of slag', commonly called a 'hearth bottom', which is formed in the hottest part of the hearth just below the tuyere (HB). The terminology is incorrect, although it persists, in that it does not necessarily form in the base of the hearth. The usual shape is a convex base with a flattish top often with a shallow depression formed by the blast of air from the bellows. Another common waste product is termed 'smithing slag lumps' (SSL). These develop as free slag within the fuel filling the hearth. They are randomly shaped pieces of iron silicate generated during the smithing process, which have failed to coalesce with the 'hearth bottom'. During formation the slag would be in a plastic or semi-molten state and would need to cool before the smith could remove it from the hearth. The high temperatures produced in the hearth can lead to considerable quantities of the clay wall and the tuyere melting, leading to the formation of vitrified hearth lining and cinder, the latter a silica rich slag (VHL, CIND). The above slags would all have formed in the hearth.

The processes involved in the formation of these hearth slags are not completely understood. The possible 'ingredients' include ash, sand, impurities in the fuel, hammerscale and any iron that 'burns' (melts) in the fire. Free iron oxide is extremely reactive with silicates and therefore the hearth wall or tuyere will be attacked leading to the combining of the sand in the clays with the slags. A result is that the hearth wall and/or the tuyere may have to be repaired or replaced between smithing operations. In the final stages of formation the 'hearth bottoms' may be attached to the tuyere or hearth wall and can threaten, by their increasing size, to block the tuyere hole and thereby lessen the air draught into the hearth. When removed they are snapped off the wall, this usually removes a certain amount of the structure again necessitating repair.

When the hot iron is hammered another waste product, hammerscale, is produced the presence of which may help in locating the anvil within a smithy archaeologically (HAMM)(McDonnell 1992b and 1992c). When heated by the smith the surface of iron oxidises and this oxidised layer flakes off when beaten producing thin flat plates of scale debris (plate hammerscale). Surface oxidation can be avoided by careful placement of the iron within the fire (in a reducing zone) and by fluxing. Fluxing involves covering the metal surface with a thin layer of sand. Spheroidal hammerscale, small droplets of slag that have solidified and may be either hollow or solid, are also produced and are again created when the hot iron is hammered (Starley 1995). Hammerscale is easily trampled and can form a concreted layer that may be mistaken for iron-pan. The significance of such deposits may not be recognised. Hammerscale is seldom recognised during excavations, indeed many archaeologists are unaware of its existence.

Unfortunately there is nothing that easily characterises a smithy archaeologically. An essential feature is the hearth, but these may have often been constructed at waist height and therefore little or nothing that is 'fired' and definable survives. Anvils and other tools are portable and valued objects and the water bosh need not be a sunken feature. The most important form of evidence is therefore the hammerscale and slag (McDonnell 1992b and 1992c). The presence of hammerscale in quite large quantities is thought to be a significant indicator of the presence of a smithy and in most circumstances this material will be found in an uncorroded state and is easily retrieved with a magnet (though often difficult to see when mixed with soils). Occasionally, however, hammerscale does corrode and resembles a type of 'loose' iron-pan (the circumstances when this occurs are not well understood). The presence of tuyeres and hearth lining is also important because it is thought that they remain close to their origins, namely the hearths. Another important part of the finds assemblage that is frequently overlooked are the iron fragments. Amongst these are often the bars, off cuts and general detritus of a smiths' waste products (see for example Ottaway 1992). Frequently they appear to be amorphous lumps, particularly if the iron is badly corroded.

ADDITIONAL CODES THAT MAY BE USED IN THE CATALOGUE

CHARC	Charcoal
INCL	Inclusions
LGE	Large
ORGA	Organic
SURF	Surface/s
TH	Thickness
V	Very
+	And

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Appendix 9

Registered finds

Catherine Holgate and Jenny Mann

APPENDIX 9
Registered finds

SF	Context	Material	Type	Dimensions/mm	Description	Easting	Northing
5000	8	Fe	?Chisel	L 218; D (wide end) 32; W (narrow end) 19; T 4.	Long metal tool; round section at wide end, tapering to flat end, corrode; socket visible on x-ray.	472087	218405
5001	8	Fe	?Sheet	Frag 1: L 39; W 36; T 7-13; Frag 2: L 23; W 11-24; T 2-5.	Two adjoining fragments, v corroded.	472087	218405
5002	200	Cu al	Coin	D 22; T 1	?Post-med ?George II farthing; complete; corroded and worn, detail not visible.	474116	218177
5003	301	Cu al	Coin	D 30.5; T 2.25	?George III halfpenny; complete; corroded, worn, pitted.	476228	217599
5004	403	Fe	Stud/tack	L 35.5; W 9.5-15; T 8-12	Rounded slightly domed head, square shaft; incomplete, end of shaft and possibly part of head missing, corroded, misshapen head; more likely to be head of large nail with broken off shaft.	479731	216868
5005	304	Fe	Knife	L 58; W 16-17; T 2-4	Knife blade with whittle tang; incomplete; both ends missing, v corroded and worn.	477089	217391
5006	304	Fe	Nail	L 82; W 11-21; T 6-16	Square head, slightly curved, rectangular tapering shaft; incomplete part of thin end missing; corroded but sturdy.	477089	217391
5007	304	Fe	?Tool	L 90; D 4.5-10	Long with rounded shaft, small point at thicker end divided from shaft but small horizontal groove, shaft then tapers; thin end may be broken; v corroded; possibly part of a stylus.	477089	217391
5008	344	Fe	Hobnails			476946	217405
5009	403	Stone	Quern	L 241; W 158; T 28-75.5	Gritstone; upper grinding stone with steep grinding angle, likely to be Roman (J Parkhouse); incomplete semicircular fragment, more than half missing	479731	216868
5010					Number not used.		
5011	577	Cu al	Coin	D 12; T 0.5-1	Incomplete, tiny piece broken from edge in antiquity; v abraded and amorphous; v little detail visible; possibly a Constantinopolis issue (350-355 AD); obv: ?CONSTANTINOPOLIS; rev: victory on prow.	483713	217248
5012	511	Flint, Pb	?Sheet	L 28.5; W 25; T 10.5	Worked flint wrapped in piece of lead sheet; lead corroded.	483890	217230
5013	511	Cu al	Coin	D 15; T 0.75	Incomplete, badly eroded and abraded; v irregular shape; no visible details; ?later third to fourth century.	483890	217230
5014	511	Pb	Scrap	L 18; W 13; T 5	Folded strip; corroded, pitted.	483890	217230
5015	580	Cu al	Blob	L 21; W 10.5; T 2.5-3	Slightly corroded; melt waste	483760	217245
5016	580	Fe	?Chisel	L 85.5; W 13-14; T 3.5-12	Rectangular flat head, rectangular shaft tapering in one plane; complete, corroded; possibly a large nail, but more likely a small tool; chisel or wedge.	483760	217245

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Registered finds

SF	Context	Material	Type	Dimensions/mm	Description	Eastings	Northing
5017	511	Cu al	Coin	D 10; T 2	Complete; badly abraded and worn, no detail left; ?later third to fourth century AD.	483890	217230
5018	581	Cu al	Coin	D 14.5; T 0.5-0.75	Complete; abraded, corroded worn, no detail left: later third to fourth century AD.	483766	217253
5019	581	Cu al	Coin	D 12.5; T 1	Complete; corroded, worn, no detail left; later third to fourth century AD.	483766	217253
5020	511	Cu al	Strip	L 53; W 3; T 0.5	Decorated on one side with two parallel incised lines running lengthways and a line of rectangular dots between the two lines; incomplete, buckled, a little worn; possibly part of a late Roman bracelet.	483890	217230
5021	541	Fe	?Tool	L 50.5; W 3-10	Tanged tool or punch; tapering head with square section tapering ?tang with roundish section; incomplete, v corroded, worn; possibly a drill bit.	483890	217890
5022	582	Cu al	Coin	D 16; T 0.25-0.5	Incomplete; two straight breaks and a nick made in antiquity, v worn, corroded, dotted border visible; ?late third to fourth century, or more likely to be a barbarous radiate: 270-84 AD.	483777	217255
5023	582	Cu al	Coin	D 18; T 1	Worn but legible; obv: bust diademed and draped, rt; rev: SECVRITAS REIPUBLICAE, victory to l holding wreath ans palm, OF/l/VGP; mint: Lyons; as CK 322; house of Valentinian 367-375 AD.	483777	217255
5024	582	Fe	Nail	L 68; W 4-12; T 5-7	Rectangular flat head, shaft tapers with square section; tip may be missing; corroded, twisted, misshapen; may be post-medieval.	483777	217255
5025	511	Cu al	Brooch	L 18; W 16; T 4	Fragment of early Roman fibula brooch; corroded; possibly upper part of bow with projecting lug, perforated for wire chord of coiled spring of pin, and parts of wings, and fragment of wire: part of hook or of spring?	483890	217230
5026	578	Cu al	Blob	L 9; W 6; T 4	Corroded; possible melt waste	483739	217252
5027	579	Ceramic	Counter	D 49-52; T 14-15	Rounded fragment, flat on both sides; re-used Roman tile; incomplete with small break on edge, abraded and pitted.	483741	217205
5028	511	Pb	Blob	L 15; W 13; T 2-7	Corroded; ?melt waste.	483890	217230
5029	511	Cu al	Coin	D 16; T 1.25	Incomplete and worn; copy of commemorative issue of Claudius II: 270-284 AD (barbarous radiate); obv: [DI]VO C[LAUDIO], bust radiate, rt; rev: [CONSECR]ATIO, eagle standing head turned.	483890	217230
5030	511	Fe	Lamp	L 39; W 25; T 14	Corroded, laminated, disintegrating.	483890	217230
5031	537	Cu al	Coin	D 16; T 0.75-1	Corroded, edges nicked and worn; rev: victory, securitas reipublicae? House of Valentinian: 364-378 AD.	483767	217245

APPENDIX 9
Registered finds

SF	Context	Material	Type	Dimensions/mm	Description	Eastings	Northing
5032	511	Cu al	Blob	L 14; W 8.5; T 3.5	Interpreted as coin in the field, but probably melt waste; corroded.	483890	217230
5033	394	Fe	Nail	L 33; W 6-8.5; T 3-6	Flat rectangular shaft, flat head; almost complete; corroded with bent tip; possibly post-medieval	477039	217356
5034					Number not used.		
5035	2504	Fe	Nail	L 36; T 6.5-9	Fragment of square shaft of ?nail; head and tip both missing; corroded, misshapen.		
5036	360	Cu al	Coin	D 10; T 1.5-2.5	No detail visible; worn; probably later third to fourth century AD.	476975	217394
5037	444	Pb	Lump	D 19.5; T 16.5	Rounded with cylindrical hole from convex face possibly right through; corroded; may be a failed casting, but if the hole went right through, could have been a crude weight.	479715	217015
5038	394	Fe	Nail	L 40; W 5.5-7	Small rounded head, tapering shaft; incomplete, tip missing, head broken.	477039	217356
5039	394	Fe	Nail	L 27; W 4-6; T 3.5-5	Rounded flat head, square shaft; incomplete' tip missing; corroded, misshapen.	477039	217356
5040	394	Fe	Buckle	L 48; W 37; T 4-7	Rectangular with a flat pin; probably a harness buckle; corroded and slightly skewed.	477039	217356
5041	443	Fe	Nail	L 113; D (head) 21-23; D (shaft) 12	Large head, roundish shaft partially sheared and twisted; x-ray suggests head may have something adhering to top, all covered in corrosion; two pieces just holding together v corroded and signs of damage.		
5042	358	Cu al	Sheet	L 64; W 42; T 0.35-0.8	With one rivet hole and one rivet in situ; incomplete with all edges missing; corroded, bent and fragile.	476973	217395
5043	304	Cu al	Blob	L 23; W 2.5-14; T 2	Irregularly shaped, corroded blob of melt waste.	477089	217391
5044	3041	Cu al	Coin	D 13.5-14.5; T 0.5-2	Worn and corroded; some detail visible; bust facing ?right with remains of writing round border; nick on edge; probable fourth century AD.	496231	222557
5045	3041	Pb	Blob	Frag 1: L 15.5; W 12; T 3; Frag 2: L 12.6; W 9; T 3	One broken corroded blob of probably melt waste.	496231	222556
5046	3041	Cu al	Coin	D 15-17; T 0.5-1.5	Worn and slightly corroded; obv: bust diademed and draped, rt; rev: [FEL TEMP REPARATIO] virtus to L, shield on L arm, spearing horseman falling from horse and raising arm behind; housie of Constantine: 350-360 AD.	496232	222556
5047	3041	Cu al	Strip	L 28.5; W 14.5; T 0.5	Strip with rivet hole; part of one original edge remaining, the others torn; corroded with one edge bent double.	496233	222551

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SF	Context	Material	Type	Dimensions/mm	Description	Eastings	Northing
5048	3041	Cu al	Strip	L 16; W 4.5; T 2	Two rivets in situ, incomplete, ends missing; v corroded; strap mount, bar-shaped; probably medieval.	496233	222556
5049	1306	Cu al	Coin	D 9; T 0.5	Nicked and broken edges, worn corroded, v brittle; probable later third to fourth century.	496370	222510
5050	2936	Cu al	Coin	D 19-19; T 0.5-1	Nicked and broken edges, corroded, worn, brittle; probably later third to fourth century.	496234	222553
5051	2936	Cu al	Coin	D 10-11; T 1-1.5	Complete, slightly worn; obv: bust diademed and draped, rt; rev: victory to L holding wreath and palm; possibly a Theodosian issue [VICTORIA AV666]: 388-395 AD	496234	222553
5052	1306	Ag	Coin	D 18; T 1.5	Worn and slightly corroded; obv: bust, radiate, rt; rev: standing figure (Aeternitas??); barbarous radiate 270-284 AD.	496370	222510
5053	3042	Pb	Finger ring	L 11.6; W 5-7; T 4.6	Fragment, possibly of bezel and shoulder of a third century finger ring.	496238	222549
5054	3042	Cu al	Coin	D 16.5-17; T 0.5-0.75	Worn, corroded, nicks around edges; possibly fourth century rather than third.	496238	222549
5055	1306	Cu al	Coin	D 9-11; T 1	Worn, corroded, brittle, nicks and breaks around edges; probable later third to fourth century AD.	496370	222510
5056	1306	Pb	Blob	L 23.5; W 6-13; T 2-12	Corroded; irregular shape; more likely to be casting sprue than simple melt waste.	496370	222510
5057	1306	Fe	Knife	L 150; W 6-24.5; T 3-6	Blade with whittle tang; corroded and bent; blade edge missing where bends and end of tang missing; probably Roman.	496370	222510
5058	1306	Fe	Strip	L 50; W 20.5; T 5-11	Tapering strip, wide end broken off, very corroded.	496370	222510
5059	2985	Cu al	Coin	D 24-27; T 2	Corroded, worn and crumbling, nicks around edges; some writing visible on one border; probable first to second century AD.	496240	222560
5060	1306	Fe	Stud	L 24; W 5.5-7; T 5-6.5	Square shaft, flat round head; tip and part of head missing, shank may also be broken off; corroded and twisted.	49637	222510
5061	3048	Pb	Blob	9 frags; largest: L 75	Corroded; one piece with three flat sides: almost certainly accidentally formed, as melt waste running into something channel-shaped.		
5062	3011	Cu al	Coin	D 15-16; T 1	Corroded, worn and crumbly; obv: [CON]STANT ..., bust rt; house of Constantine: ca 330-348 AD	496254	222551
5063	3011	Cu al	Coin	D 12; T 1	Large segment missing, corroded, worn; possibly fourth century rather than third.	496254	222551
5064	2777	Pb	Blob	L 32.5; W 25; T 9	Corroded piece of melt waste.	496275	222557

APPENDIX 9
Registered finds

SF	Context	Material	Type	Dimensions/mm	Description	Eastings	Northing
5065	3051	Cu al	Coin	D 16-16.5; T 1-2	Corrode; breaks and nicks, one part of edge and part of surface missing; house of Constantine, irregular: mid fourth century AD.	496285	222565
5066	3058	Cu al	Coin	D 25; T 1.5-2	obv: bust diademed, r; corroded and worn, large part missing and other nicks and smaller breaks; fourth century AD.	496295	222567
5067	1306	Cu al	Coin	D 15.5; T 1	Corroded and worn, nicks around edges; obv: [CONSTANTINOPOLOIS] bust helmeted L, holding sceptre; rev: victory on prow; Constantinopolis (commem) 330-335 AD>	496370	222510
5068	3057	Fe	Ring	D (outside) 38.5; T 5-7.5	Corroded, bits flaking from surface.	496291	222571
5069	1306	Cu al	Coin	D 15.5; T 0.5-1	Corroded, worn; obv: ?diademed bust, r; fourth century AD>	496370	222510
5070	3064	Cu al	Coin	D 15.5; T 1	Corroded, v worn, nicks around edges; probable later third to fourth century AD.	496315	222585
5071	3054	Cu al	Ring	D (outside) 18; T 3-4.5	Corroded, complete.	496312	222571
5072					Number not used.		
5073	1306	Fe	Nail	L 62; W 7.5-8.5	Flat irregular head, square shaft; tip missing; corroded, twisted shaft.	496370	222510
5074	1306	Fe	?Staple	L 71; W 7; T 3-10	Chisel-like end, curved shaft with rectangular section, other end broken off; probably one arm of a U-shaped staple.	496370	222510
5075	1306	Fe	Horseshoe	L 59; W 12.5-23.5; T 2-9	Corroded, broken terminal: thickened calkin and part of rectangular nail hole; medieval.	496370	222510
5076	3041	Fe	Nail	L 66; T 3.5-6.5	Rectangular, flat-headed, tapering shaft; tip may be missing; corroded, twisted and misshapen.	496234	222557
5077	1306	Ceramic	Samian vessel	D 45	Foot of stamped samian vessel.	496370	222510
5078	2786	Cu al	Bracelet	L 88; T 3; D (outer loop) 8, T (loop) 1-2	Shaft with round section, end finished with loop, other end broken with remains of similar loop. Roman bracelet, mostly complete; catch broken; outer edge of loop and remaining part of catch with decorative mouldings; straightened, too small for use on anyone but a very young child.	496371	222595
5079	1306	Stone	Quern	L 140; W 87; T 50-55	Conglomerate stone; incomplete quern; upper grinding stone, likely to be Roman because of steep grinding edge (J Parkhouse).	496370	222510
5080	3063	Pb	Blob	L 26; W 20; T 3	Corroded and bent; crumpled sheet, probably scrap.	496378	222603
5081	3063	Fe	Nail	L 88; T 9-12	V corroded shaft of nail or bolt with no head remaining.	496379	222604
5082	3063	Fe	Nail, loop	Nail: L 30; T 5-8; loop: L 43; T 3-6	Nail with diamond-shaped head, shaft with rectangular section; round section hook with no head; could be a loop terminal, possibly from a skewer, shaft probably broken.	496379	222605

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Registered finds

SF	Context	Material	Type	Dimensions/mm	Description	Easting	Northing
5083	3077	Fe	Strip	L 122; W 24-25; T 5-8	Corroded, bent, both ends broken; probable mount or binding; possible rivet hole.	496585	222600
5084	3007	Fe	Nail	L 77; T 6-9	Square, slightly tapering shaft; head and tip missing; corroded.		
5085	1306	Pb	Sheet	L 58.5; W 42.5; T 1-9	Folded and crumpled piece of scrap.	496370	222510
5086	3009	Pb	Strip	L 31; W 7-12; T 1.25-6.5	Possibly an off-cut but very thick at one end compared to the other, which is very thin and sheet-like; possibly looks thicker because it is wrapped around something at this end.		
5087	3067	Cu al	Coin	D 15; T 1.5-1.75	Worn, edges nicked, slightly corroded; obv: bust diademed and draped, r; rev: [VICTORIAE DD AVGG Q NN] two victories vis-à-vis, each holding wreath TRP; mint: Trier, as HK 139.		
5088	1306	Fe	Nail	L 52, W 5.5-10, T 6-9	Irregular shaped head; square tapering shaft; tip and fragments of head missing; corroded.	496370	222510
5089	1306	Pb	Tube	L 31.5; D 6-8; T (of metal) 2	Corroded small squashed tube; probably scrap, but could have been used as a very crude weight, perhaps line weight for fishing.	496370	222510
5090	1306	Fe	Nail	L 79; T 2-2.5	Square tapering shaft; head apparently has incised 'Y' on a raised dome-shaped protuberance, but this could be accidental hammering damage, or another object corroded onto nail; corroded and bent.	496370	222510
5091	1379	Fe	Nail	L 52; T 2-6.5	Squarish shaft; two non-joining shaft probably from same nail.	496347	222591
5092	3011	Ceramic	Vessel	D 36; T 4	Part of poor quality ?samian vessel with decorated rim scrolling, a horizontal running groove and horizontal running incised line around inside of foot.	496254	222551
5093	1306	Cu al	Boss	D 55; T 15; T (metal) 1.5; D (hole) 5; D (recess) 15	A boss or decorative plat; domed with central hole surrounded by a shallow circular recess; corroded but complete; outer convex surface ornamented with a series of four concentric circles (shallow, shown on x-ray).	496390	222602
5094	2786	Pewter	Vessel	L 44; T 2.5-3.5	Fragment of a vessel rim, narrow diameter and straight wall suggests bottle neck; corroded.	496371	222595
5095	3073	Cu al	Coin	D 17; T 1	Corroded, worn, possible writing on border; possibly a Constantinopolis issue: 330-335 AD.	496372	222592
5096	3067	Fe	Strip	L 67; W 4; T 2.5-3	Strip or shaft with rectangular section and deliberately bent at one end; this end has a small hole; other end may taper to a tang; corroded; may be a small fitting or attachment for a binding.		
5097	3010	Cu al	Buckle	L 22; W 3-4.5; T 1.5-5.5	Fragment of oval buckle with series of moulding on front of frame; thirteenth or fourteenth century AD.		

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SF	Context	Material	Type	Dimensions/mm	Description	Eastings	Northing
5098	3007	Cu al	Brooch	L 64; L (footplate) 21; W 3-6; T 3-4; W (hinge) 15	Fibula brooch; one incised line runs from the spring lengthways for 13 mm; pin and end of footplate missing; early Roman mid- to late firsts century; ?Colchester derivative; details of spring arrangement unclear.		
5099	1306	Pb	Plug	L 37.5; W 33; T 9-11	Corroded plug of lead with fragments of pottery adhering.	496370	222510
5100	1306	Cu al	Rivet		Complete, slightly corroded.	496370	222510
5101	2936	Fe	Nail	L 28; T 6	Irregular head, squarish shaft meets head off-centre; corroded, broken into 2 frags.	496234	222553
5102	2731	Fe	Nail	L 43; T 5-5.5	Rounded domed head; square shaft; tip missing; corroded, head cracking.	496338	222576
5103	2760	Fe	Hobnails	L (ave) 12-15	23 frags; two complets nails with square shafts; amorphous lumps appear to be clusters of hobnails, heavily deteriorated within concretions.	496338	222576
5104	2745	Ceramic	Vessel	T 8-15; 7 frags	Stamped mortarium rim with decorated border.	496338	222576
5105	2756	Ceramic	Vessel	T 11-12	Sherd of ?IA pot with grooves and chevron decoration.		
5106	2756	Slag	Lumps	3 frags			
5107	2759	Stone	Quern	L 223; W 152; T 51-61	Segment of circular quern; upper grinding stone with steep grinding angle, likely to be Roman (J Parkhouse)	496357	222604
5108	2763	Fe	Nail	L 32; W 3.5-6; T 1.5-3.5	Rectangular tapering shaft; head and tip missing; corroded and bent.	496338	222576
5109	2730	Fe	Ring	D 41; T 8-11.5; W 7.5-13	Complete, corroded ring.		
5110	2730	Fe	Nail	L 34; W 3-5	Irregular shaped head, square tapering shaft; tip of shaft and possibly part of head missing; corroded and slightly bent.	496338	222576
5111	2733	Fe	Blob	L 40; W 17	Could be waste, but more likely a rectangular section tapering nail shaft, completely degraded and centrally voided.	496338	222576
5112	1306	Cu al	Strip	L 44; W 12; T 0.25	One end slightly curved under; raised dots along curved edge punched from back, two possible rivet holes; good condition, unworn; ?buckle plate or strap end.	496376	222515
5113	2765	Slag	Lumps	14 frags		496327	222581
5114	3042	Ceramic	Vessel	T 5	Shell-impressed rim sherd.	496238	222549
5115	2778	Fe	Ring	D (outside) 80; D (inside) 62; T 29-41	Bulge on one side: corrosion or point of attachment; corroded, bits of surface missing.	496255	222551
5116	2778	Fe	Nails	L (1) 32.5; T 6-9; L (2) 39; T 4-9	Fragments of 2 nails; (1) square shaft; (2) irregular; no heads or tips; could be parts of the same nail.	496255	222551
5117	2777	Fe	Nails	L 40; W 5.25-11; T 6-10	Three fragments, including one fairly complete, with rectangular tapering shaft, possibly part made; very corroded.	496255	222551

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SF	Context	Material	Type	Dimensions/mm	Description	Eastings	Northing
5118	2786	Cu al	?Wire	L 61; D 2.25	Pin-like; rounded shaft, tapering slightly; bent into a regular curve; ends broken; some corrosion; could be a small rod or piece of wire.	496371	222595
5119	2786	Fe	Lumps	12 frags to L 30	Corroded amorphous lumps; x-ray suggests one small tack; several pieces of sheet, one appearing folded; frag of tubular object, circular cap and solder lump possibly part of same object.	496371	222551
5120	2791	Fe	Strip	L 44; W 13-15.5; T 3-7	Surface of one side especially irregular with 2 areas of thickening; corrode, both ends broken.	496373	222596
5121	2830	Fe	Nail	D 9.5-11; T 8	Possible hobnail; domed head with remnants of shank, v corroded.	496301	222566
5122	2830	Fe	Nail	L 31; W 6-11; T 6-9	Rectangular tapering shaft; head and tip missing, corroded.	496301	222566
5123	2813	Fe	?Nail	D 8	Fragment, probably of hobnail head; corroded, cracked.	496371	222595
5124	2791	Fe	Nail	L 42; T 6-7	Round flattish head, square tapering shaft; tip missing, corroded, twisted and misshapen.	496373	222596
5125	2786	Fe	?Nail	L 22; W 5-8; T 4.5-6	Square section shaft; ends missing, corroded.	496371	222595
5126	2820	Fe	Nail	L 35.5; W 4-7; T 3.5-7.5	Flat head, shaft probably square; v corroded and twisted slightly.	496257	222563
5127					Number not used.		
5128					Number not used.		
5129	2786	Fe	Hobnail	L 12; T 2.4-2.5	Complete apart from small fragment missing from head; v corroded, tip bent.	496371	222595
5130	2786	Fe	?Hobnail	D 7.9; T 4.25	Incomplete, v corroded fragment.	496371	222595
5131	2787	Fe	Nail	D 25.3-18.4	Oval flat head of nail; no shaft, v corroded.	496371	222595
5132	2835	Fe	Nails	L (longest) 60.5; W 4-6.6; T 4-5.4	7 fragments; all heads flat, but with irregular shapes; shafts square and tapering; all v corroded.	496259	222561
5133	2876	Stone	Lumps	11 frags	Lava stone.	496247	222557
5134	2876	Slag	Lumps	3 small pieces	Corroded.	496247	222557
5135	2876	Fe	Nail	L 43; T 6.5-10.5	Square tapering shaft; irregular head; part of head and tip of shaft missing; v corroded.	496247	222557
5136	2876	Fe	Nail	L 36.75; T 9.25	V corroded and misshapen.	496247	222557
5137	2876	Fe	Lumps	L (1) 17.8; T 4.5; L (2) 10.1; T 8	Three fragments poss from 2 different objects; one frag with remains of square-section shaft; v corroded.	496247	222557
5138	2876	Fe	?Nail	L 19.8; T 4	Shaft with square section and remains of lump attached toward one end; both ends missing.	496247	222557
5139	2877	Stone	Lumps	13 pieces	Lava stone, thought to be clinker when excavated.	496247	222557
5140	2889	Slag	Lumps	2 frags	One fragment may be piece of corroded iron.	496293	222563
5141	2922	Fe	?Nail	L 13.4; W 8.6; T 7.75	One small fragment of nail head; corroded and broken.	496247	222557

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SF	Context	Material	Type	Dimensions/mm	Description	Easting	Northing
5142	2876	Fe	Nail	L 14.1; T 4.1-5	Square shaft, broken into three pieces, one may be head; corroded.	496247	222557
5143	2822	Fe	Lump	L 13.8; W 6; T 7-9	Concretion of corroded iron.	496247	222557
5144	2876	Fe	Nail	L 10.7; W (head) 14.6; T (shaft) 4.8	Round, flatish head with square-section hollow shaft protruding; end of shaft missing; corroded.	496247	222557
5145	2876	Stone	Lump		Fragment of lava stone, thought to be clinker when excavated.	496247	222557
5146	2876	Stone	Lumps		Ten fragments of lava stone, thought to be clinker when excavated.	496247	222557
5147	2922	Stone	Lumps		Eleven large and over 400 small fragments of lava stone, thought to be clinker when excavated.	496247	222557
5148	2901	Fe	Nail	L 4.4; T 2.9-5.5	Round domed head, square tapering shaft; tip of shaft missing; corroded, bent.	496247	222557
5149	2927	Fe	Nail	W 20; T 2.8-3.9	Head probably square with rounded corners; no shaft; v corroded, part of head missing.	496234	222553
5150					Number not used.		
5151	2930	Fe	Nail	L 43.3; T 3-5.8	Square flat head, square shaft; tip and part of head missing; corroded.	496234	222553
5152	2936	Fe	Nail	L 29.8; W 4.9-5.5; T 2.7-5.8	Head compact and possibly square, or may simply be a lump of corrosion on shaft; rectangular shaft, tip missing; v corroded, misshapen.	496234	222553
5153	1319	Cu al	Strip	L 23; W 5; T 2	Small twisted strip; breaks along edge and both ends; corroded; possibly a waste offset.	496403	222609
5154	1321	Fe	Hook	L (plate) 60; W 31-36; L (hook) 59	Rectangular plate with broken hook attached; corroded.	496374	222599
5155	1321	Fe	?Tool	L 140; W 7.5-13; T (tapered end) 1.5	Long tapering shank, possibly square at top, v corroded, broad end broken off; upper end may be socketed and lower end a wedge-shaped point; perhaps a small chisel or gouge.	496374	222599
5156	1319	Cu al	Chain	D (links) 8-11; T 1-2	Three links, each is larger at central point and termini; grooves and ridges running across the thickness; corroded, squashed out of shape.	496403	222609
5157	1306	Cu al	Sheet	L 44; W (roll) 10; T (roll) 6; T (sheet) 0.5	Small rolled-up sheet, forming a hollow tube; both ends broken off.	496370	222510
5158	1306	Cu al	?Pin	L 14.5	Small rounded head and part of bent shaft, corroded.	496370	222510
5159	1306	Fe	Strip	L 58; W 7.5-9; T 1.5-4.5	Strip curving toward one end, which is sharply bent over; both ends missing.	496370	222510
5160	1319	Fe	Nail	L 41; W 3.4-5.3; T 5.5-6.5	Irregular head, may have been rectangular; square shaft; tip may be missing; corroded and slightly bent.	496403	222609
5161	1319	Cu al	Nail	L 28; D (head) 7-8; T 2-4	Flat rounded head; tapering square shaft; some corrosion.	496403	222609
5162	1321	Fe	Strip	L 93; W 8-12; T 4-8	Bent strip; v corroded.	496374	222599

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SF	Context	Material	Type	Dimensions/mm	Description	Eastings	Northing
5163	1365	Fe	Nail	L 42.6; T 6	Head probably square with rounded corners; square straight shaft; corroded; head possibly bent as a result of hammering.	496390	222606
5164	1739	Cu al	Wire	L 5.5; W 3; T 1	Small piece, curved over to possibly form a chain link; corroded, twisted.	498641	226176
5165	1332	Fe	Ring	L 34; W 6-9; T 1.5-4	Curved semicircular piece, thickening in the middle, tapering more at one end than the other; corroded; x-ray suggests part of a finger ring with expanded bezel, third century AD.	496379	222600
5166	1319	Fe	Nails	L (largest) 79; W 8.4-9.75; T 8-11	Five nails, all with square tapering shafts, one with a flat head, one with compact domed head flat on two sides; others have heads missing; all corroded and slightly bent.	496403	222609
5167	1377	Ceramic	Tessera	L 23; W 18; T 18-21	Complete; possible some abrasion.	496347	222591
5168	2725	Glass	Window	L 24; W 13; T 3	Slightly pitted and abraded piece of window glass; first to third century AD; cast.	496376	222607
5169	2936	Slag	Lump			496234	222553
5170	3067	Fe	Nail	L 53.4; W 10; T 7.5-10	Flat round head; rectangular shaft; corroded, bent.		
5171	3043	Fe	Nail	L 61; W 6.6-8.6; T 6.2-8.8	Squarish flat head, square tapering shaft; end of shaft missing; corroded, slightly bent.		
5172	3008	Fe	Nail	L 39; W 2.8-4.5; T 2.5-3.6	Rectangular tapering shaft; head and tip missing; corroded and bent.		
5173	3063	Fe	Nail	L 31; W 5; T 3.8-5	Round flat head; square shaft; part of head and tip missing; corroded, bent	496379	222603
5174	3063	Fe	Nail	L 46; T 2.3-6.2	Square tapering shaft; head may be missing; corroded, slightly bent.	496376	222601
5175	3063	Fe	Nail	L 38; W 7-9	Square tapering shaft; tip of shaft missing; corroded misshapen: twisted and bent.	496376	222601
5176	3076	Fe	Nail	D 10; T 6	Head round and domed; corroded; hobnail with shank broken off.	496380	222600
5177	3063	Fe	Hobnail	L 21; T 2-3	Domed head, square tapering shaft; complete; corroded.	496376	222602
5178	3076	Fe	Nail	L 33; W 4-7; T 2-4	Square compact head with rectangular tapering shaft; or possibly just the lower part of the shaft with blob of corrosion; bent and corroded.	496380	222600
5179	3075	Fe	?Nail	L 40; T 5-8.5	Could be a fragment of rod or staple etc; v corroded broken shaft.	496374	222598
5180	1306	Fe	Nail	L 19.6; T 3-6	Square tapering shaft; both ends missing; v corroded.	496370	222510
5181	3072	Fe	?Nail	L 28.5; T 2.5-6	Square tapering shaft; both ends missing; v corroded, bent; v small and slender for a nail.	496360	222600
5182	3072	Fe	Plate	L 42-46; W 25-37; T 0.75-4	Slightly curved; buckled or deliberately bent; corner fragment; corroded.	496360	222600

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SF	Context	Material	Type	Dimensions/mm	Description	Eastings	Northing
5183	3072	Fe	Strip	L 72; W 9-12; T 4.5-41	Curve flat strip with hole; one end broken off; corroded; x-ray shows two perforations, one with a small nail in situ; could be reinforcement strip or even a modern shoe heel.	496360	222600
5184	3072	Fe	Nail	L 54.7; W 3-6; T 2.75-5.25	Domed round head; square tapering shaft; corroded	496360	222600
5185	3072	Fe	Nail	L 35; W 3-5; T 2.5-4	Flat with rectangular tapering shaft; corroded, bent, twisted; possibly a horseshoe nail of fiddle-key type.	496360	222600
5186	3072	Fe	Nail	L 16; T 1.5-3	Square tapering shaft; head missing, corroded, bent, twisted; very small for a nail: could be a tack or pin.	496360	222600
5187	3073	Fe	Nail	L 59.8; W 3.5-10; T 4-7.5	Square tapering shaft; head missing; corroded, slightly bent.	496373	222593
5188	3074	Fe	Strip	L 101-113; W 27-28; T 2.5-4	Trapezoidal, flat with corroded lumpy surface; small piece of corner broken.	496376	222608
5189	3068	Fe	Nail	L 61; W 8.8-9.3	Possible diamond-shaped head; square straight shaft; corroded.	496351	222587
5190	3068	Fe	Lump	L 16; W 13; T 7	Corroded fragment.	496350	222588
5191	3069	Fe	Nail	L 43; T 2.5-5.7	Square tapering shaft; both ends missing; corroded, slightly bent.	496351	222584
5192	3166	Fe	Nail	L 42.2; W 4.5-5.5; T 2.6-4.6	Flat head; square tapering shaft; part of head and end of shaft missing; corroded.	496348	222587
5193	2993	Fe	Nail	L 39; W 5.5-7; T 4.4-7	Flat square head; square slightly tapering shaft; part of head and shaft missing; corroded.	496320	222580
5194	1306	Flint	Hammersone	D 62; T 45	Complete.	496376	222515
5195	3059	Fe	Nail	L 27; W 6-7; T 4	Heavy rectangular domed head; flat rectangular shaft; end of shaft missing; corroded; possibly a horseshoe nail: medieval.	496290	222579
5196	3059	Fe	Nail	L 42.4; W 5-6; T 4.6	Rounded flattish head; rectangular straight shaft; tip of shaft missing; corroded.	496280	222570
5197	3056	Fe	Nail	L 41; W 4.7-5.8; T 3.3-3.7	Rectangular flat head; flat rectangular shaft, tapering slightly; part of head and tip of shaft missing; corroded, bent.	496289	222564
5198	3054	Fe	Lump	L 14; W 12; T 9	Lump with small ledge running round one side; corroded.	496284	222566
5199	3053	Fe	Lump	L 24; W 18-19; T 6	Flat fragment; very corroded.	496281	222570
5200	3053	Fe	Lump	L 4.3; W 2-16; T 3.5-9	Tapering fragment; corroded; possibly part of one arm of a horseshoe, near the tip: cf SF 5201.	496279	222571
5201	3053	Fe	?Horseshoe	Frag 1: L 59; W 9-24; T 1.5-7.5; Frag 2: L 34; W 26; T 6-10	Two frags; curving tapering shape; thicker along one edge; corroded and crumbly; x-ray suggests part of horseshoe, broken across one of two rectangular nail holes; tip appears broken; laminating.	496278	222571

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SF	Context	Material	Type	Dimensions/mm	Description	Easting	Northing
5202	3053	Fe	Loop	L 236; W 107; T 8.5	Oval penannular loop; corroded and one terminal damaged; otherwise complete.	496278	222573
5203	3053	Fe	Nail	L 52; W 2.6-9.2; T 1.8-6.6	Very solid rectangular head, flat rectangular shaft; corroded, slightly bent.	496276	222573
5204	3053	Fe	Nail	L 14.8; W 3.5; T 3	Flat rectangular tapering shaft; head and end of shaft missing; very corroded.	496275	222574
5205	5054	Fe	Nail	L 42.6; W 3.6-4.4; T 3.5-4	Square shaft, tapering; both ends missing; corroded, slightly bent.	496282	222568
5206	2995	Fe	Nail	L 27.7; W 2.8-7.3; T 5.2-6.8	Square shaft, tapering; tip of shaft missing; corroded, misshapen.	496270	222569
5207	1306	Flint	Hammerstone	D 72; T 60	Sub-spherical; flattened on pounding end.	496376	222515
5208	3055	Fe	Plate	L 70; W 2-22; T 4.5-12	Flat, roughly triangular fragment; all edges appear to be broken; v corroded, slightly buckled.	496297	222581
5209	2995	Fe	Nail	L 43; W 4.3-9; T 4.2-5.8	Rectangular tapering shaft, tip missing; corroded with misshapen head.	496270	222569
5210	2995	Fe	Nail	L 39.4; W 6.1-5.7; T 2.6-4.3	Rectangular head, flat rectangular shaft tapering slightly in one plane; corroded, slightly bent.	496270	222569
5211					Number not used.		
5212	2995	Fe	Nail	L 27.2; W 2.4-5.9; T 2.7-4.3	Tapering flattish shaft; no head; corroded, slightly bent.	496270	222569
5213	2995	Fe	Nail	L 21.9; W 3.6-4.1; T 3.4-4.5	Square tapering shaft; no head or tip; corroded.	496270	222569
5214	1306	Cu al	Coin	D 25; T 1-1.5	Irregular, misshapen; ?Claudian copy: first or second century AD.	496370	222510
5215	1306	Cu al	Coin	D 17; T 0.25-0.5	Incomplete, large sections of edge broken off; corroded, worn; obv: obscure; rev: [CONSECRATIO] altar; dots around edge; barbarous radiate, copy of Claudius II: 270-284 AD.	496370	222510
5216	1306	Cu al	Strip	L 16; W 14; T 1	Incomplete, corroded, flat fragment.	496370	222510
5217	1321	Fe	Nail	L 26; W 4.5-7.6; T 5-6	Square tapering shaft; head apparently integral with the shaft; tip missing; corroded.	496374	222599
5218	1321	Fe	Loop	L 46; W 37; T 4-7	Oval loop, complete; corroded, bent; possibly part of harness or buckle.	496374	222599
5219	1363	Fired clay	Slabs	L (most complete) 150; W 140; T 45	Fragments of up to four slabs of clay; degraded.	496390	222606
5220					Number not used.		
5221	304	Ag	Coin	D 20-23; T 1-2	Oval, nicks around edges; v corroded and worn; probably v base silver alloy; probably mid-third century AD.	477089	217391

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SF	Context	Material	Type	Dimensions/mm	Description	Eastings	Northing
5222	304	Cu al	Coin	D 13; T 1-2	Worn; moderate corrosion; nicks and breaks around edges; obv: bust diademed and draped, rt; rev: ? Fel Temp Reparatio (falling horseman); if so, then 350-360 AD; irregular fourth century house of Constantine.	477089	217391
5223	304	Cu al	Bracelet	L 62; W 4.5-5; T 1-2	Curving strip with decoration on outside of curve: incised line along length, hatches along edges, three horizontal grooves at one end, and possible similar decoration at other end; holes both ends; bracelet terminal; late Roman.	477089	217391
5224	304	Cu al	Plate	L 42; W 29; T 0.5-1.5	Decorative plate with punched holes for mounting; bevelled edges; corroded, bent, slightly worn; ?late medieval or post-medieval.	477089	217391
5225	304	Cu al	Blob	L (1) 10; W 8; T 5.5; L (2) 11; W 9; T 5	Two small, corroded blobs of melt waste.	477089	217391
5226	304	Cu al	Terminal	D 19; T 4-7	Circular; lip with groove, central prominent circular hub; reverse side has raised rectangular knob, or possible broken end of shaft; edges with two incised lines; probably a terminal; could well be Roman.	477089	217391
5227	403	Pb	Blob	L 77; W 24; T 19	Irregular lump; probably accidentally shaped melt waste rather than ingot; corroded.	479731	216868
5228	403	Pb al	Stud	D 17; T 1.4	Round; domed; decorated: divided into 8 segments by raised lines, alternate segments with raised dots; corroded, very worn at edges, surface quite worn; casting flash visible on reverse; mount or stud, shank broken; could well be medieval.	479731	216868
5229	403	Cu al	Tack	L (head) 17.5; W 8; L (shaft) 15; T 2	Oval or diamond shaped head with at least four raised lines running parallel along the length; square tapering shaft; edges of head nicked and eroded and surface worn away; corroded, bent.	479731	216868
5230	403	Cu al	Coin	D 17; L 1.5-2	Corroded, worn, nicks around edges; obv: bust (?laureate) and draped, rt, most probably diademed; rev: ?victory to L holding wreath and palm (Seuritas Reipublicae?); house of Valentinian: 364-378 AD.	479731	216868
5231	403	Pb al	?Vessel	L 29; T 1.5-2	Fragment of ?pewter sheet with possible rim; corroded.	479731	216868
5232	403	Cu al	Screw	L 40; D (shaft) 3.5; D (head) 9; D (hole) 6	Domed head with raised line around base and hole in one side; shaft with screw thread; corroded, slightly worn.	479731	216868
5233	2509	Cu al	Blob	D 8-20; L 20	Small piece of copper alloy melt waste.	476937	217421
5234	2509	Pb	Blob		Corroded, pitted; almost certainly melt waste.	476937	217421
5235	2513	Cu al	Coin	D 15; T 1.25-2	Corroded, very worn, nicks and breaks around edges; later third or fourth century AD.	476962	217407

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SF	Context	Material	Type	Dimensions/mm	Description	Eastings	Northing
5236	2513	Cu al	Coin	D 11; T 1.5	Corroded, v worn, nicks around edges; later third or fourth century AD, just possibly a diademed bust, which would make it fourth.	476962	217407
5237	2513	Cu al	Coin	D 16; T 1.25	Corroded, worn, nicks and breaks around edge; rev: unreadable; obv: raised dotted border, bust diademed, rt: ?House of Constantine; fourth century AD.	476962	217407
5238	2513	Cu al	Coin	D 10.5; T 1.25-2	Corroded, worn, nicks and corrosion on edge; later third or fourth century AD.	476962	217407
5239	2513	Cu al	Coin	D 16-18; T 0.25-1	Corroded, nicked and broken around edges; obv: DN CONSTAN... bust diademed and draped, rt; rev: [FEL TEMP] REPARATIO, Virtus to L, shield on left arm, spearing horseman falling from horse and raising arm behind; house of Constantine: 350-360 AD.	476962	217407
5240	2513	Cu al	Strips	L 52; W 13-16; T 1-1.5 (not inc rivet)	Rectangular with four rivets in situ binding the two strips together; corroded; possibly part of a patch, for instance a vessel repair.	476962	217407
5241	2513	Cu al	Rod	L 40; D 7-9 tapering to 6-7	Small solid rod with slightly oval section; both ends broken; corroded.	476962	217407
5242	2513	Fe	Nail	L 80; W 4-8; T 4.8-6.5	Oblong head with rounded corners and flat surface, square shaft, tapering; part of head and shaft missing; corroded, bent, slightly twisted.	476962	217407
5243	2519	Cu al	Coin	D 17; T 0.5	Edge broken in two places, other nicks on edge, worn, corroded; obv: bust diademed and draped, rt; rev: ?Gloria Romanorum, emperor facing, head rt, holding labarum in rt hand, resting left on shield: house of Valentinian, 364-378 AD.	476968	217394
5244	2519	Cu al	Coin	D 14; T 0.5	Corroded, moderately worn, damage to edges; obv: bust helmeted, L, holding sceptre [CONSTANTINOPOLIS]; rev: Victory on prow; looks irregular: 330-345 AD.	476968	217394
5245	2519	Cu al	Coin	D 15; T 0.25	V worn, nicks and breaks on edges; later third to fourth centuries; later third more likely, probably a barbarous radiate (270-284 AD) rather than fourth century.	476968	217394
5246	2519	Cu al	Coin	D 16; T 0.5	Corroded, edges worn though faces less so; obv: bust diademed and draped, rt; rev: [SECURITAS REIPUBLICAE]; Victory to L, holding wreath and palm.	476968	217394
5247	2519	?Fe	?Coin	D 18; T 1-3	V rough, no detail, one side v lumpy with corrosion; later third or fourth century; probably a barbarous radiate (270-284 AD).	476968	217394

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Registered finds

SF	Context	Material	Type	Dimensions/mm	Description	Eastings	Northing
5248	2519	Cu al	Rod	L 14; D 5-6	Small piece of rod with slightly oval section, both ends broken, corroded and with iron-staining.	476968	217394
5249	520	Cu al	Coin	D 18; T 1	Two straight breaks, v worn on rev, quite worn on obv, corroded; obv: ??[IMP C TETRIJUS PF AVG. bust radiate and draped, rt; rev: standing figure; irregular (barbarous radiate; copy of ?Tetricus I): 270-284 AD.	483747	217251
5250	520	Cu al	Coin	D 19-24; T 1.25	Slight corrosion and some wear, piece broken off; obv: [DIJVO CL(AVDIO) bust radiate and draped, rt; rev: [CONSRCRATIO] ALTAR; commemorative coin struck after the death of Claudius II Gothicus: 270 AD onwards.	483747	217251
5251	2006	Flint	Handaxe	L 133.4; W 50; T 31	Complete; late Meso early Neo.		
5252					Number not used.		
5253	702	Cu al	Hook	L 41; W 18; T 0.7-1.75	Five arms radiating from a central hub, connected by a band which then joins an outer band of decoration; rectangular pierced plate above, small hook below; corroded, one tiny area of decoration missing otherwise complete; late medieval or post-medieval: 16th-17th century.	487658	218650
5254	344	Fe	Hobnails	L 10.9-16.5; D (heads) 8.75-14	Seven hobnails; tips missing from shafts; corroded and misshapen.	476946	217405
5255	511	Cu al	Ring	D 29.5; T 2.4	Hexagonal section, irregular; possible curtain ring; complete; corroded.	483890	217230
5256	1608	Cu al	Strap end	L 51; W 6-41; T 3.5-6.5	Flat; shield-shaped; rectangular hole off-centre parallel to straight side, 3 possible rivets in situ; corroded but complete; Unusually solid for a strap end: cast; rivets may be corrosion blisters.	498646	224048
5257	511	Cu al	Coin	D 18; T 1	Corroded and v worn, minor nicks on edges; Roman, fourth century; possibly a Constantinopolis (commem) issue of 330-335 AD.	483890	217230
5258	703	Pb al	Button	D 23.5; T 1	Round, flat with flower decoration; cast.	487848	219199
5259	1003	Pb al	Button	D 27; T 2	Round with slightly curved surface; symmetrical swagged design of parallel running lines around border with two concentric circles in centre with curved angled lines between; cast button, loop shank broken off.	492208	221762
5260	511	Fe	?Jew's harp	L 55; W 4-8; T 4-9	Loop with two parallel extensions, square-section shaft; corroded.	483890	217230
5261	2615	Fired clay	Slab	L 113; W 61; T 50	Rectangular slab with broken edges.		
5262	2101	Flint	Arrowhead	L 25.4; W 16.9; T 5	Triangular tanged projectile point; one side-point broken off, otherwise complete.	501189	232093

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SF	Context	Material	Type	Dimensions/mm	Description	Easting	Northing
5263	511	Flint	Scraper	L 31; W 36; T 12	Side/end scraper; steep retouch on secondary flake.	483890	217230
5264	511	Flint	Scraper	L 34; W 19; T 8.6	Lower part of secondary flake with retouch on all edges of dorsal surface and possible notch on one side; blunting retouch along one side.	483890	217230
5265	511	Flint	Flake	L 32.5; W 26; T 2-6	Secondary flake with regular shallow invasive retouch along a 10mm length of its bulbar surface.	483890	217230
5266	1306	Cu al	Sheet	L 16.5; W 15; T 0.5	Small fragment with possible remains of two rivet holes; corroded, bent.	496370	222510
5267	1757	Fe	Hook/?Bit	L 78; W 3-9; T 3-6	Square shaft, flattened at one end and bent into a hook at the other; possible mouth-piece link of a medieval or post-medieval snaffle bit.		
5268	1306	Fe	?Nail	L 54; W 7-8; T 7-9	Square shaft tapering slightly; bulbous end; broken at one end and probably at the other; v corroded.	496370	222510
5269	1306	Fe	Nail	L 67; W 6-9; T 5-10	Square shaft; square flattish head; corroded but complete.	496370	222510
5270	445	Cu al	Brooch	L 55; L (foot plate) 27; W 2.5-10; T 3.5	Bilaterally sprung brooch; four springs on each side; bow has central ridge running lengthways, with two smaller ridges and grooves on either side; triangular foot-plate with triangle cut from middle; pin missing; corroded; ?Colchester brooch; details of spring arrangement unclear; chord of spring looks like it is held in place by hook, though this could be an integral loop, on x-ray; if a true Colchester brooch, then first half of first century; if a derivative then mid- to late first century into early second century AD.		
5271	165	Cu al	Coin	D 29; T 1.75	Slight wear and slightly bent but otherwise very good; obv: bearded man looking left; B R U T U S above head; dotted border; rev: Britannia' laurel leaf border, dotted border; milled edge; almost certainly a late eighteenth century imitation of a regal halfpenny.		
5272	2315	Ceramic	Vessel	59 sherds	Iron Age patterned sherd, possibly from more than one vessel.	501653	233134
5273	2315	Flint	Flake	L 33.5; W 15; T 3	Tertiary flake with small regular pressure flaking along a 12mm length of its bulbar surface.	501653	233134
5274	616	Ceramic	Vessel	D (external) 275; H at least 400	Up to 60 sherds of Bronze Age urn, decorated with cordons and finger impressions in upper part; large parts of rim and base, but middle part missing.		
5275	?1806	Pb	Strip	L (folded) 25; W 23; T 6; T (sheet) 1	Folded sheet of ?scrap lead; corroded.		

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Registered finds

SF	Context	Material	Type	Dimensions/mm	Description	Eastings	Northing
5276	1642	Pb	Sheet	L (1) 51; W 44; T 2.5; L (2) 41; W 21.5; T 1	Two pieces; larger piece has small hole punched through it; both pieces probably scrap; the larger piece has part of one cut edge remaining adjacent to the perforation; other edges torn.		
5277	1608	Ceramic	Samian vessel	T 4.5-10	Stamped base sherd of samian vessel.	498646	224048
5278	3116	Ceramic	Vessel	T 5	Stamped base sherd.		
5279	374	Glass	Vessel	L (1) 19; W 17; T 3; L (2) 23.5; W 6.5; T 1.5; L(3) 17; W 15.5; T 2	Three fragments of base and wall of vessel; degraded and disintegrating; medieval.	477039	217356
5280	379	Glass	Vessel	L 37; W 25; T 1	Irregular triangular fragment of glass from wall of vessel; blown; clear with some bubbles; could be Roman.	477019	217367
5281	2829	Glass	Vessel	L 14; W 10; T 1.5	Fragment of glass with band of decoration; possibly Roman; fourth century; pale green with air bubbles; diagonal lines, or varying lengths, making up the decorative band, may be wheel cut.	496301	222566
5282	1389	Glass	Vessel	L 14; W 10.5; T 3	Fragment of clear glass with bubbles; blown; Roman.	496297	222575
5283	542	Glass	Vessel	L 18; W 9; T 1	Fragment of clear glass with small air bubbles; blown; probably Roman.	483781	217253
5284	512	Fe	Sheet	L 47.5; W 46; T 2-5	Flat sheet with slight lip along one straight edge; corroded and worn.	484119	217219
5285	1321	Fe	?Tool	L 58; W 34; T 5	Flat plate; one end with bevelled edge; other end tapers to a broken off tang; corroded and worn; perhaps a part-made object.	496374	222599
5286	1622	Fe	Nail	L 45; T 4-6	Rectangular flat head; square shaft; tip of shaft missing; corroded; bent.		
5287	2600	Fe	Plate	D 52-55; T 3-8	Roughly hexagonal flat sheet with three protuberances on one side corresponding with small dimples on the other side; corroded and laminating; uneven thickness; perhaps part-made.	498906	224150
5288	2529	Fe	Horseshoe	L 93; W 18-33; T 5	Fragment; four oblong holes regularly spaced near edge on outside of curve; corroded, worn; probably medieval.	477038	217361
5289	2529	Fe	Knife	L 92; W 12-21; T 2.5-4.5	Blade with tang; corroded, slightly bent and broken off at both ends; cutting edge damaged; non-ferrous bands at junction of blade and tang; remains of shoulder plate or of solder for attachment of plate; scale tang with tubular non-ferrous rivet in situ within remaining perforation.	477038	217361
5290	1608	Fe	Strip	L 43; W 11-12; T 4-5	Broken at one end and possibly at the other; corroded.	498646	224048
5291	2721	Fe	Nail	L 23; W 6; T 5	Square-section shaft; head and tip missing; corroded.	496377	222608
5292	2651	Fe	?Strip	L 27; W 17.5; T 2-5	Fragment of flat piece of corroded iron.		

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SF	Context	Material	Type	Dimensions/mm	Description	Eastings	Northing
5293	2593	Fe	?Door-latch	L 179; W 5.23; T 4-10	Rectangular-section shaft, thin and flat at one end, tapering towards the other; both ends bent into hooks, bending in opposite senses; corroded, almost rusted through at one point; probably part of a door latch/lifter.		
5294	2600	Fe	Bar	L 119; W 6.6-9; T 6-8	Curved bar with rectangular section; both ends broken off; corroded.	498906	224150
5295	2600	Fe	Nail	L 42; W 5-10; T 5-7	Square-sectioned shaft; misshapen head; corroded, bent; tip of shaft missing.	498906	224150
5296	511	Fe	?Nail	L 45; W 11-24; T 10-11	Shaft with square section; head ?broken off at sides to give T-shape; shaft broken; corroded.	483890	217230
5297	8	Fe	Lump	L 25; W 17; T 4	Corroded, rough fragment.	472087	218405
5298	2528	Fe	Hinge-pivot	L 90; W 48; T 5.5-13	Bar with rectangular section bent into right-angle; both ends broken off; corroded.	477037	217369
5299	2600	Fe	Loop	D 41-57; T 6-7	Penannular rod with ends flattened and splayed; v corroded, bent and broken.	498906	224150
5300	2931	Fe	Nail	L 38; W 6-7	Flat head, probably rectangular; shaft with square tapering section; part of head and tip missing; corroded.	496234	222553
5301	396				Natural stone: discarded.		
5302	114	Slag	Lump		One fragment.	473720	218169
5303	2743	Slag	Lumps		Two fragments.	496333	222583
5304	2710				Natural stone: discarded.		
5305	2525				Natural stone: discarded.		
5306	122	Slag	Lump		One fragment.	473754	218171
5307	2739				Natural stone: discarded.		
5308	2513	Slag	Lump		One fragment.	476962	217407
5309	469	Fe	Lump		One fragment of ?corroded iron.	479698	217013
5310	398	Slag	Lump		One fragment.	477037	217354
5311	403	Slag	Lump		One fragment.	479731	216868
5312	2672	Slag	Lumps		Three fragments.		
5313	1608	Slag	Lump		One fragment	498646	224048
5314	304	Stone	Whetstone	L 37; W 28; T 19-19.5	Rectangular; broken at one end.	477089	217391
5315	1306	Fired clay	Slab	L 140; W 90; T 60	Rectangular slab; broken and abraded; 12 fragments.	496370	222510

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SF	Context	Material	Type	Dimensions/mm	Description	Eastings	Northing
6000	2625	Cu al	Coin	D 15.5-18; T 1.5	Corroded, pitted, details on both sides unclear; rev: curved line visible; obv: [IMP IC TIE]TTICVS PF AVG] bust radiate and draped, rt; probably a copy: 270-284 AD.		
6001	1609	Cu al	Mount	L 32; W 14; T 3	Decorative mount; rectangular, except that one short side bows inwards; incised geometrical design: central cross with four L shapes around to form a gapped rectangle; rivet in situ on back; possible hinged projection on one end suggests it might be a buckle plate: strap mount more likely to have two rivets; possibly late Roman, although incurved end might originally have held enamel; possible iron corrosion in the central recess; this would suggest medieval: if so, similar to cut-outs used on early combs, twelfth to early thirteenth century	498825.541464557	224133.30176 4978
6002	1609	Cu al	Coin	D 17.5-18.5; T 1-2	Slightly corroded but generally good condition; obv: [CON]STAN[TIN]VS IVN NOB C, bust laureate, rt; rev: GLO[RIA EX]ER[CITUS] 2 soldiers standing, each holding spear and leaning on shield, between them two standards; TRP; as HK 56.	498800	224100
6003	1609	Cu al	Coin	D 13.5-14; T 1	Slight corrosion and wear, but generally good condition; obv: FILUL HE LENA[E] [AVG], bust diademed and draped, rt; rev: [PA X]PU BLICA Pax holding olive branch and transverse sceptre.	498800	224100
6004	1609	Pb	Sheet	L 95; W 74; T 4-6	Corroded; bent over, one edge cut.		
6005	1609	Cu al	Coin	D 16-16.5; T 1.5	Some corrosion and wear but quite good condition; obv: CON... bust laureate (and cuirassed?) rt; rev: GLOR [IA EXERC IT]VS and two soldiers standing, each holding spear and leaning on shield, between them two standards; TRP as HK 53; house of Constantine 330-335 AD.	498817	224111
6006	1609	Pb	Sheet	L 21; W 19; T 1	Folded; probably scrap.	498809	224111
6007	1609	Pb	Blob	L 19; W 15; T 5	Melt waste; corroded and pitted.	498807	224110
6008	1609	Fe	Lump	L 91; W 13-22; T 12-16	Possibly a tapering shaft with ends missing; v corroded and slightly bent; perhaps a part-made object.	498800	224100
6009	1609	Fe	?Tool	L 123; T 9.5-22	Round tapering hollow shaft; ends missing, corroded; possibly a socketed spike or ferrule.	498783.920396118	224092.01358 3597
6010	2625	Cu al	Coin	D 26; T 2	Complete but v corroded; probably first or second century AD, perhaps a copy of a Claudian as, ca 43-64.	498784.101787462	224093.13326 3092
6011	2625	Pb	Blob	L 31; W 9-19; T 3.5-6.5	Corroded piece of melt waste.	498781.438632727	224093.45317 1520

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Registered finds

SF	Context	Material	Type	Dimensions/mm	Description	Easting	Northing
6012	2625	Fe	?Hook	L 91; T 13	Round shaft; slightly bulbous at one end; very corroded; small curved projection at one end suggests something like a wall hook.	498782.601186342	224092.35348 6301
6013	1609	Pb	Blob	L 33; W 25.5; T 15	Hole possibly all the way through, and trace of a seam on one side suggesting it could be formed from a thick folded or rolled sheet; may have functioned as a crude weight.	498783.029929519	224097.45202 6859
6014	1608	Ceramic	Vessel	T 6-8; D (base) 54.5	Stamped base of samian vessel.	498768	224067
6015	2602	Ceramic	Vessel	T 7-8	Sherd with decorated, finger-impressed rim, wall of vessel with angle wide scored lines.		
6016	2602	Fired clay	Tile				
6017	1609	Pb	Strip			498830	224127
6018	1609	Fe	Nail			498830	224121
6019	1609	Fe	Tack			498812	224119
6020	1609	Cu al	Coin			498813	224118
6021	1609	Pb	Blob				
6022					Number not used.		
6023	1609	Fe	Nail	L 36.5; T 3-5	Shaft with rounded section; no head; end of shaft missing; v corroded and broken.	498830	224138
6024	2666	Fe	?Nail	L 44; T 4.5	Squarish shaft, slightly tapering with 2 lumps of corrosion adhering; both ends missing.	498802	224101
6025	2666	Fe	Nail	L 36; T 2-6	Head missing; badly corroded; fragile and bent.	498801	224103
6026	1609	Cu al	Brooch	L 60; W 2-27; T 4.5-6.5; L (foot plate) 33	Bilaterally sprung fibula brooch; three coils on each side; two side lugs in front of coils; Colchester brooch: first half of first century; spring of 7 coils; chord held by hook; plain bow; distorted; spring wrenched from wing on one side.	498800	224100
6027	1651	Fired clay	Slab	27 fragments	Abraded broken slab.		
6028	2696	Fe	?Nail	L 86; W 5-16; T 4.5-9	Squarish shaft tapering to one end, at the other end bends over, flattens and splay out; v corroded.		
6029	2696	Fe	Nail	L 83; W 4.5-10; T 4.5-11	Shaft with square section; head probably incomplete; v corroded, bent.		
6030	1665	Fe	Nail	L 20; W 5.5; T 3-4	Rectangular head and section of shaft; end of shaft missing; corroded.		
6031	3107	Fired clay	Slab	L 105.5; W 103; T 38-46	Incomplete slab, both ends missing.		
6032					Number not used.		

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Registered finds

SF	Context	Material	Type	Dimensions/mm	Description	Eastings	Northing
6033	2614	Cu al	Hair pin	L 95; D (shaft) 1-3; D (head) 5.6	Round shaft tapering; head divided from shaft by groove around circumference of shaft; rounded flat-topped head.		
6034	1638	Fe	Nail	L 26; T 3.5-5	Shaft incomplete, ends broken; appears as if shaft passes through head, but this may be because of a separate fragment corroded onto head.	498800	224100
6035	1609	Pb	Weight	D (outside) 24; D (inside) 8	Round with slightly off-centre hole.	498800	224100
6036	1609	Cu al	Coin	D 14-15; T 0.5-1	Corroded, v worn; obv: radiate bust rt; rev: standing figure.	498800	224100
6037	1609	Cu al	Buckle	L 29; W 27; T 1.5-2.5	Double looped buckle with chevron pattern decoration; corroded, worn, bent; late medieval??	498800	224100
6038	1609	Cu al	Jetton	D 19; T 0.5	Very corroded; roselike doily pattern: Reichsapfel: sixteenth or seventeenth century Nuremberg jeton, probably seventeenth rather than earlier.	498800	224100
6039	1609	Pb	Blob	L 20; W 20; T 6.5-10.5	Piece of melt waste or a casting sprue.	498800	224100
6040	1609	Fe	Nail	L 124; W 3-11; T 3-12	Tapering shaft with rectangular section; head appears to be oblong with rounded corners; very corroded, end bent.	498800	224100
6041	1609	Fe	Strip	L 135; W 19.5-26.5; T 3.5-6	Deliberately bent at right angle; corroded and surface missing at bend; possibly a fragment of knife broken across blade and bent across scale and tang; no signs of rivets to secure handle to tang, so if knife probably only part made.	498800	224100
6042	1663	Fired clay	Slab	L 270; W 230; T 35	Slab with finger-impressed decoration; fragile cracked and eroding.		
6043	1663	Ceramic	Lid	D 175	Round with protruding knob to form handle: this has an impressed hollow in the centre; cracked and incomplete.		
6044	1663	Ceramic	Vessel	T 6-9.5	Sixteen sherds of vessel with slashed decoration around rim and groove running horizontally around the circumference.		
6045	2679	Ceramic	Vessel	T 7-8	One sherd of a decorated vessel.		
6046	1609	Cu al	Button	D (head) 10.5; L 11	Plain domed head with broken looped shank.	498800	224100
6047	2942	Cu al	Coin	D 7; T 1	Corroded; no detail visible; probably third or fourth century AD.		

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Appendix 10

Human bone

Sue Ensor

Human Bone

Sue Ensor

Summary

The skeletal remains of a single individual were examined and an estimation of age at death, sex, stature and extent of palaeopathological conditions was made. The results showed that the remains were of an adult male possibly 35-45 years old at death, with a puncture wound to the skull, a broken rib, some evidence for infection in the lower limb, and osteoarthritis elsewhere in the post-cranial skeleton.

Condition of the Remains

The remains were physically in a fair to good condition but fragmented. In addition large areas of the skeleton were absent. This made analysis of the remains problematical, and these problems are discussed in the text below.

Gender

The sex of the individual has been assessed as male. This is based predominantly upon the pelvic morphology (subpubic angle, ventral arc, medial aspect of ischiopubic ramus) which was very much within a male range. In addition, there were characteristically male features present on the skull, namely the anterior mandible and the brow ridges. Furthermore the skeleton was generally robust with obvious, occasionally pronounced, muscle attachments also suggesting a male individual.

Age

Estimation of age was somewhat problematical as a number of diagnostic areas of the skeleton were absent or fragmented (most notably pubic symphysis, teeth). However, extent of epiphyseal fusion indicated that the individual was fully adult, and a tentative age based upon the few molars present, a fragment of pubic symphysis and two sternal ends of ribs suggest a mid-range age of 35-45. It is accepted that ageing techniques notoriously give ages that are too young, and in combination with the fragmentary material available for analysis, the age should be considered as a tentative one. The older age range is supported by the extensive ante mortem tooth loss apparent in the remaining fragment of jaw. All tooth sockets of the right mandible were healed except for three incisor sockets.

Stature

The height of this individual in life was 172cm or 5 feet 7 inches. (Based on femoral and tibial measurements, (Trotter, 1970)).

Palaeopathology

There is evidence of an injury to the skull which occurred before death. The injury consists of the healing remains of a compression fracture. The lesion appears on the exterior and interior aspect of the left parietal. Exteriously, the bone of the skull has reformed, and only a surface dent is visible. The affected area is roughly circular in form with a diameter of approximately 1.5 - 1.8 cm of affected periosteal bone. On the interior aspect of the parietal the depressed comminuted bone could be seen as four equally sized quadrants of bone forming the circular depression of the injury.

The lack of evidence for infection indicates that disruption to the blood vessels was minimal in this case. It is difficult to assess how long before death the injury occurred as the rate of fracture healing varies between individuals and is dependent upon factors such as health status, diet, the severity of the fracture and stability of the fractured ends of bone. However, it is possible to estimate that at least six to eight weeks expired between the infliction of the injury and the death of the individual (Collins 1966; 52). It is unlikely, given this time scale that serious disruption to the brain occurred as a result of the blow, particularly as no fragments of bone were dislodged.

An example of a similar date now held in the British Museum was recovered from excavations in Winchester. An almost identical wound shows equally successful healing in an adult male (Ortner & Putschar 1981;79). Courville (1967;621) concludes that with respect to cranial injuries in antiquity, most wounds and fractures of the skull are the result of intentional violence. It is hard to see how, in this case, the injury could have been caused accidentally.

There is further evidence for injury in the form of a blow to the ribcage. A malaligned fracture to an upper or mid thoracic rib was evident (it is not possible to tell from which side of the body). The fracture was well healed, despite being malaligned.

There is evidence for degenerative joint disease in the form of osteoarthritic changes to the vertebrae, the pelvis and femurs.

In the lumbar vertebrae there was medium to severe osteophytosis on the superior border of the vertebral bodies but there were no Schmorls nodes, no porosity and little eburnation. As these were the only vertebrae present, the significance of the pathological changes is limited.

In the femoral heads and acetabulae (ie the pelvic ball and socket joints) there was considerable eburnation and porosity. Again the changes ranged from medium to severe. In particular, the femoral heads showed considerable osteophytosis at the proximal epiphyseal margin. Undoubtedly this extent of mechanical wear would have caused considerable pain and inconvenience in life.

Finally on the medial aspect of the right tibia there was an area of raised bone, whose dimensions were 4.5cm parallel to the bone, and 1cm in width, tapering to rounded ends. It stood proud of the bone for 0.5cm, and its surface showed healed periosteal new bone growth, probably as a response to localised infection.

In Saxon populations generally, tibial lesions caused as a result of infection, and manifesting as periostitis are common, but not usually in this form. Again the former injury or infective episode is well-healed.

Conclusion

The remains are of limited interest, even despite the traumatic skull lesion. The difficulty of assigning an accurate age or sex to the individual also lessens the importance of palaeopathological data obtained as these will be out of context.

It is recommended that the remains are reinterred.

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Appendix 11

Animal bone

Richard Moore

Animal Bone
Richard Moore

Summary

A total of 3015 bones or fragments of bone were recovered from 234 contexts, spread over fifteen sites. Three Roman period sites, 8, 22 and 28, accounted for the bulk of the material, with only small amounts elsewhere. A very large proportion of the assemblage was in the form of small, unidentifiable fragments, and only 312 bones could be positively identified.

The range of species present was typical of mixed farming in lowland Britain, with cattle and sheep being most prominent. The presence of a comparatively large number of lower jaw bones and teeth from both sheep and cattle allowed some inferences to be drawn about the age of slaughter of these animals on the two largest sites. Both lambs and calves tended to be killed at a young age, suggesting milk production may have been important, or that the availability of winter pasture was limited.

Introduction

The material is, on the whole, very fragmentary. There are very few intact bones within the assemblage, and even bones which normally survive well, such as cattle and horse phalanges, tend to be broken. Some of this breakage can be attributed to damage incurred during machine stripping and subsequent rapid excavation, but soil conditions are probably a major factor. Much of the route crosses acidic clay soils prone to seasonal water-logging. Bone does not survive well under these conditions, and a high proportion of the recovered bone was soft and flaky with a powdery, easily abraded surface. This was typically a pale yellowish-buff colour. Elsewhere, local conditions have resulted in hard, dark brown-coloured bone with a well-preserved surface. However, this is very brittle and tends to have longitudinal splits and cracks, probably as a result of periodic drying out of the clay soil. Concretions, in the form of chalky lumps or opaque micro-crystalline surface coatings, have formed on some of the bones.

Following cleaning, the bones and bone fragments were examined and, where possible, the species and bone type determined. Identification was carried out by comparisons within the assemblage and by reference to published sources (Schmid 1972, Hillson 1986, Cohen & Serjeantson, 1996). Where appropriate, reference material was also used. A very high proportion of the material defied identification because of its fragmentary nature and poor preservation. Bones are listed by context in the appendix to this report.

On the basis of size and robustness, the larger unidentified fragments together with undiagnostic bones, such as ribs and vertebrae, are categorised as 'large mammal', 'sheep-sized' or 'small mammal'. 'Large mammal' includes cattle, horse and red deer, while sheep and goat, pig and roe deer would be 'sheep-sized'. Fragments are listed and counted separately, except where they can be shown to be from a single bone by re-fitting.

Site	Section	Plot	Period
1	0	3	Roman
7	3	23	Roman
8	3	23	Roman
9	4	33	Roman
11	5	49, 50	Roman
12	6	54	Iron Age
16	7	68, 69	Iron Age
17	7	71, 72	Late Neolithic to Roman
18	8	79, 80	Roman
19	10	96, 97	Bronze Age
21	11	101, 102	Bronze Age or Iron Age
22	13	113, 114	Roman
23	16	114	Undetermined
28	16	125, 126	Roman
31	17	134	Roman

Table 1: Sites with animal bone.

Species

The bulk of the material came from the common domestic animals, with cattle (*Bos*), sheep (*Ovis*), horse (*Equus*) and pig (*Sus*) being prominently represented. Where differentiation between sheep and goats was possible, only forms typical of sheep were noted. Dogs (*Canis*) were also present. Some of the material was tentatively identified as deer (*Cervus*), but none was completely diagnostic. A few fragments of small mammal bone were found, but were too incomplete to allow identification. These represented two kinds of animal; one could be the size of a rabbit or hare, while the other is much smaller. Chicken (*Gallus*) and Goose (*Anser*) were positively identified, and at least two other bird species were present, one of which was larger than chicken-size.

Numbers and Distribution

The numbers of bones for each type of animal are listed in table 2. Isolated teeth were not counted and bones have been excluded where identification of the species is not certain.

Site	Cattle	Sheep	Horse	Pig	Dog	Deer	Small Mammal	Chicken	Other Bird	Total
1	1	1								2
7	9	17	2	1					1	29
8	1									1
9	4	1		1				1		7
11	2		1	2			2			7
12	13	3								16
16	2									2
17										
18										
19										
21	1									1
22	64	58	14	4	2		1	1	5	149
23		1								1
28	42	23	15	10	1	2?		2		95
31	2									2

Table 2: Bone Numbers by Site

Measured in this way, cattle (48%) and sheep (32%) form nearly 80% of the total assemblage. Horses account for under 10% and pigs 6%, with other species together contributing around 5%. Comparing different sites shows that there is some variation in these proportions, but this is unlikely to be significant given the low total numbers involved.

A simple bone count gives a rather crude picture of animal numbers. The minimum numbers of animals which these bones could represent probably gives a more accurate indication of the proportions of species present on the site. These are shown in Table 3. The most notable difference between the two tables is in the proportion of sheep to cattle. The bone count apparently underestimates the relative importance of sheep.

Site	Cattle	Sheep	Horse	Pig	Dog	Small Mammal	Chicken	Other Bird
1	1	1						
7	3	2	1					1
8	1							
9	1	1		1			1	
11	1	1	1	1		1		
12	1	2						
16	2	1						
17								
18		1						
19	1?							
21	1							
22	8	9	2	2	2	2	1	3
23		1						
28	5	8	2	4	1		1	

Site	Cattle	Sheep	Horse	Pig	Dog	Small Mammal	Chicken	Other Bird
31	1		1					

Table 3: Minimum Numbers of Animals by Site

Meaningful comparisons between species are only feasible for Sites 22 and 28. Even in these cases, the low numbers involved mean that the proportions found could be accounted for by normal statistical variation. However, taking the figures for the minimum numbers of animals from these sites at face value implies that there were rather more sheep than cattle. Of other livestock species, pigs seem to have been quite important on Site 28, though perhaps of lesser importance on Site 22. Chickens were also present on both sites. The proportion of horse bones was quite high, especially on Site 28, and the minimum numbers of animals probably understates their relative importance.

There is little evidence of the exploitation of wild species, although the birds may include species used for food.

Age

For Sites 22 and 28 there are sufficient numbers of cattle and sheep for it to be worthwhile estimating the ages of these animals. This was carried out by examining the lower teeth for eruption and wear. Standard methods of ageing tend to be based on averaging scores for wear from all the cheek teeth of one side of a jaw, but as there are very few intact mandibles in the assemblage, approximate age estimates have been made for separate teeth as well.

Sheep

The attrition stages of Payne (1972) as quoted in Hillson (1986) were used as a basis for age estimates. These are given in Tables 4 and 5, for Sites 22 and 28 respectively.

Context	Side	Teeth	Comments	Age Estimate
1,325	left	pm3,4, m1,2,3		4 - 6 years
1,332	right	dpm4, m1	Small	6 - 24 months
1,356	right	m3	Fairly heavy wear	4 - 6 years
1,371	left	m1,2		1 - 2 years
2,730	right	m1		1 - 2 years
2,753	left	m2	Heavy wear	4 - 6 years
2,758	left	m2		4 - 6 years
2,778	right	dpm2,3,4, m1		6 - 12 months
2,778	right	m3	Possibly same as above	1 - 2 years
2,783	left	m1	Just come into wear	6 - 24 months
2,829	left	m3		4 - 6 years
2,931	left	m1,2		1 - 3 years
2,936	left	m2		1 - 3 years

Table 4: Age Estimates for Sheep from Site 22

Context	Side	Teeth	Comments	Age Estimate
1,619	left	dpm2,3		6 - 12 months
1,630	left	m3		3 - 6 years
1,660	left	dpm3,4, m1	dpm4 heavily worn	6 - 24 months
1,660	left	m1,2	Larger than above	1 - 2 years
1,668	left	dpm4, m1,2,3		2 - 3 years
1,692	left	m2	Just coming in to wear	1 - 2 years
2,630	left	dpm2,3,4, m1		6 - 24 months
2,651	right	dpm4,m1		1 - 2 years
2,682	right	m3		4 - 6 years
2,692	left	m1		6 - 24 months
3,201	left	m1		3 - 6 years
3,203	right	dpm2,3,4, m1		6 - 24 months
3,203	left	dpm4	Possibly same animal as above	6 - 24 months

Table 5: Age Estimates for Sheep from Site 28

On both sites, the sheep fit broadly into two distinct age groups. The younger group are typically less than two years old, still with deciduous dentition and molars newly erupted or just coming in to wear. The older group are at least 3 years old, and probably older, having mature dentition with all the molars showing moderate to heavy wear. These two groups correspond to lambs, slaughtered for meat in their first or second year, and mature animals kept for breeding and for wool. The mandible from context (1668) is from an animal of an intermediate age is an exception to the general pattern.

Comparing the two sites shows that Site 22 has five older animals and eight lambs, while on Site 28 there are three older animals and nine lambs, assuming throughout that left and right teeth come from different animals. The Site 28 lambs seem to be slightly younger than those from Site 22. With the small numbers involved, this may not be significant, but it could be evidence of a genuine difference in husbandry practice.

Very small, unfused and incompletely mineralised bones were recovered from four contexts: (709), (2730), (1692) and (2651). These are generally shaft or end fragments from long bones. While identification of such small bones is uncertain, their size might suggest that they came from neonate lambs.

Cattle

For cattle, individual teeth were scored according to the tooth wear stages of Grant (1982), quoted in Hillson (1986). Letter codes from a (unworn) to m (heavy wear) are given in Tables 6 and 7, for each tooth. The estimates of age in years corresponding to these wear stages are loosely based on a combination of sources given by Hillson, and should be regarded as very approximate.

Context	Side	Teeth	Stages of Wear	Age	Comments
1,325	left	m1	g	>3	
1,369	left	pm4	a	2.5	
2,738	left	dpm2,3,4, m1	(dpm4) g, (m1) c	2) May be
2,738	left	m2	a	2) same animal
2,738	left	m1	b	2	
2,753	left	dpm4, m1	f, b	2) Probably the
2,753	right	dpm4, m1	f, b	2) same animal
2,926	left	m3	b	3	
2,930	right	pm4, m1,2,3	g, left, k, k	>3	
2,931	left	m3	m	>3	Very heavily worn

Table 6: Age Estimates for Cattle from Site 22

Context	Side	Teeth	Stages of Wear	Age	Comments
1,630	left	dpm4	c	1.5	
2,606	right	pm2,3,4, m1,2,3	(pm4) f, (m1,2,3) g, g, g	>3	
2,625	left	m1,2,3	c, a, a	2.5	m3 just erupting
2,651	right	m1	a	1.5	
2,660	left	m3	g	>3	
3,203	right	dpm4, m1,2	g, f, b	2	
3,203	right	m2	a	2	
3,203	left	m1	c	2	

Table 7: Age Estimates for Cattle from Site 28

As with the sheep, the teeth can be divided into two groups, corresponding to younger and older animals. The younger group typically have fairly heavy wear to their deciduous premolars, with permanent molars just erupting or coming in to wear. This suggests an age of around two years for these animals. The older group have moderate to very heavily worn molars and would have been at least three years old, with the majority considerably older.

Ageing of cattle based on epiphysial fusion was also considered, but the dearth of reasonably complete bones precludes any systematic treatment. Notable examples of bones with unfused epiphyses occur in contexts (1656), (1745), (2843), (340), and (637). Reference to the table given by Schmid (1972) indicates that these are mostly from animals between 1½ and 3½ years old.

As with the sheep, the population structure seems to suggest a typical pattern of husbandry. It is consistent with a management regime where cows are kept for dairy produce and their male calves are generally slaughtered for meat at around the time that they reach adult size.

Size

With very few complete bones surviving, there is insufficient material for comparative study based on measurement data. However, it was felt to be worth recording some subjective comments based on an overall impression of the assemblage.

The cattle bone is generally from medium-sized, fairly robust individuals, very unlike the rather lightly built animals often associated with Iron Age and early medieval sites. There is some variation in size, but this could be accounted for by differences of age and sex, and all the material could be from general purpose animals, used for draught as well as beef and dairy products.

In contrast to the cattle, the sheep bones are from small animals of a fairly uniform size. They seem to be from an unimproved stock, similar perhaps to modern Soay sheep.

Of the other species present, the horses tend to be rather small, presumably used for riding rather than as draught animals. The dog tooth from context (2929) was from a fairly large individual, perhaps the size of a modern collie. The chicken bones represent a small, bantam-sized bird.

Articulated Groups

The use of animals for food usually results in the disarticulation and scattering of their bones. Recovery of portions of articulated skeletons may indicate burial for reasons other than normal disposal of food waste. In many cases they will result from accidental death of the animal, or from disposal of dead or diseased animals. However, deliberate placement in other cases will probably be of significance in the interpretation of the features containing them. One feature on Site 12, dating from the Iron Age, contained a substantial group of articulating bones, as did three contexts from Site 22.

A large proportion of the bones of a cattle right foreleg were retrieved from context (637), together with other bones which could have come from the same animal. This deposit was the fill of a ditch found in the side of the pipe-trench, and was not substantially excavated. It is probable that only a fraction of the material present in the deposit was recovered, and this may be part of a complete articulated skeleton.

The articulating sheep foot bones from context (2739) represent at least two animals. The metapodials have unfused distal epiphyses, indicating that the animals were less than two years old. Feet would normally be cut or broken off at an early stage in the butchery process, and could have been disposed of whole. The presence of these groups of bones probably implies that the animals were butchered close by.

Another cattle foreleg, again from the right side, was recovered from (2778). This was from a young animal: epiphysal fusion suggests that it was probably between one year and eighteen months old. Bone recovery from this feature, as with (2739) above, was extremely good. There is a complete set of carpal bones, for instance, which are notoriously easy to overlook during excavation.

Amongst a myriad of tiny fragments recovered from context (2813) is a set of vertebrae which probably form an articulating sequence from the cervical and thoracic regions. At least ten bones are present, and there may be more among at least thirty-seven vertebral fragments present. These are almost certainly associated with horse limb bones, teeth and mandibles also found in this context. Site photographs show that a substantial portion of the skeleton was present although much of it had been lost or disturbed when the site was machine stripped. Because of its poor state of preservation, more was lost during excavation and lifting. The vertebral epiphyses of this animal are fused implying a minimum age of four to five years. The horse teeth from the same context are permanent upper molars, all in wear but still with relatively high crowns. Assuming they are from the same animal, this would again imply an age of at least four years.

Butchery

In general, there is very little evidence of butchery. A few bone fragments have obvious cut marks, and some show scoring or scratching which could have come from knife cuts, but may be post-depositional damage by gnawing animals. The fragmentary and abraded nature of much of the bone means that butchery marks originally present could have escaped attention. Other signs of butchery practice are equally elusive. There are no complete or near complete scapula bones, so it is not possible to say whether they were holed by the common

practice of using them as convenient attachment points for meat hooks. Vertebrae tend to be similarly fragmented, but in many cases the centrum has survived intact, showing that the animals were not 'chopped' into separate halves. Few of these bones have surviving lateral processes, which may indicate that the animals were divided by cutting either side of the vertebral column.

Many of the cattle long bones were cracked, in a way typically produced by marrow extraction. The majority of the metapodial bones present were broken, as happens when feet are severed. However, it is possible that both of these forms of damage could have occurred accidentally at some later stage.

Burning

Burnt bone was noted in thirteen contexts from Site 28, six from Site 22, and from single contexts from Sites 7, 9, 11 and 19. Mostly these were isolated rib or long-bone shaft fragments, but contexts (1660) and (1671) had slightly larger quantities.

Working

One fragment of large mammal rib from Site 7, context (317), showed signs of working, having been severed with a concave curving cut, slanting obliquely to the plane of the bone surface. Its form suggests that it might have been an off-cut left over from the carving of an artefact from the blade of the rib.

Pathology

A cattle right metatarsal with extra bone growth, in the form of an elongated oval raised area approximately 3cm long on the shaft, was found on Site 28 context (2621). This was probably a response to traumatic injury to the bone surface, but could have resulted from disease. Otherwise, no obvious pathological lesions were noted.

The damage to the articular surfaces and ends of limb or foot bones, which often occurs when animals are subjected to stress from heavy loads, was not observed.

Discussion

Generally, the assemblages from the Roman period sites are typical of what might be expected of the detritus from small scale farming communities in this part of the country. Unsurprisingly, sheep and cattle were the main livestock species. Sheep were probably numerically more significant, but cattle, being individually larger, were probably economically more important. Site 28 also showed a relatively high proportion of pigs.

These findings are consistent with previous studies on Roman sites in the area which have generally found, with some exceptions, a relatively high proportion of sheep to cattle (Johnstone, 1997). Although this is said to be typical of the Roman period in particular, a comparison of the proportions of animals found on local sites from a range of periods seemed to show a little variation, with nearly all recording between 30% and 50% of both sheep and cattle (Sadler, 1998). Exceptions tended to be in small assemblages and are probably not statistically significant.

The local landscape and soils are probably the most important factors influencing the relatively high proportion of sheep. The sites are close to modern day downland, and the relatively high ground and unproductive soils may have been much more suited to sheep than cattle rearing.

The proportion of lambs to mature sheep found on Sites 22 and 28 is high, but consistent with normal husbandry practice, in which a flock of mature breeding ewes is maintained, and the majority of lambs used for meat. On both of these sites, particularly on Site 28, the lambs seem to have been very young, some at least in their first year. To maximise meat production, lambs are usually slaughtered later than this, but the optimum age depends on availability of winter pasture. Slaughtering a proportion of lambs at the end of their first summer would ensure that resources can be concentrated on the flock of breeding ewes through the winter. The young age of the lambs could also be an indication that ewes were being milked, probably for cheese production.

Studies on other local sites suggest that the slaughter of young lambs may have been typical of the Roman period (Jones, 1986). Lambs of three years or older are more usual from medieval sites (Sadler, forthcoming); this may have been linked to the development of a burgeoning wool trade especially in the later medieval period. There is also evidence of a change in practice during the Roman period, with a higher proportion of older lambs on later sites (Sadler, 1998).

The range of ages in cattle from both Site 22 and 28 show roughly half the animals were around two years old or younger, while the rest were generally much older. This is consistent with a typical husbandry regime based on mixed meat and dairy production. Calves seem to have been slaughtered for meat at a relative early age. This is

probably an indication of the importance of milk production. The lack of any evidence of injury to the foot and lower leg bones suggests that cattle were not heavily used as draught animals, although it is likely that they were harnessed for ploughing.

The relatively large size of the cattle seems to concur with findings from other Roman sites (Sadler, 1998). Both Iron Age and Medieval cattle tend to be much smaller. However, a similar pattern in the size of sheep has also been noted (Jones, 1986, Sadler, 1998) but is not supported by the evidence from this assemblage, where the sheep seem to be at the lower end of their normal size range.

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Appendix: Animal Bone Listed by Context

Site 1

Context	Count	Description
008	1	Sheep-sized shaft fragment
008	3	Unidentified fragments.
010	2	Unidentified fragments.
014	1	Cattle: right metatarsal fragment.
014	1	Sheep: upper right 4th premolar.
014	1	Sheep: right radius fragment.
014	1	Unidentified fragment.
015	3	Large mammal shaft fragments.
015	2	Sheep-sized shaft fragments.

Site 7

Context	Count	Description
312	1	Cattle: right astragalus, large.
312	1	Large mammal cervical vertebra fragments, unfused.
312	1	Bird (large, possibly goose) long-bone shaft fragment.
312	7	unidentified fragments.
317	1	Horse: left humerus, distal end fragment.
317	1	Large mammal vertebra fragment
317	3	unidentified fragments, including one worked off-cut.
319	2	large mammal long bone fragments.
321	4	unidentified fragments.
323	1	unidentified fragment.
326	1	Large mammal: vertebra fragment, unfused.
326	2	unidentified sheep-sized shaft fragments.
329	1	Cattle: right mandible (pm4, m3 erupting, m1,2 in wear).
329	1	Cattle: left tibia proximal end, with possible butchery marks.
329	1	Sheep: right mandible (pm3,4, m1,2,3 in wear).
329	1	Sheep: right mandible fragments (with loose pm4, m1,2,3);
329	11	Large mammal, including 3 long bone shaft, 2 mandible, 2 vertebra and 4 ribs.
329	1	Sheep-sized long bone fragment.
340	1	Cattle right radius, almost complete, distal end unfused.
340	3	large mammal rib fragments.
340	3	sheep-sized shaft fragments.
340	4	unidentified fragments.
344	1	Large mammal shaft fragment, rib fragment.
344	1	Sheep-sized shaft fragment.
344	4	unidentified fragments.
346	1	Cattle: lower left 3rd molar.
346	2	unidentified fragments.
350	1	unidentified fragment.
354	1	Cattle: articulating left tarsal and metatarsal.
354	1	Cattle: upper left 4th pre-molar.
354	1	Large mammal shaft and vertebra fragments.
354	2	unidentified fragments.
360	1	Cattle: 2nd phalanx.
360	1	right maxilla fragment with 3rd molar.
360	1	Horse: incisor.
360	1	large mammal shaft and vertebra fragments.
360	1	Sheep-sized shaft fragment.
360	6	unidentified fragments.
362	1	Sheep: left femur proximal end..
362	1	sheep-sized shaft fragment.
362	3	3 unidentified fragments.
372	1	Pig: left scapula.
374	1	unidentified fragment.
376	1	Large mammal shaft fragment.
376	2	unidentified fragments.
378	1	Cattle: right radius proximal end.
378	1	unidentified fragment.
379	1	Horse: left tibia distal end, rather small.
379	2	large mammal shaft fragments;
379	16	unidentified fragments

Context	Count	Description
380	2	Sheep: left innominate bone fragments from at least 2 animals.
380	1	Sheep: left humerus distal end fragment.
380	4	Sheep-sized 4 cranial fragments.
380	3	Sheep-sized 3 vertebral fragments.
380	28	unidentified fragments.
384	1	Fragment of large mammal long-bone.
392	2	unidentified fragments.
394	1	Sheep: left tibia distal end.
394	1	Sheep: left femur unfused.
394	1	Sheep: left radius unfused.
394	2	Sheep: axis.
394	3	Sheep: vertebrae.
394	1	Sheep: right mandible fragment.
394	1	Sheep: upper left 2nd, 3rd molars
394	2	Sheep-sized cranium and vertebra fragments.
394	1	Bird long-bone shaft fragment.
394	14	unidentified fragments.
396	1	unidentified fragment, possibly from small mammal.
2509	1	Cattle: right scapula fragment.
2509	2	Large mammal long-bone fragments: burnt.
2512	1	unidentified fragment.

Site 9

Context	Count	Description
403	1	Cattle: upper right 4th pre-molar.
403	1	Sheep: lower right 3rd molar.
409	1	Large mammal long-bone fragment.
412	1	Cattle: metapodial condyle fragment.
412	1	?Pig: right femur distal end fragment.
415	1	Cattle: left radius proximal end.
415	1	Sheep: 1st phalanx.
415	1	Large mammal shaft fragment.
415	1	Sheep-sized shaft fragment.
418	1	Cattle: lower right 2nd, 3rd molars heavy wear.
418	7	Large mammal: shaft fragments including burnt fragment.
418	1	Large mammal: vertebra fragment.
432	2	sheep-sized vertebra fragments.
436	1	Cattle: right humerus shaft.
436	1	Cattle: fragment of tooth (lower right 4th pre-molar ?).
469	1	Chicken: right femur distal end fragment.

Site 11

Context	Count	Description
511	1	Unidentified burnt fragment.
515	1	Pig: right mandible with 2nd & 3rd molars heavily worn, large.
515	2	Sheep-sized shaft fragments.
515	5	Unidentified fragments.
517	9	Unidentified fragments.
520	1	Horse: 2nd phalanx.
520	1	Cattle: metatarsal fragment including condyle.
520	1	Cattle: lower right 1st & 2nd molars.
520	4	Large mammal vertebra fragments.
520	2	Small, unfused long-bone shafts from ?embryo/neonate lamb or small mammal.
520	64	Unidentified fragments.
522	1	Unidentified fragment.
540	1	Cattle: left metacarpal shaft.
546	1	Unidentified fragment.
550	1	Pig: left metatarsal III proximal end fragment.
550	2	Unidentified fragments.
560	1	Sheep: fragments of ?Lower 3rd molar.
560	1	Large mammal shaft fragment.
560	9	Unidentified fragments.

Site 12

Context	Count	Description
626	2	Unidentified fragments including possible large mammal scapula.
637	1	Cattle: articulating group of right humerus radius and ulna.
637	1	Cattle: left metacarpal.
637	1	Cattle: right metatarsal.
637	1	Cattle: articulating pair of 1st, 2nd phalanges, right astragalus and metatarsal condyle fragment.
637	1	Cattle: 1st phalanx.
637	1	Cattle: tibia proximal end fragment.
637	1	Cattle: lower right 3rd molar.
637	1	Sheep: left tibia shaft and distal end.
637	1	Sheep: left tibia shaft.
637	1	Sheep: left scapula fragment.
637	11	Large mammal fragments.
637	2	Sheep-sized shaft fragments.

Site 16

Context	Count	Description
709	1	Cattle: right astragalus.
709	1	Cattle: metatarsal distal end fragment.
709	1	Cattle: upper left ?2nd molar.
709	1	Large mammal long-bone fragment.
709	1	Small unfused incompletely mineralised unidentified long-bone fragment.
709	3	Unidentified fragments.
717	1	Large mammal: ?Mandible fragment.
717	1	Unidentified fragment.
727	1	Sheep: ?Metatarsal shaft fragment.
727	2	Unidentified fragments
733	1	Cattle: upper right 3rd & 4th deciduous pre-molars & 1st molar.
733	1	Sheep-sized shaft fragment.
733	5	Unidentified fragments.

Site 17

Context	Count	Description
754	9	Unidentified fragments.

Site 18

Context	Count	Description
810	3	3 unidentified fragments.
812	1	Sheep-sized shaft fragment.

Site 19

Context	Count	Description
1037	1	Bird: fragment of long-bone.
1037	3	Large mammal: 3 shaft fragments.
1037	1	Large mammal: rib fragment.
1037	17	Unidentified fragments including 3 incompletely mineralised and one burnt.

Site 21

Context	Count	Description
1111	1	Cattle: lower left 2nd and 3rd molars.
1111	3	Unidentified fragments.

Site 22

Context	Count	Description
U/S	1	Cattle: upper left ?2nd molar.
	1	Cattle: 1st phalanx.
	1	Sheep: upper left 3rd molar.
	1	Horse: lower left molar.
	1	Large mammal shaft fragment.
	1	Large mammal rib fragment.

Context	Count	Description
	1	Large mammal innominate fragment.
	2	Unidentified fragments.
1311	1	Sheep: 1st phalanx.
1311	4	Unidentified fragments including 2 burnt fragments.
1315	1	Sheep: 1st phalanx.
1315	1	Cattle: ?Upper right molar fragment.
1315	1	Large mammal shaft fragment.
1315	2	Sheep-sized shaft fragments.
1319	1	Cattle: skull fragment with right horn core base.
1319	1	Cattle: upper left 3rd pre-molar fragment.
1319	1	Horse: lower right second pre-molar.
1319	1	Pig: lower left calcaneum.
1319	1	Sheep: 2nd phalanx fragment.
1319	2	Large mammal: vertebrae.
1319	1	Large mammal: skull fragment.
1319	6	Large mammal: shaft fragments.
1319	1	Large mammal: scapula fragment.
1319	1	Large mammal: 2 vertebrae, skull, 6 shaft fragments, scapula fragment.
1319	1	Sheep-sized: scapula fragment burnt.
1319	4	Sheep-sized: shaft fragments.
1319	18	Unidentified fragments.
1320	1	Large mammal vertebra fragment.
1321	8	Large mammal: vertebra fragments, representing at least 3 bones.
1321	1	Large mammal: rib fragment.
1321	1	Sheep-sized shaft fragment.
1321	1	Unidentified fragment.
1322	2	Sheep-sized shaft fragments.
1322	1	Unidentified fragment.
1325	3	Cattle: upper right 2nd molar, upper left 3rd molar, upper left 1st molar, lower left 1st molar (3 different animals).
1325	1	Cattle: cranium fragment with right horn-core base.
1325	1	Cattle: right ulna unfused.
1325	1	Cattle: left metatarsal shaft fragments.
1325	1	Sheep: left mandible (pm 3,4, m1,2,3).
1325	1	Sheep: right tibia distal fragment.
1325	1	Sheep: left metacarpal proximal end fragment.
1325	1	Horse: lower left 3rd molar.
1325	1	Horse: left tibia fragment.
1325	8	Large mammal: skull fragments.
1325	1	Large mammal: mandible fragment.
1325	2	Sheep-sized shaft fragments.
1326	1	Sheep: right astragalus.
1326	1	Large mammal shaft fragment.
1330	1	Large mammal shaft fragment.
1332	1	Sheep: lower right 4th deciduous pre-molar & 1st molar.
1332	1	Cattle: 2nd phalanx.
1332	1	Sheep-sized vertebra fragment.
1332	1	Sheep-sized ?Mandible fragment.
1332	6	Unidentified fragments.
1334	1	Large mammal shaft fragment.
1334	1	Sheep-sized rib fragment.
1334	2	Unidentified fragments.
1337	1	Cattle: right radius proximal end fragment.
1337	1	Sheep-sized cranial fragment.
1337	1	Sheep-sized shaft fragment.
1337	1	Unidentified fragment.
1340	1	Cattle: left metatarsal proximal end fragment - large.
1342	1	Sheep: right metacarpal distal end fragment.
1348	1	Cattle: upper left 2nd molar.
1348	1	Cattle: left scapula.
1348	1	Sheep: upper right 4th deciduous pre-molar.
1348	1	Sheep: metapodial fragment.
1348	1	Large mammal scapula fragment.
1348	1	Large mammal vertebra fragment.
1348	1	Large mammal mandible fragment.
1348	1	Large mammal innominate fragment.
1348	1	Large mammal shaft fragment.
1348	2	Unidentified fragments.
1349	1	Cattle: upper right 3rd deciduous pre-molar.
1349	1	Sheep: right humerus distal end fragment.

Context	Count	Description
1349	1	Sheep: upper right 1st molar.
1349	1	Sheep: left innominate fragment.
1349	1	Dog: right tibia distal end fragment.
1349	2	Large mammal: rib fragments.
1349	3	Large mammal: shaft fragments including one burnt.
1349	1	Sheep-sized: humerus distal end.
1349	1	Sheep-sized: cranium fragment.
1349	1	Sheep-sized: rib fragment.
1349	1	Sheep-sized: shaft fragment.
1349	2	Unidentified fragments.
1356	1	Cattle: right mandible - fragment of hinge.
1356	1	Sheep: lower right 3rd molar.
1356	1	Large mammal shaft fragment.
1356	2	Unidentified fragments.
1359	2	Sheep-sized shaft fragments.
1365	1	Cattle: 3rd (hoof) phalanx.
1365	1	Large mammal: vertebra fragment.
1365	2	Large mammal: 2 shaft fragments.
1365	3	Sheep-sized shaft fragments.
1365	2	Unidentified fragments.
1367	1	Unidentified fragment.
1369	1	Cattle: lower left 4th pre-molar.
1369	1	Sheep: 2nd phalanx.
1369	1	Small mammal long-bone fragment.
1369	7	Sheep-sized shaft fragments.
1369	34	Unidentified fragments.
1371	1	Sheep: left mandible.
1371	1	Sheep-sized shaft fragment.
1371	2	Unidentified fragments.
1376	1	Bird (chicken-sized): ulna, humerus and coracoid.
1376	1	Sheep-sized shaft fragment.
1376	1	Unidentified fragment.
1377	1	Chicken: tarso-metatarsal fragment including spur.
1377	1	Cattle: upper left 4th pre-molar
1377	1	Sheep: right humerus shaft fragment
1377	1	Unidentified fragment
1379	1	Sheep: upper right 1st molar.
1379	1	Sheep: 2nd phalanx.
1379	4	Sheep-sized shaft fragments.
1379	4	Unidentified fragments.
1381	1	Sheep metacarpal shaft fragment.
1383	5	Large mammal fragments.
1383	5	Sheep-sized fragments.
1386	1	Sheep-sized shaft fragment.
1387	1	Cattle: axis and 16 fragments of vertebra - unfused.
1387	3	Unidentified fragments.
1389	1	Cattle: right tibia proximal end fragment - unfused.
1389	1	Horse: right metatarsal distal end fragment - large.
1389	1	Large mammal: 2 vertebra fragments.
1389	1	Large mammal; mandible fragment.
1389	8	Unidentified fragments.
1390	1	Cattle: left horn-core fragment.
1392	1	Cattle: left astragalus - fairly large.
1392	3	Large mammal rib fragments.
1392	1	Sheep-sized vertebra fragment.
1392	5	Unidentified fragments.
1394	1	Sheep: right scapula blade fragment.
1394	7	Sheep-sized shaft fragments.
2701	3	Large mammal fragments.
2710	1	Cattle: right metatarsal proximal end fragment.
2710	2	Cattle: femur - fragment of head
2710	1	Large mammal: innominate fragment.
2710	4	Large mammal: long-bone fragments.
2710	2	Large mammal: rib fragments.
2710	4	Unidentified fragments.
2712	1	Unidentified fragment.
2721	1	Sheep: right humerus distal end.
2721	4	Large mammal shaft fragments.
2721	1	Sheep-sized rib fragment.

Context	Count	Description
2721	4	Unidentified fragments.
2723	1	Unidentified rib fragment.
2725	1	Large mammal fragment.
2728	1	Cattle: left astragalus – large.
2728	1	Horse: 1st phalanx.
2728	2	Large mammal: vertebra fragments - unfused.
2728	2	Large mammal: unidentified fragments.
2728	2	Sheep-sized fragments.
2728	1	Unidentified fragment.
2730	1	Cattle: fragment of upper left ?4th pre-molar.
2730	17	Large mammal: skull fragments.
2730	1	Large mammal: vertebra fragment.
2730	1	Large mammal: rib fragment.
2730	1	Unidentified thoracic vertebra, possibly from small dog or similar sized wild mammal.
2730	15	Sheep-sized shaft fragments.
2730	25	Unidentified fragments, including unfused and incompletely mineralized long bone, from neonate lamb or similar.
2730	1	Sheep: lower right 1st molar tooth.
2731	1	Cattle: left astragalus - large.
2731	1	Cattle: metatarsal shaft fragment.
2731	1	Sheep-sized cranial fragment.
2731	4	Unidentified fragments.
2732	1	Sheep: left scapula.
2735	1	Sheep: right innominate fragment.
2738	1	Cattle: right astragalus - large with butchery marks.
2738	1	Cattle: left mandible.
2738	1	Sheep: lower left 2nd molar, upper left 2nd molar fragment.
2738	2	Large mammal rib fragments.
2738	1	Unidentified caudal vertebra.
2738	1	Unidentified incisor root fragment.
2738	11	Unidentified fragments.
2739	1	Cattle: lower left 2nd molar tooth.
2739	2	Sheep: right metatarsal, paired right and left metacarpals together with unfused epiphyses, and one extra epiphysis, five 1st phalanges, four 2nd phalanges, four 3rd (hoof) phalanges, two naviculars, making sets of articulating foot bones, from at least two animals.
2739	1	Large mammal shaft fragment.
2747	1	Large mammal long-bone fragment.
2747	2	Unidentified fragments.
2748	2	Unidentified burnt fragments.
2752	1	Cattle: right mandible - hinge fragment.
2752	3	Large mammal fragments including unfused long-bone end fragment.
2753	2	Cattle: upper left second molar, lower left 4th deciduous pre-molar & 1st molar, lower left 4th deciduous pre-molar & 1st molar (teeth from at least 2 animals), left mandible fragment.
2753	1	Sheep: lower right 2nd molar.
2753	1	Sheep: left metatarsal proximal end fragment.
2753	9	Large mammal fragments.
2753	2	Unidentified fragments - one with butchery marks.
2754	1	Cattle: upper left ?2nd molar fragment.
2754	1	Sheep: upper left 2nd molar teeth.
2754	1	Sheep: left radius distal end.
2754	4	Large mammal: shaft fragments.
2754	1	Large mammal rib fragment.
2754	2	Sheep-sized shaft fragments.
2754	1	Unidentified fragment.
2759	1	Sheep-sized shaft fragment.
2759	3	Unidentified fragments.
2760	1	Sheep: ?Upper right molar fragment.
2760	1	Large mammal shaft fragment with possible butchery mark.
2763	1	Sheep: burnt fragment of upper right molar.
2767	1	Unidentified fragment.
2769	1	Unidentified fragment.
2771	1	Large mammal: vertebra epiphysis – unfused.
2773	1	Pig: canine tooth.
2773	1	Pig:, 1st phalanx.
2773	1	Large mammal shaft fragment.
2773	3	Unidentified fragments.
2775	1	Unidentified fragment.
2777	1	Cattle: left scapula fragment.
2777	1	Horse: lower left 3rd molar.
2777	1	Sheep-sized shaft fragment.

Context	Count	Description
2777	1	Burnt unidentified fragment.
2778	1	Cattle: articulating group of right humerus, ulna, radius, 8 carpals, metacarpal together with their unfused epiphyses, 2 pairs of unfused metapodial condyle epiphyses, right navicular, right radius, left maxilla fragment (dpm 2,3,4, m1), femur fragment.
2778	1	Sheep: right mandible, right lower 3rd molar.
2778	1	Sheep: femur fragment;
2778	1	Large mammal: cervical vertebra - unfused, thoracic vertebra, 3 other vertebra fragments - one with butchery marks.
2778	5	Large mammal: long-bone fragments.
2778	6	Large mammal: rib fragments;
2778	7	Large mammal: sheep-sized shaft fragments.
2778	61	Unidentified fragments.
2781	1	Sheep-sized innominate fragment.
2781	1	Sheep-sized vertebra fragment.
2781	1	Sheep-sized shaft fragment.
2781	2	Unidentified fragments.
2783	1	Sheep: lower left 1st molar, left mandible hinge fragment.
2783	1	Large mammal shaft fragment.
2783	15	Unidentified fragments.
2784	1	Sheep-sized shaft fragment.
2784	6	Unidentified fragments.
2787	1	Cattle: right mandible fragment.
2787	1	Cattle: left metacarpal proximal end fragment.
2787	1	Sheep-sized shaft fragment.
2787	67	Sheep-sized fragments of skull.
2787	2	Unidentified fragments.
2791	1	Cattle: metacarpal fragment.
2791	1	Cattle: upper left 2nd molar - large and very heavily worn.
2791	1	Sheep: articulating left humerus distal fragment radius proximal fragment and ulna fragment.
2791	1	Sheep: left mandible fragment.
2791	7	Unidentified fragments.
2793	1	Large mammal rib fragment.
2799	1	Sheep: femur epiphysis.
2799	3	Large mammal: skull fragments.
2799	1	Large mammal: shaft fragment.
2799	1	Sheep-sized shaft fragment.
2799	3	Unidentified fragments.
3003	1	Sheep: right metatarsal proximal end.
2800	1	Bird (smaller than chicken): left coracoid anterior end.
2802		Sheep: upper left 2nd molar.
2802	3	Sheep-sized vertebra fragments.
2802	1	Large mammal shaft fragments.
2802	9	Unidentified skull fragments.
2809	1	Sheep horn-core base fragment.
2809	1	Sheep-sized rib fragment.
2812	1	1 large mammal fragment - burnt.
2812	3	Unidentified fragments.
2813	1	Cattle: upper right 4th pre-molar & 1st and 2nd molars.
2813		Horse: matching pair of left and right mandibles - anterior end fragments.
2813	1	Horse: upper right 3rd molar - very heavy wear.
2813	1	Horse: left innominate fragment.
2813	1	Horse: right metacarpal distal end.
2813	1	Horse: upper right 1st 2nd & 3rd molars.
2813	1	Horse: left metatarsal proximal end.
2813	1	Sheep: femur distal end.
2813	1	Sheep, upper left 4th deciduous pre-molar 2nd & 3rd molars.
2813	1	Sheep, upper right 3rd pre-molar & 1st molar (different to previous animal).
2813	1	Large mammal: humerus shaft fragment.
2813	1	Large mammal: mandible fragment.
2813	1	Large mammal: 10 articulating cervical and thoracic vertebrae and 37 other vertebra fragments, 43 rib fragments.
2813	7	Large mammal: shaft fragments.
2813	1	Small sheep-sized or smaller caudal vertebra.
2813	378	Unidentified fragments.
2817	1	Large mammal shaft fragment.
2829	1	Sheep: lower left 3rd molar.
2830	1	Cattle: ?Right horn-core fragment.
2830	1	Cattle: 2nd phalanx fragment.
2830	12	Large mammal: skull fragments.
2830	1	Large mammal: rib fragment.
2830	13	Unidentified fragments.

Context	Count	Description
2835	1	Sheep: upper left 2nd molar.
2835	1	Large mammal vertebra.
2835	4	Unidentified fragments.
2843	1	Cattle: right femur.
2843	1	Cattle: right tibia proximal end.
2843	1	Cattle: left tibia distal end.
2843	1	Cattle: right humerus proximal end.
2843	1	Cattle: right humerus proximal end.
2843	1	Cattle: left humerus distal end.
2843	1	Cattle: right humerus shaft fragment.
2843	1	Cattle: left metacarpal - unfused.
2843	1	Cattle: right scapula fragment.
2843	1	Horse: atlas.
2843	1	Sheep: lower left 2nd molar.
2843	1	Large mammal: cervical vertebra - unfused.
2843	1	Large mammal: sacrum fragment.
2843	6	Large mammal: 6 ?Scapula fragments.
2843	7	Large mammal: 7 shaft fragments.
2843	1	Sheep-sized ?Tibia shaft,
2843	1	Sheep-sized, metapodial shaft.
2843	15	Unidentified fragments.
2847	1	Cattle: right tibia shaft.
2847	1	Large mammal shaft fragment.
2847	2	Unidentified fragment.
2849	1	Cattle metapodial condyle fragment.
2849	1	Sheep-sized right ?Humerus shaft fragment.
2849	2	Unidentified fragments.
2871	2	Unidentified fragments.
2873	1	Horse: upper and lower incisor.
2873	1	Sheep: left mandible fragment from hinge region.
2873	1	Unidentified fragments.
2876	1	Large mammal: mandible fragment.
2876	3	Large mammal: shaft fragments.
2876	2	Large mammal: rib fragments.
2876	1	Sheep-sized: shaft fragment.
2876	1	Sheep-sized: rib fragment.
2876	1	Unidentified fragment.
2889	1	Horse: left metacarpal.
2889	1	Horse: metapodial fragment.
2889	3	Large mammal shaft fragments.
2889	12	Unidentified fragments.
2922	1	Goose: left ulna.
2922	1	Unidentified fragment.
2924	1	Sheep: right metacarpal - unfused.
2926	1	Cattle: left mandible fragment with 3rd molar erupting.
2926	1	Sheep: left tibia shaft.
2926	4	Large mammal skull fragments.
2926	1	Sheep-sized ?Radius shaft fragment.
2926	12	Unidentified fragments.
2927	1	Cattle: left tibia distal end fragment.
2927	1	Cattle:, left innominate fragment.
2927	1	Cattle:, left femur shaft fragment.
2927	11	Large mammal: shaft fragments.
2927	2	Large mammal: rib fragments.
2927	12	Unidentified fragments.
2929	1	Dog: right scapula.
2929	1	Dog: upper left canine tooth.
2929	1	Large mammal femur distal end fragment.
2929	1	Sheep-sized scapula blade fragment.
2929	4	Unidentified fragments.
2930	2	Cattle: right mandible fragments.
2930	2	Cattle: left scapula fragments.
2930	1	Cattle: metapodial epiphysis.
2930	1	Cattle: skull fragment - possible butchery marks.
2930	1	Cattle: upper left 4th pre-molar.
2930	1	Sheep: right scapula fragment, upper right molar.
2930	1	Sheep: upper right molar.
2930	1	Sheep: upper right 4th deciduous, pre-molar 1st and 2nd molars.
2930	1	Large mammal: thoracic vertebra - unfused.

Context	Count	Description
2930	2	Large mammal: scapula blade fragments.
2930	2	Large mammal: shaft fragment.
2930	3	Large mammal: mandible fragments.
2930	1	Sheep-sized shaft fragment.
2930	25	Unidentified fragments.
2931	1	Cattle: upper 3rd molar.
2931	1	Cattle: lower 3rd molar.
2931	2	Sheep: fragments of ?Lower left molars,
2931	1	Sheep: left humerus shaft
2931	1	Horse: incisor.
2931	1	Horse: left innominate fragment.
2931	1	Deer right ulna - distal end.
2931	1	Large mammal: innominate fragment.
2931	2	Large mammal: shaft fragments.
2931	2	Large mammal: rib fragments.
2931	1	Sheep-sized: vertebra fragment.
2931	1	Sheep-sized: shaft fragment.
2931	10	Unidentified fragments.
2936	1	Cattle: right humerus.
2936	1	Cattle: right mandible fragment.
2936	1	Cattle: upper left 2nd molar.
2936	1	Horse: right innominate fragment.
2936	1	Sheep: lower left 2nd molar.
2936	3	Large mammal: shaft fragments.
2936	3	Large mammal: rib fragments.
2936	20	Unidentified fragments.
2940	1	Cattle: left metacarpal - chalky concretion on surface.
2940	1	Horse: articulating Axis and 3rd cervical vertebra - posterior epiphyses unfused.
2940	1	Pig: right maxilla fragment, with molar fairly heavily worn.
2940	1	Sheep-sized shaft fragment.
2940	5	Unidentified fragments.
2942	1	Sheep-sized shaft fragment.
2978	1	Sheep: upper left 4th deciduous pre-molar 1st & 3rd molars.
2978	5	Unidentified fragments.
2985	1	Unidentified rib fragment.
2997	1	Sheep: right parietal fragment.
2998	1	Pig: right maxilla fragment (pm 3,4 m1,2 with moderate wear).

Site 23

Context	Count	Description
3031	1	Sheep metapodial.
3031	1	Unidentified fragment.

Site 28

Context	Count	Description
U/S	1	Cattle: left mandible.
	1	Cattle: right mandible, fragment of hinge region.
	1	Cattle: left ulna fragment.
	1	Cattle: lower left pre-molar.
	1	Cattle: lower right pre-molar.
	1	Horse: upper left molar.
	1	Horse: left innominate fragment.
	1	Sheep: left tibia distal end and shaft.
	14	Large mammal mandible fragments - probably from the cattle mandibles listed above?
	2	Unidentified shaft fragments
1608	1	Large mammal scapula fragment.
1613	1	Pig: right mandible (c. pm 2,3,4, m1).
1613	1	Large mammal thoracic vertebra - unfused.
1613	2	Sheep-sized rib fragments.
1613	13	Unidentified fragments.
1614	1	Cattle: fragment of upper molar.
1614	28	Large mammal: skull or vertebra fragments.
1614	4	Unidentified fragments including 3 small burnt fragments.
1615	1	Pig: right ulna.
1615	1	Sheep: right innominate fragment.

Context	Count	Description
1615	1	Sheep: upper right 4th pre-molar.
1615	24	Unidentified skull fragments, possible from two or more animals.
1619	1	Cattle right scapula blade fragment.
1619	1	Sheep: right mandible.
1619	1	Large mammal: cervical vertebra fragment.
1619	1	Large mammal: rib fragment.
1619	1	Sheep-sized: left humerus shaft.
1619	1	Sheep-sized: ?Radius shaft fragment.
1619	2	Sheep-sized: scapula fragments.
1619	5	Unidentified fragments, including 1 burnt ?rib fragment.
1620	1	Sheep-sized shaft fragment.
1625	1	Cattle: left scapula blade fragment.
1627	1	Pig: left mandible (pm 4 m1,2,3 - m1 heavily worn, m3 moderate wear).
1627	4	Fragments all probably from the pig mandible above but not re-fitting.
1630	1	Cattle: 1st phalanx.
1630	1	Cattle: lower left 4th deciduous pre-molar.
1630	1	Sheep: left scapula fragment - burnt.
1630	1	Sheep: upper right 1st & ?3rd molars.
1630	1	Sheep: lower left 3rd molar.
1630	10	Unidentified fragments, including one with butchery marks.
1632	1	Sheep: right metacarpal fragment.
1632	5	Unidentified sheep-sized fragments.
1633	1	Cattle: left tibia proximal end fragment.
1633	1	Cattle: right calcaneum.
1633	1	Cattle: .upper right 4th deciduous pre-molar.
1633	1	Large mammal shaft fragment.
1633	3	Unidentified fragments.
1638	1	Large mammal vertebra fragment.
1638	1	Unidentified burnt fragment.
1640	1	Unidentified burnt fragment, possibly sheep rib.
1649	1	Sheep: 2nd phalanx.
1651	1	Cattle: right tibia.
1651	1	Cattle: left astragalus fragment.
1651	1	Horse: left scapula blade fragment.
1651	1	Horse: upper 3rd & 4th deciduous pre-molar fragments.
1651	1	Large mammal: long-bone fragment.
1651	1	Large mammal: tarsal bone.
1651	1	Sheep-sized shaft fragment.
1651	17	Unidentified fragments.
1653	12	Unidentified fragments, including 2 burnt.
1655	1	Sheep: right innominate fragment.
1656	1	Cattle: right humerus - unfused epiphyses missing.
1656	1	Cattle: articulating right radius and ulna.
1660	2	Sheep: left mandible, left mandible fragment - both small.
1660	1	Sheep: lower left 2nd molar - probably from a bigger jaw than either of above.
1660	1	Cattle: left scapula blade fragment.
1660	1	Cattle: innominate fragment.
1660	1	Chicken: tarso-metatarsal - no spur.
1660	1	Chicken: 1st pedal phalanx.
1660	1	Large mammal rib fragment.
1660	1	Sheep-sized shaft fragment - burnt.
1660	4	Unidentified burnt fragments.
1660	14	Further unidentified fragments.
1667	1	Cattle: right radius distal end and shaft - unfused.
1667	1	Cattle: upper deciduous pre-molar fragment.
1667	1	Pig: right innominate.
1667	1	Sheep-sized unfused vertebra fragment.
1667	7	Unidentified fragments.
1668	1	Cattle mandible fragment - with butchery marks.
1668	1	Sheep: left mandible.
1668	1	Sheep: atlas - with butchery marks.
1668	4	Sheep-sized skull fragments.
1668	2	Rib fragments.
1668	2	Unidentified fragments.
1671	12	Unidentified burnt fragments.
1672	1	Pig: left mandible (m2, m3 not erupted).
1672	1	Pig: left innominate fragment.
1672	1	Sheep: right mandible fragment
1672	1	Sheep-sized: cervical vertebra - posterior epiphysis unfused.

Context	Count	Description
1672	1	Sheep-sized: skull fragment.
1672	11	Unidentified fragments including one burnt.
1677	1	Cattle: incisor.
1677	1	Large mammal vertebra fragment.
1677	1	Large mammal shaft fragment.
1680	1	Sheep-sized shaft fragment.
1692	1	Sheep lower left 2nd molar.
1692	1	Very small, unfused and incompletely mineralized possible metatarsal shaft from ?neonate lamb.
1692	7	Sheep-sized: skull fragments.
1692	5	Sheep-sized: shaft fragments.
1692	3	Unidentified fragments.
1693	1	Pig: left tibia distal end - recently fused.
1693	1	Sheep: upper right 2nd molar.
1693	1	Large mammal vertebra - unfused.
1693	1	Large mammal long-bone shaft.
1693	1	Unidentified fragment.
2602	1	Cattle: right radius.
2602	1	Cattle: right humerus shaft fragment - possibly from same animal as radius.
2602	1	Cattle: right humerus shaft fragment - larger.
2602	1	Cattle: upper right 1st 2nd & 3rd molars.
2602	1	Cattle: upper left 4th pre-molar & 2nd molar - possibly from the same animal as above.
2602	1	Cattle: upper right 2nd 3rd 4th pre-molars & 1st 2nd 3rd molars.
2602	1	Cattle: upper left 4th pre-molar & 1st molar.
2602	1	Cattle: left scapula fragment, small fragment of horn-core.
2602	16	Large mammal: skull fragments.
2602	1	Large mammal: ?Femur shaft.
2602	1	Large mammal: humerus fragment.
2602	12	Large mammal: fragments of vertebra from at least two bones.
2602	7	Large mammal: shaft fragments.
2602	2	Large mammal: rib fragments.
2602	3	Unidentified shaft fragments including one with butchery marks.
2602	232	Unidentified fragments.
2604	1	Cattle: left scapula fragment.
2604	1	?Deer: right radius proximal end.
2604	1	Large mammal: vertebra fragment.
2604	2	Large mammal: shaft fragments.
2604	1	Large mammal: rib fragment.
2604	13	Unidentified fragments.
2606	1	Cattle: right mandible.
2606	1	Cattle: left metatarsal - large.
2606	2	Horse: upper right molars teeth.
2606	1	Sheep: lower right 3rd molar.
2606	38	Large mammal fragments - most probably from cattle mandible listed above.
2607	1	Horse: right maxilla fragment (pm 2,4 ml,2,3).
2607	1	Horse: upper left 2nd & 3rd pre-molars.
2607	46	Fragments of large mammal skull - probably from horse.
2609	1	Sheep-sized skull fragment.
2609	1	Unidentified burnt fragment.
2610	1	Sheep: metapodial proximal end fragment.
2610	3	Unidentified sheep-sized shaft fragments.
2612	1	Cattle: right metacarpal proximal end.
2612	1	Horse: left humerus distal end.
2612	1	Horse: left radius distal end.
2612	1	Horse: 1st phalanx.
2612	1	Large mammal: ?Right femur shaft fragment.
2612	1	Large mammal: vertebra - fragment of neural spine.
2612	2	Large mammal: shaft fragments.
2612	2	Large mammal: rib fragments.
2612	2	Sheep-sized shaft fragments.
2612	9	Unidentified fragments.
2614	1	Horse: right metacarpal distal end.
2614	1	Large mammal vertebra - neural spine.
2614	1	?Pig: tibia shaft fragment.
2614	1	Sheep-sized rib fragment.
2614	1	Unidentified fragment.
2615	1	Cattle: left scapula blade.
2615	1	Cattle: 1st phalanx;
2615	1	Sheep: right scapula fragment.
2615	1	Small unfused incompletely mineralised sheep-sized femur - with butchery mark.

Context	Count	Description
2617	1	Sheep: right tibia distal fragment.
2617	2	Large mammal: shaft fragments.
2617	1	Large mammal: scapula blade fragment.
2617	1	Sheep-sized shaft fragment
2617	1	Unidentified fragment.
2618	1	Horse: left metatarsal distal end - possible butchery cuts.
2618	1	Horse: right radius - fragmentary but mostly complete.
2621	1	Cattle: left humerus proximal end.
2621	1	Cattle: right metatarsal - with pathological bone growth on shaft.
2621	1	Cattle: left maxilla fragment (m3 and fragments of other teeth).
2621	1	Small unfused incompletely mineralized foetal or neonate ?lamb long-bone fragment.
2621	4	Large mammal rib fragments.
2621	28	Unidentified fragments.
2622	3	Large mammal: fragments of cervical vertebrae - at least 2 unfused.
2622	1	Large mammal: rib fragment.
2622	1	Unidentified fragment.
2624	1	Cattle: left mandible fragment from hinge region.
2624	1	Horse: left humerus condyle fragment.
2624	1	Sheep: left mandible fragment from hinge region.
2624	1	Sheep-sized: cervical vertebra.
2624	2	Sheep-sized: shaft fragments.
2624	1	Sheep-sized: rib fragment.
2624	4	Unidentified fragments.
2625	1	Horse: right radius.
2625	1	Cattle: left mandible.
2625	1	Cattle: scapula fragment.
2625	5	Large mammal shaft fragments.
2625	5	Sheep-sized shaft fragments.
2625	30	Unidentified fragments.
2627	1	Horse: incisor.
2627	1	Unidentified fragment.
2630	1	Sheep: left mandible fragment.
2630	1	Large mammal fragment.
2630	1	Sheep-sized shaft fragment.
2632	1	Fragment possibly from cattle right mandible.
2632	1	Sheep-sized vertebral fragment.
2635	1	Sheep-sized skull fragment, 2 shaft fragments.
2635	2	Sheep-sized shaft fragments.
2635	2	Unidentified fragments.
2643	1	Sheep-sized vertebra centrum.
2643	1	Sheep-sized shaft fragment.
2643	1	Unidentified fragment.
2645	1	Sheep: upper left pre-molar.
2645	1	Cattle: mandible fragment.
2645		Cattle: tooth root fragment.
2645	4	Sheep-sized fragments.
2645	6	Unidentified fragments.
2650	1	Cattle: ?Phalanx fragment - burnt .
2650	1	Sheep: left metacarpal proximal end - burnt.
2650	1	Sheep: ?Phalanx fragment - burnt.
2650	1	?:Pig: left scapula fragment - burnt.
2650	7	Unidentified burnt fragments.
2650	1	Sheep: rib fragment including head.
2650	16	Sheep-sized skull fragments.
2650	1	Sheep-sized rib fragment.
2651	1	Cattle: lower right 1st molar.
2651	1	Sheep: ?Tibia shaft fragment.
2651	1	Sheep: lower right 4th deciduous pre-molar & 1st molar.
2651	1	Small incompletely mineralized fragment of neonate ?lamb long-bone.
2651	4	Large mammal mandible fragment.
2651	2	Burnt sheep-sized rib fragments.
2651	41	Unidentified fragments.
2655	2	Unidentified fragments.
2657	1	Sheep: fragment of molar.
2657	1	Horse: incisor fragment.
2657	1	Large mammal: tibia shaft.
2657	3	Large mammal: shaft fragments.
2657	5	Large mammal: ?Mandible fragments.
2657	4	Sheep-sized shaft fragments.

Context	Count	Description
2657	6	Unidentified fragments.
2658	1	Sheep-sized shaft fragment.
2660	1	Pig: left mandible (pm 2,3,4 m1,2,3 only m1 showing much wear).
2660	1	Pig: right mandible fragment - probably from a different animal.
2660	1	Pig: lower right male canine - probably from mandible listed above.
2660	1	Cattle: left scapula fragment.
2660	1	Cattle: lower left 3rd molar.
2660	1	Large mammal: thoracic vertebra.
2660	1	Large mammal: shaft fragment.
2660	1	?Sheep innominate fragment.
2660	1	Sheep-sized innominate fragment - iliac crest, shaft fragment.
2661	1	Horse: left tibia distal end.
2661	1	Horse: 1st phalanx fragment.
2661	1	Horse: right innominate fragment.
2661	2	Large mammal: fragments of thoracic vertebrae.
2661	2	Large mammal: rib fragments (all above from same horse??).
2661	1	Human parietal bone also found in this context.
2666	1	Cattle: fragment of molar.
2666	2	Unidentified fragments.
2668	1	Horse: left metatarsal distal end.
2668	1	Large mammal jaw fragment.
2668	1	Sheep-sized shaft fragment.
2669	1	Cattle: upper right 2nd pre-molar tooth.
2669	9	Large mammal rib fragments.
2670	1	Cattle right ulna.
2670	4	Large mammal: vertebra fragments.
2670	3	Large mammal: rib fragments.
2670	8	Unidentified fragments.
2675	1	Sheep-sized rib fragment.
2682	1	Sheep: lower right 3rd molar.
2682	1	Sheep: fragments of upper right 2nd molar.
2682	1	Sheep: ?Metacarpal shaft fragment.
2684	1	Sheep: left scapula.
2684	2	Sheep-sized shaft fragments.
2684	1	Sheep-sized scapula blade fragment.
2684	1	Unidentified fragment.
2687	1	Large mammal mandible fragment.
2687	1	Sheep-sized shaft fragment.
2690	1	Cattle: upper right 3rd molar.
2690	4	Unidentified fragments.
2692	1	Cattle: right metacarpal proximal end.
2692	1	Sheep lower left 1st molar.
2692	1	Large mammal vertebra fragment.
2692	1	Sheep-sized shaft fragment.
2692	1	Unidentified fragment.
2694	1	Cattle: right humerus distal end of shaft.
2694	1	Cattle: right metacarpal fragment.
2694	1	Sheep: fragment of molar.
2694	5	Sheep-sized skull fragments.
2696	4	Large mammal: skull fragment.
2696	1	Large mammal: rib fragment.
2697	1	Cattle 3rd (hoof) phalanx.
2697	1	Pig: left mandible fragment (dpm 3,4).
2697	1	Sheep: right tibia distal end.
2697	2	Large mammal: vertebra fragments - one unfused.
2697	1	Large mammal: cranial fragment.
2697	1	Large mammal: tarsal bone.
2697	1	Large mammal: rib fragment.
2697	1	Sheep-sized: mandible fragment.
2697	1	Sheep-sized: shaft fragment.
2697	2	Unidentified fragments.
3128	1	Large mammal rib fragment.
3194	1	Cattle: right carpal bone.
3194	1	Large mammal rib fragment.
3194	1	Sheep-sized shaft fragment.
3194	1	Unidentified fragment.
3185	1	Large mammal thoracic vertebra.
3196	1	Dog: left humerus shaft fragment.
3196	1	?Pig: occipital fragment of skull.

Context	Count	Description
3201	1	Sheep: left mandible fragment.
3201	1	Sheep: lower left molar - not from mandible listed above.
3201	1	Sheep-sized ?Metapodial shaft fragment.
3201	2	Unidentified burnt fragments.
3203	1	Sheep: right mandible.
3203	1	Sheep: lower left 4th deciduous pre-molar - probably same animal as mandible listed above.
3203	1	Cattle: right mandible fragment.
3203	1	Cattle: left mandible fragment.
3203	6	Cattle: mandible fragments probably from same bone as above but not re-fitting.
3203	1	Cattle: lower right 2nd molar.
3203	1	?Deer (or large mammal): left radius proximal end fragment.
3203	1	Large mammal: innominate - fragment of right iliac crest.
3203	2	Large mammal: shaft fragments.
3203	18	Unidentified fragments.

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Context	Count	Description
1745	1	Cattle: articulating right radius proximal end and ulna fragments, with butchery marks.
1745	3	Large mammal shaft fragments.
1745	2	Unidentified fragments.
1758	1	Horse: upper molar.
1765	1	Large mammal rib fragment.

Appendix 12

Environmental archaeology

James Rackham

Environmental Archaeology Assessment: Site 22
*by James Rackham***Introduction**

In construction section 13 of the Steppingley Pipeline, excavation uncovered a Roman settlement west of Stanbridgeford, Bedfordshire. During the excavation of features within the stripped area of the pipeline 21 soil samples were collected for environmental analysis. These ranged in date from deposits of late 1st-early 2nd century to one of 4th century date, and in size from 2.5 litres of sediment up to 20 litres. A range of feature types were sampled including ditch fills, gully fills, pit fills and post-hole fills, although the majority derive from ditches and recut ditches (Table 1).

Table 1 (Site 22): List of samples, context description and phasing

sample	context	description	date	phase	pot residuality?
7000	2760	primary fill of pit 2761	3C	5	large sherds, fresh breaks
7001	2877	fired clay lining of pit 2875	EM2	3	
7002	2901	fill of posthole 2900	EM2	?3	
7003	2880	charcoal lens within intermediate fill 2922 of 2875	EM2	3	
7004	2876	upper fill of pit 2875	EM2	3	
7005	2924	primary fill of ditch 2923	L1-E2	2	fresh breaks
7006	2929	fill of recut ditch 2923, cut 2928	ML2	4	
7007	2820	upper fill of gully 2819		-	
7008	2942	only fill of pit 2941	EM2	?3	
7009	1389	upper fill of recut ditch 1391, cut 1388	ML2	4	
7010	1390	primary fill of recut ditch 1391, cut 1388	ML2	4	
7011	1392	only fill of ditch 1391	L1-E2	2	small sherds, some abraded
7012	2717	intermediate fill of gully 1375	L1-E2	?2	
7013	2753	intermediate fill of ditch 2726	ML2	4	small sherds, some abraded
7014	1321	upper fill of recut ditch 1320, cut 1323	4C	6	medium sized sherds, most fresh
7015	2751	primary fill of ditch 2726	ML2	4	large sherds, many with abraded surface
7016	1317	only fill of ditch 1316		-	
7017	2752	intermediate fill of ditch 2726	ML2	4	mostly fresh, some worn
7018	1365	only fill of ditch 1364	EM2	3	medium sized sherds, fresh, mix of dates
7019	2778	primary fill of recut ditch 2776, cut 2779		??	most abraded, scrappy
7020	2783	primary fill of ditch 2776	EM2	3	some abraded

Methods

The soil samples were processed in the following manner. Sample volume and weight was measured prior to processing. The samples were washed in a 'Siraf' tank (Williams 1973) using a flotation sieve with a 0.5mm mesh and an internal wet-sieve of 1mm mesh for the residue. Both residue and float were dried, and the residues subsequently re-floated to ensure the efficient recovery of charred material. The dry volume of the flots was measured, and the volume and weight of the residue recorded. A total of 266.5 litres of soil was processed in this way.

The residue was sorted by eye, and environmental and archaeological finds picked out, noted on the assessment sheet and bagged independently. A magnet was run through each residue in order to recover magnetised material such as hammerscale and prill. The residue was then discarded. The float of each sample was studied under a low power binocular microscope. The presence of environmental finds (ie snails, charcoal, carbonised seeds, bones etc) was noted and their abundance and species diversity recorded on the assessment sheet. The float was then bagged. The float and finds from the sorted residue constitute the material archive of the samples. The individual components of the samples were then preliminarily identified and the results are detailed below in Tables 2 and 3.

Table 2 (Site 22): Summary of sample size and archaeological finds

sample	context	sample vol. l.	weight in kg	residue vol. ml.	brick/tile in g	fired clay /earth g.*	pottery no./wt	burnt residue	finds	bone weight	comments	date
7000	2760	17	16	300	3	37	4/5			2	Calcareous silt residue	3C
7001	2877	2.5	2	150		4		+		<1	Much burnt clay in res.	EM2
7002	2901	4	3.5	50		11	1/1			1		EM2
7003	2880	5	4.5	250		53	2/6			7		EM2
7004	2876	10	10.5	400				+		3		L1-E2
7005	2924	20	23	800		24	+/49			16		ML2
7006	2929	20	21	1700		31	2/2			5	Large pebble	
7007	2820	20	23	1200		28	1/1		Coin frag	<1	Split stone in res.	EM2
7008	2942	14	12	500			2/4		Wire & corros. Flakes	5		ML2
7009	1389	20	20	800					Iron flake	2		ML2
7010	1390	15	14	300						1		L1-E2
7011	1392	13	12	700	<1					2	Res. largely of chalk	L1-E2
7012	2717	6	5.5	150		6	1/2			2		L1-E2
7013	2753	8	6.5	250	2					2		ML2
7014	1321	15	14.5	1000		38	+/73	+	2 Fe objs, wire Fe corros. Flakes	47		4C
7015	2751	8	9	3000		25	+/7		?corros. flakes	6		ML2
7016	1317	14	13	550		97	3/8	+		5		
7017	2752	12	12	2200		13	7/8			9	pebble	ML2
7018	1365	20	18	1000		34	4/11	+		29		EM2
7019	2778	14	14	600	<1		2/3		Fe corros. flakes	10		
7020	2783	9	8	600		1	4/19			7		EM2

* picked out of the coarse fraction of the residue only. Very small fragments were discarded with the residue.

Table 3 (Site 22): Summary of environmental finds from the samples

sample	cont.	sample vol. l.	flot vol.	char-coal*	snails #	charr'd seed#	char'd grain*	char'd chaff*	mammal	bird *	amphib.*	fish *	marine shell	egg-shell*	comments
7000	2760	17	<1	1	2/2	1/1			Sheep, indet.		1			1	Nutshell
7001	2877	2.5	10	3	2/2	2/2	2	1							
7002	2901	4	55	4	2/2	2/2	3	2	Rodent.		1	1			Barley, oat?
7003	2880	5	250	5	2/3	2/2	3	2	House mouse, indet.		1	1			Barley, stickleback

sample	cont.	sample vol. l.	flot vol.	char-coal*	snails #	charr'd seeds#	char'd grain*	char'd chaff*	mammal	bird *	amphib.*	fish *	marine shell	egg-shell*	comments
7004	2876	10	70	4	3/2	2/2	3	3	Sheep, house mouse, water vole, indet.		1		Cockle		Barley, wheat
7005	2924	20	25	2	3/3	2/2	2		Rodent, indet.	Indet.		1			Barley, oats, nutshell, lots aquatic snails
7006	2929	20	25	2	3/3	2/2	3	3	Sheep, cow, common vole, water vole, indet.		1	1			Barley, wheat
7007	2820	20	15	2	3/3	2/2	3	3	Bank vole, common vole, wood mouse indet.			1	Mussel?	1	Barley, mussel poss freshwater
7008	2942	14	25	4	2/3	2/2	3	3	Indet.						Burnt bone, barley, oat, frags coal
7009	1389	20	35	2	4/3		2	2	Sheep, common vole, indet.		1				Barley, wheat
7010	1390	15	12	2	4/3	2/2	2	3	Indet.		1				Oats, barley lots aquatics
7011	1392	13	10	2	4/3		2	2	Wood mouse, indet.		1	1			Barley, frags coal in flot, lots aquatics
7012	2717	6	10	2	3/3	2/2	2	2	Indet.		1		Oyster		Barley?
7013	2753	8	8	2	3/3		2	2	Wood mouse, indet.		1	1			
7014	1321	15	18	2			2	1	Sheep, cattle, bank vole, common vole.		1		Peri'kle oyster	1	
7015	2751	8	5		2/3	1/1		1	Sheep, common vole			1			
7016	1317	14	30	2	2/2	3/2	3	1	Bank vole, indet.					1	Barley, oat, burnt bone
7017	2752	12	10		3/3	2/2	3	3	Cattle, water vole?, indet.		1			1	Freshwater mussel
7018	1365	20	18	2	3/3	2/3	2	1	Common vole, bank vole, house mouse, indet.		1	1		2	Barley, wheat, freshwater mussel, burnt bone, coal in flot
7019	2778	14	40		5/3	1/1	2		Common vole, bank vole, mole, wood mouse.		2				Stickleback, newt, snake, lots aquatics
7020	2783	9	10		4/3	2/2	2	2	Sheep, wood mouse, common vole, indet.	1	1				

* frequency of items: 1=1-10; 2= 11-100; 3=101-250; 4=251-500; 5=>500

species/diversity: species as above and diversity as follows: 1=1-3; 2=4-10; 3=11-25; 4=26-50 taxa.

Results

The residues of most of the samples were composed of small and medium flint gravel with variable amounts of small rolled chalk nodules. One or two samples had little gravel or chalk (7000 and 7001) and in sample 7012 most of the residue was composed of small rolled chalk nodules. The matrix washed out was largely clay and the site would appear to lie on calcareous slightly gravelly clayey soils lying near the junction of three soil types over alluvium (Fladbury 1 association), chalky drift (Grove association) and Cretaceous and Jurassic clays (Evesham 3 association) (Soils of England and Wales Sheet 4). Occasional pebbles and split stone occurred which are unlikely to occur naturally in these soils. In general the residue caught on the 1mm sieve composed less than 10% of the original sample by volume, however two samples, the primary fill and an intermediate fill of ditch 2726 contained 37.5 and 18.3% coarse sand and flint gravel. The primary fill includes much medium gravel (>7mm diameter) and these two fills suggest that coarse gravel from the bank was being actively re-worked into the ditch fill which could in part be responsible for the abrasion on the pottery (see below).

A brief review of the pottery collected during excavation was available to consider the potential level of residuality in the sampled contexts (see Table 1). Sample sizes did not permit much comment for some of the samples. Some contexts produced large sherds with fresh breaks, and a few with abraded sherds, but only 1365 produced a ceramic assemblage of mixed dates. Three samples from phase 4 fills of ditch 2726 contained abraded sherds, and two from fills of ditch 2776, a recut of the latter containing particularly scrappy pottery. Although the pottery assemblages are not large there is little evidence for reworking.

Three of the samples are at the time of assessment unphased. These are samples 7007 (2820), 7016 (1317) and 7019 (2778).

Archaeological finds

Archaeological finds were not particularly abundant in the samples (Table 2). Occasional tiny fragments of brick or tile were present in four samples, and fired 'earth' and pottery occurred in most. Evidence for burning of the sediment was present in samples 7005 (2924), 7001 (2877), 7018 (1365), 7016 (1317) and 7014 (1321). While 7001 was a sample of a fired clay pit lining, the remainder of these samples derive from ditches and suggest the discard of hearth material as well as other rubbish into the ditches. A few fragments of iron or its corrosion flakes were present in five samples. The only identifiable finds included a fragment of coin from 2942, pieces of very fine wire (not certainly ancient?) in 1389 and 1321, and a probable iron nail in 1321. Animal bone was present in small quantities in most samples, but in none did the quantities suggest large scale dumping of domestic food refuse.

Very small fragments of coal were recovered from the flots and residue of a number of the samples. These are small enough to have travelled down through the soil as a result of soil processes and it is therefore not possible to suggest that coal was used at the site. The absence of cinder fragments or larger pieces suggests in fact that these are likely to be intrusive. All the sample residues were checked with a magnet and although one or two samples yielded magnetised material, possibly suggesting burnt debris in the sediment, no hammscale or prill deriving from iron smithing was found in any.

Environmental finds

Phase 2

The late 1st- early 2nd century AD is represented by only three samples (7005, 7011, 7012). These were taken from ditch fills and are dispersed across the site (see Fig.00). They included carbonised cereals, including barley and oats, quantities of charred cereal chaff and weed seeds. The flots are relatively small and include small quantities of comminuted, largely unidentifiable, charcoal. The animal bone is minimal, although rodent and wood mouse (*Apodemus sylvaticus*) were present. A fragment of oyster (*Ostrea edulis*) was present in 7012 (2717). Snails are abundant in all three samples and it is clear that ditches 2924 and 1392 were water filled and probably permanently, rather than merely seasonally. The terrestrial molluscan fauna suggests a damp habitat and open grassland, but with some individuals more typically found in shaded environments (see below).

Phase 3

The early-mid 2nd century AD is the best represented phase with seven samples. In contrast to the previous phase these samples (six of them) are concentrated within the enclosure at the west end of the site, and in the enclosure ditch. The seventh sample, 7018, derives from a ditch fill at the eastern end of the site and may be associated with the unphased sample 7016, which was taken from a ditch cut immediately to its west. Three

samples (7001, 7003 and 7004) derive from pit 2875 and a fourth (7002) from a post-hole fill at the edge of this pit. All of these samples are rich in charred grain and chaff, although the pit lining has somewhat less than the other contexts. Preliminary identification indicates that barley, with some wheat and oats are present. Charred weed seeds are present and charcoal is more abundant than in any of the other samples, with 7003 - a charcoal lens within the fills, a sample of only 5 litres, producing the largest flot (250 ml) from the site. This is the only context from which substantial numbers of identifiable charcoal fragments have been recovered. Sample 7008, from a pit a few metres to the east of this group is also rich in charred grain and chaff and it seems likely that this area of the site is associated with processing or storage of crop products. The sample from the adjacent enclosure ditch, 2776, has somewhat less charred material although cereal grain and chaff are present. The amount of animal bone in all these contexts is very small and apart from fragments of bones and teeth of sheep all the identifiable material is small mammal, although fragments of amphibian, fish teeth and a small bird ulna are also present. House mouse (*Mus musculus*) is present in two of the contexts from the pit, 2875, and wood mouse and common vole (*Microtus agrestis*) in the enclosure ditch. A fragment of cockle was recovered from pit 2875, and also a stickleback (*Gasterosteus aculeatus*) spine.

The sample from this phase from the eastern end of the site, 7018 (1365), has charred grain of barley and wheat, with a little chaff, and a few weed seeds. The bone finds include burnt mammal bone fragments and bones of common vole, bank vole (*Clethrionomys glareolus*) and house mouse, amphibian and fish teeth. This deposit also produced a number of fragments of bird eggshell.

The mollusc fauna is abundant in three of the samples and the terrestrial suite from this phase continues to suggest damp habitats and an open grassland, with a few shells of species associated with more shaded, or even wooded, environments. Aquatic species are common, even in pit 2875 within the enclosure, although only within the intermediate and upper fills. The ditch samples 7020 (2783) and 7018 (1365) both include many aquatic snails, and the latter has freshwater mussels suggesting that this ditch at least contained permanent, possibly intermittently flowing, water (Ellis 1978).

Phase 4

The mid-late 2nd century phase is represented by six samples. These all derive from ditch fills and the fills of ditch recuts (Fig.00). The only groups are a sequence of samples from the fills of ditch 2726, and two samples from the fills of a recut of ditch 1391. Charred cereal grain and chaff is present in most of these, being particularly abundant in 7006 (2929) and 7017 (2752), with chaff as abundant or more abundant than grain in three of the samples. Preliminary identification indicates that barley, wheat and oats are present. Small quantities of charred weed seeds and relatively small quantities of comminuted charcoal comprise the remainder of the flot. Animal bone is again not very abundant although fragments of sheep and cattle have been identified, and small animals are represented by bones of common vole, water vole (*Arvicola terrestris*), wood mouse, amphibian and fish teeth.

The molluscan evidence continues to indicate that the ditches are water filled, with the intermediate fill of ditch 2726 producing freshwater mussels. The terrestrial suite is similar to that obtained from samples from the earlier phases and suggests that there has been little or no change in the local environment of the site.

Phase 5

Only one sample has been recovered from 3rd century deposits. This, 7000 (2760), derives from the primary fill of a pit in the centre of the site. Environmental finds are relatively uncommon in this sample with only small quantities of charcoal and charred seeds being recovered, including hazelnut shell. Vertebrate remains are represented by fragments of sheep, amphibian and bird eggshell. Even the molluscan fauna is small, including a few aquatics individuals as well as a typically grassland fauna.

Phase 6

Only a single sample has been assigned to the 4th century AD. This, 7014 (1321) is the upper fill of recut ditch 1320. This sample produced a few charred cereal grains and fragments of chaff, a little charcoal and bones of sheep, cattle, bank vole, common vole and amphibian. Other finds included a few fragments of bird eggshell, a shell of periwinkle (*Littorina littorea*) and oyster. This sample is the only one from the site that exhibits what might be considered a typical domestic rubbish assemblage, being relatively rich in pottery and bone, and including small finds.

The unphased samples, 7007, 7016 and 7019 show very similar assemblages to those considered above. 7007 (2820), the upper fill of gully 2819 is particularly rich in charred cereal grain and chaff, while 7016 (1317), the fill of ditch 1316, is rich in charred grain and weed seeds. The flot of sample 7019 (2778), the fill of a recut of ditch 2779, is dominated by aquatic snails, and includes a rich small vertebrate fauna of common vole, bank vole, wood mouse, frog, newt and snake.

The charred plant remains

The charred material deserves individual treatment. Many of the samples include many charred cereal grains and chaff fragments and in addition other charred seeds. These samples are all relatively rich and the presence of large quantities of chaff in many samples suggests that many of the deposits may include material from crop processing activities, and that these activities, or the burning of the waste from them, was taking place within, or adjacent to, the areas of the site that were excavated. The western end of the site appears to have been a focus for such activity during the early-mid 2nd century. From this one might infer at this stage of analysis that the site is an agricultural producer site (Jones 1985) although without specific identification of the cereals as either free-threshing or glume wheats such a conclusion may be premature (Van der Veen 1992).

The molluscan remains

The chalky character of much of the soil has resulted in the excellent survival of snails in the sediments, and apart from one sample snails are common or abundant, and include a relatively high diversity of species, with many aquatics. The latter give some indication of the conditions prevalent in the ditches at the site throughout most of the period of Roman occupation. Shells of *Vallonia* sp., *Carychium* sp. and *Pupilla muscorum* are the most abundant terrestrial snails. These genera and species are characteristic of open grassland habitats. Individuals of fairly catholic species and genera such as *Cochlicopa* sp., *Hygromia hispida*, *Succinea* sp., *Punctum pygmaeum* are also present, with a few shells only of the Zonitoides which tend to prefer shaded habitats. There is little indication of change in the suite of species throughout the history of the site but it would be necessary to quantify the species to confirm this.

Among the aquatics members of the genus *Planorbis* spp. are very abundant, some samples have numerous shells of the small bivalve *Pisidium* spp., and the gastropods *Lymnea peregra*, *Valvata piscinalis*, and others also occur. In two samples shells of the large Unionidae occur. This abundance of aquatic shells suggests that many of the ditches may have carried permanent water and some species suggest that this may have been flowing, although a more confident picture could be obtained through detailed analysis of the shells.

Other remains

There is little evidence of food debris in the samples if the cereals remains are seen as associated with crop processing activities. Fragments of nutshell, a few very fragmented pieces of bone, including cattle and sheep bones, and rare fragments of oyster and periwinkle - testimony at least to some long distance transport of food, and a few small pieces of bird eggshell (probably chicken although not identified) are the only indications of 'domestic rubbish'.

There is greater evidence of the natural environment in the form of bones of rodents, reptiles, amphibians and fish in addition to the molluscs discussed above. The house mice indicate that there are structures nearby since this species does not generally survive outdoors. The common vole, bank vole, wood mouse and water vole suggest a mixture of habitats since they are normally associated with grassland, scrub and hedgerows, woodland and water respectively, but in this context they may all have been attracted by a plentiful supply of grain. The reptile, amphibian and fish would have found a ready habitat in the ditches, although apart from the stickleback most of the fish remains are teeth, some of which might well be fossilised material that derives from the chalk.

Potential and Recommendations

Two elements of the environmental data from these samples deserve further study.

The charred plant remains afford an opportunity to consider the nature of the activities taking place at this site through phases 2-4, late 1st century to mid-late 2nd century AD. A detailed analysis of the charred material would be required to determine the nature of the activities that produced the assemblages before their burning, and establish whether the site can be viewed as a producer or consumer site. The charred weed assemblages besides contributing to these objectives may also give a clue to the soils being cultivated. Certainly if the calcareous soils around the site are those upon which the cereals are being cultivated then the weed flora can be expected to yield those arable weeds characteristically found on such soils, otherwise a different suite of arable

weeds may be present. Both alluvial soils and the soils on the Jurassic and Cretaceous clays are available in the immediate vicinity. The types of cereal being grown may also reflect changes in agricultural practice, for instance Jones (1984) suggesting that the switch to spelt wheat is associated with agricultural expansion. Furthermore the oats may be the wild rather than cultivated species.

The analyses of the assemblages from individual samples can therefore potentially yield specific information on the function or activities associated with or nearby these features, while a broader consideration of the assemblages across phases 2-4 may reflect a general agricultural stasis or illustrate changes in crop types, soils under cultivation, or different activities taking place on the site. The dispersed nature of the samples along the line of the pipeline indicates that although there is little evidence for re-working of deposits from the pottery, there is also very little likelihood that the assemblages from individual samples could have been effected by re-working of charred remains from sampled deposits of earlier phases, a particular problem when charred remains are abundant.

The most abundant environmental remains from the samples are the molluscs. These suggest a fairly uniform species suite throughout the history of the site and afford the only evidence from which a broader environmental picture can be constructed. It is unnecessary to study all the samples in detail since a number of samples have been assigned to each phase. It may have been more appropriate to take columns of samples through the ditch fills of different periods in order to consider the environmental history of the site, but in the absence of these a selection of mollusc rich samples from ditches of each period should suffice. In fact sequences of individual ditches and their recuts have been taken, for instance ditch 1391 (fill, primary fill of recut, and upper fill of recut), ditch 2726 (primary fill, and two intermediate fills), ditch 2776 (primary fill, and primary fill of recut), and even a sequence through pit 2875 (lining, intermediate fill, upper fill). While these do not permit the definition of a longer and more detailed sequence they should give a clear indication of both changes in the immediate environment of the site, and the aquatic conditions within the ditches. This may be of some interest since permanently water filled ditches would suggest a high watertable at the time of the Roman occupation.

Conclusions

The samples show only limited concentrations of what might be termed 'domestic debris' with small quantities of fragmented and burnt animal bone, a very few fragments of bird eggshell and edible marine mollusc, limited quantities of charcoal, and not much pottery, although a few grammes of fired 'earth' are present in most samples. In contrast there are relatively large, by comparison with many sites, quantities of burnt waste that might be associated with crop processing activities in most of the samples, which could also explain the presence of fired earth. The frequent presence of small rodents does not suggest an intensively occupied area although these animals, including the house mouse, could have been attracted by the availability of grain.

The environmental context would appear to be an open grassland with waterfilled ditches containing numerous aquatic molluscs and sticklebacks, and affording good cover for frogs, newts, snakes and water voles. Suitable banks and hedges may have been present to afford cover for bank voles and wood mice, and those snails that favour shaded environments.

The charred plant remains from the samples comprise an important assemblage and should be studied in detail, while the molluscs may record evidence of change or stasis in the local environment and watertable on the site.

Environmental Archaeology Assessment: Site 28*by James Rackham***Introduction**

In construction section 16 of the Steppingley Pipeline two plots, 125 and 126 uncovered evidence of Late Iron Age and Roman settlement south east of Tilsforth, Bedfordshire. During the excavation of features within the stripped area of the pipeline 29 soil samples were collected for environmental analysis. These ranged in date from deposits of late Iron Age to those of 2nd century AD date, and in size from 1.9 litres of sediment up to 17 litres. The samples all derive from ditch fills and pits (Table 1). Two samples, 8020 and 8021 were not received and are not reported here.

Table 1 (Site 28): List of samples, context description and phasing

sample	context	description	date
8000	2609	upper fill of pit 2608	M1-E2
8001	2610	intermediate fill of pit 2608	ML1+
8002	2629	intermediate fill of pit 2628	-
8003	2630	upper fill of pit 2628	ML1
8004	3107	primary lining of pit 2608	-
8005	3108	primary lining of pit 2628	-
8006	2614	upper fill of recut of ditch 2616	L1-E2
8007	2615	primary fill of recut of ditch 2616	EM2
8008	2617	upper fill of ditch 2616	1-2C
8009	2604	upper fill of recut of ditch 2605	2C+
8010	2622	intermediate fill of recut of ditch 2605	1-2C
8011	2638	primary fill of recut of ditch 2605	-
8012	2622	intermediate fill of recut of ditch 2605	-
8013	1619	upper fill of ditch 1618	ML1-E2
8014	1663	upper fill of ditch 1650	LIA-M1
8015	1693	intermediate fill of pit	1C
8016	2604	upper fill of recut of ditch 2605	2C+
8017	2604	upper fill of recut of ditch 2605	2C+
8018	2604	upper fill of recut of ditch 2605	2C+
8019	1633	primary fill of ditch 1631	-
8020	1684	primary fill of ditch 1683	1-2C
8021	1671	intermediate fill of pit 1669	LIA-M1
9015	3197	lower fill of enclosure ditch 3193, natural accumulation	
9016	3197	lower fill of enclosure ditch 3193, natural accumulation	
9017	3196	lower fill of enclosure ditch 3193, natural accumulation	
9018	3195	upper central fill of enclosure ditch 3193, nat. accum.	
9019	3195	upper central fill of enclosure ditch 3193, nat. accum.	
9020	3195	upper central fill of enclosure ditch 3193, nat. accum.	
9021	3195	upper central fill of enclosure ditch 3193, nat. accum.	

Methods

The soil samples were processed in the following manner. Sample volume and weight was measured prior to processing. The samples were washed in a 'Siraf' tank (Williams 1973) using a flotation sieve with a 0.5mm mesh and an internal wet-sieve of 1mm mesh for the residue. Both residue and float were dried, and the residues subsequently re-floated to ensure the efficient recovery of charred material. The dry volume of the flots was measured, and the volume and weight of the residue recorded. A total of 189.2 litres of soil was processed in this way.

The residue was sorted by eye, and environmental and archaeological finds picked out, noted on the assessment sheet and bagged independently. A magnet was run through each residue in order to recover magnetised material such as hammerscale and prill. The residue was then discarded. The float of each sample was studied under a low power binocular microscope. The presence of environmental finds (ie snails, charcoal, carbonised seeds, bones etc) was noted and their abundance and species diversity recorded on the assessment sheet. The float was then bagged. The float and finds from the sorted residue constitute the material archive of the samples.

Table 2 (Site 28): Summary of sample size and archaeological finds

sample	context	sample vol. l.	weight in kg	residue vol. ml.	brick/ tile in g	fired clay /earth g.*	pottery no./wt	burnt residue	finds	bone weight	comments
8000	2609	10	8	450		5	4/5	+		36	
8001	2610	11	11	550		53	2/3	\$		2	
8002	2629	10	9	350			1/3	\$		8	
8003	2630	8	7.5	400			12/46	+		12	firecracked pebbles
8004	3107	5	7	2500		105	nc/126	+		1	firecracked pebbles
8005	3108	14	13.5	4000				+		<1	firecracked pebbles
8006	2614	15	15	800		44	7/13	+		6	
8007	2615	12	10	800		26	1/2	+		4	
8008	2617	9	7	350		4		+		<1	
8009	2604	17	20	800			2/1	\$	1 flake hammerscale	30	
8010	2622	11	10.5	850				\$	tiny frag wire	6	
8011	2638	2.2	2.55	150				+		2	
8012	2622	2.2	2.35	175						<1	
8013	1619	14	14	300		4	8/13	\$		6	
8014	1663	13	13	400		41	2/1	+		11	
8015	1693	15	15	1000			nc/20	+		108	firecracked stone
8016	2604	2.2	2.43	100			1/3	\$		1	
8017	2604	2	2.3	75			2/<1	\$	1 flake hammerscale?	2	
8018	2604	2	2.2	50						2	
8019	1633	21									
9015	3197	1.9	1.9	20						<1	
9016	3197	21		25						<1	
9017	3196	2.2	2.35	100					1 spheroid ham'scale	1	
9018	3195	21		140						3	
9019	3195	2.5	2.8	120						1	
9020	3195	2	2.3	200			1/1			<1	abraded Roman pot
9021	3195	21		110			1/<1			<1	abraded Roman pot

* picked out of the coarse fraction of the residue only. Very small fragments were discarded with the residue.

\$ - samples which produced reddened magnetised material probably caused by burning.

nc - not counted, includes many small crumbs

! - record of sample volume and weight lost- approximate volume 2 litres

Table 3 (Site 28): Summary of environmental finds from the samples

sample	cont.	sample vol. l.	flot vol.	char-coal*	snails #	charr'd seeds#	char'd grain*	char'd chaff*	mammal	bird *	amphi bian*	fish *	egg-shell*	comments
8000	2609	10	3		2/2	1/1	2		lamb, indet, mouse		1	1		burnt bone, barley, wheat?
8001	2610	11	2		2/2	2/2	1		rodent, indet.					
8002	2629	10	4		2/2	2/2	2		sheep, indet, common shrew			1		oat, barley
8003	2630	8	4		2/2	2/2	2		indet, wood mouse		1	1		burnt bone, aquatic molluscs incl bivalves
8004	3107	5	<1		2/2				indet, wood mouse					bone mostly burnt, aquatic molluscs most abundant
8005	3108	14	1		2/2	1/1	1		indet		1			fish tooth (fossil)
8006	2614	15	5	2	2/3	2/2	2	1	sheep, indet, bank vole, common shrew		1	1		wheat, barley, grasses, bone mostly burnt
8007	2615	12	55		2/2	4/3	5	5	indet, wood mouse					barley, wheat, oat, grasses, burnt bone, flot mainly weed seeds, chaff and grain
8008	2617	9	195	2	2/2	4/3	5+	5+	indet		1			barley, wheat, oat, burnt bone, flot mainly weed seeds, chaff and grain
8009	2604	17	20	1	4/3		1		cattle, indet, mouse, rodent		2			frog, newt, aquatic molluscs abundant
8010	2622	11	2	1	2/2	1/1	1		cattle, indet, common vole, mouse	1	1	1		bird ulna-chicken size
8011	2638	2.2	<1	1	1/2	1/1	1	1	indet					possible legume?
8012	2622	2.2	1	1	2/2	1/1			shrew		1			
8013	1619	14	1		2/2	2/2	2	1	neonatal lamb, indet, poss. human?, rodent		1		1	barley, oat, grasses, burnt bone
8014	1663	13	2		2/2	1/1	1		sheep, indet, vole, wood mouse		1			burnt bone, tiny fish vertebra, flot mainly snails, lots of aquatics
8015	1693	15	3	1	2/2	1/1	1		pig, cattle, wood mouse, house mouse, bank vole, common vole		2	1	1	barley, frog, newt
8016	2604	2.2	10	1	3/3	2/2	1	2	indet		1			wheat
8017	2604	2	5		3/3	1/1	1		indet		1			flot mainly snails, mostly aquatics
8018	2604	2	2	1	3/2	1/1	1		indet		1			one grain, frog, newt, snails mainly aquatics
8019	1633		2	1	3/2	2/2	1							barley
9015	3197	1.9	1	1	2/2						1			uncharr'd elder seeds, lots of ostracods, aquatic snails more common than terrestrial

sample	cont.	sample vol. l.	flot vol.	char-coal*	snails #	charr'd seeds#	char'd grain*	char'd chaff*	mammal	bird *	amphibian*	fish *	egg-shell*	comments
9016	3197		3	1	2/2							1		very many Chara 'seeds', very small fish vertebra, tufa
9017	3196	2.2	5	1	3/3				indet, rodent	1	2		1	frog, newt, many elder and Chara seeds, many ostracods, song bird humerus frag
9018	3195		5	1	3/3	1/1	1	1	indet, wood mouse, water vole, rodent		2			lots uncharred Juncus, many ostracods, frog, newt, snake
9019	3195	2.5	4		3/3		1		indet, pygmy shrew, bank vole?, house mouse, wood mouse	1	2	1		frog, newt, small bird vertebra, very small fish vertebra, many uncharred Juncus seeds and ostracods, lots aquatic snails
9020	3195	2	2	1	2/3				indet, rodent		1	1	1	many ostracods, uncharred Juncus seeds, fish tooth-prob fossil
9021	3195		2	1	2/2				indet, vole		2			many ostracods, newt, frog, snake?, many uncharred Juncus seeds, tufa in residue

* frequency of items: 1=1-10; 2= 11-100; 3=101-250; 4=251-500; 5=>500
species/diversity: species as above and diversity as follows: 1=1-3; 2=4-10; 3=11-25; 4=26-50 taxa.

Table 4 (Site 28): Summary of artefacts recovered from the samples

sample	context	sample vol. l.	weigh t in kg	residue vol. ml.	brick/ tile in g	fired clay /earth g.*	pottery no./wt	burnt residue	finds	bone weight	comments
8014	1663	13	13	400		41	2/1	+		11	
8000	2609	10	8	450		5	4/5	+		36	
8001	2610	11	11	550		53	2/3	\$		2	
8004	3107	5	7	2500		105	nc/126	+		1	firecracked pebbles
8003	2630	8	7.5	400			12/46	+		12	firecracked pebbles
8002	2629	10	9	350			1/3	\$		8	
8005	3108	14	13.5	4000				+		<1	firecracked pebbles
8015	1693	15	15	1000			nc/20	+		108	firecracked stone
8019	1633	2!									
8008	2617	9	7	350		4		+		<1	
8016	2604	2.2	2.43	100			1/3	\$		1	
8017	2604	2	2.3	75			2/<1	\$	1 flake hammerscale?	2	
8018	2604	2	2.2	50						2	
8009	2604	17	20	800			2/1	\$	1 flake hammerscale	30	
8010	2622	11	10.5	850				\$	tiny frag wire	6	

sample	context	sample vol. l.	weigh t in kg	residue vol. ml.	brick/ tile in g	fired clay /earth g.*	pottery no./wt	burnt residue	finds	bone weight	comments
8012	2622	2.2	2.35	175						<1	
8011	2638	2.2	2.55	150				+		2	
9015	3197	1.9	1.9	20						<1	
9016	3197	2!		25						<1	
9017	3196	2.2	2.35	100					1 spheroid ham'scale	1	
9018	3195	2!		140						3	
9019	3195	2.5	2.8	120						1	
9020	3195	2	2.3	200						<1	abraded Roman pot
9021	3195	2!		110						<1	abraded Roman pot
8013	1619	14	14	300		4		\$		6	
8006	2614	15	15	800		44		+		6	
8007	2615	12	10	800		26				4	

The individual components of the samples were then preliminarily identified and the results are detailed below in Tables 2 and 3. Sub-samples were retained from the fills of ditch 3193 but it was felt that the clearly calcareous nature of the samples and the lack of any significant organic remains would have mitigated against the good survival of pollen so no pollen assessment was carried out.

Results

The residue of most of the samples is composed of small flint gravel and coarse sand, with occasional pebbles up to 7cm diameter and in some samples a little chalk. Variable amounts of concreted sediment were present and occasional firecracked pebbles up to 7 cm in diameter. Two samples (8004 and 8005), the linings of pits 2608 and 2628 respectively, contained abundant pebbles up to 10cm diameter, some with evidence of burning, as well as medium flint gravel and coarse sand, indicating a pebble lining. The residue caught on the 1mm sieve comprised less than 10% of the sample in all cases except these pit linings. The matrix washed out was largely silty clay and the site lies on soils of the Hanslope association over chalky till (Soils of England and Wales Sheet 4). The fills of ditch 3193 include tufa and indicate that, in this ditch at least, the water was calcareous.

A few uncharred plant remains occur in a number of samples. These tend to be robust seeds such as those of elder or goosefoots and may be intrusive (Keepax 1977). They have been excluded from Table 3 below.

Phase 1

The late Iron Age to mid- 1st century AD is represented by a single sample from the upper fill of ditch 1618 at the western end of the site (Fig.00). This sample produced a little fired clay, 2 small sherds of pottery, a few grammes of animal bone and the residue showed evidence of burning. The environmental evidence for occupation is indicated by only very small quantities of charred material (Table 3) including a few fragments of grain and weed seeds, some burnt bone and fragments of sheep femur and innominate. The palaeoenvironmental evidence is dominated by molluscs of aquatic habit, and includes a few shells of terrestrial species associated with grassland (see below), and bones of small fish, amphibian, vole and wood mouse (*Apodemus sylvaticus*).

Phase 2

The mid-late 1st century AD is represented by a group of samples (8000-8005) from two pits (2608 and 2628) at the eastern end of the site (Fig.00), a sample from the intermediate fill (1693) of pit 1691 at the western end of the site, and the primary fill of ditch 1631 also at the western end.

The base of pit 2608 appears to have been lined with pebbles and subjected to some firing, both firecracked pebbles and fired clay and residue being present. The >1mm residue of the upper fill (2609) is also composed largely of fired sediment although little of this was large enough to warrant picking out. The base of pit 2628 also appears to have been lined with pebbles although, despite the presence of firecracked stone, there is less evidence of burning. Small quantities of bone and pottery were recovered from the fills of both pits. Despite the evidence of firing there was little charred material in any of the fills. Charred grain and weed seeds were present in small quantities, burnt and unburnt bone, including fragments of lamb and sheep, and a few fragments of eggshell. The palaeoenvironmental evidence is equally limited. Molluscs are common throughout the fills and include many aquatic shells, suggesting either flooding or waterlogging of the pits, redeposition of sediments from adjacent ditches and/or incorporation of vegetation collected from the ditches. The terrestrial component of the snail fauna appears to be dominated by grassland taxa (see below). Small vertebrates are represented by bones of wood mouse, amphibian and teeth of fish, although the latter are almost certainly fossil in origin.

The fill of pit 1691 (8015) at the western end of the site includes a number of larger stones, including firecracked pebbles, burnt material in the residue, and fragments of pottery and a relatively large sample of bone, including fragments of pig and cattle. Small quantities of charred seeds and cereal grain are present and a little charcoal. The palaeoenvironmental data is limited to a terrestrial snail fauna, suggesting a grassland habitat, with bones of house mouse (*Mus musculus*), wood mouse, bank vole (*Clethrionomys glareolus*), common vole (*Microtus agrestis*) and amphibian, including newt. This sample is the one that most closely approaches what might be termed 'domestic debris' with house mouse present, bones of domestic animals, bird eggshell, pottery, a few charred seeds and cereal grains, firecracked pebbles and other evidence of burning. However the flint volume and charcoal content is low.

The small sample from ditch 1631 has very little archaeological material in it, just a few charred seeds and the odd cereal grain, although the snail fauna is a little richer and includes numerous aquatic molluscs.

Phase 3

The late 1st to early 2nd century contexts are limited to an extended sequence in the recut of ditch 2605 (8016-18, 8009-12) at the eastern end of the site (Fig.00), a single sample from the upper fill of ditch 2616 (8008) which is later recut in phase 5 (see Fig.00) and a sequence of small samples from the fills of enclosure ditch 3193 (9015-9021) which were thought to have accumulated naturally.

Sample 8008 (2617) from ditch 2616 while lacking in finds (Table 2) contains the richest charred plant assemblage from the site. The 195 ml of flot is almost entirely composed of charred cereal grain, chaff and weed seeds, although charcoal fragments are more abundant than elsewhere on site. The cereals include grains of wheat, barley and oat, but no further identification has been made at this stage of the project. A limited snail fauna including *Vallonia* sp. and *Hygromia hispida* is the only other evidence from the sample. This corner of the ditch appears to contain large quantities of waste from crop processing or accidental burning of un- or part processed crops. More precise interpretation requires a detailed study of the assemblage.

The sequence of samples from the recut of ditch 2605 is not particularly rich in archaeological debris. A few sherds of pottery were recovered, there is some evidence for burning, apart from one sample bone is infrequent, and a tiny fragment of wire (filigree size) and two flakes of hammerstone represent most of the small finds from the samples. Small quantities of charcoal occur throughout, with a few charred seeds, grain and in two samples some chaff. Cattle and possibly chicken have been identified from the larger bone fragments. The ditch contains the richest sequence of samples for palaeoenvironmental evidence. Snails are abundant in the upper fills of the recut, 2604, and are dominated by shells of aquatic species. Vertebrates include common vole, mouse, shrew, frog and newt, while the only fish remains, teeth, again suggest fossil material.

The fills in ditch 3193 have very little archaeological material. Samples of the upper fills (9021 and 9020 - 3195) contain one sherd of pottery each and little other indication of settlement activity. Very small quantities of charcoal are present and a few charred seeds, one or two cereal grains and a couple of fragments of chaff were recovered from the upper central fills (9018 and 9019). This material is in such low density that it suggests 'background' material that may have been blowing around the site, or even being reworked. The palaeoenvironmental data indicates that all the fills were waterlain, with ostracods (aquatic shelled crustaceans), aquatic molluscs, and oospores of the freshwater algae *Chara* sp. (stoneworts) being common, although the upper levels have fewer *Chara* and more, partially calcified, seeds of *Juncus* sp. suggesting a marshy rather than wet habitat at this level, although ostracods are still frequent. The vertebrate fauna includes bones of very small fish, and fragments of newt, frog, snake, water vole (*Arvicola terrestris*), wood mouse, bank vole(?), pygmy shrew (*Sorex minutus*) and an unidentified song bird. Tufa is present in the fills indicating that the water is calcareous. Apart from the upper fills there is very little evidence of human activity and the fauna and flora suggest a 'natural' watercourse.

Phase 4

The only sample from the late 1st to early 2nd century phase is the upper fill of ditch 1618 at the western end of the site (see Fig.00). This contained a little fired clay, a few sherds of pottery, a few grammes of animal bone, including a fragment of neonatal lamb and burnt bone, and some bird eggshell. The flot is very small (Table 3) although it contains a number of charred seeds, cereal grains and chaff. The palaeoenvironmental data is limited including a few snails and bones of amphibian.

Phase 5

The two samples assigned to the early to middle 2nd century AD derive from the fills of a recut of ditch 2616. These included fired clay, pottery sherds and a few grammes of bone, but are dominated by charred plant remains. The primary fill, 2615, is extremely rich in charred seeds, grain and chaff, which suggests that this may have been re-worked from the even richer fills of the earlier phase 3 ditch. Grain and chaff is also present in the upper fill (2614) suggesting that even this deposit may include re-worked material although it is possible that similar activities are taking place in this part of the site and generating similar assemblages to those of phase 3! It may be possible to answer this question by detailed study of the charred assemblages from each of the fills. The palaeoenvironmental evidence is again limited to relatively small samples of snails suggesting a grassland type of habitat, with some aquatic species also present, and bones of wood mouse, bank vole, common shrew and amphibian.

Discussion**Charred plant remains**

In general the charred plant remains might be described as 'background' material. They occur in small quantities only, are composed of charred weed seeds with occasional cereal grain and rare chaff fragments and are typical of the material that might 'blow', or otherwise move, around an occupation site. It is not in a primary context and indicates only the presence of the species represented and perhaps the general frequency of cereal types, which include wheat, barley and oats but have not been identified further.

In contrast to this general picture the fills of ditch 2616 and its recut 2613 clearly suggest a primary or secondary context for debris resulting from the burning of crop processing waste or an accidental fire, and probably indicate that processing or storage of crop and crop products occurred nearby. These samples afford an interesting comparison to those of similar date from Plot 113 a few miles west (Rackham 1998).

Molluscan evidence

The mollusc remains from the site are less abundant than those from Plot 113, and the aquatic species appear to reflect a somewhat different environment. The most abundant terrestrial genera and species are *Vallonia* sp., *Carychium* sp., *Pupilla muscorum* and *Hygromia hispida* suggesting a calcareous grassland environment (Cameron and Redfern 1976; Evans 1972), with shells of *Cochlicopa* sp., *Helicella* sp., *Succinea* sp., *Truncatellina* sp., *Vertigo* sp., *Punctum pygmaeum* and *Zonitoides* occurring sporadically and indicating wetland and shaded habitats in addition to grassland. *Ceciliodes acicula*, a burrowing snail, thought to be a recent introduction (Evans 1972), is present in a number of samples.

The abundance of shells of aquatic species, even in the upper fills of ditches and pits suggests that the area was prone to floods or had a high water table. Few of these shells have been specifically identified at this stage of the project. The most abundant are members of the genus *Planorbis*. Shells of the bivalves *Pisidium* sp. (Ellis 1978) are present in pit 2628, while those of *Lymnaea* sp. occur in many samples, including *L. palustris* which is typical of marshes and small ditches where water is flowing or stagnant (Macan 1977).

Other remains

Further evidence of the aquatic conditions under which many of the sediments formed is given by the presence of tufa, ostracods, *Chara* sp. oospores and calcified seeds of *Juncus* sp., particularly in enclosure ditch 3193. One or two fragments of non-fossilised small fish and bones of newt are further indications of the wetness of the ditches throughout their depositional history.

The small mammal fauna of wood mouse, common vole, bank vole, water vole, common shrew and pygmy shrew suggest a variety of habitats including grassland, and well shaded areas such as hedgerows or ditch banks. A range of habitats that would also suit the snake, although it has not been specifically identified.

The evidence for nearby occupation is very limited in the samples. The presence of house mouse suggests buildings nearby but in general the quantities of 'domestic' debris such as pottery, domestic animal bone and small finds is very low, and do not match the densities that might be expected from 'rubbish' deposits. The only small finds include a single piece of very fine wire and two flakes and a spheroid of hammerstone, the latter indicating iron smithing somewhere, but fairly remote from the sampled deposits. The relatively common evidence for burning, particularly the firecracked pebbles in some deposits, may be associated with disposal of agricultural waste rather than domestic fires. The character of the lining and evidence for burning in pits 2608 and 2628, in conjunction with fragments from a single pot in 2608, suggests a functionally specific use for these features although what this is is not clear. If it had been associated with crop processing one might have expected much more cereal evidence than was present.

Potential and recommendations

This site contrasts with that at Plot 113 in that it has produced less material, less evidence for occupation debris, less evidence for agricultural activity and a generally smaller amount of palaeoenvironmental data. The potential for further work is therefore more limited. Apart from the two samples from ditch 2616 little, except species presence and the types of cereals, can be expected from the charred plant remains. The two rich samples, however, should be studied to check initially for re-working from phase 3 to phase 5 sediments, or a re-assessment of the fill sequence; secondly, to establish whether it is crop processing waste - and at what stage of processing, or accidental destruction; and finally to compare the assemblage with those from contemporary

samples on the Roman site at Plot 113. The weed species component of these samples may indicate whether or not a similar soil type was under cultivation at this site (Van der Veen 1992).

There may be a slight difference in the aquatic fauna at this site by comparison to that at Plot 113 although the terrestrial suite appears very similar. Samples from ditch deposits of each phase, particularly the sequences in ditches 2605 and 3193 would justify study to ascertain changes in the level and character of the water in the ditches, and the character of the surrounding landscape and the molluscs from the pits may be interpretable in terms of evidence for flooding. Within this context the plant and ostracod assemblages from ditch 3193 may also warrant further work.

Conclusions

The site probably lay in an open grassland environment with a high watertable and initially calcareous conditions within the aquatic environment of the ditches. There was little evidence for domestic occupation in the immediate vicinity although a low level of domestic debris does occur across the site.

Crop processing activities are suggested within the enclosure of ditch 2616 at the south-east corner in phase 3 and it is possible that similar activities were continuing on the site in phase 5 although the latter assemblage may have been re-worked or derived from earlier deposits.

The charred plant assemblage from ditch 2616 warrants further detailed analysis and quantification while a more general indication of the crops utilised at the site and the soils upon which they were grown may be obtained from a rapid scan of the other samples. Study of the molluscs from samples of each phase, and particularly the two ditch sequences, is recommended for comparison with the site at Plot 113 and evidence for flooding or a high watertable.

Environmental Archaeology Assessment: Sites 7, 12, 13, 14, 19, 37*by James Rackham***Introduction**

The group of samples assessed in this report comprise the small sites from 6 plots along the Steppingley Pipeline. Site 7, Construction Section 3, plot 23 produced two samples of which only one has been processed. Site 12, Construction Section 6, plot 54 produced a column of six samples from a palaeo-channel with fills of uncertain date and four samples from archaeological ditch and pit fills of Iron Age date. Site 14, Construction Section 6, plot 63 produced a sample from a dumped fill within a shallow ditch of possible Bronze Age date and Site 13 a possible Bronze Age cremation. In construction Section 8, plot 79 three samples of Roman date were collected from Site 18 from a 'domestic' rubbish pit and a pit containing a cremation burial. Site 19, Construction Section 10, plot 96 produced a sequence of three samples from the fill of a river meander, and two samples from a possible occupation layer and a ditch fill, both of possible Bronze Age date. In section 23, plot 165, Site 37 a single sample of middle Iron Age date was recovered from a feature interpreted as a tree bole.

Table 1 (other sites): List of samples, context description and phasing

Sample	Context	Description	Site	Sect'n	Plot	Date
9023	383	possible posthole	7	3	23	ROM
9024	383	possible posthole - not processed	7	3	23	ROM
9025	687	probable alluvial deposit	12	6	54	IA
9026	688	riverine deposit	12	6	54	IA
9027	689	riverine sediment	12	6	54	IA
9028	690	riverine sediment	12	6	54	IA
9029	691	accumulation of branches	12	6	54	IA
9030	692	accumulation of sediment	12	6	54	IA
9001		probable terminus of ditch 620	12	6	54	IA
9002	621	upper fill of ditch 620	12	6	54	IA
9003			12			IA
9004	637	single fill of ditch 636	12	6	54	IA
9005	647	fill of fire pit 646	12	6	54	IA
9006	649	natural soil accumulation?	12	6	54/55	IA
9007	660	fill,dump in shallow ditch 659	14	6	63	BA?
9032/41	617	cremation	13	6	63	BA
9000	810	single fill of domestic rubbish pit 809	18	8	79	ROM
9008	810	single fill of domestic rubbish pit 809	18	8	79	ROM
9009	815	primary fill of pit 813, possibly cremation	18	8	79	ROM
9010	1021	channel fill, river silts	19	10	96	BA?
9011	1022	channel fill, river deposits	19	10	96	BA?
9012	1023	channel fill, peaty deposit in former river meander	19	10	96	BA?
9013	1039	possible occupation layer	19	10	96	BA
9014	1048	single fill of ditch 1047	19	10	96	BA
9022	2315	single fill of possible tree-throw hole2314	36	23	165	MIA

BA-Bronze Age; IA- Iron Age; MIA-middle Iron Age; ROM-Roman.

Methods

The soil samples were processed in the following manner. Sample volume and weight was measured prior to processing. All the samples except 9014 and 9022 were washed in a bowl using a flotation sieve of 0.5mm, with the residue rinsed on the same mesh. Samples 9014 and 9022 were washed in a 'Siraf' tank (Williams 1973) using a flotation sieve with a 0.5mm mesh and an internal wet-sieve of 1mm mesh for the residue. A number of the samples had a high organic content and these were retained wet, but for those without preserved organics both residue and float were dried, and the residues subsequently re-floated to ensure the efficient recovery of charred material. The dry volume of these flots was measured, and the volume and weight of the residue recorded. For the wet samples a wet volume was recorded. A total of 121.5 litres of soil was processed.

Table 2 (other sites): Summary of sample size and archaeological finds

sample	context	sample vol. l.	weight in kg	residue vol. ml.	flint in g	fired earth g	brick/tile g.	pottery wt g.	burnt residue	finds	bone wt g.	comments
9023	383	1	1.15	100						no finds		
9025	687	2.5	2.5	25							<1	
9026	688	1.75	1.75	5							<1	
9027	689	3	2.75	75							<1	
9028	690	2	1.6	50	<1					tiny flakes	<1	
9029	691	2	1.6	100	<1					tiny flakes	<1	worked wood
9030	692	2	2.25	650	<1					possible microlith	<1	
9001	620	4	4.5	550			<1	4			1	
9002	621	4	4	400				3			1	
9003	633	7	7.5	600				2			9	
9004	637	9	9	650	1	<1		22			32	burnt flint
9005	647	2	2.5	500					+		<1	firecracked stone and pebbles
9006	649	2	2.75	30							<1	
9007	660	7	7	1000				3	+		3	firecracked pebbles
9032/41	617			3525				152			7	
9000	810	2	3	200		65		7	+		1	firecracked pebbles
9008	810	4	4	200		11		36	+		15	burnt stone & flint
9009	815	9	8	1400				1			354	some burnt stone
9010	1021	2	2.5	30							<1	
9011	1022	1.25	1.75	10								
9012	1023	1	1	45							<1	
9013	1039	3	3.5	100								
9014	1048	20	20	1200				7		no finds	17	carbonate concretions
9022	2315	30	40	2400	1			4		glass-half bead		

Table 3 (other sites): Summary of environmental finds from the samples

sample cont.	sample vol. l.	flot vol.	water-logged	charcoal* #	snails #	charr'd seeds#	charr'd grain* #	charr'd chaff* #	beetles #	mammal	bird *	amphibian* *	fish *	egg-shell*	comments
9023	383	1	2		1/1										Vallonia sp.
9025	687	2.5	20	2/2	3/3				1		1				small bird, frog/toad, newt
9026	688	1.75	25	3/3	3/3				2/2	rodent, vole					freshwater molluscs and beetles

sample	cont.	sample vol. l.	flot vol.	water-logged	charcoal*	snails #	charr'd seeds#	charr'd grain*	charr'd chaff*	beetles #	mammal	bird *	amphibian*	fish *	egg-shell*	comments
9027	689	3	15	5/3	2	4/3				3/3	bank vole		2	2		freshwater molluscs, fish, beetles; frog/toad, newt, caddis larval cases, twigs and wood
9028	690	2	12	4/3	2	3/3				5/3	indet		1	1		freshwater molluscs, fishes, beetles; frog/toad, cyprinid, Daphnia, caddis larval cases, twigs and roundwood
9029	691	2	70	4/4		4/3				4/4	vole, water vole		2	2		freshwater molluscs, fishes; frog/toad, cyprinid, stickleback, caddis larval cases, small twigs and roundwood, hazelnut, worked wood and small stake point.
9030	692	2	20	3/3	1	3/2				2/2	rodent, bank vole		1	1		fossil ? fish teeth; freshwater molluscs; frog/toad, hazelnut, twigs, bark and wood
9001	620	4	5		2		1	1			pig, burnt bone, indet.					5 cereal grains- poorly preserved, possible legume
9002	621	4	8		2		1	1	1		indet, burnt frags					few grains, possible pea/bean, couple bits chaff
9003	633	7	14	1/1	2		1	1	1		indet, some burnt; many eroded					1 or 2 grains, poorly preserved, one piece chaff, possible pea/large legume
9004	637	9	14	1/1	2		1	1	1		sheep, indet., burnt fragments, field vole					pea/legume, couple cereal grains, couple of chaff fragments
9005	647	2	45		4		1	1			burnt fragment					2 poorly preserved grains
9006	649	2	4		1						indet fragments					
9007	660	7	50	1/1	4			1			burnt bone, indet					one unidentifiable grain
9032-41	617										burnt bone; bank vole, field vole		1			frog/toad
9000	810	2	55	1/1	5						indet					one uncharred seed
9008	810	4	28		3	1/1	1				sheep, indet, eroded					Vallonia sp, Pupilla muscorum
9009	815	9	11	1/1	2	1/1					creamated human? bone					Carychium sp.
9010	1021	2	20	2/2	1	4/3				2/2			1			frog/toad, ostracods, freshwater molluscs
9011	1022	1.25	50	3/3	1	3/3				3/3				1		freshwater molluscs and beetles; small fish vert
9012	1023	1	15	4/3		3/3				3/3	indet small mammal					freshwater molluscs, midge larvae and Daphnia, twigs, small roundwood & bark
9013	1039	3	2		2	1/1								1		fish tooth
9014	1048	20	13		4	5/3	1	1			indet, burnt bone, vole, bank vole	1		1		wheat; fish tooth (fossil?); small bird phalanx
9022	2315	30	10	2/2	2					1/1						

* frequency of items: 1=1-10; 2= 11-100; 3=101-250; 4=251-500; 5=>500
species/diversity: species as above and diversity as follows: 1=1-3; 2=4-10; 3=11-25; 4=26-50 taxa.

The residue was sorted by eye, and environmental and archaeological finds picked out, noted on the assessment sheet and bagged independently. A magnet was run through each residue in order to recover magnetised material such as hammerstone and prill. The residue was then discarded. The float of each sample was studied under a low power binocular microscope. The presence of environmental finds (ie snails, charcoal, carbonised seeds, bones etc) was noted and their abundance and species diversity recorded on the assessment sheet. The float was then bagged. The float and finds from the sorted residue constitute the material archive of the samples.

The individual components of the samples were then preliminarily identified and the results are detailed below in Tables 2 - 5. Unprocessed sub-samples were retained for possible pollen analysis from the full sequence of samples in the stream in site 12 (samples 9024-9030) and from the basal two samples in the channel fills of site 19 (samples 9011 and 9012).

Results

A few preserved uncharred seeds, including *Rubus* (black/raspberry), *Sambucus* (elder) and *Chenopodium* (goosefoot) were recovered from the samples taken from archaeological features. These were otherwise lacking in preserved organic remains and these particularly robust seeds cannot be guaranteed to be contemporary with the sediments in which they were found (Keepax 1977). In the channel fills the sediments preserved large quantities of organic material and there is very little likelihood of contamination.

Site 7

Two samples were collected from a possible posthole fill in plot 23. One was not processed and the second sample, 9023, produced no archaeological finds and one or two shells of the snail *Vallonia* sp. a genus normally associated with grassland.

Site 12

Two groups of samples were recovered from features in plot 54. A sequence of samples was taken from a natural stream channel (samples 9025-9030), and a second group from archaeological features (samples 9001-9005). A layer thought to be a natural soil accumulation (sample 9006) spread from the group of features to the stream course.

The archaeological features have been assigned to the Iron Age, and it is assumed at present that the stream sediments may be of similar date.

The archaeological features include small quantities of flint, fired earth, pottery and animal bone (Table 2). The fill (637) of ditch 636 produced the highest densities and included some burnt flint. Fire pit 646, not unexpectedly contains quantities of firecracked stone and pebbles. Small quantities of environmental material are present including charred cereal grains, large legumes, very small quantities of charred chaff, charcoal and domestic mammal bone including sheep and pig, with some burnt and calcined. The fire pit includes significantly larger quantities of charcoal than the other features.

The sample, 9006, from the natural accumulation (649) between these features and the stream channel produced very little material. A few fragments of unidentifiable mammal bone and small quantities of charcoal.

The sequence of fills in the stream channel had very little archaeological material. A few small flint flakes may not be natural. However layer 691 (sample 9029), an accumulation of branches and wood within the fills, included some worked and 'chopped' wood. One or two of the marks on the soft wood may have been created by an archaeological trowel during sampling, but others are clearly contemporary and the presence of the sharpened end of a small stake is positive evidence for artefactual material amongst this brushwood layer. Radio-carbon dating of this layer obtained a calibrated date range of BC. 1750-1620.

Apart from some of the wood remains the environmental evidence from this sequence of fills appears to have accumulated entirely naturally. Waterlogged preservation is extremely good with large numbers of seeds and beetle fragments in some of the samples. Wood is abundant in the lowest two samples and a contemporary fauna of fish, amphibians, molluscs, water beetles, caddis larval cases and chironomid larvae in the layers indicates their deposition in freshwater conditions. Bank vole, *Clethrionomys glareolus*, and water vole, *Arvicola terrestris*, have been identified among the vertebrate remains.

The molluscs were one of the most abundant remains in the samples and these have been scanned and preliminarily identified (Table 4) but not quantified. While aquatic species dominate the assemblage both in terms of species and shell numbers there is considerable variation from the base of the stream fills (9030) to the upper fills (9026 and 9025) before the feature is sealed by alluvial deposits.

Aquatic conditions are evident from the base of the sequence but a high terrestrial component is present in the brushwood rich sample, 9029. The terrestrial species are unspecific with woodland, grassland and wet meadow and marsh species present and this assemblage suggests an influx of terrestrial shells being washed into the channel. In subsequent layers the fills become dominated by aquatic shells with the terrestrial component diminishing up the profile. A number of the aquatic species in the lower samples 9029-9027 suggest a current flow in the channel, *Valvata cristata*, *Valvata piscinalis*, *Physa fontinalis* and *Ancylus fluviatilis*, while the bulk of the molluscs in the upper fills are more consistent with marsh, ditch or pond habitats (Macan 1977). The most abundant shells are those of small bivalves, *Pisidium* and *Sphaerium*, but without specific identification these afford little indication of the aquatic environment and members of these genera occur in a wide variety of aquatic habitats.

Table 4 (other sites): Molluscs from the stream channel in Site 12

Species	9025	9026	9027	9028	9029	9030
<i>Pisidium</i> sp	+	+	+++	++	+	+
<i>Planorbis</i> sp	+					
<i>Planorbis laevis</i>	+					
<i>Planorbis albus</i>	+	+	+	+	+	+
<i>Planorbis leucostoma</i>	+	+		+		
<i>Bithynia tentaculata</i>	+	+	+	+	+	+
<i>Lymnaea truncatula</i>	+	+	+	+		
<i>Valvata cristata</i>	+		+		+	
<i>Acroloxus lacustris</i>		+	+	+	+	
<i>Sphaerium</i> sp.		+	+	+		
<i>Valvata piscinalis</i>			+	+		
<i>Lymnaea peregra</i>			+			
<i>Lymnaea glabra</i>			+	+		
<i>Physa fontinalis</i>			+			
<i>Unio</i> sp.			+	+		
<i>Lymnaea palustris</i>				+		
<i>Ancylus fluviatilis</i>					+	
<i>Segmentina nitida</i>					+	
<i>Punctum pygmaeum</i>						+
<i>Discus rotundatus</i>					+	
<i>Helix</i> sp.					+	+
<i>Vertigo</i> sp.					+	+
<i>Hygromia hispida</i>				+	+	
<i>Oxychilus</i> sp			+	+	+	
<i>Vitrea</i> sp			+		+	
<i>Cochlicopa</i> sp			+		+	
<i>Vertigo antivertigo</i>			+		+	
<i>Clausilia</i> sp.			+		+	
Limacidae		+				
<i>Succinea</i> sp.		+	+	+	+	+
<i>Carychium</i> sp.		+	+	+	+	
<i>Vallonia costata</i>		+		+	+	
<i>Vallonia</i> sp	+	+	+	+		

The sequence suggests a fairly characteristic infilling of a channel with the final phases of channel fill being marsh dominated. Elements in the terrestrial snail fauna, such as *Carychium* sp, *Succinea* sp and *Vertigo antivertigo*, also indicating a marshy environment (Cameron and Redfern 1976; Evans 1972).

Sites 13 and 14

Two samples were taken from deposits in plot 63. One of these a dump, 660, within a shallow ditch, 659, site 14, produced a few fragments of pottery and bone, some burnt sediment and fire cracked pebbles. Environmental remains were limited, although a single charred cereal grain was present and quantities of charcoal.

The sample from site 13 derives from an urn, thought to be a cremation, which was excavated, after lifting, in ten spits. These have been treated collectively in this assessment. Archaeological finds were limited to large numbers of small pottery sherd fragments clearly from the original urn and a few grammes of animal bone. No human bone could be identified amongst the burnt fragments, while a number of individuals of both field and bank vole were present. This suggests that the urn contained a void when originally deposited and either acted as a 'nest' or pit fall trap for small mammals. The density of small mammals in this sample far exceeds any other of the samples discussed in this report. Only small amounts of charcoal are present and despite the presence of some burnt bone there is little to suggest that this was a cremation.

Site 18

Three samples were recovered from two pits in plot 79. Two samples, 9000 and 9008, were taken from a 'domestic' rubbish pit, 809, while a third sample was taken from the primary fill of pit 813, a possible cremation pit.

The two samples from fill 810 in pit 809 produced many small fragments of pottery, a few grammes of bone, fired earth, firecracked pebbles and burnt stone and flint. Charcoal was abundant, with one or two charred seeds present. The bone, mostly indeterminate and slightly eroded included a fragment of sheep, and the very few snail shells from sample 9008 are suggestive of a grassland habitat.

Pit 813 does appear to be a cremation pit. The archaeological finds are restricted to one or two very small fragments of pottery, some burnt stone and a large sample of calcined bone. All of the bone appears to be burnt human bone. In addition small amounts of charcoal and a few snails were recovered.

Site 19

Five samples were taken in plot 96. Three of these derive from a sequence of fills in a possible former river meander and the remaining two were collected from archaeological features, a possible occupation layer and the fill of a ditch, 1047.

The possible occupation layer, sample 9013, contained no archaeological finds, small quantities of charcoal, a few snail shells and a fish tooth. The latter is probably fossil. The ditch sample was richer with both pottery and bone being recovered and a fragment of a small glass or mineral bead. Charcoal was abundant in the flot and the few charred seeds and grain included wheat. The larger mammal bones were all indeterminate with some burnt, but bank vole, amphibian and small bird bones were present, in addition to a fish tooth, again probably fossil. Snail shells were very abundant and included an aquatic element (see below Table 5).

The sequence of three samples from the channel fill produced no archaeological finds whatsoever; they were however environmentally fairly rich. Very small quantities of charcoal had been incorporated into the upper fills, samples 9010 and 9011, but the bulk of the material was waterlogged with excellent survival of preserved plant and insect remains. The lowest fill, 9012, included a number of fragments of small roundwood, twigs and bark. The freshwater depositional environment is indicated by abundant aquatic molluscs, ostracods, small fish, water beetles, midge larvae and water fleas, *Daphnia* sp.

The channel fills are dominated by aquatic species with shells of *Valvata cristata* and *V. piscinalis* suggesting some current flow, although the other species are typically found in a variety of pond, ditch and marsh habitats. The terrestrial snails include species characteristic of woodland and grassland habitats, with some being found in damp grassland or marshes. The ditch fill, 9014, although including aquatic species is dominated by terrestrial snails. In this assemblage genera typical of grassland habitats dominate but more catholic, marshy ground and woodland species are present.

Site 36

One sample, from a possible tree-throw hole was collected from plot 165. It produced a few grammes of pottery and three tiny flint flakes (possibly worked flakes). Some degraded organic material was present and both seeds and beetles are preserved in small numbers. A few fragments of charcoal are present.

Table 5 (other sites): Molluscs from Site 19 channel and ditch

Species	9010	9011	9012	9014
<i>Pisidium</i> sp	++	+	+	+
<i>Planorbis</i> sp	+			
<i>Planorbis albus</i>	+	+	+	
<i>Planorbis leucostoma</i>	+			
<i>Planorbis contortus</i>	+			
<i>Bithynia tentaculata</i>	+	+	+	
<i>Lymnaea truncatula</i>	+	+		+
<i>Valvata cristata</i>	+	+	+	
<i>Sphaerium</i> sp.	+			
<i>Valvata piscinalis</i>	+	+	+	
<i>Lymnaea glabra</i>	+			
<i>Euconulus fulvus</i>				+
<i>Helicella</i> sp.				+
<i>Pupilla muscorum</i>				+
<i>Oxychilus draparnaldi</i>				+
<i>Pyramidula rupestris</i>				+
<i>Pomatia elegans</i>				+
<i>Punctum pygmaeum</i>			+	+
<i>Discus rotundatus</i>		+		+
<i>Helix</i> sp.				+
<i>Vertigo</i> sp.				+
<i>Hygromia hispida</i>	+		+	+
<i>Oxychilus</i> sp		+		+
<i>Vitrea</i> sp			+	+
<i>Cochlicopa</i> sp	+			+
<i>Clausilia</i> sp.		+		
<i>Succinea</i> sp.	+	+	+	+
<i>Carychium</i> sp.			+	+
<i>Carychium minimum</i>	+			
<i>Carychium tridentatum</i>	+			
<i>Vallonia costata</i>				+
<i>Vallonia excentrica</i>		+		+
<i>Vallonia</i> sp	+	+		+++

Discussion

The majority of the samples from archaeological features contained very poor environmental assemblages. The material relating to the palaeoeconomy of the sites was extremely limited and apart from a few poorly preserved charred cereal grains, rare chaff fragments, quantities of charcoal and largely indeterminate mammal bone, much of which was burnt, little was recovered. These finds can contribute very little apart from species presence and in no samples did they appear to reflect any specific activities such as crop processing. The richest samples were those in which burnt stones or flint and firecracked pebbles occurred suggesting the discard of hearth and domestic material into the sampled features. 'Rubbish' densities were relatively low in all features.

Pit 813 is confirmed as a cremation pit on the basis of the relatively large quantities of calcined human bone in the sample from its fill. However there is little to indicate that the urn from context 617 was a cremation.

In contrast to the palaeoeconomic evidence that for the palaeoenvironment is much richer. The samples from the stream channel at site 12 were rich in most categories of environmental data, and although the pollen was not assessed its preservation in these layers should be excellent. The presence of worked wood in the lower fills of this channel indicates the proximity of human activity and the environmental remains from these fills can be expected to yield considerable palaeoenvironmental information about the area and the impact of the adjacent archaeological site. It would first be necessary to date these sediments since no dateable archaeological finds were recovered from the deposits. The channel fills in site 19 are similarly rich in palaeoenvironmental evidence and if there are definable archaeological remains within the immediate vicinity of these deposits further work may be justified.

Potential and recommendations

No further work can be recommended on the material from archaeological contexts, although some detail may be obtained if the calcined bone from the cremation is submitted for specialist analysis.

The palaeoenvironmental data may well be worth pursuing. A sample should first be submitted for radiocarbon dating from the wood rich layer, 9029, from the stream channel. Material in this layer is associated with worked artefactual material and may be contemporary with the adjacent Iron Age site. Unwashed sub-samples have been retained from all the sampled layers which would permit a series of six pollen samples through the fills to be studied in order to assess the character of the surrounding landscape, evidence for agriculture, and the extent of woodland cover. Vegetational history studies are limited in this part of England and if a suitable result is obtained from the radiocarbon analysis a palaeoenvironmental study of this sequence of fills would be an important addition to the regional database besides contributing to a broader understanding of the landscape in which the adjacent Iron Age site lies.

A similar recommendation might be made for the channel in Site 19. While this has been less comprehensively sampled, is not so rich in environmental evidence, has no artefactual evidence within the fills and has a more limited association with adjacent archaeological features, its potential Bronze Age date might justify palaeoenvironmental study. A first step would be the radiocarbon dating of small roundwood from the basal fill, context 1023, with follow up work on the palaeoenvironmental assemblages if the results confirm a Bronze Age date.

Conclusions

The palaeoeconomic data, that relating to the agriculture and animal husbandry, of these sites is relatively insignificant and can make little or no contribution to the interpretation of the sites. Domestic and hearth contexts are indicated and the charcoal remains may indicate the available wood fuel resources of the sites, but the limited archaeological evidence suggests that further work on these samples is not justified.

In contrast two sequences of deposits through palaeochannel fills of probable Iron Age and Bronze Age dates have yielded extremely well preserved organic remains with abundant identifiable seeds, insects and molluscs. Preservation of pollen is likely to be excellent and the assemblages can be expected to permit some reconstruction of the environmental conditions and vegetation of the region through which the streams flowed. Radiocarbon dates are a necessary prerequisite before further work is undertaken. The value of the results from the study of these deposits will be considerably enhanced if it can be shown that they are contemporary with the adjacent archaeological sites discovered during the pipeline construction.

Acknowledgments

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Appendix 13

Radiocarbon determinations

RADIOCARBON MEASUREMENT REPORT

For: Ms C Lingard
Network Archaeology,
25 West Parade,
Lincoln,
LN1 1NW

Customer Code: C-104

Laboratory Results

Laboratory Reference	Measurement Reference	Submitter's Reference	Radiocarbon Age (BP)	Stable Isotope $\delta^{13}\text{C}$ (‰)	Comments
1	2	3	4	5	6
RCD-3356	Q1120997	SA972407	1210 ± 70	-21.70	*****

Calibration

Calibrated Age Ranges, as shown on graphically on Sheet 2 are:


68% confidence interval (1 σ) is cal AD 715 to 945
95% confidence interval (2 σ) is cal AD 680 to 970

Collated Report

Bone sample July 1997 by Ms C Lingard.

Extraction of collagen and carbon-14 measurement was carried out by RCD, Lockinge, the stable isotope ratio was measured by the Godwin Laboratory, Cambridge.

This sheet reports the final measurement results for the sample indicated. Explanation of the method of presentation is given in the accompanying notes sheet NS/90/01.



Radiocarbon Dating
The Old Stables,
East Lockinge,
Wantage,
Oxfordshire OX12 8QY.

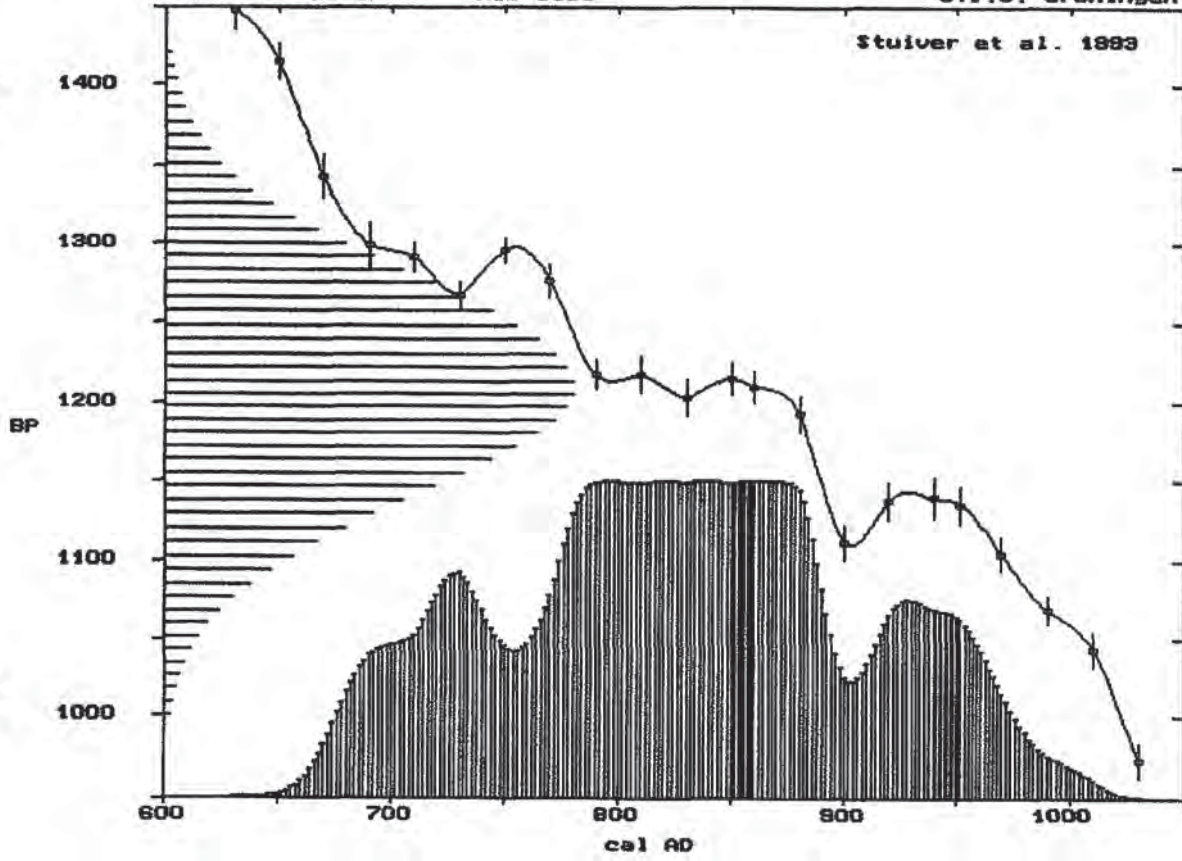
RL Otlet/A J Walker
14th October 1997

1210 +/- 70 BP

RCD-3356

C.I.O. Groningen

Stuiver et al. 1993



CALIBRATION OF RADIOCARBON AGE TO CALENDAR YEARS

(Variables: estimated C13/C12=-25; lab mult.=1)

Laboratory Number: Beta-125857

Conventional radiocarbon age*: 3400 ± 60 BP

**Calibrated results:
(2 sigma, 95% probability)**

**cal BC 1875 to 1805 and
cal BC 1795 to 1525**

* C13/C12 ratio estimated

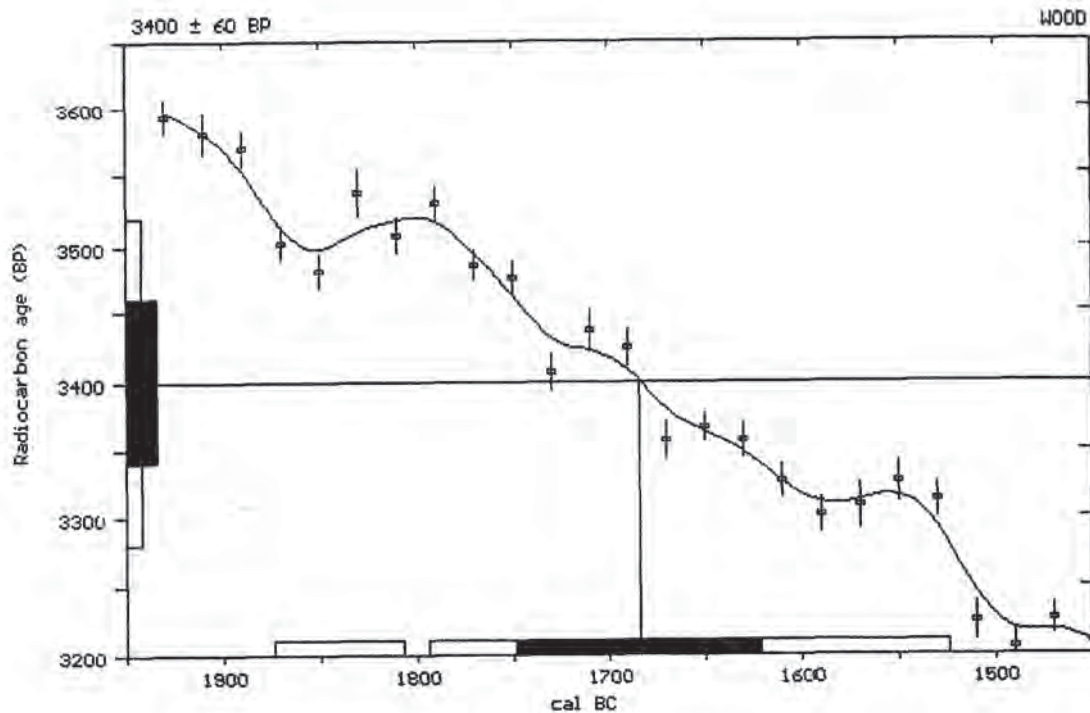
Intercept data:

Intercept of radiocarbon age
with calibration curve:

cal BC 1685

1 sigma calibrated results:
(68% probability)

cal BC 1750 to 1620



References:

Pretoria Calibration Curve for Short Lived Samples

Vogel, J. C., Fuls, A., Visser, E. and Becker, B., 1993, *Radiocarbon* 35(1), p73-86

A Simplified Approach to Calibrating C14 Dates

Talma, A. S. and Vogel, J. C., 1993, *Radiocarbon* 35(2), p317-322

Calibration - 1993

Stuiver, M., Long, A., Kra, R. S. and Devine, J. M., 1993, *Radiocarbon* 35(1)

Calibration of Radiocarbon Dates for the Late Pleistocene Using T/Uh Dates on Stalagmites

Vogel, J. C., Kronfeld, J., 1997, *Radiocarbon* 39(1), p27-32

Beta Analytic Radiocarbon Dating Laboratory

4985 S.W. 74th Court, Miami, Florida 33155 ■ Tel: (305)667-5167 ■ Fax: (305)663-0964 ■ E-mail: beta@radiocarbon.com

Appendix 14

Gazetteer of archaeological features

Construction Section 0

Context 001 unstratified finds, plot 1

Context 002 unstratified finds, plot 2

Context 003 unstratified finds, plot 3

Finds RB pot, med/pmed pot

Context 004 unstratified finds, plot 4

Context 005 unstratified finds, plot 5

Finds RB pot

Context 006 unstratified finds, plot 6

Finds RB pot

Ditch 007 oriented approximately N-S, steep sided 'V'- shaped profile, with flat base (L 5m+, W 1.10m, D 0.48m)

Fill 012 orange-brown clay with orange mottles, frequent calcareous pockets

Fill 008 grey-brown gritty clay, with orange mottles, occ. charcoal flecks and fragments, and occ. small calcareous pieces

Finds SFs 5000, 5001, 5297, 5297 (Fe objs), RB pot, fired clay, bone

Ditch 009 oriented approximately E-W, asymmetrical V-shaped profile, with S side steeper than N (L 29m+, W 1.50m, D 0.28m), cut by Ditch 013

Fill 010 mid yellow-grey silty clay with orange mottles, v. occ. calcareous flecks and grits

Finds RB pot, bone

Ditch 013 oriented approximately E-W, asymmetrical U-shaped profile, with N side steeper than S (L 19m+, W 3.70m, D 0.65m), cuts Ditch 009

Fill 011 light-mid, grey-yellow silty clay with grits, calcareous grits and sand concentrated at base of ditch

Finds RB pot

Fill 014 mid yellow-grey, loamy clays, occ. calcareous flecks and grits, v. occ. ironstone, gleying/oxidisation present

Finds RB pot, bone

Layer 015 arbitrary layer of unstratified surface finds, over Ditch 018

Finds RB pot, fired clay, bone

?Pit 016* moderately steep sides, concave base (W 1.15m, D 0.30m)

Fill 017 mid grey-brown, sandy clay, occ. calcareous grits and gravels, some dumped burnt clay and charcoal

Ditch 018 oriented NE-SW, moderately steep, concave sides, concave base (W 1.48m D 0.34m)

Fill 020 mid to dark grey-black, friable loamy clay, occ. flint grits, occ. chalk grits

Finds RB pot, fired clay

Fill 019 mid grey-brown, firm, sandy clay, occ. calcareous grits, occ. flint gravels

Construction Section 1

Context 100 unstratified finds, plot 7

Context 101 unstratified finds, plot 8

Context 202 unstratified finds, plot 9

Context 103 unstratified finds, plot 10

?Ditch 104 oriented NW-SE, steep, undulating W side, flat base (W 0.30m+, D 0.40m), re-cut by ditch 106
Fill 105 mid blue-grey, semi-gleyed silty clay, occ. charcoal flecks and fragments

R.Ditch 106 oriented NW-SE, moderately steep E side, steep W side, flattish base (W 1.28m, D 0.40m), re-cut of ?ditch 104

Fill 107 mid brown silty clay, occ. small calcareous fragments and pebbles

Layer 108 above 107, 110, 112, 114, 116, 120, 122

Ditch 109 oriented NE-SW, steep, concave, undulating sides, concave base (W 1.00m, D 0.40m), under layer 108

Fill 110 mid blue-grey, semi-gleyed silty clay, occ. calcareous pebbles

Ditch 111 oriented NNE-SSW, steep, convex, undulating sides, flattish base (W 1.90m, D 0.50m), under layer 108

Fill 112 mid blue-grey, semi-gleyed silty clay, occ. calcareous pebbles

Ditch 113 oriented N-S, steep, concave E side, moderately steep, undulating W side (W 1.58m, D 0.50m), under layer 108

Fill 114 mid blue-grey, semi-gleyed silty clay, occ. calcareous pebbles

Finds SF 5302 (slag), RB pot

Ditch 115 oriented NE-SW, irregular, undulating sides, steep E side, moderately steep W side, flat base (W 1.50m, D 0.60m), under layer 108

Fill 116 mid blue-grey, semi-gleyed silty clay, occ. calcareous pebbles, occ. charcoal

Ditch 117 oriented NE-SW, moderately steep, concave W side, slightly concave base (W 0.30m+, D 0.30m+), under layer 108

Fill 118 mid blue-grey, semi-gleyed silty clay, occ. calcareous pebbles, occ. charcoal

Re-cut ditch 119 oriented NE-SW, moderately steep, straight E side, gently sloping, slightly concave W side, sloping, base (W 1.40m, D 0.34m), under layer 108

Fill 120 mixed, mid brown-grey silty clay, occ. well sorted calcareous pebbles

Gully 121 oriented ENE-WSW, moderately steep sides, flat base (W 1.00m, D 0.30m), under layer 108

Fill 122 mixed, mid brown-grey silty clay, occ. charcoal flecks, fragments burnt clay towards bottom of fill

Finds SF 5306 (slag)

Gully 123 oriented NE-SW, moderately steep, straight sides, flat base (W 1.00m, D 0.30m), under layer 108

Fill 124 mixed, mid brown-grey silty clay, occ. charcoal flecks and fragments, occ. fired clay fragments, occ. flint gravels

Finds slag

Construction Section 2

Context 200 unstratified finds, plot 11

Finds SF 5002 (coin), flint

Context 201 unstratified finds, plot 12

Context 202 unstratified finds, plot 13

Context 203 unstratified finds, plot 14

Context 204 unstratified finds, plot 15

Context 205 unstratified finds, plot 16

Context 206 unstratified finds, plot 17

Context 207 unstratified finds, plot 18

Ditch 208* oriented ENE-WSW, V-shaped profile, steep, slightly convex sides, uneven, narrow, concave base (W 3.02m, D 1.42m)

Fill 234 mid to dark blue-grey silty clay, occ. calcareous grits

Fill 209 mid grey loamy clay, occ. calcareous grits

Finds RB pot

Ditch 210* oriented N-S, steep, straight E side, slot in base (W 1.1m+, D 0.98m), re-cut by 235

Fill 211 mid to dark blue-grey silty clay, occ. calcareous grits

Ditch 212* oriented N-S, steep, undulating E side, slot in base (W 0.65m+, D 0.86m), re-cut by 239

Fill 213 mid to dark blue-grey silty clay, occ. calcareous grits, similar to Fill 211

Ditch 214* oriented N-S, steep, convex E side, slot in base (W 0.45m+, D 0.6m), re-cut by 241

Fill 215 mid to dark blue-grey silty clay, occ. calcareous grits, similar to Fill 211

Ditch 216* oriented N-S, steep convex E side, moderately steep concave W side, sloping base (W 1.15m+, D 0.71m), re-cut by 245

Fill 217 Mid to dark blue-grey silty clay, occ. calcareous grits, similar to Fill 211

Ditch 218* oriented N-S, moderately steep sides, concave W side, convex E side, concave base (W 1.15m, D 0.52m), re-cut by 247

Fill 219 Mid-dark blue-grey silty clay, occ. calcareous grits, similar to Fill 211

Ditch 220* oriented N-S, steep sides, straight E side, flattish base (W 0.9m+, D 0.70m), re-cut by 249

Fill 221 mid to dark blue-grey silty clay, occ. calcareous grits, similar to Fill 211

Ditch 222* oriented N-S, steep straight sides, concave narrow base, (W 0.24m+, D 0.25m+), re-cut by 251

Fill 223 mid to dark blue-grey silty clay, occ. calcareous grits, similar to Fill 211

Ditch 224* oriented N-S, steep sides, concave base (W 0.24m+, D 0.25m+), re-cut by 253*

Fill 225 Mid-dark blue-grey silty clay, occ. calcareous grits, similar to Fill 211

Pit 226* steep sides, undercut on lower east side, flat, undulating base (W 0.79m, D 0.70m)

Fill 227 mid to dark blue-grey silty clay, occ. oxidisation, occ. fragments sub rounded chalk fragments

Finds flint

Ditch 228* oriented NNW-SSE, 'V' shaped, steep, straight sides, narrow concave base (W 1.09m, D 0.74m)

Fill 229 Mid to dark blue-grey silty clay, occ. small chalk fragments

- Fill* 233 mid grey-brown loamy clay
- Ditch** 230* oriented NNW-SSE, 'V' shaped, steep straight sides, narrow, concave base (W 1.37m, D 0.89m)*
- Fill* 231 mid to dark blue-grey silty clay, v. occ. chalk flecks
- Finds* RB pot
- Fill* 232 mid brown-grey loamy clay, occ. flint
- Re-cut** 235* steep sides, concave W side, straight E side, concave base (W 1.4m+, D 0.68m), re-cut of 210, re-cut by 237
- Fill* 236 mid brown-yellow silty clay, no inclusions
- Re-cut** 237* steep sides, convex W side, concave E side, concave base (W 1.55m, D 0.52m), re-cut of 235
- Fill* 238 mid brown-grey silty clay, no inclusions
- Re-cut** 239* steep, straight west side, moderately steep, straight E side, concave base (W 1.55m+, D 0.58m), re-cut of 212
- Fill* 240 mid brown-yellow silty clay, no inclusions, similar to Fill 238
- Re-cut** 241* steep sides, concave base, with slot on W side (W 0.85m+, D 0.5m), re-cut of 214, re-cut by 243
- Fill* 242 mid to dark blue-grey silty clay, occ. calcareous grits, similar to Fill 211, but with yellow mottles
- Re-cut** 243* steep to moderately steep, straight sides, concave base (W 1.38m, D 0.50m), re-cut of 241
- Fill* 244 mid brown-grey silty clay, no inclusions, similar to Fill 238
- Re-cut** 245* moderately steep, straight sides, flat base (W 1.62m, D 0.42m), re-cut of 216
- Fill* 246 mid brown-grey silty clay, no inclusions, similar to Fill 238
- Re-cut** 247* moderately steep, concave sides, concave base (W 1.32m, D 0.26m), re-cut of 218
- Fill* 248 mid brown-grey silty clay, no inclusions, similar to Fill 238
- Re-cut** 249* steep, straight W side, moderately steep, undulating E side, concave base, (W 1.32m, D 0.26m), re-cut of 220
- Fill* 250 Mid brown-grey silty clay, no inclusions, similar to Fill 238
- Re-cut** 251* V-shaped profile, mod. steep, straight sides, slot in base (W 1.38m, D 0.62m), re-cut of 222
- Fill* 252 mid brown-grey silty clay, no inclusions, similar to Fill 238
- Re-cut** 253* steep sides, concave W side, convex E side, concave base - undercut on E side (W 1.30m, D 0.55m), re-cut of 224
- Fill* 254 Mid brown-grey silty clay, no inclusions, similar to Fill 238
- Layer** 255* located across plot 15 and part of plot 16, mid brown, humus rich, silty clay, v. occ. calcareous grit and flint gravel, (D 0.06m-0.12m), overlies 209, 238, 240, 244, 246, 248, 250, 252, 254

Construction Section 3

Context 300 unstratified finds, plot 19

Context 301 unstratified finds, plot 20

Finds SF 5003 (coin), SF 5006, 5007 (Fe nails)

Context 302 unstratified finds, plot 21

Context 303 unstratified finds, plot 22

Context 304 unstratified finds, plot 23

Finds SFs 5005 (Fe knife), 5043, 5223, 5224, 5225 (Cu alloy objs), 5221, 5222 (coins), 5226 (Pb obj), 5314 (whetstone), med/pmed pot

Context 305 unstratified finds, plot 24

Context 306 unstratified finds, plot 25

Finds med/pmed pot

Context 307 unstratified finds, plot 26

Finds RB pot

Context 308 unstratified finds, plot 27

Context 309 unstratified finds, plot 28

Context 310 unstratified finds, plot 29

Ditch 311 oriented approximately NW-SE, steep, slightly convex sides, flat base (L 25m+, W 1.20m, D 0.62m), cuts gully 316, cut by gully 314, relationships with gullies 355, 357, and ditch 359 unclear

Fill 313 pale yellow, soft, malleable clay, v. occ. limestone flecks

Finds RB pot, ceramic building material

Fill 312 mid brown-grey, compact, malleable silty clay, moderate amount limestone grits, ?fill of re-cut of ditch 311

Finds RB pot, bone, ceramic building material, fired clay

Gully 314 oriented approximately NW-SE, steep, straight NE side, moderately steep, concave SW side, concave base (L 25m+, W 0.40m, D 0.15m), cuts ditch 311, relationships with Gully 355, 357, and Ditch 359 unclear

Fill 315 mid grey-brown, moderately compact silty clay, occ. limestone flecks

Gully 316 oriented NNW-SSE, U-shaped, moderate to steep sides, concave base (L 9m+, W 0.72m, D 0.23m), cut by gullies 311, 314, 361, 363

Fill 317 grey-brown, compact, malleable silty clay, occ. limestone flecks

Finds RB pot, bone, ceramic building material

Gully 318 oriented approximately N-S, steep sides, concave base (L 14m+, W 0.50m, D 0.10m), cuts ditch 322, cut ?by gullies 361, 363

Fill 319 mid orange-brown, compact silty clay, occ. small flints

Finds RB pot, bone

Pit 320 sub-oval in plan, moderately steep, concave, undulating sides, concave, undulating base (L 0.56m, W 0.54m, D 0.08m)

Fill 321 mid grey-brown, v. compact silty clay, occ. limestone flecks

Finds bone, fired clay

- Ditch 322** oriented NW-SE, undulating sides and base, moderately steep WSW side, almost vertical ENE side, slightly sloping base (L 100m+, W 1.16m, D 0.47m), cut by gully 318, unclear relationship with ditch 359, gully 357, 375, ?posthole in the south corner of excavated section
- Fill* 324 pale yellow-brown, soft silty clay, iron staining, moderate amount limestone flecks and small fragments
- Fill* 323 dark brown-grey, v. compact silty clay, occ. iron staining, occ. limestone flecks
- Finds* RB pot, bone
- Posthole 325** vertical sides, stepped horizontal base (L 1.10m, W 0.80m, 0.33-0.52m), southernmost of line of postholes oriented NW-SE, 2m apart, sub-rectangular in plan
- Fill* 326 mid grey-brown, compact, malleable silty clay, occ. flint gravels, natural mottles and lenses towards edges of feature
- Finds* med/pmed pot, bone
- Gully 327** oriented approximately NW-SE, U-shaped, gently sloping sides, concave base (L 17m+, W 0.65m, D 0.16m), unclear relationship with gully 369, 377
- Fill* 328 pale yellow-brown, compact clay, frequent limestone inclusions
- Finds* RB pot, fired clay
- Ditch 331** oriented WNW-ESE, steep sides, flat base (W 0.70m), part of Ditch 311, relationship with ditch 333 uncertain,
- Fill* 332 mid green-grey, firm silty clay, occ. orange flecks, occ. flint gravels
- Fill* 329 dark brown-grey, firm silty clay, frequent charcoal flecks and fragments, moderate amount flint gravels and grits
- Finds* bone, ceramic building material, quern fragments
- Ditch 333** oriented N-S, rectilinear, U-shaped, moderately steep, concave sides, concave base (L 17m+, W 0.92m, D 0.23m), unclear relationship with ditch 311 and gully 316, truncated by modern land drain.
- Fill* 334 dark grey, firm silty clay, occ. flint gravels
- Finds* RB pot
- Pit 335** sub circular in plan, U-shaped, steep sides, flat base (L 1.02m, W 0.93m, D 0.12m)
- Fill* 336 mid to dark grey, v. compact clay, occ. small rounded and angular flints, frequent charcoal flecks, frequent burnt clay flecks
- Finds* RB pot
- Pit 337** sub-rectangular in plan, long axis oriented NE-SW, U-shaped, steep sides, flat base (L 3.20m, W 1.24m, D 0.10m)
- Fill* 338 mid to dark grey, v. compact clay, occ. small to medium rounded and angular flints, occ. charcoal, burnt clay flecks
- Finds* RB pot
- Ditch 339** oriented N-S, moderately steep sides, convex E side, concave W side, concave base (L 20m+, W 1.41m, D 0.48m), relationship with ditch 353 unclear
- Fill* 340 dark black-grey, firm, malleable clay, blue tinges, v occ. flint pebbles
- Finds* RB pot, bone
- Gully 341** oriented approximately N-S, moderately steep W side, gradual E side, with flat, undulating base (L ?20m, W 0.57m, D 0.07m), relationship with unexcavated feature (?pit) to S unclear,
- Fill* 342 mid brown-grey, firm silty clay, no inclusions
- Ditch 343** rectilinear, oriented approximately N-S, U-shaped, almost vertical, straight sides, flat base (W 0.42m, D 0.34m)
- Fill* 388 white-grey limestone fragments up to 0.4m across
- Finds* large limestone pieces
- Fill* 387 mid grey with dark grey and orange-brown mottles, occ. calcareous fragments and gravel
- Finds* RB pot
- Fill* 344 dark grey, firm clayey silt, moderate amount charcoal flecks and fragments, occ. small calcareous fragments, occ. small flint fragments

- Finds* SF 5008, 5254 (Fe nails), RB pot, bone, large limestone fragments, ?slate
- Pit** 345 sub-circular in plan, gradual to vertical sides, flat, sloping base (L 1.90m, W 1.15m, D 0.08m), cuts pit 384
- Fill* 346 dark grey, v. compact clay, small to medium sized rounded and angular flints, single large limestone fragment, frequent charcoal flecks, frequent burnt clay flecks
- Finds* RB pot, bone
- Pit** 347 circular in plan, gradual sides, concave base (W 0.75m, D 0.13m)
- Fill* 348 dark brown-grey firm silty clay, v. occ. flint grits, similar to Fill 352
- Pit** 349 sub-circular in plan, moderately steep sides, irregular, concave base (L 1.12m, W 1.00m, D 0.10m)
- Fill* 350 dark brown-grey, firm silty clay, no inclusions
- Finds* RB pot, bone
- Pit** 351 circular in plan, moderately steep SW side, gradual NE side, concave base (W 0.70m, D 0.09m),
- Fill* 352 dark brown-grey, firm silty clay, no inclusions
- Ditch** 353 oriented NW-SE, then turns E-W, moderately steep, straight sides, concave base (L 20m+, W 1.10m, D 0.25m)
- Fill* 354 dark blue-black, firm clay, no inclusions
- Finds* RB pot, bone
- Gully** 355 oriented NNW-SSE, gradual, undulating N side, moderately steep S side, flat, undulating base (L 20m+, W 0.80m, D 0.09m), relationship with ditches 333 and 331 unclear
- Fill* 356 occ. small stones and limestone fragments
- Gully** 357 oriented N-S, moderately steep W side, gradual E side, flat base (L 13m+, W 0.74m, D 0.11m), relationship with ditches 363 and 311 unclear
- Fill* 358 mid to dark grey, v. compact silty clay, small to medium sized rounded and angular flints, occ. limestone flecks, frequent charcoal flecks, frequent burnt clay flecks
- Finds* SF 5042 (Cu alloy obj), RB pot
- Gully** 359 oriented N-S, moderately steep, straight sides, concave base (L 13m+, W 1.45m, D 0.30m, cut by pit 375)
- Fill* 386 dark green-grey, firm silty clay, sub-angular flint pebbles
- Finds* RB pot, fired clay
- Fill* 360 dark blue-black-brown, firm clay, occ. sub-angular flint pebbles
- Finds* SF 5036 (Ro coin), RB pot, bone, fired clay, flint
- Gully** 361 ?rectilinear, long axis oriented E-W, gradual to moderately sloping sides, concave base (L ?m, W 1.07m, D 0.16m), cuts pit 363
- Fill* 362 dark grey v. firm silty clay, occ. orange-brown mottles, occ. flint gravels, occ. medium sized calcareous fragments
- Finds* bone
- Pit** 363 ?sub-circular in plan, moderate to steep sides, concave base (W 0.58m, D 0.20m), cut by Gully 361
- Fill* 364 dark grey, tenacious silty clay, orange-brown staining, occ. flint gravels, occ. ?charcoal flecks
- Ditch** 365 not recorded on site: photos show shallow feature with rounded base (W ca 0.60m, D ca 0.15m) relationship with 367 unclear
- Fill* 366 not recorded on site: photos show mid-grey clay with ?chalk fleck
- Finds* RB pot, fired clay
- Ditch** 367 not recorded on site: photos show gently sloping sides to rounded base, with hollow (?animal burrow/root hole) on eastern side of section (W ca 1.25m, D ca 0.40m)
- Fill* 368 not recorded on site: photos show mid-grey clay with ?chalk fleck
- Finds* RB pot, fired clay

- Gully** 369 oriented WSW-ENE, gradual NNW side, moderately sloping SSE side, concave base (L 3m+, W 0.60m, D 0.12m)
Fill 370 mid brown, v. compacted silty clay, no inclusions
- Gully** 371 oriented N-S, moderately sloping sides, slightly convex W side, concave E side, concave base (L ?m, W 0.62m, D 0.16m), cut by land drain
Fill 372 mid brown, v. compacted silty clay, no inclusions
Finds med/pmed pot, bone
- Gully** 373 oriented NW-SE, moderately steep sides, flat base (L 10m+, W 0.49m, D 0.13m)
Fill 374 mid grey-brown silty clay, frequent calcareous flecks, frequent small lenses, moderate amount small to medium rounded and angular flints, frequent charcoal, frequent burnt clay flecks
Finds RB pot, bone
- Pit** 375 circular in plan, U-shaped, moderately steep, concave sides, concave base (W 0.69m, D 0.15m), ?cuts Ditch 359
Fill 376 dark blue-black, firm clay, no natural inclusions
Finds RB pot, bone
- Ditch** 377 oriented N-S, gradual to steep convex sides, flat base (L 19m+, W 2.70m, D 0.87m)
Fill 380 dark green-grey, firm clayey silt, rounded and sub-angular flint pebbles, calcareous flecks
Finds RB pot, bone
Fill 379 dark grey-brown, firm silty clay, sub-angular flint pebbles, calcareous flecks
Finds SF 5280 (glass), RB pot, bone, fired clay
Fill 378 dark grey-brown, firm silty clay, angular flint pebbles, calcareous lens
Finds RB pot, med/pmed pot, bone, fired clay
- Pit** 382 sub-oval in plan, oriented E-W, steep, convex N side, steep straight S side, concave base (W 0.53m, D 0.26m), cut by 399, unclear relationship with 391
Fill 383 mid brown-grey, v. compact silty clay, frequent calcareous flecks
- Pit** 384 sub-circular in plan, moderately steep, straight NW side, concave base (W 1.39m, D 0.23m), cut by Pit 345
Fill 385 dark grey-black v. compact silty clay, ?humus rich,
Finds RB pot, bone, metal
- Gully** 389 rectilinear, oriented WNW-ESE, gradual, undulating NNE side, moderately steep, straight SSW side, concave base (W 0.90m, D 0.12m)
Fill 390 mid brown, firm silty clay, occ. orange-brown flecks, occ. limestone flecks
Finds RB pot, fired clay
- Gully** 391 oriented E-W, steep sides, steep sides, stepped S side, flat base (W 0.71m, D 0.38m), relationship with pit 382 unclear
Fill 398 pale orange-brown, firm silty clay, calcareous flecks
Finds SF 5310 (slag), RB pot, fired clay, flint
Fill 392 dark green-grey-brown, firm silty clay, calcareous flecks
Finds RB pot, bone, fired clay
- Ditch** 393 oriented E-W, steep N side with undulation, flat base (L ?m, W 0.77m, D 0.43m), cut by modern drain
Fill 394 mid green-grey, v. compact silty clay, frequent small to medium angular and rounded flints, frequent charcoal flecks
Finds SF 5033, 5038, 5039 (Fe nails), 5040 (Fe buckle), 5279 (glass), med/pmed pot, bone, ceramic building material
- Ditch** 395 oriented E-W, almost vertical sides, flat base (L ?m, W 1.09m, D 0.37m)
Fill 397 white-orange, firm, friable chalky clay, no inclusions
Fill 396 dark black-brown, firm silty clay, frequent, well sorted calcareous clasts, moderate amount flint pebbles

Finds RB pot, bone

Ditch 399 oriented E-W, gradual, convex slope at top, moderately steep, concave towards bottom of S side (W 0.55m, D 0.46m), cuts Pit 382, cut by modern drain

Fill 381 mid green-grey-brown, v. compact silty clay, occ. rounded and angular flints, calcareous flecks, occ. charcoal flecks

Layer 2500 (road surface) oriented N-S, dark green-brown, compact clay, frequent small to large calcareous flecks and fragments, moderate amount sub-rounded flint gravels and pebbles, under ditch 2501

Finds RB pot, med/pmed pot

Ditch 2501 oriented N-S, moderately steep sides, flat, undulating base (L ?m, W 2.60m, D 0.20m), cuts layer 2507 and ?387

Fill 2504 green-brown, compact, streaked clay, occ. limestone flecks and small fragments, occ. charcoal fragments

Finds SF 5035 (Fe nail)

Fill 2503 pale to mid brown, firm, compact sandy clay, moderate amount limestone flecks and small fragments, occ. small sub-angular flints

Layer 2502 orange-yellow, compact, crumbly clayey sand, occ. small rounded flints, over layer 2500 and ditch 2501

Ditch 2505 oriented N-S, moderately steep, undulating sides, concave, irregular base (W 1.80m, D 0.29m)

Fill 2506 mid-brown, compact, malleable gritty clay, frequent flint grits, occ. small flints, occ. calcareous flecks, v.occ. medium sized calcareous fragments

Layer 2507 brown-green, compact clay, dark grey-green mottles, occ. sub-rounded flint pebbles, occ. sub-angular flints, under layer 2500, cut on E side by ditch 2501,

Context 2508 surface finds

Finds RB pot

Context 2509 surface finds

Finds SFs 5233 (metal melt), 5234 (Pb obj), bone

Context 2510 surface finds

Finds RB pot, med/pmed pot

Context 2511 surface finds

Finds RB pot

Context 2512 surface finds

Finds RB pot, bone

Context 2513 surface finds

Finds SFs 5235, 5236, 5237, 5238, 5239 (coins), 5240, 5241 (Cu alloy objs), 5244 (Fe nail), 5308 (slag), RB pot

Context 2514 surface finds

Finds RB pot

Context 2515 surface finds

Finds RB pot

Context 2516 surface finds

Finds RB pot

Context 2517 surface finds

Finds RB pot

Context 2518 surface finds

Finds RB pot

Context 2519 surface finds

Finds SFs 5243, 4244, 4245, 4246 (coins), 5247, 5248 (Fe objs), RB pot

Context 2520 surface finds

Finds RB pot

Context 2521 surface finds

Finds RB pot

Context 2522 surface finds

Finds RB pot

Context 2523 surface finds

Finds RB pot

Context 2524 surface finds

Finds RB pot

Context 2525 surface finds

Finds RB pot

Context 2526 surface finds

Finds RB pot

Context 2527 surface finds

Finds med/pmed pot

Context 2528 surface finds

Finds 5298 (Fe obj), brick/tile, med/pmed pot

Context 2529 surface finds

Finds SFs 5288 (Fe horse-shoe), 5289 (Fe knife)

Context 2530 surface finds

Finds brick/tile, med/pmed pot

Context 2531 surface finds

Finds RB pot

Ditch 2532* oriented E-W, moderately steep, straight sides, E side steeper than W, concave base (W 1.19m, D 0.48m)

Fill 2533 mid brown-grey silty clay

Ditch 2534* oriented E-W, steep, straight sides, E side steeper than W, concave base (W 1.09m, D 0.57m)

Fill 2535 mid brown-grey silty clay

Ditch 2536* oriented NE-SW, steep, straight sides, flat base (W 0.61, D 0.42m)

Fill 2537 mid grey-brown loamy clay, occ. chalk flecks

Finds bone in section - not collected

Ditch 2538* oriented NE-SW, V-shaped, moderately steep, straight sides, concave base (W 1.21m, D 0.58m)

Fill 2539 mid white-grey calcareous loamy clay, frequent chalk flecks and small fragments, occ. rounded and angular flints, occ. wood fragments

- Ditch** 2540* oriented N-S, moderately steep, straight sides, concave base (W 1.18m, D 0.44m)
Fill 2541 mid brown-grey silty clay
- Ditch** 2542* oriented N-S, moderately steep W side, steep E side, flat base (W 1.01m, D 0.26m)
Fill 2543 frequent calcareous flecks and fragments, occ. sub-angular flints
- Ditch** 2544* oriented NE-SW, moderately steep sides, flat base (W 2.35m, D 0.14m), cuts Ditch 2545
Fill 2547 calcareous loam, v. frequent calcareous inclusions
Fill 2549 mid to dark grey loamy clay
Fill 2548 mid brown-grey sandy loam, occ. calcareous flecks
- Ditch** 2545* oriented NE-SW, moderately steep W side, gradual E side, flat base (W 0.63m, D 0.08m), cut by Ditch 2544
Fill 2546 calcareous loam, frequent sub rounded calcareous inclusions
Fill 2550 mid brown-grey sandy loam, occ. calcareous flecks
- Ditch** 2551* oriented E-W, moderately steep, slightly stepped sides, concave base (W 1.29m, D 0.38m)
Fill 2552 mid to dark silty clay, humus rich
Fill 2553 occ. small-medium calcareous fragments, occ. flints
- Ditch** 2554* oriented E-W, steep, undulating W side, moderately steep, undulating E side, concave base (W 1.17m, D 0.29m)
Fill 2555 mid to dark silty clay, humus rich
Fill 2556 occ. calcareous fragments, occ. flints
- Ditch** 2557* oriented NNE-SSW, moderately steep sides, slightly convex W side, steeper E side than W, flat base (W 1.42m, D 0.42m)
Fill 2558 mid brown-grey silty clay, occ. sub-angular flints, occ. oxidisation
- Ditch** 2559* oriented NNE-SSW, moderately steep, undulating W side, steep, slightly convex E side (W 13.46m, D 2.60m+, unrectified)
Fill 2560 mid grey-brown silty clay, occ. flint pebbles
Fill 2561 mid to dark brown-grey silty clay, becoming paler towards base, semi-gleyed, frequent flint grits, occ. oxidisation, occ. small-medium calcareous fragments, occ. charcoal flecks
 Finds bone
Fill 2562 mid brown-grey silty clay, semi-gleyed, occ. oxidisation, occ. flint pebbles

Construction Section 4

Context 400 unstratified finds, plot 30

Context 401 unstratified finds, plot 31

Context 402 unstratified finds, plot 32

Finds flint, RB pot

Context 403 unstratified finds, plot 33

Finds SFs 5004 (Fe nail), 5009 (quern), 5227, 5231 (Pb objs), 5228, 5229, 5232 (Cu alloy objs), 5230 (coin), 5311 (slag), flint, bone, fired clay

Context 404 unstratified finds, plot 34

Finds RB pot

Context 405 unstratified finds, plot 35

Finds RB pot, med/pmed pot

Context 406 unstratified finds, plot 36

Finds flint

Context 407 unstratified finds, plot 37

Finds RB pot

Context 408 unstratified finds, plot 38

Ditch 409 oriented approximately N-S, gradual, concave W side, moderately steep E side, concave base (L 8m+, W 1.13m, D 0.27m)

Fill 410 light grey-brown, malleable sandy clay, occ. well sorted, sub-rounded flint pebbles, occ. flint gravels

Finds RB pot, bone

Ditch 411 oriented approximately NE-SW, moderately steep, concave NNW side, slightly stepped, steep SSE side, flat base (L 9m+, W 1.52m, D 0.42m)

Fill 413 orange-brown sandy gritty clay, grey clay lenses, occ. sub-angular flint gravels and grits, occ. charcoal flecks, occ. iron staining flecks

Fill 412 mid blue-grey, v. compact sandy clay, v. occ. small sub-rounded and sub-angular flints

Finds RB pot, bone, ceramic building material

Pit 414 sub-oval in plan, oriented N-S, almost vertical E side, moderately steep, undulating W side (L 1.55m, W 1.35m, D 0.46m)

Fill 416 yellow-brown, compact, malleable gritty clay, frequent sub angular flint grits and gravels, moderate amount charcoal flecks

Fill 415 dark brown-grey, compact sandy gritty clay, moderate amount flint grits, occ. small sub-rounded and sub-angular flints, occ. charcoal flecks

Finds bone

Ditch 417 oriented approximately N-S at S end of site, turning to ENE-WSW before hitting north baulk, moderately steep sides, slightly stepped and convex NW side, flat base (L 20m+, W 1.70m, D 0.62m), cut by ditch 421

Fill 418 mottled orange-brown and blue-grey, compact sandy clay, moderate amount of well sorted sub-rounded and sub-angular flints.

Finds RB pot, bone, ceramic building material, fired clay.

?Pit 419 sub-circular in plan, moderately steep remains of sides, concave, undulating base, (W 1m, D 0.16m).

Fill 420 mottled orange-brown and grey, crumbly sandy clay, occ. small sub-angular flints

- Ditch** 421 oriented approximately N-S, moderately steep sides, flat, undulating base (L 9m+, W 0.90m, D 0.25m), may cut ditches 417 and 423, but not clear in section.
- Fill* 422 dark grey-brown, v. compact sandy silty clay, occ. small sub-angular and sub-rounded flints
- ?Pit** 423 or ditch terminal, steep sides, base not visible (W 0.5m, D 0.16m), ?cut by 421
- Fill* 424 grey-brown, firm sandy clay, occ. small sub-angular inclusions.
- Gully** 425 oriented approximately NNE-SSW, moderately steep, concave W side, steep, straight E side, flat base (L 10m+, W 0.58m, D 0.16m)
- Fill* 426 mottled grey-brown, firm sandy clay, orange streaks, occ. small sub-angular flints
- Pit** 427 sub-circular in plan, moderately steep sides, undulating, sloping base (L 1.22m, W 1.14m, D 0.18m), cuts pit 429
- Fill* 428 pale to mid grey, v. compact silty clay, orange mottling, moderate to small rounded and angular flints, charcoal flecks
- Pit** 429 sub-oval in plan, shallow gently sloping sides, concave, undulating base (L 1.82m, W 0.76m, D 0.14m), cut by pit 427
- Fill* 430 pale to mid grey, v. compact silty clay, orange and yellow mottling, occ. small rounded and angular flints, charcoal flecks, burnt clay flecks
- Pit** 431 oval in plan, oriented E-W, moderately steep sides, concave base (L 1.1m, W 1m, D 0.2m), cuts pit 433
- Fill* 432 dark green-brown, compact silty clay, occ. small rounded flints, occ. calcareous flecks, occ charcoal flecks
- Finds* RB pot, bone
- Pit** 433 sub-oval in plan, oriented E-W, steep, straight W side, flat base (L 1.10m, W 0.95m, D 0.20m), cut by pit 431
- Fill* 434 brown-grey, compact sandy clay, v. occ. small sub-rounded flints, v. occ. charcoal flecks
- Pit** 435 sub-oval, oriented E-W, gradual sides, N side slightly stepped, concave base (L 4m, W 2.5m, D 0.27m)
- Fill* 436 mid brown-grey, compact gritty clay, occ. small sub-rounded flints, occ. charcoal flecks
- Finds* RB pot, fired clay, bone
- Pit** 437 oval in plan, oriented N-S, moderately steep remains of N side, slightly concave, uneven base (L 1.43m, W 1.24m, D 0.17m), cut by pit 439
- Fill* 438 dark grey, v. compact silty clay, occ. small rounded and angular flints, occ. charcoal flecks
- Finds* RB pot, fired clay
- Pit** 439 oval in plan, oriented E-W, moderately steep N side, uneven base (L 1.80m, W 1.03m, D 0.19m), cuts pit 437, cut by ditch 441
- Fill* 440 mid green-grey, v. compact silty clay, occ. small rounded and angular flints, occ. charcoal flecks
- Ditch** 441 oriented approximately E-W, steep sides, N side steeper than S, flat base (W 1.34m, D 0.6m), cuts pit 439, and is re-cut by 446
- Fill* 442 yellow-brown, firm, malleable gritty clay, occ. small sub-rounded and sub-angular flints, occ. charcoal flecks
- Finds* RB pot
- Fill** 443 unexcavated feature
- Finds* SF 5041 (Fe obj)
- Fill** 444 unexcavated feature
- Finds* SF 5037 (musket ball)
- Fill** 445 unexcavated feature

Finds SF 5270 (brooch)

Re-cut ditch 446 oriented approximately E-W, steep sides, N side steeper than S, flat base (W 0.80m, D 0.35m), ?re-cut of ditch 441

Fill 448 pale to mid brown-grey, greasy gritty clay, occ. small flints, moderate amount flint grits

Finds pot

Ditch 449 oriented approximately NW-SE, moderately steep, convex E side, steep, straight W side, flat base (L 7.24m, W 1.3m, D 0.45m), cuts ditch 453

Fill 450 mid grey, plastic, friable silty clay, dark brown-green flecks, v. occ. charcoal flecks, occ. flint and quartz gravels, smelly

Ditch 453 oriented approximately N-S and E-W, moderately sloping, undulating sides, concave base (W 1.3m, D 0.53m), cut by ditch 449, cuts pit 454

Fill 452 pale grey, plastic silty clay, frequent orange-brown flecks - iron staining and decayed iron compounds, v. occ. flint and quartz pebbles

Fill 451 mid grey, plastic, friable silty clay, brown-green flecks, occ. flint and quartz gravels

Pit 454 oval in plan, moderately sloping, concave W side, flat base (L 1.5m+, W 1m, D 0.26m), cut by ditch 453

Fill 455 pale to mid brown-yellow, firm, slightly sandy silty clay, small mid grey lenses, moderate amount flint gravels

Context 456 surface finds from unexcavated feature

Finds RB pot

Context 457 surface finds from unexcavated feature: pot, fired clay

Finds RB pot

Context 458 surface finds from unexcavated feature: pot

Finds RB pot

Context 459 surface finds from unexcavated feature: pot

Finds RB pot

Context 460 surface finds from unexcavated feature: pot

Finds RB pot

Context 461 surface finds from unexcavated feature: pot

Finds RB pot

Context 462 surface finds from unexcavated feature: pot

Finds RB pot

Context 463 surface finds from unexcavated feature: pot

Finds RB pot

Ditch 464 former field boundary, oriented N-S, contains pale brown clay, frequent flint gravels, occ. charcoal fragments, frequent humus, large burnt tree roots

?Re-cut ditch 465 oriented E-W, steep, straight sides, flat base (W 0.43m, D 0.19m), re-cuts ditch 446

Fill 447 dark grey-brown, compacted sandy clay, occ. flint gravels, occ. charcoal flecks

466 unused

?Hollow 467 running around contour of hill, ?natural

Ditch 468* oriented NNW-SSE, moderately steep W side, steep E side, gentle break of slope towards the bottom of both sides, flat base (L ?, W 2.1m, D 0.95m)

- Fill* 469 mid grey, friable loamy clay, occ. flint gravels, v. occ. calcareous grits, occ. charcoal flecks
Finds SF 5309 (Fe nail), RB pot, fired clay, bone
- Pit** 470* irregular shape in plan, gradual sides, convex E side, concave base (W 2.95m, D 0.51m)
Fill 471 grey-brown, compact loamy clay, frequent flint cobbles, occ. flint gravels and pebbles, frequent burnt limestone, frequent charcoal flecks
Finds RB pot, fired clay, dressed stones
- Ditch** 472* oriented approximately N-S, V-shaped, moderately steep, undulating sides, concave, narrow base (L ?, W 1.53m, D 0.78m), cut by ditches 476 and 478
Fill 473 pale yellow-grey, firm silty clay, occ. flint gravels, occ. calcareous grits, occ. charcoal flecks
- Gully** 474* oriented N-S, moderately steep, undulating sides, flat base (L ?, W 1.30m, D 0.54), ?cut by gully 480
Fill 475 mid brown-grey, firm loamy clay, occ. flint gravels, occ. calcareous grits, occ. charcoal flecks
Finds RB pot
- Ditch** 476* oriented N-S, steep, concave E side, moderately steep, straight W side, flat, undulating base (L ?m, W 2.5m, D 0.39m) ?re-cut of ditch 472
Fill 477 pale to mid brown-grey, soft silty clay, occ. flint gravels, patches of charcoal flecks
- Ditch** 478* oriented N-S, gradual E side, moderately steep W side, concave base (L ?m, W 1.5m, D 0.49m), ?re-cut of ditch 472
Fill 479 pale to mid brown-grey, firm silty clay, occ. flint gravels, moderate amount calcareous grits
- Gully** 480* oriented N-S, gradual E side, Steep W side, concave base, (L ?, W 0.70m, D 0.38), ?cuts gully 474, cut by land drain
Fill 481 mid brown-grey, firm loamy clay, no visible inclusions

Construction Section 5

Context 500 unstratified finds, plot 39

Finds RB pot

Context 501 unstratified finds, plot 40

Finds med/pmed pot

Context 502 unstratified finds, plot 41

Context 503 unstratified finds, plot 42

Finds med/pmed pot

Context 504 unstratified finds, plot 43

Finds flint

Context 505 unstratified finds, plot 44

Context 506 unstratified finds, plot 45

Context 507 unstratified finds, plot 46

Finds flint, med/pmed pot

Context 508 unstratified finds, plot 47

Finds flint

Context 509 unstratified finds, plot 48

Finds flint, med/pmed pot

Context 510 unstratified finds, plot 49

Finds SF 5025 (Ro brooch), RB pot, med/pmed pot

Context 511 unstratified finds, plot 50

Finds SFs 5012, 5014 5028, 5260 (Pb objs), 5013, 5017, 5029, 5031, 5257 (coins), 5020, 5032, 5255 (Cu alloy objs), 5021, 5296, 5030 (Fe obj), 5263, 5264, 5265 (flint), flint, bone, brick/tile, RB brick/tile, RB pot, med/pmed pot

Context 512 unstratified finds, plot 51

Finds SF 5283 (glass), flint

Context 513 unstratified finds, plot 52

Finds med/pmed pot

Context 514 unstratified finds, plot 53

Finds med/pmed pot

Context 515 unstratified finds, section 5

Finds RB pot, fired clay, bone

Ditch 516 oriented N-S, gradual E side, moderately steep W side, slightly concave base (L 15m+, W 1.90m, D 0.42m)

Fill 518 yellow-brown, malleable sandy clay, occ. fossils, occ. calcareous flecks

Fill 517 mid to dark brown, firm sandy gritty clay, frequent flint grits

Finds flint, RB pot, bone

?Re-cut ditch 519 orientation E-W, moderately steep N side, gradual south side, concave base (L 55m, W 1.60m, D 0.62m), re-cut of ditch 553, same as ditch 521, cut by furrows at several points

Fill 520 dark brown-grey, v. compacted gritty clay, occ. rounded and sub-angular flint pebbles, occ. charcoal flecks, under layer 562

Finds SFs 5249, 5250 (coins), RB pot, bone, fired clay.

Section 521 oriented E-W, moderately steep sides, S side steeper than N, concave base (W 0.88m, D 0.17m), same as Ditch 519

Fill 522 yellow-brown, v. compact clay, v. occ. small, sub-rounded and sub-angular flints

Finds bone

Ditch 523 oriented N-S, moderately steep, concave W side, sloping, undulating base (L 12m+, W 1.75m, D 0.25m), ?same as Ditch 525.

Fill 524 mid brown, compact sandy clay, occ. flint grits, ?same material as fill 526

Finds RB pot.

?Ditch 525 oriented E-W, gradual N side, slightly concave base (L 12m+ or 3m, W 1.50m, D 0.20m), ?terminus of ditch 523/?pit

Fill 526 yellow brown, compact sandy clay, occ. small sub-rounded flints

Finds RB pot

Gully 527 orientation NE-SW, steep, straight sides, flat base (L 4m+, W 0.6m, D 0.09m)

Fill 528 mid brown-yellow, firm sandy clay, v. occ. flint gravels

Finds fired clay

Gully 529 oriented NW-SE, steep sides, stepped NE side, concave base (L 14m+, W 0.55m, D 0.30m)

Fill 530 yellow-brown sandy clay, gleying at base of feature, occ. small flints, occ. charcoal flecks

Context 531 unstratified surface find

Finds RB pot

Unstratified finds 532

Finds post-med brick

Pit 533 sub-oval in plan, oriented N-S, moderately steep N side, flattish base (L 0.75m, W 0.15m, D 0.12m), cut by pit 551

Fill 555 yellow-brown, slightly sandy clay, small flints, charcoal inclusions

Finds RB pot, ceramic building material

Pit 534 sub-circular in plan, S side obscured by baulk, flat base interrupted by moderately steep slope which continues into baulk (L 1.35m, W 1.07m, D 0.07m), unclear relationship with pit 557

Fill 556 grey-brown, compact, mottled clay, occ. small flints

Finds RB pot, ceramic building material, fired clay

535 arbitrary layer of unstratified finds

Finds flint, med/pmed pot

Gully 536 oriented E-W, steep S side, moderately steep N side, flat base with step (L 2.35m+, W 0.80m, D 0.09m), cut by furrow

Fill 561 pale grey-brown sandy clay, occ. sub-rounded pebbles, occ. calcareous flecks

Finds flint, RB pot, fired clay

Context 537 unstratified surface finds

Finds SF 5031, RB pot

Context 538 unstratified surface finds

Finds RB pot, med/pmed pot

Context 539 surface finds

Finds RB pot

Context 540 surface finds

Finds RB pot, fired clay, bone

Context 541 surface finds

Finds SF 5021 (Fe obj), flint, RB pot

Context 542 surface finds

Finds SF 5283 (glass), flint, RB pot

Pit 543 sub-oval in plan, oriented NW-SE, steep SW side, moderately steep NE side, flat base (L 1.48m, W 0.72m, D 0.09m)

Fill 544 mottled orange-brown, firm, compact, slightly sandy clay, occ. sub-rounded and sub-angular flint pebbles

Gully 545 oriented N-S, U-shaped, moderately steep sides, flattish base (L 2.70m+, W 0.80m, D 0.14m), cuts gully 547

Fill 546 mid brown, firm, compact sandy clay, occ. sub-rounded and sub-angular flint pebbles, occ. charcoal flecks

Finds RB pot, bone, fired clay

Gully 547 oriented N-S, moderately steep W side, fairly flat base (L 2.20m+, W 0.56m, D 0.12m), cut by Gully 545

Fill 548 mottled orange-grey, malleable clay, occ. small flints

Pit: 549 sub-rectangular in plan, oriented NW-SE, moderately steep sides, concave SW side, slightly convex NE side, irregular base (L 0.8m+, W 1.00m, D 0.19m), cut by furrow

Fill 550 mid brown, compact, mottled sandy clay, occ. small flints

Finds pot, bone

Pit 551 sub-circular in plan, gradual S side, steep N side, concave base (L 1.2m, W 0.9m, D 0.15m), cuts pit 533

Fill 552 dark grey-brown, compact sandy clay, occ. small flints, occ. charcoal flecks

Ditch 553 oriented E-W, gently sloping south side (L 55m, W 1.05m, D 0.50m), ?re-cut by ditch 519, cut by furrows

Fill 554 light brown-grey, compacted, slightly sandy gritty clay, occ. small sub-angular flints, flint pebbles, occ. calcareous material, underlies layer 562

Layer: 562 pale orange-brown, compact, crumbly sandy clay, iron staining, occ. sub-rounded flint pebbles

Pit 557 sub-circular in plan, oriented N-S, moderately steep N side, flat base (L 1.10m, W 1.07m, D 0.12m), unclear relationship with pit 534

Fill 558 dark grey-brown, compact sandy clay, small flints

Pit 559 sub-oval in plan, oriented N-S, moderately steep sides, concave base (L 1.63m, W 0.70m, D 0.10m)

Fill 560 mid grey-brown, compact sandy clay, occ. small sub-rounded flint pebbles

Finds RB pot, bone, fired clay

?Pit 565, oriented NNW-SSE, pit or ditch terminus, V-shaped, steep, straight sides, flat base (L ?m, W 0.80m, D 0.65m)

Fill 566 mid grey-brown, firm silty clay, frequent small flints, frequent orange oxidised fragments, occ. charcoal flecks.

Section 563 oriented NE-SW, moderately steep sides (L 1.5m+, W 0.68m), ?terminus of gully 529, cut by furrow.

Fill 564

Ditch 567* oriented N-S, gradual sides, concave W side, convex E side (W 1.7m, D 0.17m), ?contiguous with ditch 519

Fill 568 mid grey-brown, firm, friable loamy clay to silty clay, occ. flint gravels

?Pit 569* ?several pits, unclear in plan, gradual sides, concave base (W 2.35m, D 0.22m)

Fill 570 mid brown, moderately firm silty clay to loamy clay, occ. flint gravels

?Ditch 571* oriented approximately N-S, gradual to moderately steep, stepped W side, steep, straight E side, slightly concave base (L ?m, W 1.69m, D 0.28m), ?truncated

Fill 572 mid grey-brown, firm loamy clay, occ. flint gravels

?Ditch 573* oriented approximately N-S, gently sloping, straight W side, steep, slightly concave E side, flat base (L ?m, W 1.83m, D 0.28m), cut by furrow

Fill 574 mid brown, compact loamy clay, moderate amount flint pebbles, occ. charcoal, occ. burnt clay flecks

Section 575 oriented ENE-WSW, U'-shaped (L 1.45m+, W 0.45m) ?terminus of gully 529, cut by furrow

Fill 576

Context 577 unstratified surface finds

Finds SF 5011 (coin)

Context 578 unstratified surface finds

Finds SF 5026 (Cu alloy obj)

Context 579 unstratified surface finds

Finds SF 5027 (tile counter)

Context 580 unstratified surface finds

Finds SF 5015, (Cu alloy obj), 5016, (Fe nail)

Context 581 unstratified surface finds

Finds SF 5018, 5019 (coins)

Context 582 unstratified surface finds

Finds SF 5022, 5023 (coins), 5024 (Fe nail)

Construction Section 6

Context 600 unstratified finds, plot 54
Finds flint

Context 601 unstratified finds, plot 55
Finds flint

Context 602 unstratified finds, plot 56

Context 603 unstratified finds, plot 57
Finds flint, RB pot, med/pmed pot

Context 604 unstratified finds, plot 58

Context 605 unstratified finds, plot 59
Finds RB pot, med/pmed pot

Context 606 unstratified finds, plot 60
Finds med/pmed pot

Context 607 unstratified finds, plot 61

Context 608 unstratified finds, plot 62
Finds RB pot, med/pmed pot

Context 609 unstratified finds, plot 63
Finds RB pot, med/pmed pot

Context 610 unstratified finds, plot 64
Finds med/pmed pot

Context 611 unstratified finds, plot 65
Finds RB pot, med/pmed pot

Context 612 unstratified finds, plot 66
Finds med/pmed pot

Context 613 unstratified finds, plot 67

Furrows 614

Fill 614 fill of furrows

Finds RB pot, med/pmed pot

Pit 615* sub-circular in plan, steep straight sides, flat base (Diameter 0.36m)

Vessel 616 flint gritted urn (SF 5274), upper portion of body damaged, cordons with ?fingernail decoration around rim

Fill 617 mostly within 616, mid to dark grey-brown, soft, friable, sandy clayey loam, occ. flint grits, occ. calcareous gravels

Finds flint, ph pottery

Gully 618* oriented N-S, steep straight sides, U-shaped (W 0.16m, D 0.12m)

Fill 619 mid to dark grey-brown, soft, friable, sandy clayey loam, occ. flint grits, occ. calcareous gravels

Finds ph pottery

Ditch 620* orientation uncertain, V shaped, flat base (W 1.15m, D 0.78m), cuts Ditch 623

Fill 622 dark brown, silty clay, frequent charcoal flecks, occ. small burnt stone

- Fill* 621 mid brown, friable, silty clay, frequent sandy orange mottles, occ. small flints, moderately frequent charcoal flecks
- Finds* ph pot, fired clay
- Ditch** 623* oriented NNW-SSE, steep sides, convex W side, straight E side, with moderately sharp break of slope near top, flat base (W 1.96m, D 1.08m), cut by Ditch 620
- Fill* 638 pale grey-brown, silty clay, frequent iron oxidation, occ. charcoal flecks, occ. flint grits, moderate compaction
- Finds* ph pot
- Fill* 625 mid brown, loamy clay, frequent yellow sandy mottles, occ. charcoal flecks, occ. oxidised stones, moderate compaction
- Fill* 624 mid brown, loamy clay, frequent yellow sandy mottles, occ. small flints, occ. charcoal flecks, moderate compaction
- ?Pit** 626* 'U' shaped; steep concave sides, concave base (W 0.61m, D 0.39m), cuts Ditch 639, underlies Layer 642
- Fill* 627 dark brown-grey, firm, friable, silty clay, moderate charcoal flecks and pieces, sub-angular and rounded flint gravels
- Finds* ph pot, fired clay, bone
- Gully** 628 oriented ESE-WNW, steep concave W side, flat base (W 0.51m+, D 0.15m), cut by Gully 630, overlies Layer 650
- Fill* 629 mid brown-grey, firm, silty clay, occ. charcoal flecks, occ. flint gravels and grits
- Gully** 630 oriented NNW-SSE, vertical sides, flat base (W 0.19m, D 0.22m), cuts Gully 628, underlies Layer 600
- Fill* 631 black-grey, firm, loamy clay, moderately frequent charcoal flecks and pieces, occ. burnt clay flecks
- Pit** 632* Straight sides; vertical W. side, steep E side, concave base (W 0.65, D 0.25), cuts Layer 650, underlies Layer 642
- Fill* 633 mid to dark brown-grey, soft, friable clayey loam to loamy clay, occ. charcoal flecks and pieces, occ. calcareous grits, occ. flint grits/gravels
- Finds* ph pot
- Ditch** 634* oriented N-S to NNE-SSW, steep and convex W. side, flattish/slightly concave base (W 0.52m+, D 0.45m), re-cut by 636, cuts Layer 650
- Fill* 635 pale to mid grey-brown, firm, loamy clay, occ. charcoal pieces, occ. calcareous grits
- Re-cut ditch 636** oriented N-S to NNE-SSW broad 'U'-shape, moderately steep concave sides, concave base (W 1.32m, D 0.38m) cuts Ditch 634, underlies Layer 600
- Fill* 637 dark brown-grey, firm, friable sandy clayey loam to loamy clay, flint gravels, occ. calcareous grits
- Finds* pot, bone
- Ditch** 639* oriented ESE-WSW, profile caught askew: gently sloping straight E. side, steep, convex W side, concave base (W 3.45m, D 1.09m), cut by Pit 626, overlies Layer 650
- Fill* 640 mid grey-brown, firm, friable, silty clay to loamy clay, v. occ calcareous grits, v. occ. charcoal flecks
- Fill* 641 mid brown-blue/grey, firm, loamy clay to silty clay, occ. flint gravels, v. occ charcoal flecks, moderate oxidation towards top of fill
- Layer** 642* soft, friable, mottled pale grey clay with orange-brown loamy clay, occ. flint gravels, v.occ. charcoal flecks, overlies Pits 626, 632
- Ditch** 643* oriented WNW-ESE, moderately steep sides, stepped W side, undulating E side, flattish base (W 2.77m, D 0.80m), cuts Layer 650, underlies Layer 600
- Fill* 656 pale grey-yellow, soft, sticky, silty clay, yellow-brown mottles, occ. charcoal pieces
- Finds* ph pot, fired clay
- Fill* pale to mid brown-blue/grey, firm, loamy clay to silty clay, v. occ calcareous grits, occ. oxidised small iron nodules.

- Finds* ph pot
Fill 644 mid grey/blue-brown, firm, loamy clay to silty clay, v. occ. flint gravels, small oxidised iron nodules
- Hearth** 646* small fire pit, moderately steep, straight/undulating sides, flattish base (W 1.05m, D 0.27m), underlies Layer 649, cuts Layer 650
Fill 647 dark grey-black, soft, sticky, silty clay, frequent burnt limestone, frequent burnt flint, frequent charcoal flecks and pieces, occ. burnt clay flecks
Finds burnt flint & limestone
- Layer** 648* natural alluvium deposit, pale yellow-grey, firm, sticky, silty clay, some surface oxidisation, no inclusions (D 0.43-1.2m), overlies Layers 649, 686, 694, 698, underlies Layer 600
- Layer** 649* natural soil accumulation, mid to dark brown-grey/blue, soft, loamy clay to silty clay, occ. calcareous, occ. flint grits (D 0.2-0.3m), overlies Hearth 646, underlies Layer 648
- Layer** 650 mid grey-brown, firm, friable, clay with pale grey mottles, and orange brown sandy clay, rare sub angular-rounded flint gravels and grits, occ. calcareous grits (D 0.45-0.90m), overlies Layer 651, underlies Gully 628, Pit 632, Ditches 634, 639, 643, Hearth 646
- Layer** 651 pale grey, soft, coarse sand (D 0.04-0.06m), overlies Layer 652, underlies Layer 650
- Layer** 652 pale white-grey silt, rounded calcareous grits, rounded and sub-angular flint gravels and grits (D 0.08-0.11m), overlies Layer 653, underlies Layer 651
- Layer** 653 pale to mid grey, soft, fine sand, with some coarse sands (D 0.10-0.13m), overlies Layer 654, underlies Layer 652
- Layer** 654 pale to mid yellow-grey, soft, silt, rounded and sub angular calcareous and flint grits and gravels (D 0.25-0.28m), overlies Layer 655, underlies Layers 653, 693
- Layer** 655 natural Kimmeridge clay, dark blue-grey, firm, silty clay, occ. flint grits and fossiliferous material (D unknown), underlies Layers 653, 693
- Hollow** 657* oriented N-S, steep sides, flattish, undulating base (W 6m, D 0.64m)
Fill 658 mid grey-brown, firm, friable clayey loam to loamy clay, frequent flints (up to 0.15m), occ. flint gravels
Finds med/pmed pot
- Ditch** 659* oriented NNW-SSE, moderately sloping sides, concave base (W 1.33m, D 0.28m), cut by Gully 661
Fill 660 mid grey-brown, friable loamy clay, frequent charcoal flecks and pieces up to 0.01m, frequent gravels, frequent flints up to 0.08m, frequent limestone fragments up to 0.08m, moderate amount burnt clay flecks
Finds ph pot
- Gully** 661* oriented NNW-SSE, steep sides, concave base (W 0.45m, D 0.15m), cuts Ditch 659
Fill 662 pale brown, friable loamy clay, occ limestone up to 0.05m, moderate amount flint up to 0.04m, occ. bright orange clay mottles
- Ditch** 663* oriented N-S, W side steep, E side moderately steep, flat base (W 1.60m, D 0.42m), sealed by furrow
Fill 664 mid brown silty clay, v. occ charcoal flecks, v. occ. flints up to 0.04m, occ. calcareous grits, occ. gravels, occ. oxidised orange clay, occ. manganese flecks
- Ditch** 665* oriented WNW-ESE, ENE side steep, WSW side moderately steep, flat base (W 2.90m, D 0.62m), sealed by furrow
Fill 667 mid grey-brown silty clay, moderate amount flints, occ. calcareous grits, occ. gravel, frequent oxidised orange-cream clay mottles, occ. manganese flecks, occ. gravels

- Fill* 666 mid brown silty clay, v. occ medium flints, occ. calcareous grits, frequent oxidised orange clay mottles, manganese flecks
- Ditch** 668* oriented WNW-ESE, WSW side steep, ENE side moderately steep, undulating base (W 4.30m, D 0.80m), sealed by furrow
- Fill* 670 mid grey-brown silty clay, moderate amount medium flints, occ. gravel, frequent oxidised orange-cream clay mottles, occ. manganese flecks, occ. gravels, similar to Fill 667
- Fill* 669 mid brown silty clay, moderate amount medium flints, occ. calcareous grits, v. occ. oxidised clay mottles, occ. manganese flecks, similar to Fill 666
- Finds* flint
- Ditch** 671* oriented WNW-ESE, gently sloping sides, WSW side becomes steeper half way down, flat base (W 4.50m, D 0.60m), sealed by furrow
- Fill* 672 mid brown silty clay, occ. calcareous grits, frequent oxidised orange-cream clay mottles, manganese flecks, similar to Fill 666
- Finds* ph pot
- Ditch** 673* oriented WNW-ESE, moderately steep top of slope, with sides becoming steep half way down, flat base (W 3.50m, D 0.65m), sealed by furrow
- Fill* 674 mid brown silty clay, occ. calcareous grits, frequent oxidised orange clay mottle, occ. manganese flecks, occ. charcoal flecks, moderate amount medium flints, similar to Fill 676
- Ditch** 675* oriented NNW-SSE, steep, irregular sides, concave base (W 1.40m, D 0.55m), sealed by furrow
- Fill* 676 mid brown silty clay, occ. calcareous grits, frequent oxidised orange clay mottles, occ. manganese and charcoal flecks, moderate amount medium flints, similar to Fill 674
- Finds* ph pot
- Ditch** 677* oriented N-S, only steep W side remains, flat base (W 0.30m+, D 0.25m), re-cut by 679
- Fill* 678 dark brown silty clay to loamy clay, occ. calcareous grits, occ. charcoal flecks
- Finds* ph pot
- Re-cut** 679* oriented WSW-ESE, SW side steep, convex and stepped, NW side moderately steep to steep, straight with break of slope towards bottom, flattish base (W 2.05m, D 0.70m), re-cut of 677, sealed by furrow, cut by modern field drain
- Fill* 681 dark brown clay, occ. flint gravels, occ. medium flints
- Fill* 680 dark brown silty clay to loamy clay, occ. flint pebbles, occ. calcareous grits, occ. charcoal flecks
- Context 682** unused
- Context 683** unused
- Ditch** 684* oriented NW-SE, NE side steep, straight, SW side moderately steep, concave, concave base (W 1.70m, D 0.45m), sealed by furrow
- Fill* 685 mottled, mid brown-orange loamy clay, v. occ. charcoal flecks, moderate amount flint pebbles, occ. flint gravels
- Layer** 686* pale to mid grey-brown, soft, silty clay, ?humified, orange-brown mottles, no inclusions (D 0.15m), overlies Layer 687, underlies Layer 648
- Layer** 687* pale to mid blue-grey, soft, silty clay, occ. shell fragments (D 0.10m-0.50m), underlies Layers 686, 695, overlies Layer 688
- Layer** 688* mid brown-grey, soft, silty clay, occ. shell fragments, occ. organics (D 0.23m), overlies Layer 689, underlies Layer 687
- Layer** 689* mid brown, silty clay, frequent shell fragments, frequent organics (tree branches, roots) (D 0.17m), overlies Layer 690, underlies Layer 688

- Layer 690*** mid to dark grey, soft, silty clay, humified, occ. shell fragments, occ. organics (D 0.21m), overlies Layer 691, underlies Layer 689
- Layer 691*** dark black-brown, silt, organics (tree branches up to 0.5m long), some burnt wood (D 0.07m-0.11m), overlies Layer 692, underlies Layer 690
- Layer 692*** mid brown-grey, soft, coarse sand, occ. flint grits and gravels (D 0.07m), overlies Layer 693, underlies Layer 691
- Layer 693*** pale grey-white, firm, calcareous grits, occ. organics (D 0.05m), overlies Layer 654, underlies Layer 692
- Layer 694*** pale grey, soft, v. silty clay to clayey silt, no inclusions (D 0.07m), overlies Layers 695, 696, underlies Layer 648
- Layer 695*** pale grey, v. silty clay to clayey silt, frequent shell fragments (D 0.25m), overlies Layer 687, underlies Layer 694
- Layer 696*** mid yellow-grey, soft, coarse sand, occ. calcareous and flint grits (D 0.05m-0.20m), overlies Layer 697, underlies Layers 694, 698
- Layer 697*** pale green-white, firm, silty clay, occ. calcareous grits (D 0.10m), overlies Layer 654, underlies Layer 696
- Layer 698*** mid brown-grey, moderately firm, silty clay, moderately frequent calcareous grits and gravel, frequent flint gravel (D unknown), overlies Layer 695, underlies Layer 648,

Construction Section 7

Context 700 unstratified finds, plot 68
Finds ph pot

Context 701 unstratified finds, plot 69

Context 702 unstratified finds, plot 70
Finds SF 5253 (Cu alloy obj)

Context 703 unstratified finds, plot 71
Finds SF 5258 (button), flint

Context 704 unstratified finds, plot 72
Finds flint, RB pot, med/pmed pot

Context 705 unstratified finds, plot 73
Finds med/pmed pot

Context 706 unstratified finds, plot 74

Context 707 unstratified finds, plot 75
Finds med/pmed pot

Pit 708* shape in plan not visible, E side steep, W side moderately steep, flattish base (W 1.20m, D 0.59m)
Fill 709 mid grey sandy-clay, occ. charcoal flecks, small calcareous fragments
Finds ph pot, bone, fired clay

Pit 710* shape in plan not visible, W side steep, E side moderately steep, slightly concave base (W 0.60m, D 0.23m)
Fill 711 pale yellow, gritty silty-clay, occ. charcoal flecks, v. occ. small flint nodules
Finds none

Pit 712* shape in plan not visible, moderately sloping sides, concave base (W 0.82m, D 0.27m)
Fill 713 pale yellow, gritty silty-clay to loamy clay, occ. charcoal flecks, moderate amount small flint nodules, v. occ. small calcareous fragments
Finds ph pot

Pit: 714* shape in plan not visible, Steep E side, moderately steep W side, concave base (W 0.75m, D 0.20m)
Fill 715 pale yellow-grey silty clay to loamy clay, moderate amount charcoal flecks, occ. small flint pebbles, v. occ. calcareous fragments
Finds ph pot

Ditch 716* oriented NNW to SSE, E side steep, W side moderately steep, concave base (W 1.05m, D 0.40m)
Fill 717 pale grey silty clay, moderate amount charcoal flecks, occ. to moderate amount small flint nodules
Finds ph pot, bone

Ditch 718* oriented WNW-ESE, steep sides, slightly concave base (W 1.47m, D 0.50m)
Fill 719 light to mid grey-brown silty clay, moderate amount flint nodules (up to 10cm), occ. small stones
Finds ph pot, fired clay

Pit 720* shape in plan not visible, moderately sloping sides, concave base (W 1.40m, D 0.25m), cut by modern field drain
Fill 721 mid brown-grey loamy clay, occ. charcoal flecks and fragments, occ. small flint pebble

?Ditch 722* possibly a ditch terminus, or a pit, orientation unknown, steep convex slopes, flattish base (W 1.35m, D 0.42m)

- Fill* 723 mid yellow-grey silty clay, flint nodules (up to 10cm) moderately sorted, occ. small stones
- ?*Pit* 724* pit or gully terminus, shape in plan not visible, steep sided U-shaped profile, flattish base (W 0.60m, D 0.27m)
- Fill* 725 mid yellow-grey silty clay, moderate amount small flint pebbles
- Ditch* 726* oriented NW-SE, W side convex, steep, E side undulating, moderately steep, flattish base (W 1.40m, D 0.60m), cut by modern land drains
- Fill* 727 dark brown-green silty clay with clay slump on western edge, frequent flint nodules (up to 10cm), frequent flecks and fragments of charcoal and burnt clay
- Finds* ph pot, fired clay, baked clay, bone
- Ditch* 728* oriented NNW-SSE, W side convex, steep, E side undulating, gently sloping, slightly concave base (W 6.31m, D 0.60m)
- Fill* 729 pale yellow-brown loamy clay, moderate amount flint nodules and pebbles, occ. small stones
- Ditch* 730* oriented WNW-ESE, W side undulating, moderately steep, E side straight, steep, base flattish, undulating (W 1.65m, D 0.34m), cut by modern field drain
- Fill* 731 mixed grey-brown loamy clay, moderate amount flint pebbles and nodules, occ. limestone fragments, moderate oxidisation
- Ditch* 732* oriented WNW-ESE, moderately steep to steep sides, flattish base (W 1.30m, D 0.45m)
- Fill* 733 Mid grey-brown loamy clay, moderate amount well sorted flint pebbles and larger nodules (up to 10cm), occ. oxidisation, moderate amount burnt clay flecks in centre of fill, occ. small stone, occ. charcoal flecks and small fragments
- Finds* ph pot, bone
- Ditch* 734* oriented NW-SE, W side stepped; top moderately steep, middle gradual, bottom steep, E side convex, moderately steep to steep, flat base (1.60m, D 0.67m)
- Fill* 735 mid grey silty clay, moderate amount oxidisation, semi-gleyed, well sorted inclusions; moderate amount flint pebbles, occ. flint nodules, occ. charcoal flecks and small fragments, moderate amount small stones
- Ditch* 736* oriented NW-SE, moderate to steeply sloping convex sides, flattish base (W 1.40m, D 0.69m), cut by modern land drain
- Fill* 737 mid grey silty clay, moderate oxidisation, semi-gleyed, moderate amount flint pebbles and nodules, occ. limestone fragments (up to 5cm), clay slump on western edge
- Ditch* 738* oriented NW-SE, W side steep straight, E side moderately steep undulating, concave base (W 1.65m, D 0.55m)
- Fill* 739 mid grey silty clay, moderately oxidised, semi-gleyed, occ. flint pebbles, moderate amount flint nodules, occ. small stones, occ. charcoal flecks and small fragments
- Ditch* 740* oriented NW-SE, W side slightly convex moderately steep, E side stepped with moderately sloping top and steep bottom, flattish base (W c. 2.20m, D 0.67m)
- Fill* 741 Mid grey silty clay, moderately oxidised, semi-gleyed, moderate amount flint pebble and nodules (up to 10cm), occ. small stone, occ charcoal flecks and small fragments
- Ditch* 742* oriented E-W, not fully seen, gently sloping sides, recessed flattish base (W c. 2m, D 0.8m) cut by Ditch 744
- Fill* 749 blue-grey silty clay
- Fill* 748 grey-yellow silty clay, occ. small stones, occ. flint pebbles
- Fill* 747 blue-grey silty clay
- Fill* 746 grey-yellow clay in gravel matrix, moderate amount flint pebbles and nodules (up to 10cm) mainly concentrated in E side of fill
- Fill* 743 yellow-grey silty clay in gravels, occ. flint nodules (up to 8cm)
- Ditch* 744* oriented E-W, W side unclear, E side convex, gentle to moderately steep, concave base (W c. 1.60m, D 0.70m) cuts Ditch 742

- Fill* 745 mid grey silty clay, occ. flint pebbles, occ. limestone (up to 5cm), occ charcoal flecks and small fragments located towards base of fill
- Ditch** 750* oriented NNE-SSW, stepped profile, flattish base (W 3.45m, D 0.78m), under 762
- Fill* 752 pale to mid grey, firm, silty clay, frequent flint gravels, occ. calcareous grits, inclusions concentrated towards WSW side of fill
- Fill* 751 mid brown-grey, firm, friable loamy clay, occ. sub-angular to rounded flint gravels, occ. calcareous grits, occ. charcoal flecks and pieces, heavy iron oxidation
- Ditch** 753* oriented N-S, V-shaped, steep sides, rounded base (W 0.38m, D 0.34m), (?re-) cut by ditch 755
- Fill* 754 mid grey-brown, firm sandy clayey loam to loamy clay, orange mottles, occ. sub-angular to rounded calcareous grits, occ. limestone, occ. charcoal flecks
- Finds* flint, ph pot, bone
- (?r.)Ditch** 755* oriented N-S, W side steep, concave, E side moderately steep, concave base (W 0.57m, D 0.23m), cuts Ditch 753
- Fill* 756 mid brown-grey, firm, friable sandy, clayey loam, occ. iron mottles, occ. flint gravels, occ. calcareous grits, occ. limestone fragments, moderate amount charcoal flecks and fragments
- Finds* ph pot
- Ditch** 757* oriented WSW-ENE, moderately steep, slightly concave sides, concave base (W 1.45m, D 0.36m), under Layer 761
- Fill* 758 mid orange-brown, firm sandy clayey loam, frequent oxidisation, occ. sub-angular to rounded flint gravels located mostly along the sides of the ditch
- ?Hollow** 759* oriented WSW-ENE, gently sloping, undulating sides, flat base (W 3.0m, D 0.40m)
- Fill* 760 mid to dark grey-brown, soft, friable, sandy clayey loam, moderate amount orange mottles, occ. rounded flint gravels ?same as 761
- Finds* ph pot
- Layer:** 761 mid grey-brown, firm, friable, sandy loam, occ. sub-angular to rounded flint gravels, occ. calcareous grits, occ. charcoal, occ. baked clay flecks, ?same as 760, above 758
- Layer:** 762* (?colluvium) pale grey-yellow, firm, silty clay, occ evenly dispersed, sub-angular flint gravels, v. occ calcareous grits (D 0.3-0.85m), over 751

Construction Section 8

Context 800 unstratified finds, plot 76

Context 801 unstratified finds, plot 77
Finds flint, RB pot, med/pmed pot

Context 802 unstratified finds, plot 78
Finds flint, RB pot, med/pmed pot

Context 803 unstratified finds, plot 79
Finds flint, RB pot

Context 804 unstratified finds, plot 80
Finds RB pot

Context 805 unstratified finds, plot 81

Context 806 unstratified finds, plot 82

Context 807 unstratified finds, plot 83
Finds med/pmed pot

Context 808 unstratified finds, plot 84
Finds med/pmed pot

Pit 809* irregular sub-square shape in plan, steep SSE side, shallow NNW side, flat base (L 0.42m, W 0.26m, D 0.14m), truncated by machine trench

Fill 810 mid to dark brown-black, firm clayey loam, occ. flint gravels, occ. burnt clay flecks, frequent burnt limestone, frequent flint, uneven distribution of charcoal

Finds ph pot, daub, fired clay, bone

Ditch 811* oriented NW-SE, moderately steep sides, slightly concave NW side, convex SE side, flattish base (W 1.82m, D 0.71m)

Fill 812 mid brown-grey, oxidised, firm silty clay, occ. blue mottles, flint gravels, occ. calcareous grits, occ. charcoal flecks

Finds ph pot, bone

Pit 813* sub-square in plan, U-shaped, rounded edges, steep, almost vertical sides, flat base (L 0.44m, W 0.22m, D 0.24m)

Fill 815 dark grey-black, soft silty clay, occ. flint grits, patches of burnt bone, patches of charcoal

Finds ph pot

Fill 814 mottled pale grey-yellow, firm, sticky silty clay, v. occ. flint grits

Finds pot, cremated bone

Ditch 816* oriented E-W, V-shaped, concave base (W 0.80m, D 0.22m) re-cut by ditch 818

Fill 817 pale to mid blue-grey, firm, semi-gleyed silty clay to loamy clay, oxidisation, occ. flint gravels along base and sides, v. occ. charcoal flecks

Finds ph pot

Ditch re-cut 818* oriented E-W, steep W side, gently sloping E side, flat base (W 2.15m, D 0.27m), re-cut of ditch 816

Fill 819 mid brown-grey, firm silty clay, orange-yellow mottles, occ. flint gravels along base and sides

Stake hole 820* sub-circular in plan, steep, straight sides, concave base (W 0.18m, D 0.56m)

Fill 821 mixed mid to dark yellow-grey, loose sandy clayey loam, flint gravels, occ. calcareous grits, occ. charcoal flecks

Finds ceramic building material

- Pit** 822* sub-square in plan, undulating base (W 0.48m, D 0.24m)
Fill 823 mixed mid to dark yellow-grey, loose sandy clayey loam, flint gravels, occ. calcareous grits, occ. charcoal flecks
Finds flint, ph pot, ceramic building material
- Ditch** 824* oriented NNE-SSW, U-shaped, rounded base (W 0.52m, D 0.25m)
Fill 825 mid brown-grey, firm loamy clay, flint grits and pebbles, occ. iron oxidation towards base
Finds pot (not retrieved)
- Ditch** 826* oriented ??, moderate to steep sides (W +1.45m, D 0.52m), terminus within trench, WSW side cut by machine
Fill 827 mid grey brown, firm but friable, silty clay, orange tinge suggests iron oxidation, occ. to moderate amount of flint gravels along sides, base and throughout upper part of fill, occ. calcareous grits
Finds ph pot
- Ditch** 828* oriented N-S, U-shaped, gently sloping, concave sides, concave base (W +1.45m, D 0.44m)
Fill 829 mid grey brown, firm but friable, silty clay, orange tinge suggests iron oxidation, occ. flint gravels, occ. calcareous grits
- Ditch re-cut** 830* oriented N-S, gently sloping E side, moderately sloping W side, concave-flat base (W 1.50m, D 0.43m)
Fill 831 mid grey-brown, firm, friable silty clay with orange tinge, flint gravel mainly towards sides, occ. calcareous grits
Finds ph pot
- ?Pit** 832* gently sloping, concave to straight sides, concave to flat base (W 2.70m, D 0.22m)
Fill 833 mid brown-grey, firm, loamy clay with red-brown tinge, occ. flint gravel along base
- ?Pit** 834* undetermined shape, gently sloping, concave sides, concave to flat base (W 1.48m, D 0.15m)
Fill 835 mid brown-grey, firm, loamy clay with red-brown tinge, occ. flint gravel along base
- ?Pit** 836* undetermined shape, gently sloping, concave E side, steep, straight W side, flat base (W 1.86m, D 0.21m)
Fill 837 mid brown-grey, firm loamy clay with red-brown tinge, occ. flint gravel along base
Finds pot
- Ditch** 838* oriented N-S, concave base (W 1.04m, D 0.66m)
Fill 839 mid brown-grey, firm, loamy clay with red-brown tinge, flint gravels especially along E side
Finds pot

Construction Section 9

Context 900 unstratified finds, plot 85

Context 901 unstratified finds, plot 86

Context 902 unstratified finds, plot 87
Finds med/pmed pot

Context 903 unstratified finds, plot 88

Context 904 unstratified finds, plot 89

Construction Section 10

Context 1000 unstratified finds, plot 90

Context 1001 unstratified finds, plot 91

Context 1002 unstratified finds, plot 92

Context 1003 unstratified finds, plot 93
Finds SF 5259 (button), RB pot

Context 1004 unstratified finds, plot 94
Finds RB pot

Context 1005 unstratified finds, plot 95
Finds med/pmed pot

Context 1006 unstratified finds, plot 96
Finds med/pmed pot

Context 1007 unstratified finds, plot 97

Context 1008 unstratified finds, plot 98

Ditch 1009* oriented NNE-SSW, gradually sloping sides, rounded base (W 1.60m, D 0.40m)
Fill 1010 pale to mid-grey, clay, coarse sand lenses, flint gravel, shells, iron panning, merges with 1011
Fill 1011 upper fill, mid to dark grey silty clay, flint gravel, iron panning, shell
Finds

?Pit 1012 (or ditch terminus) oriented NNE-SSW, U-shape, S side steeper, slightly rounded base (W 1.30m, D 0.25m)
Fill 1013 mid- to dark grey silty clay, common flint gravel, merges with 1014
Fill 1014 primary fill, pale to mid-grey/yellow clay, common coarse sand, flint gravel, iron panning, shells

?Pit 1015 (or ditch terminus) oriented NNE-SSW, symmetrical U-shape, rounded base (W 1.00m, D 0.30m)
Fill 1016 mid- to dark brown/grey silty clay, common flint gravel, shell
Finds flint

Layer 1017 alluvial layer in top of pipe-trench, up to 0.90m thick, pale mid-grey/yellow firm silty clay, v. occ. flint gravel

Ditch 1018 oriented NNE-SSW, roughly symmetrical U-shape, rounded base (W 1.20m, D 0.38m)
Fill 1019 mid- to dark brown/grey silty clay, common flint gravel, shells

Layer 1020 river silts, dark brown to grey/black soft humic silty clay, occ, calcareous grit, to 0.3m deep beneath 1017
Finds med/pmed pot

Layer 1021 pale grey clay/silt, occ, sand/grit patches, to 0.5m deep beneath 1020

Layer 1022 mid- to dark grey silty clay, occ, burnt wood and charcoal, v. occ. grit, to 0.5m deep beneath 1021

Layer 1023 dark brown to black, soft humic silty clay, occ, calcareous grit, to 0.12m deep beneath 1023

Layer 1024 pale yellow/white coarse sand grit and gravel, fluvio-glacial, to 0.1m deep beneath 1017

Layer 1025 pale to mid-orange/yellow coarse sand grit and gravel, fluvio-glacial, to 0.2-0.65m deep beneath 1024

- Layer 1026** mid-grey/blue firm clay, natural Gault, at least 1.0m thick, beneath 1025
- ?Ditch 1027** oriented NNE-SSW, N side steep, S side more rounded, slightly rounded base (W 0.70m, D 0.20m)
- Fill 1028** mottled pale and mid- to dark grey/black silty clay, common shells, occ charcoal fleck and small pieces, occ calcareous grit
- ?Ditch 1029** oriented NNE-SSW, gradually sloping sides to flattish base, (W 2.30m, D 0.30m)
- Fill 1030** mid- to dark grey/black silty clay, common, shells, occ calcareous grit.
- ?Ditch 1031** oriented NNE-SSW, fairly symmetrical U-shape, (W 1.05m, D 0.47m)
- Fill 1032** grey/brown silty clay, occ. sandy mottling, common snails, common gravel and calcareous grit
- ?Pit 1033** steep sides to E, less so to W (W 0.69m, D 0.21m)
- Fill 1034** upper fill, pale grey/yellow firm silty clay, occ gravel, frequent calcareous grit
- Fill 1035** lower fill, mid- to dark brown/grey soft squidgy silty silty clay, occ charcoal fleck, calcareous grit
- ?Pit 1036** U-shaped, E side unclear (W c.0.80m)
- Fill 1037** dark brown/grey silty clay, common small stones, mod. charcoal
- Finds** ph pot, bone
- Layer 1038** pale-grey slightly silty clay, occ. small stones 0.70m thick, beneath 1017
- Finds** ph pot
- Layer 1039** dark-grey/brown silty clay, common small stones, occupation related?, (W3.80m) beneath 1038
- Layer 1040** pale grey v. silty clay, common small stones, occupation related?, (W 2.60m) beneath 1038
- ?Ditch 1041** or ?pit, U-shaped with slightly irregular base, (W 1.25m, D 0.52m)
- Fill 1042** mid-grey loamy clay, occ. gravel, frequent calcareous grit
- ?Ditch 1043** oriented NW-SE, steep sloping sides more so on NE, narrow rounded base (W 1.705m, D 0.90m)
- Fill 1044** mid-brown silty clay, mod. gravel and calcareous grit, occ charcoal fleck
- Ditch 1045** oriented NE-SW, symmetrical steep sided, (W 1.05m, D 0.80m), cuts alluvium 1017
- Fill 1046** mid-brown/grey clay loam, mod. small stones occ. larger flinty stones
- ?Ditch 1047** oriented NE-SW, symmetrical sloping sides to flat base, (W 0.95m, D 0.25m)
- Fill 1048** pale grey silty clay, occ. small stones and flinty gravel, occ. charcoal flecks

Construction Section 11

Context 1100 unstratified finds, plot 99

Finds flint, RB pot

Context 1101 unstratified finds, plot 100

Context 1102 unstratified finds, plot 101

Finds flint, RB pot

Context 1103 unstratified finds, plot 102

Finds flint, RB pot

?Pit* 1104 steep, undulating sides, straight-ish W side, concave E side, concave base (W 0.60m, D 0.45m)

Fill 1106 mid to dark brown-grey clayey loam, frequent small stones, moderate amount burnt limestone, moderate amount charcoal flecks and pieces, occ. burnt flint

Fill 1105 pale to mid brown-yellow, loamy clay, occ. small flint, occ. small stones

? Pit* 1107 steep E side, moderately steep W side, flattish base (W 1.20m, D 0.34m)

Fill 1109 mid to dark brown-grey clayey loam, frequent small stones, frequent flint, moderate amount burnt limestone, moderate amount burnt flint, moderate amount charcoal flecks and fragments

Fill 1108 pale to mid brown-yellow, loamy clay, occ. small flint, occ. small stones

Pit 1110* gently sloping, concave sides, concave base (W 2.10m, D 0.31m)

Fill 1111 black-brown, loamy clay, moderate amount charcoal flecks & pieces, moderate amount calcareous grits & pebbles

Finds ph pot, bone

Ditch 1112* oriented NW-SE, 'V' shaped, moderately steep sides, irregular NE side, concave, narrow base (W 1.45m, D 0.61m)

Fill 1113 black-brown, loamy clay, moderate amount charcoal flecks & pieces, occ. flint pebbles, occ. chalk grits

Finds ph pot, fired clay

Pit 1114* moderately steep, irregular sides, concave base (W 0.95m, D 0.32m)

Fill 1115 black-brown, loamy clay, moderate amount charcoal flecks, occ. flint pebbles, occ. calcareous grits

Finds flint, fired clay

Fill 1116 black-brown, loamy clay, occ. charcoal flecks, occ. calcareous grits

Finds pot

Gully 1117* oriented NW-SE, steep, irregular sides, flattish, sloping base (W 0.71m, D 0.42m)

Fill 1118 black-brown, loamy clay, moderate amount charcoal flecks

Pit 1119* gently sloping, convex sides, concave base (W 1.07m, D 0.20m)

Fill 1120 moderate amount charcoal flecks & pieces, occ. calcareous pebbles

Pit 1121* oriented SE-NW, moderately steep, concave sides, concave base (W 2.04m, D 0.41m)

Fill 1122 black-brown, loamy clay, moderate amount charcoal flecks & pieces, occ. flint pebbles, occ. calcareous grits & pebbles

Construction Section 12

Context 1200 unstratified finds, plot 103

Context 1201 unstratified finds, plot 104

Context 1202 unstratified finds, plot 105

Finds flint

Context 1203 unstratified finds, plot 106

Finds flint

Construction Section 13

Context 1300 unstratified finds, plot 107

Context 1301 unstratified finds, plot 108

Context 1302 unstratified finds, plot 109

Context 1303 unstratified finds, plot 110

Context 1304 unstratified finds, plot 111

Context 1305 unstratified finds, plot 112

Context 1306 unstratified finds, plot 113

Finds SFs 5044, 5046, 5049, 5052, 5054, 5055 5059, 5065, 5066, 5067, 5069, 5070, 5087 5095, 5214, 5215 (coins), 5047, 5048, 5071 5073, 5074, 5093, 5100, 5112, 5157, 5158, 5216, 5266 (Cu alloy objs), 5045, 5056 5061 5064 5080 5085, 5086, 5089, 5099 (Pb frags), 5057, 5058, 5060 5068 5075, 5081 5083, 5096, 5159, 5175, 5176, 5182, 5183, 5185, 5188, 5190, 5198, 5199, 5200, 5201, 5202, 5208 (Fe objs), 5076, 5082, 5084, 5088, 5090, 5170, 5171, 5172, 5173, 5174, 5177, 5178, 5179, 5180, 5181, 5184, 5186, 5187, 5189, 5191, 5192, 5193, 5195, 5196, 5197, 5203, 5204, 5205, 5206, 5209, 5210, 5212, 5213, 5268, 5269 (Fe nails), 5077 (stamped samian), 5079 (quern), 5097 (Cu alloy finger ring), 5098 (Cu alloy brooch), 5114 (shell impressed pot), 5194, 5207 (flint), flint, bone, fired clay, RB brick/tile, RB pot, med/pmed pot

Context 1307 unstratified finds, plot 114

Ditch 1308 N-S, concave sides, steep at top (W 0.60m, D 0.12m), same as 1331

Fill 1309 Dark brown compact clay/silt, freq. flinty stones, limestone frags

Gully 1310 N-S, concave sides, steep at top (W 0.70m, D 0.12m)

Fill 1311 dark brown compact silty clay, freq. flinty stones, limestone frags

Finds RB pot, fired clay, bone

Ditch 1312 terminus of 1310, steep sides, flat base (W 0.59m, D 0.21m)

Fill 1313 dark grey/brown firm silty clay, occ. Small pebbles, calcareous flecks

Finds RB pot, fired clay

Gully 1314 curving, shallow, flat base, slightly concave sides (W 0.23m, D 0.12m)

Fill 1315 Dark grey/brown, firm silt clay, paler than 1313 occ. calcareous flecks and angular stones

Finds RB pot, fired clay, bone

Pit 1316 circular, small, concave sides, base not fully revealed (W 0.63m, D 0.23m)

Fill 1317 dark grey/brown firm silty clay, occ. calcareous flecks, pebbles

Finds RB pot, fired clay

Ditch 1318 NW-SE, broad U-shape, blurred edges (W 1.60m, D 0.70m)

Fill 1319 dark blue/grey tenacious clay, com. chalk and flint frags, occ charcoal

Finds SFs 5153, 5156, 5161 (Cu alloy objs), 5160, 5166 (Fe nails), flint, RB pot, RB brick/tile, fired clay, bone

Fill 1325 primary fill, mid-greenish grey clay, freq. chalky stones, chalky gravel bands

Finds RB pot, RB brick/tile, fired clay, bone

Ditch 1320 E-W, Steep sided, one edge truncated by gully (W 1.10m, D 0.60m)

Fill 1372 primary fill, red compact sandy gravel, abundant flinty stones

Finds RB pot

Fill 1324 grey solid clay, v occ. limestone frags

- Gully 1323** E-W, steep sides, S side stepped (W 1.20m, D 0.36m)
Fill 1321 dark grey compact silty clay, occ. flinty stones
Finds SFs 5154, 5162, 5218, 5285 (Fe objs), 5155, 5217 (Fe nails), RB pot, RB brick/tile, fired clay, bone
Fill 1322 primary fill, pale brown loose gravel, com. flinty stones
Finds RB pot, bone
- Drain 1327** N-S, steep sided, (W 0.18m, D 0.50m)
Fill 1328 backfill of modern drain, grey clay
- Pit 1329** circular, steep sides, conical base (W 0.60m, D 0.28m)
Fill 1330 yellow/brown clay, occ. chalky gravel stones
Finds RB pot, bone
- Ditch 1331** E-W, truncated U-shaped sides, unclear edges (W 0.72m, D 0.32m)
Fill 1332 mid-brown/grey compact silty clay, occ. flinty stones, chalk flecks
Finds SF 5165 (Fe obj), RB pot, RB brick/tile, fired clay, bone
- Gully 1333** linear, flat-bottomed (W 0.60m)
Fill 1334 mid-brown compact silty clay, occ. flinty stones, charcoal fleck
Finds bone
- Ditch 1335** gently sloping sides truncated to E by 1338, flat base (W 0.39m, D 0.45m)
Fill 1336 upper fill, dark grey/brown compact silty clay, occ. pebbles (D 0.21m)
Finds RB pot
Fill 1337 primary fill, dark green/grey compact silt clay, occ. small rounded pebbles
Finds RB pot, fired clay, bone
- Ditch 1338** N-S, E side steep, flat base (W 0.79m, D 0.39m)
Fill 1339 upper fill, dark grey/brown compact silty clay, occ. small rounded pebbles and calcareous flecks (D 0.26m)
Fill 1340 primary fill, dark grey compact silty clay, freq. small rounded pebbles, occ charcoal flecks (D 0.11m)
Finds RB pot, fired clay, bone
- Pit 1341** oval, NW-SE, U-shaped profile, unclear edges (L 0.81, W 0.71m, D 0.32m)
Fill 1342 mid-brown/greenish brown compact silty clay, occ. flinty stones, chalky flecks (D 0.25m)
Finds RB pot, fired clay, bone
Fill 1343 upper fill, dark brown compact silty clay, occ. flinty stones, chalk fleck (D 0.07m)
Finds RB pot, fired clay
- Posthole 1344** sub-circular, U-shaped profile, v. clear definition (L 0.40m, W 0.36m, D 0.11m)
Fill 1345 dark greyish brown silty clay, occ. flinty stones and chalk fleck (D 0.08m)
Finds fired clay
Fill 1346 lower fill, leached yellowish green, slightly silty clay, occ. degraded chalk fleck (D 0.04m)
- Ditch 1347** SW-NE, U-shaped, slumping sides, edges indistinct (W 1.00m, D 0.50m)
Fill 1348 upper fill, dark silty clay, v occ. flinty stones (D 0.40m)
Finds RB pot, RB brick/tile, bone
Fill 1350 lower fill, slumped natural, dark crumbly clay, no inclusions (D 0.10m)
Finds RB pot, RB brick/tile
- Unstratified finds 1349** recovered from hand cleaning over 1336, 1339
Finds RB pot, RB brick/tile, fired clay, bone
- Ditch 1351** NW-SE, broad, stepped on west, edges well defined (W 3.10m, D 0.48m)
Fill 1326, yellow/grey compact plastic clay, v occ. chalk and flinty stones (D 0.40m)
Finds RB pot, fired clay, bone
- Ditch 1352** NW-SE, U-shaped, flattish base, not visible on surface (W 0.80m, D 0.46m)

- Fill* 1353 upper fill, yellow/grey compact clay, v occ. chalk grit (D 0.20m)
Fill 1354 dark grey clay, occ. charcoal smudges and daub flecks, freq chalky grit
- Pit** 1355 sub-circular, steep-sided, flat base, edges not clear (W 0.70m, D 0.70m)
Fill 1356, blue/grey compact plastic clay, sandy chalk patches and charcoal smudges
Finds RB pot, fired clay, bone
- Group** 1357 group number for gully sections 1358, 1360
- Gully** 1358 N-S, V-shaped, flat base, clearly defined (W 0.45m, D 0.07m)
Fill 1359, dark grey/brown compact silty clay, occ. small sub-angular pebbles
Finds fired clay, bone
- Gully** 1360 N-S, concave sides, flat base, slightly U-shaped to N, clearly defined (W 1.20m, D 0.10m)
Fill 1361, dark grey/brown compact silty clay, occ. small sub-angular pebbles
Finds RB pot
- Ditch** 1362 SW-NE, shallow, truncated, concave sided, edges clear (W 0.80m, D 0.15m)
Fill 1363, brown/green compact silty clay, occ. flinty stones and chalk flecks
Finds SF 5219 (daub), RB pot, fired clay
- Ditch** 1364 curving SW-NE, shallow, truncated, U-shaped, edges not well defined (W 0.50m, D 0.13m)
Fill 1365, dark brown/grey compact silty clay, occ. flinty stones and chalk flecks
Finds SF 5163 (Fe nail), flint, ph pot, RB pot, fired clay, bone
- Pit** 1366 truncated circular, U-shaped profile, edges clear (W 0.95m)
Fill 1367, dark grey slightly silty, very compact clay, occ. flinty stones
Finds RB pot, fired clay, bone
- Gully** 1368 NE-SW, U-shaped, fairly clearly defined (W 0.48m, D 0.15m)
Fill 1369, mid- to light grey firm clay, occ. small sub-angular flinty stones, limestone frags, sandy clay mottling
Finds RB pot, fired clay, bone
- ?Tree throw** 1370 irregular shape, roughly U-shaped profile (L 0.90m, W 0.36m, D 0.50m)
Fill 1371, mid-greyish brown firm clay, occ. small sub-angular flinty stones, limestone frags
Finds RB pot, flint, fired clay, bone
- Ditch** 1373 N-S, irregular bowl-shaped profile with basal slot, edges fairly clear (W 0.60m, D 0.30m)
Fill 1374, light grey solid clay, occ. flinty stones
- Ditch** 1375 NNW-SSE, U-shaped but with fairly narrow base, some irregularity to sides (W 1.09m, D 0.46m), re-cut as 1397
Fill 1377, mid-olive grey soft clay, occ. flinty stones, small limestone frags, charcoal flecks
Finds SF 5167 (tessera) RB pot, RB brick/tile, fired clay, bone
- ?Tree throw** 1378 irregular NW-SE linear, E side convex, W side vertical (L 4.00m, W 0.92m, D 0.20m)
Fill 1379, mid-greyish brown firm clay, mod. small sub-angular flinty stones, occ. chalk frags and fleck
Finds RB pot, fired clay, bone
- Gully** 1380 E-W, roughly U-shaped profile, fairly clearly defined (W 0.50m, D 0.12m)
Fill 1381, mid-olive grey firm silty clay, occ. small sub-angular flinty stones, limestone frags
Finds RB pot, fired clay, bone
- Gully** 1382 NE-SW, fairly shallow, flat base, edges clear (W 0.60m, D 0.22m)
Fill 1383, pale to mid-grey compact silty clay, occ. small sub-angular flinty stones
Finds RB pot, RB brick/tile, fired clay, bone
- Pit** 1384 oval, U-shaped profile, edges clear (W 1.48, D 0.46m)

- Fill* 1386, middle fill, mid-greenish grey, plastic silty clay, v occ. flinty stones, occ chalk fleck, iron panning
Finds RB pot, fired clay, bone
- Fill* 1387, primary fill, mid-brownish grey, firm clay, v occ. flinty stones, occ chalk fleck (D 0.23m)
Finds RB pot, fired clay, bone
- Fill* 1399, upper fill, mid-brownish grey, firm clay, v occ. flinty stones, occ chalk fleck, mod. charcoal flecks (D 0.10m)
Finds RB pot, RB brick/tile, fired clay, bone
- Ditch** 1388 E-W, broad U-shaped, well defined edges (W 2.30m, D 0.40m) re-cut of 1391
Fill 1389, upper fill, mid-grey v compact clay, occ. flinty stones (D 0.35m)
Finds SF 5282 (glass), RB pot, fired clay
Fill 1390, lower fill, dark blue/grey tenacious clay, slight dark organic staining (D 0.28m)
Finds bone
- Ditch** 1391 E-W, broad U-shaped, steeper N side, edges indistinct at surface (W 2.50m, D 0.67m)
Fill 1392, yellow/grey tenacious clay, occ. flinty stones, sand patches
Finds RB pot, bone
- Gully** 1393 N-S, concave sides to rounded base, clearly defined (W 0.55m, D 0.24m)
Fill 1394, dark brownish grey firm clay, occ. small sub-angular flinty stones, chalk flecks and frags
Finds RB pot, fired clay, bone
- Layer** 1395 dark blackish brown friable silty clay loam, freq. angular flint stones, small chalk frags, wheat chaff, ?remnant topsoil
- Ditch terminus** 1396 NNW-SSE steep sided U-shaped, well defined edges (W 0.70m, D 0.62m)
Fill 2717, lower fill, mid-olive grey soft clay, occ. flinty stones, limestone frags (D 0.18m)
Finds fired clay
Fill 2718, upper fill, mid-grey gravelly silty clay, abundant gravel, limestone flecks, occ. flinty stones (D 0.28m)
- Ditch** 1397 NNW-SSE U-shaped, indistinct edges (W 0.70m, D 0.21m)
Fill 1376, mid-brownish grey firm clay, occ. flinty stones, occ limestone fleck
Finds SF 5091 (Fe nails), RB pot, RB brick/tile, fired clay, bone
- Ditch** 1398 NNW-SSE U-shaped, indistinct edges (W 0.80m, D 0.18m)
Fill 1385, moderate to dark greyish brown firm clay, v occ. flinty stones, occ chalk fleck
- Pit** 2700 oval, truncated by ditch 2702 (W 1.48m, D 0.10m)
Fill 2701, dark grey plastic clay, occ. calcareous flecks
Finds fired clay, bone
- Ditch** 2702 E-W U-shaped profile, steep sided, clear edges (W 0.46m, D 0.23m)
Fill 2703, grey brown clay silt, occ. flinty stones
Finds RB pot, fired clay
- Gully** 2704 NW-SE v shallow, flat bottomed, steep sides, clear edges (W 0.50m, D 0.13m)
Fill 2705, mid-grey compact clay, occ. flinty stones
- ?Beam slot** 2706 WSW-ENE near vertical sides, flat base, clear edges (L 1.30m, W 0.28m, D 0.16m)
Fill 2707, mid-orange brown compact clay, occ. small flinty stones
Finds RB brick/tile
- ?Pit** 2708 rounded gradually sloping sides, flattish base, indistinct edges (W 0.38m, D 0.17m)
Fill 2709, olive green/grey compact clay, v occ. small flinty stones
- Layer** 2710 between ditches 1388 and 2711, mid-yellow/grey firm compact clay, freq flinty pebbles, edges blurred (W 2.5m, D 0.25m)

Finds RB pot, RB brick/tile, fired clay, bone

Ditch 2711 E-W steep sided to uneven flattish base, slightly blurred edges (W 0.80m, D 0.40m)

Fill 2712, mid-grey compact tenacious clay, occ. flinty stones

Finds RB pot, fired clay, bone

Pit 2713 on S side of 2711, sub-circular, shallow bowl-shaped, indistinct edges (W 0.40m, D 0.15m)

Fill 2714, pale grey/yellow clay, occ. flinty stones, ill-defined edges

?Gully 2715 or ?pit, only seen in section, shallow truncated sloping side to flat base (W 0.32m, D 0.08m)

Fill 2716, pale green/grey compact silty clay, occ. calcareous frags, indistinct edges

Furrow 2719 N-S, shallow profile, gently sloping side, not very clear edges (W 3.0m, D 0.15m)

Fill 2720, grey/brown compact silty clay, occ. flinty stones, calcareous frags

Layer 2721 dark brown friable silty clay, freq. flinty stones, calcareous frags, covers 2722, 2744 (W 1.27m, D 0.13m)

Finds SF 5291 (Fe nail), RB pot, RB brick/tile, fired clay, bone

Ditch 2722 NNW-SSE steep sided U-shaped profile, clear edges (W 0.80m, D 0.45m)

Fill 2723, mid-grey/brown friable silty clay, occ. flinty stones, chalk frags and fleck

Finds RB pot, fired clay, bone

Ditch 2724 curvilinear NE-SSE wide profile, gently sloping sides, clear W edge, truncated to E (W 1.06m, D 0.28m)

Fill 2725, mid-grey/brown friable silty clay, occ. flinty stones, chalk frags and fleck

Finds SF 5168 (glass), fired clay, bone

Ditch 2726 N-S stepped sides more so to W, U-shaped below step, clear edges (W 2.57m, D 0.54m)

Fill 2751, lower fill, mid-brown compact gravel/silt, abundant gravel, occ. flinty stones, limestone frags (D 0.30m)

Finds RB pot

Fill 2752, middle fill, dark brown compact gravelly clay, common gravel, occ. flinty stones, chalky flecks (D 0.21m)

Finds RB pot, RB brick/tile, fired clay, bone

Fill 2753, third fill grey/brown friable clay silt, occ. flinty stones, chalk flecks (D 0.25m)

Finds RB pot, RB brick/tile, fired clay, bone

Fill 2754, top fill, dark brown friable silty clay, occ. flinty stones, chalk flecks

Finds RB pot, RB brick/tile, fired clay, bone

Context 2727 Unstratified finds

Context 2728 Unstratified finds

Finds RB pot, bone, fired clay

Ditch 2729 almost right-angled corner SE-NW to NE-SW, steep slightly convex sides to flattish base, fairly distinct despite redeposited natural in fill (W 1.35m, D 0.60m), see also 2761

Fill 2730, upper fill, mid- to dark grey v compact clay, occ. flinty stones, charcoal flecks (D 0.20m)

Finds SFs 5109 (Fe ring), 5110 (Fe nail), RB pot, RB brick/tile, fired clay, bone

Fill 2731, middle fill, mid-grey compact slightly silty clay, occ. flinty stones, charcoal flecks (D 0.40m)

Finds SF 5102 (Fe nail), RB pot, RB brick/tile, fired clay, bone

Fill 2732, lower fill, light yellow/grey compact silty clay, occ. flinty stones, charcoal flecks (D 0.10m)

Finds RB pot, fired clay, bone

?Gully 2734 or ?beam slot, NNW-SSE, vertical sides to flat base fairly distinct edges (W 0.32m, D 0.27m)

Fill 2735, upper fill, mid- to dark brownish grey soft friable silty clay loam, occ. chalky fleck and small frags, v occ. flinty stones (D 0.15m)

Finds RB pot, flint, bone

Fill 2736, lower fill, pale to mid-brownish yellow firm silty clay, occ. chalky fleck and small (D 0.20m)

Pit 2737 sub-round, steep to vertical sides to flat base clear edges (L 1.65m W 1.45m, D 0.29m)
Fill 2738, upper fill, mid- to dark blackish grey soft friable clay loam, occ. flinty stones (D 0.12m)
Finds RB pot, bone
Fill 2739, lower fill, mid-brownish grey friable loamy clay loam, occ. flinty stones, chalk frags (D 0.18)
Finds RB pot, fired clay, bone

Gully 2740 N-S, shallow profile, distinct edges (W 1.12m, D 0.14m)
Fill 2741, pale brown plastic clay occ. chalky fleck and small frags, occ. flinty stones
Finds RB pot

Gully 2742 N-S, steep sided V-shaped profile, distinct edges (W 0.28m, D 0.22m)
Fill 2743 dark grey silty clay, occ. flinty stones
Finds SF 5303 (slag), fired clay

Context 2744 same as 1384

Context 2745 same as 1385
Finds RB pot

Ditch 2746 NNW to SSE, U-shaped profile, E edge slightly undercut, clear edges (W 0.80m, D 0.38m)
Fill 2747 upper fill, mid-greyish brown soft clay, v occ. flinty stones, charcoal flecks, occ chalk fleck (D 0.20m)
Finds SF 5104 (stamped pot), RB pot, fired clay, bone
Fill 2748, primary fill, mid-greenish grey soft silty clay, occ. flinty stones, charcoal flecks v occ chalk flecks (D 0.18m)
Finds fired clay, bone

Gully 2749 slightly irregular U-shaped profile, indistinct edges (W 0.20m, D 0.15m)
Fill 2750, mid-greenish brown soft clay, occ. chalky fleck and small frags, v occ. flinty stones
Finds RB pot, fired clay

Gully 2755 E-W, U-shaped profile, clear edges (W 0.37m, D 0.22m) same as 2764
Fill 2756, mid-grey brown clay, occ. charcoal fleck and small frags, v occ. flinty stones
Finds SFs 5106 (slag, cinder), 5105 (dec pot), RB pot, RB brick/tile,

Ditch terminus 2757 NE-SW, U-shaped ditch, well defined edges (W 0.85m, D 0.33m)
Fill 2758, upper fill, dark grey silty clay, no inclusions (D 0.05m)
Finds RB pot, fired clay
Fill 2759, lower fill, mid-brown clay, (D 0.30m)
Finds SF 5107 (quern), RB pot, fired clay, bone

Feature 2761 shallow rectangular, NW-SE, near vertical sites, regular flattish base, fairly indistinct edges (L 0.65m, W 0.50m) cut into base of 2729
Fill 2760 primary fill, pale to mid-grey compact clay, greenish flecks, v occ. flinty stones (D 0.15m)
Finds SF 5103 (Fe nails), RB pot, fired clay, bone
Fill 2733 large sub-angular chalk and ironstone stones, to 0.25m across
Finds SF 5111 (Fe obj), RB pot

Furrow 2762 N-S, shallow profile with v gently sloping sides, clear edges (W 1.55m, D 0.11m)
Fill 2763 mid-green friable clay/silt, occ. flinty stones, chalk fleck
Finds SF 5108 (Fe nail), RB pot, RB brick/tile, bone

Gully 2764 U-shaped profile, indistinct edges, severely truncated by furrow (W 0.38m, D 0.18m)
Fill 2765, mid-greyish brown soft/plastic clay, occ. chalky fleck and small frags, flinty stones, charcoal fleck
Finds SF 5113 (slag, tuyere frag), RB pot, fired clay

Furrow 2766 NNW-SSE, gradual sloping sides, clear edges (W 1.70m, D 0.16m)

Fill 2767 mid-greyish brown soft clay, occ. chalky fleck and small frags, flinty stones, v occ. charcoal fleck

Finds RB pot, RB brick/tile, fired clay, bone

Posthole 2768 sub-circular, U-shaped profile (L 0.40m, W 0.37, D 0.14)

Fill 2769 mid-greyish brown flecked orange clay, occ. flinty stones, v occ. chalk and charcoal fleck

Finds bone

Gully 2770 oval curvilinear, U-shaped profile, clear edges (W 0.40m, D 0.23m)

Fill 2771 mid-brownish grey mottled green soft/plastic clay, occ. chalky fleck, flinty stones, charcoal fleck

Finds RB pot, RB brick/tile, fired clay, bone

?Tree throw 2772 irregular lozenge shape in plan, NE-SW, steep sides to flat base, clear edges (L 2.00m, W 0.80m, D 0.39m) not fully excavated

Fill 2773 pale to mid- grey friable clay, occ. flinty stones

Finds RB pot, RB brick/tile, fired clay, bone

Gully 2774 N-S, shallow and narrow, concave sides, fairly clear edges (W 0.30m, D 0.30m)

Fill 2775 pale grey/brown friable clay silt, occ. chalky fleck, flinty stones.

Finds RB pot, bone

Ditch 2776 NE-SW, roughly U-shaped, N side undercut, clear edges (L 69m vis, W 2.37m, D 0.80m)

Fill 2783 primary fill, pale olive grey firm clay, lenses of darker clay, freq small limestone fleck, occ. small flinty stones, occ. larger stones (D 0.55m)

Finds RB pot, fired clay, bone

Fill 2784 mid-orange/grey firm clay, occ. small chalky frags, freq flinty stones, occ mollusc shells (D 0.33m)

Finds RB pot, fired clay, bone

Fill 2785 mid-orange brown clay, no inclusions, small lens of slumped natural (D 0.07m)

Re-cut ditch 2779 NE-SW, roughly U-shaped, flat base sloping to N (W 1.35m, D 0.62m) re-cut of 2776

Fill 2777 upper fill, dark blackish brown firm clay loam, occ. small limestone fleck, small flinty stones and rounded pebbles, sandstone frags (D 0.22m)

Finds SFs 5062, 5063 (coins), 5092 (dec samian), 5117 (Fe nails), RB pot, RB brick/tile, bone

Fill 2778 lower fill, dark grey firm clay, occ. small chalky frags, flinty stones, freq mollusc shells v. occ. sandstone frags (D 0.54m)

Finds SFs 5115, 5116 (Fe objs), flint, RB pot, RB brick/tile, fired clay, bone

Re-cut ditch 2782 NE-SW, roughly U-shaped, base truncated by 2779 (W 1.96m, D 0.58m) re-cut of 2776

Fill 2780 S of re-cut 2776 pale grey silty clay, occ. chalky fleck, sandstone frags (D 0.44m)

Fill 2781 N of re-cut 2776, mid-olive grey firm clay, freq. small chalky frags, occ. flinty stones, mollusc shells sandstone frags (D 0.53m)

Finds RB pot, RB brick/tile, bone

Gully 2788 curvilinear oval, U-shaped profile, clear edges (W 0.46m, D 0.23m)

Fill 2789 mid-grey/brown plastic clay silt, occ. charcoal fleck.

Ditch 2790 NW-SE, shallow with gradual sides, clear edges (W 1.23m, D 0.28m)

Fill 2791 mid-brown/grey soft clay, occ. small flinty stones, chalk fleck

Finds SF 5120 (Fe obj), 5124 (Fe nail), RB pot, fired clay, bone

Gully 2792 SW-NE steep sided V-shaped profile, clear edges (W 0.24m, D 0.28m), cuts 2794

Fill 2793 mid-grey plastic clay, occ. small flinty stones, chalk fleck

Finds RB pot, RB brick/tile, bone

?Tree throw 2794 or pit, possibly circular feature, only clear in section, steep-sided (D 0.24m)

Fill 2795 mid-brown to grey soft clay, occ. small flinty stones, charcoal frags

Finds RB pot

?Tree throw 2796 irregular circular, U-shaped profile, clear edges (W 0.46m, D 0.23m)

Fill 2797 red, loose gravel

Ditch 2798 NNW-SSE, near vertical sides, flat base (W 0.80m, D 0.60m)

Fill 2800 lowest fill, pale grey brown flecked compact silty clay, occ. small flinty stones (D 0.40m)

Finds RB pot, fired clay, bone

Fill 2799 mid-grey compact silty clay, occ. small flinty stones (D 0.30m)

Finds RB pot, RB brick/tile, fired clay, bone

Fill 2787 mid-grey/brown silty compact and sticky clay, common small limestone pebbles, freq small flinty stones (D 0.10m)

Finds SF 5131 (Fe obj), RB pot, fired clay, bone

Fill 2786 upper fill, dark grey compact silty clay, occ. small flinty stones (D 0.20m)

Finds SFs 5078, 5118 (Cu alloy objs), 5094 (Pb alloy obj), 5119, 5123, 5125, 5129, 5130 (Fe objs), RB pot, RB brick/tile, fired clay

Horse skeleton 2813 within 2786.

Finds RB pot, bone

?Gully 2803 or basal slot in 2776, SW-NE steep slightly irregular sides, flat base, clear edges (W 0.27m, D 0.21m)

Fill 2801 upper fill, mid-orange grey firm clay, paler patches, no inclusions, slumped natural (D 0.15m)

Finds RB pot

Fill 2802 primary fill, mid-grey firm clay, occ. chalk flecks, flinty stones (D 0.21m)

Finds RB pot, fired clay, bone

Posthole 2804 sub-circular, steep concave sides flat base (L 0.53m, W 0.38m, D 0.13m)

Fill 2818 primary fill, pale orange grey soft clay, occ. chalky flecks (D 0.10m)

Fill 2805 upper fill, mid-greyish brown, flecked white friable silty clay, freq chalky flecks and frags, occ. small flinty stones (D 0.08m)

Posthole 2806 sub-circular, N side near vertical, slight undercut, S side sloping convex, dished base (W 0.83m, D 0.62m)

Fill 2807 primary fill, mid-greyish brown, soft/plastic clay, occ. flint stones, v occ. chalky flecks, freq charcoal fleck (D 0.57m)

Fill 2809 mid-greyish brown, mottled orange soft clay, v. occ. chalky flecks, occ. small flinty stones (D 0.57m)

Finds RB pot, bone

Fill 2810 chalk blocks, no apparent matrix between, poss post packing in upper fill (D 0.16m)

Ditch 2808 ESE-WSW, U-shaped profile, S side steeper and undercut, clear edges (W 1.69m)

Fill 2841 primary fill yellow/grey friable clay/silt occ. small flinty stones, chalk fleck (D 0.40m)

?Pit 2811 sub-rectangular NE-SW, almost vertical sides, base sloping down to 2806 (L 1.65m, W 0.70m, D 0.17m)

Fill 2812 pale brownish grey firm clay, v occ. flinty stones, chalk frags, charcoal fleck occ. chalk fleck

Finds RB pot, fired clay, bone

Unused contexts 2814 to 2817 section through 2790, abandoned, numbers same as 2790 to 2793

Ditch terminus 2819 N-S, concave sloping sides, base generally flat (W 0.66m, D 21m)

Fill 2820 upper fill, dark greyish brown soft/plastic clay, occ. flinty stones, v occ. chalk fleck and frags (D 0.17m)

Finds SF 5126 (Fe nail), fired clay

Fill 2821 middle fill, mid-brownish greyish soft/plastic clay, occ. flinty stones, chalk fleck and frags (D 0.10m)

Finds fired clay

Fill 2822 primary fill, mid-greyish brown mottled orange soft clay, occ. flinty stones, v occ. chalk fleck and frags (D 0.04m)

?Pit 2823 or small gully terminus, N-S ?linear or rounded, sides sloping gradually (L ?1.00m, W 0.35m, D 0.10m)
Fill 2824 mid-greyish brown firm clay, v occ. flinty stones, occ. chalk fleck
Finds RB pot, RB brick/tile, fired clay

Posthole 2825 sub-circular, sides gradual to vertical, base rounded (L 0.52m, W 0.45m, D 0.36m)
Fill 2826 dark greyish brown soft clay, abundant large chalk blocks, v occ. flinty stones

Ditch 2827 NNW-SSE, to N turning to the W, broad U-shape with gently sloping sides (W 1.00m, D 0.40m)
Fill 2828 primary fill, brown, green/yellow patches, friable silt clay, occ. flinty stones, chalk fleck (D 0.11m)
Fill 2829 middle fill, greeny brown, friable silty clay, occ. flinty stones (D 0.20m)
Finds SF 5281 (glass), RB pot, RB brick/tile, bone
Fill 2830 upper fill, mid-brown, plastic clay/silt, occ. flinty stones, chalk fleck (D 0.14m)
Finds SFs, 5121, 5122 (Fe nails), RB pot, fired clay, bone

Land drain 2831 NNW-SSW, deep U-shape, cuts top of 2827 (W 0.21m, D 0.26m)
Fill 2832 lower fill, dark brown, soft clay, occ. chalk fleck (D 0.10m)
Fill 2833 upper fill, greeny dark brown, plastic silty clay, occ. chalk fleck (D 0.16m)

?Pit 2834 or natural hollow, irregular shape, sides slope gradually to flattish base, fairly well defined (L 2.10m, W 1.80, D 0.12m)
Fill 2835 upper fill, dark greyish brown firm clay, v occ. flinty stones, chalk frags and fleck, charcoal fleck (D 0.10m)
Finds SF 5132 (Fe nail), RB pot, fired clay, bone
Finds RB brick/tile
Fill 2836 lower fill, dark greyish brown mottle orange firm clay, v occ. flinty stones (D 0.02m)

Posthole 2837 sub-circular, near vertical, slightly sloping convex sides, base rounded,, edges clear (L 0.45m, W 0.44m, D 0.35m), similar to 2825
Fill 2838 dark brownish grey firm clay, abundant chalk blocks, occ. charcoal fleck

Posthole 2839 sub-circular, U-shaped profile, clear edges (L 0.40m, W 0.38m, D 0.15m) cuts 2834
Fill 2840 mixed grey/white orangey brown, firm to friable clay and gravel, occ. chalk frags

Ditch re-cut 2842 ENE-WSW, shallow concave profile, S side steep, clear edges (W 1.08m, D 0.38m), re-cut of 2808
Fill 2843 primary fill, dark grey/brown, friable silt clay, occ. chalk fleck (D 0.23m)
Finds RB pot, bone
Fill 2844 upper fill, dark grey/brown, friable silty clay, v occ. chalk fleck (D 0.16m)
Finds RB pot

?Posthole 2845 or small pit, oval, U-shaped profile, fairly clear edges (L 0.60m, W 0.31m, D 0.38m)
Fill 2846 primary fill, grey/green, yellow/brown patches, friable silty clay, occ. pebbles, chalk flecks (D 0.15m)
Fill 2847 upper fill, red/brown silty clay, occ. flinty stones, chalk flecks (D 0.25m)
Finds RB pot, bone

?Beam-slot 2848 oval to sub-rectangular, SW-NE, steep sides, flat base, fairly clear edges (L 1.74m, W 0.78m, D 0.55m), cut to E by 2989
Fill 2849 fill of poss post-pipe, mid-greyish brown, soft clay, v occ. flinty stones, occ. chalk flecks and frags
Finds RB pot, RB brick/tile, fired clay, bone
Fill 2850 mottled orange/greyish brown silty clay, occ. flinty stones, ?packing around post
Fill 2851 mottled orange/greyish brown clay, occ. flinty stones, v occ. chalk fleck, ?packing around post
Finds RB pot

Posthole 2852 sub-circular, steep sides, flat base, clear edges (L 0.60m, W 0.50m, D 0.70m) within 2848, ?associated with 2806
Fill 2853 post-packing, mid-greyish brown soft clay, occ. flinty stones, chalk flecks and frags

- Finds* RB pot, fired clay
Fill 2854 ?post-pipe, dark greyish black soft silty clay, abundant charcoal fleck, v. occ. flinty stones
Finds RB pot
- Pit** 2855 sub-circular, shallow U-shaped profile, concave base, clear edges (L 1.00m, W 0.80m, D 0.27m) cut by 2857, 2888
Fill 2856 dark grey firm clay, occ. flinty stones, chalk fleck, small ironstone frags
Finds RB pot, fired clay
- Posthole** 2857 sub-circular, steep sides with some weathering, flat base, clear in section not in plan (L 0.46m, W 0.40m, D 0.42m) cut into 2855, poss just cut by 2888
Fill 2858 upper fill, dark greyish brown firm clay, occ. flinty stones, some root disturbance (D 0.08m)
Fill 2859 layer of slumped natural, pale yellowish grey soft clay, v occ. chalk frags (D 0.09m)
Fill 2860 mid-grey soft clay, no inclusions (D 0.13m)
Finds PH pot
Fill 2861 ?post-pipe, dark greyish brown soft/friable clay loam, no inclusions (D 0.15m)
Fill 2862 primary fill, pale yellowish grey firm clay, occ. small flinty stones
- ?Pit** 2863 or posthole, circular, shallow, step sided, fairly clear edges (W 1.15m, D 0.20m)
Fill 2864 mid-brown/grey compact plastic clay, occ. small flinty stones
- Gully** 2865 E-W, straight sides to concave base, fairly clear edges (W 0.65m, D 0.25m)
Fill 2866 mid- to dark brown grey, paler below, silty clay loam, occ, small flinty stones
- Posthole** 2867 sub-circular, mod steep concave sides, concave base, clear edges (L 0.28m, W 0.25m, D 0.21m)
Fill 2868 mid-grey/brown soft sandy loam, occ. chalk frags, small flinty stones (D 0.18m)
Fill 2869 post-packing, flint and limestone stones (D 0.08m)
- Hollow** 2870 oval, sides and base gradually sloping, concave to flat, clear edges (L 1.96m, W 0.70m, D 0.15m) poss associated with 2875
Fill 2871 dark brownish grey firm clay, v occ. chalk and sandstone frags and fleck, small flinty stones
Finds fired clay, bone
- Hollow** 2872 sub-circular, sides gradually sloping concave poor clarity of edges (L 0.72, W 0.71m, D 0.11m)
Fill 2873 upper fill, dark greyish brown soft clay, occ. chalk frags and fleck, small flinty stones (D 0.10m)
Finds RB pot, fired clay, bone
Fill 2874 primary fill, mid-orangey grey brown soft clay, occ. chalk frags and fleck, v occ. small flinty stones (D 0.03m)
- Pit** 2875 extended oval or sub-rectangular, ENE-WSW, E end obscured by furrow, near vertical sides to irregular base, postholes (2900, 2902, 2904, 2906, 2910, 2912) along its sides and stake-holes (2914, 2916, 2918, 2920) in its base, clearly defined edges (W 1.60m, D 0.70m)
Fill 2876 dark grey compact clay, occ. chalk frags and fleck, small flinty stones, common slag, clinker
Finds SFs 5133, 5145, 5146 (lava stone), 5134 (slag), 5135, 5136, 5144 (Fe nails), 5137, 5138, 5142 (Fe objs) fired clay, bone
Fill 2877 base of feature, compact fire-hardened clay
Finds SF 5139 (lava stone), fired clay
Fill 2880 charcoal lens in fired clay layer, black, friable (D 0.03m)
Finds fired clay
Fill 2922 lenses of charcoal, dark grey clay and patches of yellow redeposited natural clay, occ. small flinty stones, within or below 2877
Finds SFs 5141, 5143 (Fe objs), 5147 (lava stone), RB pot, fired clay, bone
Fill 2962 mix of pale grey and mid-yellow compact clay, v occ. small flinty frags, small rounded chalk frags, redeposited natural in base of feature, originally 2923 but no duplicated
- Unused contexts** 2878, 2879
- Posthole** 2881 sub-circular, concave sides, flattish base, poor clarity of edges (L 0.65m, W 0.62m, D 0.20m) may be related to 2837, 2839, 2849, 2823, 2806

- Fill* 2882 pale greyish brown soft clay, occ. chalk frags, small flinty stones
Finds RB pot, fired clay
- Posthole 2883** sub-circular, sides near vertical slightly concave, flat base, clear edges (L 0.52m, W 0.50m, D 0.41m)
Fill 2884 upper fill, dark brownish grey firm clay, occ. chalk flecks, small flinty stones (D 0.27m)
Fill 2885, ?post-packing, mid-grey firm clay, occ. chalk flecks (D 0.41m)
Fill 2886 ?post pipe fill, dark brown firm clay, occ. small flinty stones (D 0.21m)
Fill 2887 primary fill, mid-yellowish brown firm clay, occ. chalk flecks, small flinty stones (D 0.21m)
- Pit** 2888 sub-circular, steep concave sides to flattish irregular base, slightly indistinct edges (L 2.60m, W 2.10m, D 0.26m) cuts 2891, 2855, 2893, cut by 2896
Fill 2889 upper fill, dark grey compact clay, occ. chalky frags and fleck, small flinty stones (D 0.14m)
Finds SF 5140 (slag) RB brick/tile, bone
Fill 2890 primary fill, pale yellowish grey friable clay, occ. small flinty stones, chalk flecks (D 0.22m)
- Pit** 2891 sub-circular, steep concave sides to gently dished base, fairly clear edges (W 0.80m, D 0.55m)
Fill 2892 pale yellowish grey friable clay, occ. chalky fleck, small flinty stones with some larger nodules
- Pit** 2893 irregular sub-oval, steep concave sides to roughly flat base, fairly indistinct edges (L 1.60m, W 1.50m, D 0.50m)
Fill 2894 upper fill, mid- to dark grey firm clay, occ. v small chalky frags, small flinty stones (D 0.21m)
Fill 2895 primary fill, pale yellowish grey friable clay, occ. chalky fleck, small flinty stones (D 0.08m)
- ?Pit** 2896 only seen in section, sloping sides to flat base (W 0.63m, D 0.26m)
Fill 2897 dark grey soft clay, occ. chalky fleck, small flinty stones
- Ditch** 2898 N-S, sloping convex sides to undulating base, fairly clear edges (W 1.10m, D 0.17m)
Fill 2899 mid-brownish grey firm clay, occ. flinty stones, chalk fleck
Finds RB pot
- Posthole 2900** within 2875, sub-circular, vertical sides, slightly rounded base, clear edges (W 0.30m, D 0.50m)
Fill 2901 v dark grey/black silty clay, occ. small flinty stones
Finds SF 5148 (Fe nail), fired clay
- Posthole 2902** within 2875, sub-circular, vertical sides, flat base, indistinct edges (W 0.20m, D 0.48m)
Fill 2903 pale grey, flecked orange, silty clay, charcoal flecks
- Posthole 2904** within 2875, sub-rectangular, vertical sides, rounded base, indistinct edges (W 0.28m, D 0.45m)
Fill 2905 pale grey silty clay orange flecks, no inclusions
- Posthole 2906** within 2875, sub-circular, vertical sides, flattish base, indistinct edges (W 0.20m, D 0.53m)
Fill 2907 pale grey silty clay, v occ. small chalk inclusions
- Posthole 2908** within 2875, sub-circular, vertical sides, flattish base, indistinct edges (W 0.25m, D 0.48m)
Fill 2909 pale grey silty clay with orange flecks, fairly compact, no inclusions
- Posthole 2910** within 2875, sub-rectangular, vertical sides, flattish base, indistinct edges (W 0.25m, D 0.50m)
Fill 2911 pale grey silty clay with orange fleck, compact, v, occ. small chalky inclusions
- Posthole 2912** within 2875, sub-circular, vertical sides, flattish base, indistinct edges (W 0.10m, D 0.63m)
Fill 2913 pale grey silty clay with orange flecks, compact, no inclusions
- Stake-hole 2914** within 2875, rounded, vertical sides, flattish base, indistinct edges (W 0.14m, D 0.15m)
Fill 2915 pale grey compact silty clay, v occ. small chalk frags, occ. charcoal flecking
- Stake-hole 2916** within 2875, sub-circular, vertical sides, flattish base, indistinct edges (W 0.11m, D 0.28m)
Fill 2917 pale grey compact silty clay, v occ. small chalk frags, occ. charcoal flecking
Finds fired clay

Stake-hole 2918 within 2875, sub-rectangular, vertical sides, rounded base, clear edges (L 0.15m, W 0.10m, D 0.30m)

Fill 2919 pale grey compact silty clay, occ. small chalk frags, occ charcoal flecking

Stake-hole 2920 within 2875, sub-circular, vertical sides, flattish base, indistinct edges (W 0.11m, D 0.15m)

Fill 2921 pale grey compact silty clay, no inclusions

Finds RB pot, fired clay

Ditch 2923 NW-SE, shallow sloping weathered top to SW side, dropping sharply to steep-sided flattish base, clear edges (W 3.20m, D 0.89m) cut by 2932, 2928, 2937

Fill 2924 primary fill, mid-grey soft clay with pale olive patches, occ. flinty stones, calcareous fleck (D 0.15m)

Finds RB pot, fired clay, bone

Fill 2925 pale olive-grey friable silty clay, v occ. small calcareous frags (D 0.17m)

Fill 2926 upper fill, mid-olive grey friable silty clay, occ. flinty stones, some larger nodules (D 0.60m)

Finds RB pot, fired clay, bone

Fill 2927 slumped side of ditch, mixed pale grey and greyish orange friable silt, freq. flinty stones, some larger nodules, chalky flecks and frags, occ. sandstone lumps (D 0.20m)

Finds SF 5149 (Fe obj), RB pot, RB brick/tile, bone

Ditch re-cut 2928 NW-SE, sides concave, slightly irregular slope to U-shaped base, clear NE edge, less so to SW (W 2.27m, D 0.67m), re-cut of 2923

Fill 2929 primary fill, dark grey flecked black soft clay, occ. flinty stones, small lenses of silty sand (D 0.20m)

Finds RB pot, fired clay, bone

Fill 2930 dark olive-grey friable sandy clay, occ. small flinty stones and some larger nodules, chalky frags sandstone frags (D 0.16m)

Finds SF 5151 (Fe nail), RB pot, fired clay, bone

Fill 2931 upper fill, mid-olive grey firm clay, occ. flinty stones, v occ. chalky frags and flecks, small sandstone frags (D 0.30m)

Finds SF 5300 (Fe nail), RB pot, RB brick/tile, fired clay, bone

Ditch re-cut 2932 NW-SE, sides steeply sloping, sharp break to flattish base sloping gently to NE, fairly clear edges (W 0.78m, D 0.38m), re-cut of 2923, may be cut by 2928

Fill 2933 primary fill, mid-grey firm clay, occ. flinty stones, v occ. chalky frags and flecks, small sandstone frags (D 0.15m)

Finds RB pot

Fill 2934 pale brownish-grey firm to friable silty clay, freq. small flinty stones, abundant small rounded stones, occ sandy lenses, some sandstone frags (D 0.10m)

Fill 2935 upper fill, dark grey firm clay, occ. flinty stones, v occ. chalky frags and flecks (D 0.24m)

Finds RB pot

Layer 2936 overlies 2928, 2923, dark blackish brown loamy clay, quite firm, freq small flinty stones, occ. chalky frags, some sandstone and ironstone frags

Finds SFs 5169 (?slag), 5050, 5051 (coins), 5101, 5152 (Fe nails), 5150 (Fe scrap), RB pot, RB brick/tile, fired clay, bone

Land-drain 2937 NW-SE, near vertical sides to flat base (W 0.15m, D 0.15m) cuts 2923

Fill 2938, dark reddish brown friable silty clay, no inclusions

Ditch re-cut 2939 NW-SE, gently sloping sides to shallow U-shaped base, unclear edges (W 1.14m, D 0.34m), re-cut of 2923

Fill 2940 dark grey firm clay, freq flinty stones, occ. small rounded sandstone, chalky frags and flecks, v occ. rounded ironstone frags

Finds RB pot, RB brick/tile, fired clay, bone

Hollow 2941 irregular sub-circular, S side steep, base slopes up gently to N, poor clarity of edges (L 1.96m, W 1.60m, D 0.09m) poss associated with 2875, stakeholes 2944-2960 in base

Fill 2942 upper fill, dark greyish black firm clay, v occ. chalk frags and fleck, occ. small flinty stones (D 0.07m)

Finds RB pot, fired clay, bone

Fill 2943 primary fill, pale yellowish grey, flecked dark grey and black, friable clay, v occ. small flinty stones, charcoal flecking (D 0.04m)

Stake-hole 2944 sub-circular, steep sides to pointed base, clear edges (W 0.12m, D 0.14m)

Fill 2945 mid-grey, soft clay, no inclusions

Stake-hole 2946 sub-circular, near vertical sides to near point at base, clear edges (L 0.06, W 0.05m, D 0.09m)

Fill 2947 mid-grey, soft clay, no inclusions

Stake-hole 2948 sub-circular, near vertical sides to flat base, clear edges (W 0.05m, D 0.09m)

Fill 2949 mid-grey, soft clay, v occ. small rounded stones

Stake-hole 2950 sub-circular, near vertical sides to flat base, clear edges (W 0.09m, D 0.13m)

Fill 2951 mid-grey, soft clay, no inclusions

Stake-hole 2952 sub-circular, vertical sides curving to dished base, fairly clear edges (L 0.15m W 0.12m, D 0.12m)

Fill 2953 mid-grey, soft clay, no inclusions

Stake-hole 2954 sub-circular, near vertical sides to flattish base, clear edges (L 0.09 W 0.08m, D 0.10m)

Fill 2955 mid-grey, soft clay, no inclusions

Stake-hole 2956 sub-circular, steep sides to rounded base, clear edges (W 0.05m, D 0.07m)

Fill 2957 mid-grey, soft clay, no inclusions

Stake-hole 2958 sub-circular, steep concave sides to rounded base, clear edges (W 0.05m, D 0.04m)

Fill 2959 mid-grey, soft clay, no inclusions

Stake-hole 2960 sub-square, steep sides to rounded base, clear edges (L 0.07m, W 0.06m, D 0.06m)

Fill 2961 mid-grey, soft clay, no inclusions

Posthole 2963 sub-circular, steeply sloping sides breaking suddenly to flat base, sloping down to W, poor clarity of edge (L 0.42m, W 0.38m, D 0.10m)

Fill 2964 pale yellowish grey friable clay, several rounded flint nodules and pebbles, occ large rounded sandstone frags, small flinty stones, chalk flecks, v occ. charcoal fleck, Mn staining

Hollow 2965 irregular, sides sloping to undulating irregular base, clear edges (L 0.80m, W 0.55m, D 0.07m)
?associated with 2875, stake-holes 2967-2975 in base

Fill 2966 dark blackish grey clay, paler below, freq small flinty stones, occ. chalk frags, small sandstone and ironstone frags

Finds RB pot, fired clay

Stake-hole 2967 sub-oval, steep sides to rounded base, clear edges (L 0.07m, W 0.05m, D 0.06m)

Fill 2968 mid-grey, soft clay, no inclusions

Stake-hole 2969 sub-circular, steep sides to flat base, clear edges (L 0.07m, W 0.07m, D 0.05m)

Fill 2970 mid-grey, soft clay, occ. small rounded stones

Stake-hole 2971 sub-circular, steep sides to rounded base, clear edges (L 0.05m, W 0.05m, D 0.05m)

Fill 2972 mid-grey, soft clay, no inclusions

Stake-hole 2973 sub-circular, steep sides to rounded point, clear edges (L 0.09m, W 0.09m, D 0.09m)

Fill 2974 mid-grey, soft clay, v occ. small flinty stones, v small chalk frags

Stake-hole 2975 sub-circular, steep sides to rounded point, clear edges (L 0.10m, W 0.10m, D 0.12m)

Fill 2976 mid-grey, soft clay, v occ. small flinty stones, v small chalk frags

Finds fired clay

Hollow 2977 irregular, sides steep concave slope to flattish undulating, clear edges (L 1.35m, W 0.54m, D 0.13m) ?associated with 2875, stake-holes 2980, 2982 in base

Fill 2978 upper fill, dark blackish grey firm clay, freq small flinty stones, occ. chalk frags, small sandstone frags, v occ. ironstone frags (D 0.12m)

Finds RB pot, bone

Fill 2979 primary fill, pale yellowish grey friable clay, occ. small flinty stones, freq. chalk flecks and frags (D 0.03m)

Stake-hole 2980 sub-circular, steep sides to grading to rounded base, clear edges (W 0.08m, D 0.06m)

Fill 2981 mid-grey, soft clay, no inclusions

Stake-hole 2982 sub-circular, near vertical sides, flat base, clear edges (W 0.05m, D 0.07m)

Fill 2983 mid-grey, soft clay, no inclusions

Context 2984 located surface finds from excavation

Context 2985 located surface finds from excavation

Finds RB pot, bone

Context 2986 located surface finds from excavation

Finds RB pot, RB brick/tile

Context 2987 located surface finds from excavation

Finds RB pot

Context 2988 located surface finds from excavation

Finds fired clay, RB brick/tile

Context 2989 located surface finds from excavation

Finds RB brick/tile

Context 2990 located surface finds from excavation, above Ditch 2776

Finds RB pot, RB brick/tile

Context 2991 located surface finds from excavation

Context 2992 located surface finds from excavation, above Ditch 1391

Finds RB brick/tile

Context 2993 located surface finds from excavation

Finds RB pot

Context 2994 located surface finds from excavation, above Ditch 3052

Finds RB pot, fired clay, RB brick/tile

Context 2995 located surface finds from excavation

Finds RB pot

Context 2996 located surface finds from excavation, above Ditch 1378

Finds brick/tile

Context 2997 located surface finds from excavation

Finds bone, fired clay, RB brick/tile

Context 2998 located surface finds from excavation, above Ditch 1378

Finds bone

Context 2999 located surface finds from excavation

Finds fired clay

Context 3000 located surface finds from excavation, above Ditch 1391

Finds fired clay

Context 3001 located surface finds from excavation

Context 3002 located surface finds from excavation, above Ditch 3079

Context 3003 located surface finds from excavation

Finds RB pot, bone, fired clay, RB brick/tile

Context 3004 located surface finds from excavation, above Ditch 2726

Context 3005 located surface finds from excavation, above Pit 2794

Finds fired clay

Context 3006 located surface finds from excavation

Context 3007 located surface finds from excavation

Finds fired clay

Context 3008 located surface finds from excavation

Context 3009 located surface finds from excavation

Finds fired clay

Context 3010 located surface finds from excavation

Finds fired clay, RB brick/tile

Context 3011 located surface finds from excavation, above Ditch 2776

Finds RB pot

Stream bed 3012* oriented N-S, curvilinear, broad U-shaped profile, steep concave sides, flat base (W 8.06m, D 1.15m)

Fill 3013 light grey silt, coarse sand, calcareous grits, occ. flint gravels

Finds none

Fill 3014 mid to light grey, clayey silt, occ. bands of sand and calcareous grits, frequent ironstones and mollusc shells

Finds none

Fill 3015 mid to light yellow-grey, silty clay, with iron mottles, moderate mollusc shells

Finds RB pot

Ditch 3022* oriented NNE-SSW, asymmetrical profile, W side steeper than E, flat base (W 3.08m, D 0.58m)

Fill 3023 mid yellow-grey, clayey loam, occ. flint gravels, occ. calcareous grits

Finds none

Ditch 3024* oriented ENE-WSW, asymmetrical profile, W side steeper than E, flat base (W 3.50m, D 0.51m)

Fill 3025 mid yellow-grey, clayey loam, occ. flint gravels, occ. calcareous grits, calcareous grits concentrated along E side

Finds pottery

Ditch 3026* oriented NE-SW, asymmetrical profile, W side steeper than E (W 4.10m, D 0.71m)

Fill 3028 light grey, clayey sand, moderate calcareous grits

Finds none

Fill 3027 dark grey-brown, clayey loam, occ. iron mottles, occ. flint gravels, moderate calcareous grits

Finds none

Ditch 3029* oriented NW-SE, steep, irregular sides, concave base (W 2.60m, D 1.30m)

Fill 3032 soft, firm, gleyed, grey clay, occ. flint pebble, occ. charcoal flecks, occ. oxidisation, frequent mollusc shells

Fill 3031 mid grey-orange, soft, friable sandy loamy clay, oxidisation, moderately frequent sandy mottles, moderate amount flint pebbles, frequent calcareous grits, occ. mollusc shell

Finds bone

Fill 3030 mid orange-grey, soft, friable sandy loam, moderate amount oxidisation, moderate amount sandy mottles, occ. flint nodule, moderately frequent flint pebbles, moderately frequent calcareous grits, v. occ. charcoal flecks

Ditch 3033* oriented NW-SE, V-shaped profile, moderately steep to steep, convex sides, narrow, concave base (W 3.60m, D 1.80m)

Fill 3040 pale, yellow-grey, soft clayey silt, no inclusions

Fill 3039 mid grey, moderately soft silty clay, occ. flint gravels, moderate to frequent calcareous grits

Fill 3038 pale to mid yellow-grey, soft silty clay, no inclusions

Fill 3037 mid grey, soft silty clay, with light orange-brown mottles, frequent calcareous grits

Fill 3036 dark brown-grey, soft clayey silt, with uneven orange-brown mottles, humus rich, 3 bands pale yellow-white, calcareous grits and coarse sands, patch of flint gravels/cobbles on E side of fill

Fill 3035 pale to mid grey, firm silty clay, with light orange-brown mottles, v. occ. flint gravels, occ. patches limestone grits

Fill 3034 mid yellow-brown, soft sandy clayey loam, moderate amount orange-brown mottles, moderate amount flint gravels, v. occ. limestone grits

Context 3041 unstratified surface finds, above Ditch 2923

Context 3042 unstratified surface finds, above Ditch 2923

Context 3043 unstratified surface finds

Linear 3044 oriented E-W, not excavated

Furrow 3045 oriented NW-SE (D 0.28m)

Furrow 3046, oriented NW-SE (D 0.20m)

Tree-throw 3047 no information recorded

Fill 3048 no information recorded

Layer 3049 arbitrary layer of unstratified surface finds, above Ditch 1388

Linear 3050 oriented NE-SW, not excavated

Layer 3051 arbitrary layer of unstratified surface finds

Linear 3052 oriented NE-SW, not excavated

Furrow 3053 oriented NW-SE (D 0.15m)

Context 3054 unstratified surface finds

Context 3055 unstratified surface finds, above Ditch 2776

Context 3056 unstratified surface finds, above Ditch 2776

Context 3057 unstratified surface finds, above Ditch 1391

Linear 3058 oriented NE-SW, not excavated

Layer 3059 arbitrary layer of unstratified surface finds

Linear 3060 oriented NW-SE, not excavated

Linear 3061 oriented NW-SE, not excavated

Linear 3062 oriented NW-SE, not excavated

Context 3063 surface finds

Context 3064 surface finds

Linear 3065 oriented NW-SE, not excavated

Context 3066 unstratified surface finds

Context 3067 unstratified surface finds

Context 3068 unstratified surface find

Context 3069 unstratified surface finds, above Ditch 1382

Linear 3070 oriented NW-SE, not excavated

Linear 3071 oriented not excavated NW-SE feature

Context 3072 unstratified surface finds, above Ditch 2719

Context 3073 unstratified surface finds, above Ditch 3070

Context 3074 unstratified surface finds

Context 3075 unstratified surface finds, above Pit 2796

Context 3076 unstratified surface finds

Context 3077 unstratified surface finds

Linear 3079 oriented NW-SE, not excavated

Linear 3081 oriented NW-SE, not excavated

Construction Section 14

Context 1400 unstratified finds, plot 115

Ditch 1401 * oriented NW-SE, moderate to steep, concave E side, gentle to moderately steep, concave W side, concave base (W 1.27m, D 0.67m)

Fill 1402 pale to mid yellow-grey, soft, friable, clayey loam, occ. calcareous grits, occ. iron oxidation, occ. mollusc shells

Construction Section 15

Context 1500 unstratified finds, plot 116

Ditch 1501* oriented N-S, moderately steep, concave sides, straight W side, slightly irregular E side, concave base (W 1.60m, D 0.55m) cuts Layer 1515

Fill 1503 dark brown-grey, firm silty clay, calcareous grits and aquatic mollusc shells

Fill 1502 pale grey, firm, friable silty-clay, iron oxide mottle, occ. calcareous grits, flint gravels seen particularly on E side (D. 0.25m), land snails

Ditch 1504* oriented NNW-SSE, moderate to steep, convex sides, narrow rounded base (W 1.42m, D 0.65m) cuts Layer 1515

Fill 1505 mid grey-yellow, firm, friable sandy clayey loam to clayey loam, frequent calcareous grits, occ. calcareous gravels, occ. flint gravels, v. occ. charcoal flecks

Finds bone

Ditch 1506* oriented NW-SE, U-shaped, moderately steep sides, concave base (W 0.87m, D 0.31m) cuts Layer 1515

Fill 1507 mid to dark grey-yellow with pale mottles, firm, friable sandy clay to clayey loam, with calcareous grits and gravels, occ. flint gravel, land snails

Ditch 1508* oriented NE-SW, V-shaped, steep, straight sides, narrow rounded base (W 1.09m, D 0.77m) cuts Layer 1515

Fill 1509 mid grey-yellow, firm, friable sandy clayey loam, calcareous grit, occ. flint gravel

Ditch 1510* oriented NE-SW, V-shaped, moderate to steep sides, convex W side, straight E side, concave narrow base (W 1.06m, D 0.48m) cuts Layer 1515

Fill 1511 mid grey-yellow, firm, friable sandy clayey loam, frequent calcareous grits, occ. flint gravels

?Stream channel 1512* oriented approx. N-S, poorly visible, ?U-shaped, ?curvilinear (approx. W 7.00m, D 2.20m)

Fill 1513 mid to dark brown-grey, soft, wet clayey silt (D. 0.6m)

Layer 1514* (alluvium) pale to mid yellow-grey, firm silty clay (D 0.60m thins towards E), overlies deposits 1502, 1505, 1507, 1509, 1511, 1513

Layer 1515* (natural) pale to mid yellow-white (?fluvio-glacial) coarse sands, iron stains, calcareous grits, occ. flint gravels (D up to 0.40m), cut by ditches 1501, 1504, 1506, 1508, 1510, overlying layer 1516

Layer 1516* (natural) mid blue-grey, firm, blocky slightly silty clay, v. occ. flint gravel, occ. marine shells, natural hollows in clay filled with material from 1515 - ?periglacial fissures.

Construction Section 16

Context 1600 unstratified finds, plot 117

Context 1601 unstratified finds, plot 118

Finds RB pot, med/pmed pot

Context 1602 unstratified finds, plot 119

Context 1603 unstratified finds, plot 120

Context 1604 unstratified finds, plot 121

Finds flint

Context 1605 unstratified finds, plot 122

Finds flint, RB pot

Context 1606 unstratified finds, plot 123

Context 1607 unstratified finds, plot 124

Context 1608 unstratified finds, plot 125

Finds SFs 5256 (Cu alloy obj), 5277 (stamped samian), 5290 (Fe strip), 5313 (slag), 6014 (stamped samian), flint, bone, fired clay, RB pot, med/pmed pot

Context 1609 unstratified finds, plot 126

Finds SFs 5293, 6008, 6009, 6012, 6041 (Fe objs), 6001, 6037, 6046 (Cu alloy obj), 6002, 6003, 6005, 6010, 6020, 6036, 6038 (coins), 6004, 6006, 6007, 6013, 6017, 6021, 6035, 6039 (Pb objs), 6015 (dec pot), 6018, 6019, 6023, 6040 (Fe nails), 6026 (brooch), RB pot, RB brick/tile

Context 1610 unstratified finds, plot 127

Finds RB pot

Ditch 1611 oriented S-N before turning towards E, U-shaped with wide flat bottom (L +20m, W 0.82m, D 0.16-0.28m) cuts Gully 1654

Fill 1615 yellow-green-grey, pliable clay with occ. sand and gravel patches

Finds RB pot bone

Fill 1614 dark clayey silt with frequent charcoal flecks

Finds RB pot, bone

Fill 1613 light brown-grey, sandy clay with 10% gravel size particles

Finds RB pot, bone, metal

Context 1612 finds from the surface of this feature

Finds RB pot, flint, fired clay

Gully 1616 oriented E-W, shallow, U-shaped with butt end, rounded base (L 0.85m, W 0.33m, D 0.10m)

Fill 1617 mid brown-grey, fairly firm, sandy clay with re-deposited natural towards base, occ. small stones

Finds RB pot

Ditch 1618 oriented E-W and bends to N, V-shaped with rounded base (L +20m, W 1.40m, D 0.42m) cuts Pit 1659

Fill 1619 upper fill, mid brown-grey, malleable, silty clay, occ. sandstone cobbles, gravel, limestone, charcoal flecks

Finds RB pot, bone, fired clay

Fill 1620 lower fill, mixed mid brown-grey, malleable, silty clay and pale creamy grey redeposited natural, occ. gravel, limestone, charcoal flecks

Finds RB pot, bone, fired clay

Gully 1621 oriented N-S, shallow U-shaped with flat base (W 0.63m, D 0.28m)

Fill 1623 mid grey highly compact sandy-clay, occ. gravel, limestone flecks
Finds RB pot, fired clay
Fill 1622 mid green-grey compact silty-clay, small-medium flints, occ. limestone flecks
Finds SF 5286 (Fe nail), RB pot, fired clay

Pit/Gully 1624 oriented N-S, steep, rounded sides, rounded base (W 0.60m, D 0.40m) cut by possible Pit 1626

Fill 1625 light to mid brown-grey, friable sandy clay, occ. gravel and limestone flecks, single sandstone cobble

Finds RB pot, bone

?Pit 1626 gently sloping sides, rounded undulating base (L ?2.70m, D 0.60m), truncates S edge of 1624,

Fill 1628 light grey-brown, compact sandy-clay, occ. limestone flecks, flints

Fill 1627 mid grey-brown, crumbly silty-clay, occ. small-medium flints, pebbles

Finds RB pot, bone, fired clay

Ditch 1629 oriented N-S with bend to E, V-shaped sides, flat base (L +20m, W 0.65m, D 0.22m) cuts Oven 1683, cut by modern drain

Fill 1630 yellow-grey, silty-clay with 25% gravel-pebble, occ. charcoal flecks

Finds RB pot, bone, fired clay

Gully 1631 oriented NE-SW, U-shaped with rounded base (W 0.80m, D 0.22m) cuts Gully 1634

Fill 1633 green-grey, compact, silty clay, occ. medium flints

Finds flint, fired clay, bone

Fill 1632 dark green-brown, compact silty clay, occ. sand, moderate pebbles

Finds flint, RB pot, bone, fired clay

Gully 1634 curvilinear, oriented WNW-ESE with bend to NE-SW, almost vertical sides, rounded base (L ?4.50m, W 0.50m, D 0.35m), cut by Gully 1631

Fill 1636 mid brown-green, compact, sandy clay, occ. small stones

Fill 1635 light mottled yellow-brown-green, compact, sandy clay, occ. small stones

Furrow 1637 oriented N-S, shallow U-shaped with flat bottom (W 1.04m, D 0.11m), cuts Ditch 1650

Fill 1638 light brown, silty clay, occ. chalk inclusions, 7% gravel

Finds SF 6034 (Fe nail), bone

Context 1639 surface finds top of unexcavated feature

Finds RB pot

Context 1640 surface finds top of unexcavated feature (= 1639)

Finds RB pot, bone

Context 1641 surface finds top of 1611

Finds RB pot

Context 1642 surface finds top of unexcavated gully

Finds SF 5276 (Pb sheet), RB pot

Context 1643 surface finds top of unexcavated pit

Finds RB pot

Context 1644 surface finds top of unexcavated gully

Finds RB pot

Context 1645 surface finds top of 1631

Finds RB pot

Context 1646 surface finds top of furrow

Finds RB pot

Context 1647 surface finds, top of 1618

Finds RB pot

Context 1648 surface finds

Context 1649 surface finds top of furrow

Finds bone

Ditch 1650 oriented N-S, V-shaped with rounded base (W 2.52m, D 0.92m), cut by Furrow 1637

Fill 1656 mid grey, pliable sandy clay, frequent chalk, snails, frequent iron oxide flecks at base, 15% stones

Finds bone

Fill 1651 mid-dark grey, silty-clay, high charcoal content, chalk inclusions

Finds SF 1651 (fired clay), RB pot, RB brick/tile, fired clay, bone

Fill 1663 charcoal band on W side of 1651

Finds SF 6042 (fired clay), 6043, 6044 (pot), pot, bone, fired clay, metal

Pit 1652 shallow, oval shaped with flat base (L 1.00m N-S, W 0.90m E-W, D 0.14m)

Fill 1653 dark grey, compact, sandy clay, charcoal flecks, chalk flecks, occ. pebbles

Finds RB pot, bone, fired clay

Gully 1654 oriented NW-SE, damaged feature (W approx. 0.4m, D +0.02m), cut by Ditch 1611

Fill 1655 grey-brown, sandy clay

Finds RB pot, bone

Pit 1657 ?oriented N-S, rectangular in plan, steep sides, base unknown (L 1.10m, W 0.66m, D ?0.50m), cuts Gully 1674, re-cut by 1659

Fill 1658 yellow-green, soft silty clay, v. occ. calcareous gravel, silted up or re-deposited natural

Pit re-cut 1659 oriented N-S, steep sides, flat base (L 1.1m, W 0.05m truncated, D), re-cuts Pit 1657, cut by Ditch 1618

Fill 1662 mixed light grey-orange, friable silty clay, slump of natural in base

Fill 1661 light to mid grey, friable silty clay, v. occ. flint and chalk fragments, charcoal flecks, natural silting

Finds RB pot

Fill 1660 mid grey, compact clay, v. occ. small flint and charcoal fragments

Finds RB pot, bone, fired clay, burnt bone/stone

Furrow 1664 oriented N-S, (L +20m, W 0.40m unexcavated), cuts pit 1666

Fill 1665 mid brown, compact clay, 10% small rounded pebbles

Finds SF 6030, RB pot

Pit R. 1666 oriented N-S, sub-circular, W edge steepest, sloping flat base (W 1.55m, D 0.47m), re-cuts Pit 1669, cut by Furrow 1664

Fill 1668 light green-grey, compact, silty clay, v. occ. small sub-angular stones

Finds RB pot, fired clay, bone

Fill 1667 light grey, compact, silty clay with brown flecks, 2% medium sub-rounded stones, 2% charcoal lenses at base

Finds RB pot, bone, fired clay

Pit 1669 oriented N-S, ?oval, steep sided, deep rounded-flat base, re-cut by 1666

Fill 1673 olive green-grey, compact, silty clay, redeposited natural in side of pit

Fill 1672 light yellow-grey, compact, silty clay, v. occ. small rounded stones

Finds RB pot, fired clay, bone

Fill 1671 v. dark grey-black, fairly compact clay, 10% large-medium sub-angular stones, ?edge of pit

Finds RB pot, fired clay, bone

Fill 1670 mid grey-brown, compact, silty clay, v. occ. pebbles

Finds pot, bone, fired clay

Gully 1674 oriented N-S, bending to E then to SE, curvilinear, rounded base (W 0.40m, D 0.09m)

Fill 1675 light to mid brown-grey clay, 5% rounded pebbles

Pit 1676 circular, gradually sloping sides, rounded base (Diam. 0.76m, D 0.15m) cuts Stake Hole 1678

Fill 1677 light brown-grey, smooth, compact, silty clay, v. occ. small rounded pebbles

Finds bone

Stake hole 1678 circular, steep sided (Diam. 0.06), cut by Pit 1676

Fill 1679 light brown-grey, smooth, compact, silty clay

Pit/post hole 1680 circular, gradually sloping sides, flat base (W 0.34m, D 0.08m)

Fill 1682 yellow-grey, silty clay, iron oxide flecks

Fill 1681 dark grey-brown, silty clay, chalk and charcoal inclusions, occ. pebbles

Finds RB pot, bone

Oven 1683 circular, steep sides, flat base (W 0.70m, D 0.28m) cut by Ditch 1629

Fills: 1684 dark brown-grey, fired clay, lining of oven base

Finds fired clay

Fill 1686 mixed, light green-yellow-grey, compact, silty clay, occ. charcoal flecks

Fill 1685 v. dark grey-black, friable, silty clay, 40% charcoal

Finds RB pot

Fill 1687 dark brown-grey, fired clay, oven roof remains

Fill 1688 light green-yellow, compact, silty clay

Finds fired clay, pot

Post-hole 1689 oval, steep sided, flat base (L 0.65m, W 0.50m, D 0.17m)

Fill 1690 dark brown-grey, smooth, silty clay, occ. pebbles at middle depth

Finds fired clay

Pit 1691 sub-circular, steep sided, wide flat base (L 0.97m, W 0.92, D 0.32m)

Fill 1694 yellow-green-grey, rounded and sub-angular stones mainly at edge, occ. iron oxide flecks

Fill 1693 grey-brown, silty clay, chalk and charcoal flecks, occ. stones

Finds RB pot, bone

Fill 1692 mid brown-grey, pliable, silty clay, occ. chalk and charcoal flecks, moderately frequent stones

Finds RB pot, bone, fired clay

Context 2600 unstratified finds

Finds SFs 5287, 5294, 5299 (Fe objs), 5295 (Fe nail), flint, fired clay, RB pot, RB brick/tile, med/pmed pot

Pit 2601 sub-circular, gradually sloping sides, almost vertical towards base (L 4.50m, W 4.10m, D +2.20m)

Fill 2673 grey-green, sticky, silty clay, oxidised manganese, organic material towards base; ?reeds

Fill 2672 grey, firm, silty clay, oxidised manganese, 1% flint, redeposited/weathered natural

Finds SF 5312 (slag), RB pot

Fill 2621 mid grey, fairly compact, silty clay, occ. flint, sandstone, irregular horizons

Finds flint, RB pot, bone

Fill 2602 dark grey-brown, firm, silty clay, occ. flint

Finds SF 6016, RB pot, bone, CBM, flint

Ditch 2603 oriented E-W, steep sides, near vertical towards base, flat base (L +20m, W 2.40m, D 1.06m), cuts Ditch 2605

Fill 2638 mixed, dark brown-green, plastic, silty clay, v. occ. pebbles

Fill 2622 dark brown, plastic, silty clay, occ. sub-rounded pebbles

Finds RB pot, bone

Fill 2604 dark brown, plastic, silty clay, sub-angular stones, occ. rounded pebbles

Finds RB pot, bone, metal, RB brick/tile

Ditch 2605 oriented N-S, steep sides, flat base (D 0.63m), cuts Gullies 2626 and 2634, cut by Ditch 2603

Fill 2639 dark brown-green, plastic, silty clay, occ. sub-angular stones
Fill 2607 dark brown-green, plastic, silty, clayey sand, occ. stones
Finds RB pot, bone
Fill 2606 dark brown, plastic, silty sand, occ. stones
Finds RB pot, bone, metal

Pit 2608 circular, vertical sides, flat base, (Diam. 0.6m, D 0.27m)
Fill 3107 rounded and sub-angular flint gravel bonded with mid brown-grey clay natural, occ. chalk, charcoal flecks
Finds SF 6031 (brick), fired clay
Fill 2610 mid brown-grey, soft, silty clay, darker upper boundary
Finds RB pot, fired clay, bone
Fill 2609 dark black-brown, soft clay, occ. pebbles, mixed organic and burnt deposits
Finds SF 6031, RB pot, bone, CBM, fired clay

Ditch 2611 curved to E-W alignment, shallow U-shaped, narrow rounded base (L +15m, W 1.13m, D 0.28m) cut by Ditch 2616

Fill 2633 light grey, soft, pliable clay, frequent stone and chalk
Fill 2612 light brown, soft, pliable clay, frequent flint, occ. chalk and charcoal flecks
Finds bone

Ditch re-cut 2613 oriented WNW-ESE, rounded U-shaped, rounded base (L +20m, W 1.25m, D 0.41 m), re-cut of Ditch 2616

Fill 2615 dark brown-grey, sticky, silty clay, redeposited natural, occ. medium pebbles, flints, freq. charcoal
Finds SF 5261 (clay slab), RB pot, fired clay, bone
Fill 2614 dark brown-grey, compact, silty clay, occ. pebbles, flints, limestone flecks, freq. charcoal
Finds SF 6033 (Cu alloy pin), RB pot, bone, CBM, fired clay

Ditch 2616 oriented WNW-ESE, rounded U-shaped, rounded base (L +20m, W 1.50m, D 0.64m), cuts Ditch 2611, truncated by Ditch 2613,

Fill 2618 cream, soft, silty clay, occ. light grey mottles, occ. sub-rounded pebbles, sub-angular stones, charcoal flecks, redeposited natural
Finds RB pot, fired clay, bone
Fill 2617 dark grey, ashy silt, redeposited natural, occ. sub-rounded pebbles, freq. charcoal
Finds RB pot, bone, RB brick/tile, fired clay

Ditch 2619 ?same as ditch 2611 although narrower and more shallow and thinning towards W, ?rounded terminus (W 0.42-0.30m, D 0.65-0.40m)

Fills: 2620 light brown-grey, soft clay, occ. charcoal, freq. chalk fragments, flint pebbles
Finds burnt flint

Layer 2624 grey-brown, silty clay
Finds SF 6009, RB pot, bone, RB brick/tile

Layer 2625
Finds SFs 6000 (coin), 6011 (Pb obj), RB pot, bone, metal, fired clay

Gully 2626 oriented NW-SE, U-shaped with irregular sides, flat base (L +2m, W 0.32-0.39m, D 0.13m), cut by Ditch 2605

Fill 2627 light brown, soft, pliable clay, 20% pebbles, occ. charcoal flecks
Finds bone

Pit 2628 circular, near vertical sides, flat base (Diam. 0.60m, D 0.17m)
Fill 3108 gravel with mid grey-brown clay natural, occ. chalk, charcoal flecks
Fill 2629 mid brown-grey, soft silty clay, v. occ. charcoal, stones
Fill 2630 black-brown, fairly soft clay, occ. pebbles; some burnt, occ. charcoal
Finds RB pot, bone

Pit/?posthole 2631 circular, shallow U-shaped, flat base (Diam. 0.75m, D 0.17m)

- Fill* 2632 light grey-brown, firm clay, occ. gravel, pebbles
Finds bone
- Gully** 2634 oriented SSE-NNE, shallow V-shaped with steeper E side, rounded base (L +1.5m, W 1.07m, D 0.21m), ?cut by Ditch 2605
Fill 2635 light brown-grey, pliable clay 15% flint pebbles chalk flecks
Finds pot, bone
- ?Posthole** 2636 possible tree bowl; irregular circular shape, shallow sided with undulating base (Diam. 0.70m, D 0.09m)
Fill 2637 orange-brown, soft, sandy clay, light grey, sandy clay inclusions, occ. pebbles, charcoal flecks
Finds daub
- Gully** 2640 oriented NW-SE, narrow linear with tapered W end, shallow 'U'-shape, rounded base (L 3.50m, W .024m, D 0.06m), same as Ditch 2640, cut by Ditch 2656
Fill 2641 dark brown, silty-clay, occ. chalk and manganese flecks, sub rounded pebbles
- Gully** 2642 oriented NW-SE, V-shaped, pointed base (W 0.12m, D 0.10m), same as Gully 2640, cut by Ditch 2656
Fill 2643 dark brown, plastic, silty clay, occ. chalk flecks, small pebbles
Finds RB pot, bone
- Ditch** 2644 oriented N-S, V-shaped, steep sides, W side irregular, concave base (L +15.0m, W 1.70-1.75m, D 0.75m)
Fill 2650 stiff, v dark yellowish brown clay, occ. small pebbles, one medium chalk pebble
Finds RB pot
Fill 2649 light to mid grey, soft clay, occ. iron oxide flecks, v. occ. sub-rounded pebbles
Fill 2646 light to mid grey, soft clay, occ. iron oxide flecks, v. occ. sub-rounded/angular pebbles
Fill 2648 light to mid green-grey-brown, soft clay, iron oxide flecks, mod. amount sub-rounded pebbles, occ. large sub-rounded pebbles
Fill 2647 light to mid grey, soft clay, occ. iron oxide flecks, v. occ. sub-rounded/angular pebbles
Fill 2645 light to mid yellow-grey, soft, smooth clay, large angular pebble, v. occ. sandstone, chalk inclusions
Finds RB pot, bone
- Context** 2651 surface finds
Finds SF 5292 (Fe obj), RB pot, bone, fired clay
- Ditch** 2652 oriented N-S, narrow, straight sides, rounded base (L ? W 0.19m, D 0.29m), cuts Furrow 2654
Fill 2653 light grey-brown, firm, medium clay, v. occ. pebbles, crushed chalk pipe
Finds RB pot
- Furrow** 2654 oriented N-S, shallow U-shaped, flat base (L +20m, W 1.17m, D 0.15m), cuts Ditch 2656, cut by Ditch 2652
Fill 2655 light grey-brown, firm, medium clay, 10% pebbles, occ. chalk flecks
Finds RB pot, bone
- Ditch** 2656 oriented N-S, U-shaped, shallow-steep W side, flat-rounded base (L +20m, W 0.70m, D 0.40m), cuts Ditch 2659, and Gullies 2640 and 2642, cut by Furrow 2654
Fill 2658 black-brown, soft clay, occ. chalk, 40% pebbles towards top of fill
Finds RB pot, bone
Fill 2657 black-brown, soft clay, occ. chalk, pebbles
Finds RB pot, bone, fired clay, charcoal
- Ditch** 2659 oriented N-S, U-shaped steep sides and flat base (L +20m, W 1.07m, D 0.49m), cut by Ditch 2656
Fill 2661 light green-grey, soft, silty clay, v. occ. pebbles, chalk upper horizon stained green, black staining at base
Finds bone

- Fill** 2660 brown-black, soft clay, occ. green staining, organic deposits
Finds RB pot, bone
- Furrow** 2665 oriented N-S, gradually sloping sides, concave base (L +20m, W 1.30m, D 0.13m)
Fill 2666 mid yellow-brown, plated, stiff clay, mod. amount pebbles concentrated at base, occ. limestone inclusions
Finds SFs 6024, 6025 (Fe objs), RB pot, bone, RB brick/tile
- Ditch** 2667 oriented N-S, V-shaped, small rounded base (L +20m, W 1.95m, D 0.74m), cut by Gully 2640 / 2642
Fill 2671 mixed red-green-grey, plastic, silty clay, v. occ. chalk flecks
Fill 2670 light green-brown, plastic, silty clay, v. occ. gravel
Finds RB pot, flint, bone
Fill 2669 green-brown, plastic, silty clay, v. occ. sub-rounded/angular gravel, charcoal flecks
Finds bone
Fill 2668 dark green-brown, plastic, silty clay, v. occ. small sub-rounded stones
Finds RB pot, bone, flint
- Furrow** 2674 oriented N-S, U-shaped with flat base (L +20m, W 1.15m, D 0.11m), ?cut by Drain 2676
Fill 2675 mid to dark yellow-brown, stiff, plated clay, occ. rounded pebbles concentrated at base
Finds RB pot, bone, ?quern stone fragment
- ?Land drain** 2676 oriented N-S, U-shaped with flat base (L +20m, W 0.14-0.18m, D 0.20m), ?cuts Furrow 2674
Fill 2677 dark yellow-brown, plated, soft clay, v. occ. fine mixed pebbles
- Gully** 2678 oriented E-W, U-shaped with smooth rounded base, rounded W end (L ?, W 0.59m, D 0.19m), cuts Ditch 2680
Fill 2682 dark yellow-brown, firm, medium clay with black staining, occ. chalk flecks and pebbles concentrated particularly towards base
Finds bone
Fill 2679 brown-black, soft clay, occ. chalk flecks and stones
Finds SF 6045 (dec pot), RB pot, bone, charcoal
- Ditch** 2680 oriented E-W, steep sides, V-shaped with flat base, rounded W end (L +13m, W 1.60m, D 0.63m), cut by Gully 2678
Fill 2685 light orange-brown, soft, silty clay, v. occ. pebbles
Fill 2681 orange-brown, firm, medium clay, chalk and manganese flecks, extensive mineralisation, occ. pebbles (large at base), natural slump on N side
Finds pot, bone, charcoal
- Gully** 2683 oriented NE-SW, steep sides, U-shaped with flat base, rounded NW end (L 4.16m, W 0.49m, D 0.17-0.20m)
Fill 2684 dark brown-grey, soft, silty clay, yellow-green patches, occ. chalk flecks and stones
Finds RB pot, bone, fired clay
- Pit** 2686 small sub-circular with steep W side, gradual E side, irregular base (Diam. 0.55m, D 0.14m), cut by modern field drain running N-S
Fill 2687 mid brown-grey, sandy clay, occ. chalk and charcoal flecks, base lined with stones up to 0.05m diam.
Finds RB pot, bone
- Ditch** 2688 ?oriented NNW-SSE, steep sides, U-shaped with flat base (L +10m, W 1.93m, D 0.69m)
Fill 3100 light grey-brown, pliable, silty clay, occ. chalk flecks, iron staining, very stony
Fill 2699 mid brown-grey, sandy clay, 15% stones, occ. chalk and charcoal
- Gully** 2689 oriented N-S, rounded base (W 0.35m, D 0.11m), cut by Ditch 2691
Fill 2690 light grey-brown, soft, silty clay, occ. pebbles

Finds RB pot, bone, fired clay

Ditch 2691 oriented N-S, U-shaped with wide flat base (W 1.72m, D 0.26m), cuts Gully 2689

Fill 2692 dark brown, medium clay, occ. chalk flecks, pebbles

Finds RB pot, bone, charcoal, burnt flint, fired clay

Ditch 2693 oriented NE-SW, bending to E-W, curvilinear (L? W 1.12m, D 0.35m), cuts ditch 2695, cut by Ditch 2691

Fill 2694 green-brown, soft, silty clay, occ. stones at base, occ. chalk flecks, mineralisation, bioturbation at base

Finds RB pot, bone, fired clay

?Pit/Ditch 2695 ?oriented E-W, irregular circular shape in plan, highly truncated, steep sides, wide, flat base (L +1.83m, W +1.15m, D 0.37m), cuts Ditch 2698, cut by Ditch 2693

Fill 3101 light green-grey, soft, mixed, silty clay, v. occ. chalk flecks, stones, irregular horizon with 2696

Fill 2696 dark green-brown, medium clay, v. occ. chalk flecks, pebbles, irregular horizon with 3101

Finds SFs 6028, 6029 (Fe nails), RB pot, bone, fired clay, charcoal, metal, burnt stone

?Ditch 2698 oriented N-S, gradually sloping sides, steeper at bottom, flat base (L +11m, W 1.10m, 0.60m), cut by Ditch 2695

Fill 3102 light blue-grey, moderate, silty clay, v. occ. flint stones

Fill 2697 light green-brown, moderately silty clay, v. occ. chalk and pebbles

Finds RB pot, bone, CBM, fired clay

Posthole 3104 circular, steep sides, rounded base, depression in centre (W 0.4m, D 0.24m), cuts Ditches 2695, 2698

Fill 3103 mixed, light green-grey and dark green-brown, soft, silty clay, v. occ. pebbles

Gully 3105 no information on context sheet

Fill 3106 no information on context sheet

Context 3109 surface finds top of 2644

Finds RB pot

Context 3110 surface finds

Finds RB pot

Context 3111 surface finds top of 2680

Finds fired clay, RB pot

Context 3112 surface finds top of furrow

Finds RB pot

Context 3113 surface finds top of unexcavated ditch

Finds SF 5315 (fired clay), RB pot

Context 3114 surface finds

Context 3115 surface finds top of ?3200

Finds RB pot

Context 3116 surface finds

Finds SF 5278 (stamped pot), RB pot

Context 3117 surface finds

Context 3118 surface finds top of unexcavated ditch

Context 3119 surface finds top of furrow 2654

Finds RB pot

Context 3120 surface finds top of 3200

Finds fired clay, RB pot

Context 3121 surface finds

Context 3122 surface finds top of 2667

Finds RB pot

Context 3123 surface finds unexcavated feature

Finds RB pot

Context 3124 surface finds top of 2665, 2674

Finds RB pot

Context 3125 surface finds, top of furrow

Finds RB pot

Context 3126 surface finds top of 1611

Finds fired clay, RB pot

Context 3127 surface finds top of unexcavated feature

Finds RB pot

Context 3128 surface finds top of unexcavated feature

Finds bone, RB pot

Context 3129 surface finds top of unexcavated feature 1643

Finds RB pot

Context 3130 surface finds top of furrow

Finds RB pot

Context 3131 surface finds top of ?1618

Context 3132 surface finds top of ?1329

Finds RB pot

Context 3133 surface finds top of 1666, 1669

Finds fired clay

Context 3134 surface finds

Context 3135 surface finds

Ditch 3136* oriented NNW-SSE, gentle to moderately steep W side with two breaks of slope, gentle E side, moderately steep after break of slope, concave base (L?, W 1.43m, D 0.41m)

Fill 3137 mid to dark brown-grey, firm, silty clay, occ. calcareous and flint grits, below layer 3140

Ditch 3138* oriented NW-SE, moderate to steep sides, straight W side, convex E side, concave base (L?, W 0.47m, D 0.27m) re-cut by Ditch 3143

Fill 3139 mid to dark brown-grey, firm, silty clay to clayey loam, moderately frequent calcareous grits, occ. land snails

Layer 3140* mid brown-grey, firm, silty clay (alluvium), light iron oxidation, occ. calcareous grits, (D 0.05-0.20m), cut by Ditches 3156, 3163, above all other features

- Layer 3141*** pale to mid white-yellow, coarse sands, orange staining, calcareous grits, flint gravels (W up to 2.00m, D 1.00m), forms pockets on surface of 3142,
- Layer 3142*** pale, mottled, mid blue-grey, firm, blocky, silty clay, v. occ. flint gravel clay in upper 1-1.5m (D approx. 2.00m)
- Ditch R. 3143*** oriented NNW-SSE, shallow concave sides, concave base (W 1.16m, D 0.28m), re-cut of Ditch 3138, below 3140
- Fill* 3144 mid brown-grey, firm, friable, silty clay to clayey loam, occ. calcareous grits, flint gravels
- Ditch 3145*** oriented NW-SE, U-shaped, moderately steep, concave sides, concave base (W 0.68m, D 0.36m), below 3140
- Fill* 3146 dark brown-grey, soft, clayey loam, occ. calcareous and flint grits
- Ditch 3147*** oriented NNW-SSE, moderately steep, straight sides, concave base (W 3.12m, D 0.58m), shallow extension of ditch along W side with convex base
- Fills:* 3149 mid to dark brown-grey, firm, silty clay, occ. calcareous grits and flint gravels
- Fills:* 3148 dark humus rich, clayey loam, brown red mottles, occ. calcareous grits
- Ditch 3150*** oriented NNW-SSE, V-shaped with concave base (W 1.05m, D 0.61m) ?pair with Ditch 3152
- Fill* 3151 mid to dark brown-grey, firm, silty clay, orange mottles, v. occ. calcareous grits, below 3140
- Ditch 3152*** oriented N-S, V-shaped, moderately steep sides, straight E side, convex W side, narrow, concave base (W 1.35m, D 0.72m) ?pair with Ditch 3150, below 3140
- Fill* 3153 mid to dark brown-grey, firm, silty clay, orange mottles, v. occ. calcareous grits
- ?Ditch terminus 3154*** oriented NNW-SSE, steep, straight W side, moderately steep, convex E side, undulating, concave base (W 2.20m, D 0.90m)
- Fill* 3155 mid yellow-grey, friable, clayey loam, occ. calcareous grits and flint gravels mostly towards base and sides, below 3140
- Ditch 3156*** oriented NNW-SSE changing to N-S, moderately steep, straight sides, undulating base (W 4.30m, D 1.00m) cuts Layer 3140
- Fill* 3158 mid yellow, firm, friable, silty clay to loamy clay, light iron mottles, calcareous grits, occ. flint gravels
- Fill* 3157 dark yellow-grey, clayey loam, moderate orange mottles, occ. calcareous grits and flint gravels
- Tree throw 3159*** amorphous, undercut E side (approx. L 5.00m, D 0.10-0.40m), below 3140
- Tree throw 3160*** amorphous (L 3.20m, D 0.30m) undercut W side, below 3140
- Ditch 3161*** oriented NNW-SSE, straight, moderately steep sides, concave base (W 1.25m, D 0.44m), below 3140
- Fill* 3162 mid brown-grey, firm, friable, clayey loam, evenly dispersed calcareous grits, v. occ. flint gravels
- Ditch 3163*** oriented WNW-ESE, moderately steep, straight W side, gentle, concave E side (W 2.50m, D 0.65m), cuts Layer 3140
- Fill* 3165 light grey, firm, silty clay, calcareous grits, occ. land snails, weathering of ditch sides
- Fill* 3164 dark yellow-grey, firm, friable, silty clayey loam, occ. calcareous and flint grits and gravels
- Ditch 3166*** (W 7.00m, D 2.00m) alleged course of stream into the Ouzel
- Fill* 3166 dumped gravel with large plastic pipe
- Ditch re-cut 3167*** oriented N-S, moderately steep, concave sides, concave base (W 1.7m, D 0.9m), re-cut of Ditch 3171
- Fill* 3168 dark brown-grey, soft, friable, humic, clayey loam to loamy clay, v. occ. flint gravels

- Ditch 3169*** oriented NNW-SSE, moderately steep, concave W side, truncated E side, concave base (W +1.9m, D 1.00m), re-cut by Ditch 3171
Fill 3170 pale yellow-grey firm, friable, silty clay, pale iron mottles, v. occ. calcareous grits, moderate amount land mollusc shells
- Ditch re-cut 3171*** oriented N-S, moderately steep, straight W side, truncated E side, concave base (W 1.10m, D 0.58m,) re-cut of Ditch 3169, re-cut by ditch 3167
Fill 3172 mid grey firm, friable silty clay, pale mottles, v. occ. calcareous grits, land mollusc shells
- Ditch 3173*** oriented N-S, broad, V-shaped (W 2.10m, D 0.85m)
Fill 3173 humic, loamy clay, heavy iron oxidisation
- Ditch 3174*** oriented E-W, steep, straight E side, moderately steep W side, concave base (W 2.5m, D 0.95m)
Fill 3175 mid brown-grey, firm, friable, silty to loamy clay, occ. flint gravels, v. occ. calcareous grits
- Ditch 3176*** oriented NW-SE, steep, straight sides, narrow concave base (W 0.85m, D 0.4m+)
Fill 3177 mid brown-grey, firm, friable, silty clay, occ. flint gravels, v. occ. calcareous grits, ?below deposit 3180
- ?Stream course 3178*** curvilinear, oriented N-S, broad, gently sloping sides, flattish base (W approx 55m D 0.85m.)
Fills: 3179 mid grey, silty clay, coarse sands, flint gravels
Fills: 3180 mid to dark, silty clay, extends 15 m beyond limits of 3178, ?alluvial deposit
- Ditch 3181*** oriented N-S, moderate to steep, concave W side, moderately steep, convex E side, sloping base (W 0.88m), cuts 3141, ?below 3180
Fill 3182 mid brown-grey firm, friable silty clay, slight yellow mottles, v. occ. flint gravels
- Ditch 3183*** oriented NW-SE, moderately steep sides, concave SW side, convex NE side, concave base (W 1.55m) ?cuts/ sealed by layer 3185
Fill 3184 mid yellow-grey, firm, silty clay to loamy clay, occ. calcareous grits, occ. flint gravels
Finds RB pot
- Layer 3185*** mid to dark brown-grey, silty clay to loamy clay, occ. flint gravels, occ. calcareous grits (D 0.1m)
Finds bone, RB brick/tile
- Ditch 3186*** oriented NNW-SSE, V-shaped, steep concave sides, narrow rounded base (W 1.80m, D 1.52m)
Fill 3187 mid to dark brown-grey, loamy clay, moderate amount iron mottles, occ. flint gravels, calcareous grits
- Ditch 3188*** oriented NNW-SSE, gently sloping W side, steep E side, flat base (W 3.80m, D 1.15m), under Layer 3190
Fill 3189 dark brown-grey, firm silty clay to loamy clay with orange tinge, occ. flint gravels, occ. calcareous grits
- Layer 3190*** mid grey-brown, firm, friable silty clayey loam, flint gravels, calcareous grits
- Ditch 3191*** oriented NNW-SSE, V-shaped, steep straight sides, narrow, concave base (W 1.21m, D 0.98m), under Layer 3199
Fill 3192 mid yellow-grey, silty clay to loamy clay, occ. calcareous grits
- Ditch 3193*** oriented NW-SE, gentle break of slope at top, moderately steep, concave sides (W 6.00m, D approx. 2.00m)
Fill 3198 light yellow-grey, soft, friable, loamy clay
Fill 3197 mid yellow-grey, loamy clay, hard and blocky at top, soft at base, iron mottles, occ. flint gravel
Finds RB pot

- Fill* 3196 mid grey, firm, smeary, silty clay, green-yellow mottles, flint gravel-cobbles along sides and base, occ. charcoal
- Finds* RB pot, bone
- Fill* 3195 dark brown-grey, firm, loamy clay, occ. iron mottles, occ. large flint gravels, v. occ. calcareous grits mostly along E side and base
- Finds* RB pot
- Fill* 3194 light to mid yellow-grey, firm, friable, clayey loam, occ. rounded-sub-angular flint gravels, calcareous grit
- Finds* bone, pot
- Layer** 3199* mid yellow-brown, firm loamy clay, moderately frequent, rounded flint pebbles/gravels, occ. calcareous grits, not sorted
- Ditch** 3200* oriented NNW-SSE, broad V-shaped, steep sides, narrow concave base (W 3.80m, D 2.00m)
- Fill* 3204 light grey, soft, silty-clay, uneven orange staining, occ. flint gravel and calcareous grits along sides, snail shells
- Fill* 3203 dark brown-grey, soft, friable, loamy clay to clayey loam, occ. flint gravel, snail shells
- Finds* RB pot, bone
- Fill* 3202 light to mid yellow-grey soft, friable, loamy clay, light orange mottles, occ. flint gravel and calcareous grit
- Finds* RB pot, RB brick/tile
- Fill* 3201 dark brown-grey, soft, friable, sandy clayey loam, light orange mottles, flint gravels and calcareous grits, occ. sandstone/limestone fragments and charcoal flecks
- Finds* RB pot, bone, fired clay
- Ditch** 3205* oriented E-W, U-shaped with concave sides and base (W 1.54m, D 0.62m)
- Fill* 3206 mid orange-brown, firm, friable, loamy clay, grey mottles, evenly distributed flint gravel
- ?Pit/Tree Throw** 3207* broad, flat base (W 3.10m, D 0.60m)
- Fill* 3207 mid orange-brown, loamy clay, flint gravel
- Ditch** 3208* oriented N-S, V-shaped, steep, straight sides, narrow, concave base (W 2.70m, D 1.50m)
- Fill* 3208 dark brown-grey, clayey loam, tree roots
- Finds* CBM

Construction Section 17

Context 1700 unstratified finds, plot 128

Context 1701 unstratified finds, plot 129

Context 1702 unstratified finds, plot 130

Finds flint

Context 1703 unstratified finds, plot 131

Finds flint, RB pot, fired clay

Context 1704 unstratified finds, plot 132

Finds flint

Context 1705 unstratified finds, plot 133

Finds flint

Context 1706 unstratified finds, plot 134

Finds RB pot, flint

Ditch 1707* oriented E-W, V-shaped, N side stepped, both sides steep (W 1.95m, D 1.50m), cuts Ditch 1708 and Layer 1726

Fill 1707 dark brown-grey, loose, organic rich, sandy clay loam, occ. flint gravel and tree roots

Ditch 1708* oriented E-W, steep straight S side, N side not visible (W 1.30m, D 1.35m), truncated on N side by Ditch 1707, cuts Layer 1726

Fill 1709 mid brown, firm, friable, sandy loam, becoming sandy clayey loam towards base, occ. calcareous grits and flint gravels, moderate snail shells

Ditch 1710* oriented E-W, broad U-shaped, moderate to steep sides, concave base (W 2.10m, D 1.30m) cuts Layer 1726

Fill 1710 dark brown-grey, humus rich, sandy clay loam, tree roots

Ditch 1711 oriented E-W, V-shaped, narrow, concave base (W 0.76m, D 0.38m), cuts Layer 1726

Fill 1712 light to mid blue-grey, firm, silty clay, occ. flint gravel and grit, v. occ. calcareous grits all evenly dispersed

Ditch 1713* oriented E-W, V-shaped with narrow, concave base (W 0.93m, D 0.53m), cuts Layer 1726

Fill 1714 light to mid blue-grey, firm, silty clay, occ. flint gravel and grit, v. occ. calcareous grits all evenly dispersed

?Ditch 1715 * oriented NE-SW, gentle to moderately sloping, slightly concave sides, concave base (W 4.30m, D 1.25m) cuts Layer 1726

Fill 1718 mid grey-brown, firm, sandy clayey loam, flint gravels, occ. flint cobbles and calcareous grits

Fill 1717 mid blue-grey, soft, loamy clay, pale orange mottles, v. occ. calcareous grits, moderately frequent mollusc shells

Fill 1716 mid brown, crumbly, sandy loam, occ. flint gravels (10 cms??)

Ditch 1719* oriented NE-SW, U-shaped with concave sides and base (W 1.22m, D 0.59m) cuts Layer 1726

Fill 1721 mid grey-brown, crumbly, coarse sandy loam, frequent flint gravels and grits, occ. calcareous grits, v. occ. flint cobbles

Fill 1720 mid to dark brown-grey, firm, crumbly, loamy-clay, occ. iron mottles, occ. flint gravels and cobbles

Ditch 1722* oriented NW-SE, moderately steep, concave E side, steep, straight W side (W 2.05m, D 0.65m) cuts Layer 1726

- Fill* 1724 mid blue-grey, soft loamy-clay, pale orange mottles, v. occ. calcareous grits, moderately frequent mollusc shells, sandy gravel slump along N side
- Fill* 1723 mid brown, crumbly sandy loam, occ. flint gravels
- Layer** 1725* (colluvium) mid grey-brown, friable loamy clay with fine sand, occ. flint gravels (L approx 70.0m), above Fills 1716, 1720, 1723, ?1778
- Finds* RB pot
- Layer** 1726* (fluvio-glacial) mid yellow-brown, firm, discontinuous, coarse sand and gravels, orange iron mottles (D 0.20-0.50m), below 1725, cut by Ditches 1707, 1708, 1710, 1711, 1715, 1719, 1722, 1776
- Layer** 1727* (natural ?calcareous clay) pale grey, firm, friable, silty sandy clay, (D 2.0m+), below Layer 1726
- Layer** 1728* (?ploughsoil) mid brown, firm, clayey loam, flint gravel, occ. calcareous grits, slight increase in stones towards base (L +20.0m, D up to 0.45m), overlies Ditches 1711, 1713
- Layer** 1729* (?bank material) mid grey-brown, coarse, sandy clayey loam, flint grit and gravels, occ. calcareous grits (D 0.15m)
- Layer** 1730* (bank material) mid brown, friable, sandy loam, flint gravel, occ. calcareous grits (W 17.4m, D 0.70m)
- ?Hollow** 1731* oriented E-W, moderate to steep, convex sides, irregular base (W 20.0m, D 2.0m), cuts Layer 1733
- Fill* 1732 mid yellow-brown, loamy clay (becoming light grey with orange tinge, firm, blocky and less clayey towards base), occ. flint gravel, v. occ. calcareous grit and sandstone fragments evenly dispersed
- Finds* flint, RB pot
- Layer** 1733 (natural sand outcrops) mid orange-brown, fine and coarse sand, banded with some gravels, running water along base of sand
- Layer** 1734 (natural) mixed, grey-brown, calcareous, sandy clay, chalky gravels, flint gravels
- ?Quarry pit 1735*** gently sloping N side, narrow, concave base (W 2.85m, D 0.95m)
- Fill* 1737 mid grey-brown, compact, sandy loam with orange mottles, flint gravel, occ. calcareous grits, limestone fragments, charcoal flecks
- Fill* 1736 mid to dark grey-brown, friable, firm, sandy loam, flint gravel and pebbles, occ. larger flint cobbles, limestone fragments, sandstone fragments, charcoal flecks
- Finds* RB pot
- ?Quarry pit 1738*** under cut sides, slightly undulating flat base (W 3.90m, D 0.87m)
- Fill* 1739 dark brown-grey, soft, friable, loamy sand to sandy loam, flint gravel and grits, calcareous grits, occ. ironstone fragments, occ. limestone fragments, charcoal flecks
- Finds* SF 5164 (Cu alloy wire), RB pot, flint
- ?Quarry pit 1740*** moderate to steep, straight sides, slightly sloping, concave base (W 2.95m, D 0.72m), cuts pit 1744
- Fill* 1749 pale to mid orange-yellow, coarse sand, calcareous grits, flint gravel with a slight loamy matrix
- Fill* 1741 dark brown-grey, soft, friable, loamy sand to sandy loam, flint gravels and grits, calcareous grits, occ. ironstone, occ. limestone (some burnt) fragments, charcoal flecks
- Finds* RB pot, flint
- Pit** 1742* gently sloping sides, concave base (W 2.90m, D 0.65m), cuts Pit 1744, cut by land drain
- Fill* 1743 dark grey-brown, soft, loamy sand, occ. flint gravels, calcareous grits, charcoal flecks
- Finds* RB pot, flint
- ?Quarry pit 1744*** moderate to steep sides, sloping flat base (W +7.40m, D 0.90m), cuts Pit 1747, cut by Pits 1740 and 1742

- Fill* 1746 mid grey-brown, friable, loamy sand, flint gravels and grits, calcareous grits, occ. ironstone, occ. limestone fragments, charcoal flecks, increase in stones towards base
- Fill* 1745 dark grey-brown, soft, friable, sandy loam, occ. flint gravels, occ. calcareous grits, v. occ. charcoal flecks
- Finds* RB pot, bone

?Quarry pit 1747* steep, straight S side, concave N side, sloping flat base (W 4.80m, D 1.00m), cut by Pit 1744

- Fill* 1775 mid grey-brown, loose, friable, coarse, loamy sand, orange mottles, flint gravels and calcareous grits
- Fill* 1748 mid grey-brown, friable, loamy sand, flint gravels and grits (10-15%), calcareous grits (1-5%), occ. ironstone, occ. limestone fragments, charcoal flecks
- Finds* RB pot

?Quarry pit 1750* gently sloping, straight sides, flat base (L 8.20m, D 1.26m) cut by Pit 1752

- Fill* 1751 dark grey-brown, soft, loamy sand, occ. flints, occ. calcareous grits, v. occ. charcoal flecks, stones towards base and S side
- Finds* flint, RB pot, fired clay

?Quarry pit 1752* gently sloping, concave sides, concave base (W 3.00m, D 0.78m), cut by Pit 1754, cuts Pit 1750

- Fill* 1753 mid brown-orange, soft, silty sand, occ. light, sandy lenses, flint gravels, occ. calcareous grits, occ. charcoal flecks, inclusions concentrated along S side and base
- Finds* RB pot
- Fill* 1759 mid grey-brown, soft, sandy loam, flint gravels, occ. calcareous grits

?Quarry pit 1754* concave N side, straight S side, concave base (W 2.00m, D 0.84m), cuts Pit 1752, cut by Pit 1756

- Fill* 1755 mid brown-orange, soft, silty sand, light, sandy lenses, flint gravels (larger gravels towards base), occ. calcareous grits, occ. charcoal flecks

- Layer* 1758 mid grey-brown, soft, sandy loam, occ. flint gravels, occ. calcareous grits, evenly dispersed
- Finds* bone

?Quarry pit 1756* concave sides, concave base (W 4.20m, D 0.64m), cuts Pit 1754

- Fill* 1757 mid brown-orange, silty sand, occ. flint gravels, occ. calcareous grits
- Finds* SF 5267 (Fe obj), flint, RB pot

Quarry pit 1760* steep, straight S side, under cut N side, flat base (W 4.95m, D 1.48m), cut by Pit 1764

- Fill* 1774 dark brown-grey, soft, friable, sandy clayey loam, occ. flint gravel, occ. calcareous grit, occ. charcoal flecks, occ. burnt clay flecks
- Fill* 1773 pale orange-yellow sand, grit and gravel, mostly along S side and base
- Fill* 1772 mid grey-brown, firm, crumbly, loamy sand, flint gravels and grits, occ. calcareous grits, occ. ironstone, mostly along base and sides
- Fill* 1771 dark brown-grey, soft, friable, sandy clayey loam, occ. flint gravels and calcareous grits, occ. charcoal, occ. burnt clay flecks
- Finds* RB pot
- Fill* 1770 mid brown-yellow, coarse sand, occ. flint gravels
- Fill* 1763 mid grey-brown, friable, sandy loam, flint gravels and grits, occ. calcareous grits, occ. ironstone, inclusions evenly dispersed
- Fill* 1762 light to mid yellow, coarse, sand, occ. gravels
- Fill* 1761 mid grey-brown, friable, sandy loam, flint gravels and grits, occ. calcareous grits, occ. ironstone, inclusions evenly dispersed
- Finds* flint, SF 5267 (Fe obj)

Quarry pit 1764* gently sloping, straight N side, concave base (W 11.90m, D 1.78m), cuts Pit 1760

- Fill* 1769 pale to mid grey-yellow, coarse sand and flint gravel
- Fill* 1768 mid to dark grey-brown, soft, clayey loam, v. occ. flint gravels, v. occ. calcareous grits
- Fill* 1767 mid grey-brown, crumbly, loamy sand, flint gravels and grits

Fill 1766 pale orange-yellow, crumbly, coarse sand and gravel

Fill 1765 mid grey-brown, friable, sandy loam, flint gravels and grits, occ. calcareous grits, occ. ironstone, inclusions evenly dispersed

Finds RB pot, bone, flint

Ditch 1776* steep-vertical S side, concave N side, flat base (W 2.00m, D 0.68m) cuts Layer 1726

Fill 1777 mid grey-brown, soft, sandy loam, flint gravel and calcareous grit throughout fill

Fill 1778 dark grey-brown, soft, sandy clayey loam, flint gravel, occ. calcareous stones

Construction Section 18

Context 1800 unstratified finds, plot 135

Finds flint

Context 1801 unstratified finds, plot 136

Context 1802 unstratified finds, plot 137

Context 1803 unstratified finds, plot 138

Context 1804 unstratified finds, plot 139

Context 1805 unstratified finds, plot 140

Context 1806 unstratified finds, plot 141

Finds flint

Natural hollow 1807* oriented E-W, irregular sides, (W 50.0m, D 2.0m)

Fill 1807 homogenous, sandy clayey loam, flint gravels, calcareous grits

Layer 1808* (?colluvium) mid grey-brown, soft, crumbly, loamy sand to sandy loam, occ. flint gravel, grit and calcareous grit, v. occ. charcoal flecks

Finds flint, ph pot

Layer 1809* (natural) orange-brown, coarse sands

Layer 1810* (natural) mid grey, fossiliferous clay, chalk inclusions,

Ditch 1811* oriented WNW-ESE, moderately steep, concave sides, concave base (W 0.90m, D 0.29m)

Fill 1812 mid grey-brown silty clay becoming more loamy towards surface, occ. flint gravels, occ. calcareous grits, occ. manganese flecks, occ. charcoal flecks, occ. iron oxidation

Ditch 1813* oriented WNW-ESE, U-shaped, concave base (W 0.85m, D 0.35m)

Fill 1814 mid grey-brown silty clay becoming more loamy towards surface, occ. flint gravels, occ. calcareous grits, occ. manganese flecks, occ. charcoal flecks, occ. iron oxidation

Ditch 1815* oriented WNW-ESE, moderately steep, straight sides, flattish base (W 0.70m, D 0.33m)

Fill 1816 mid grey-brown silty clay becoming more loamy towards surface, occ. flint gravels, occ. calcareous grits, occ. manganese flecks, occ. charcoal flecks, occ. iron oxidation

Ditch 1817* oriented WNW-ESE, steep sides, concave base (W 0.90m, D 0.65m)

Fill 1818 mid grey-brown silty clay becoming more loamy towards surface, occ. flint gravels, occ. calcareous grits, occ. manganese flecks, occ. charcoal flecks, occ. iron oxidation

Finds fired clay

Ditch 1819* oriented WSW-ENE, moderately steep, straight sides, flattish base (W 1.54m, D 0.93m)

Fill 1820 mid grey-brown silty clay becoming more loamy towards surface, occ. flint gravels, occ. calcareous grits, occ. manganese flecks, occ. charcoal flecks, occ. iron oxidation

Ditch 1821* oriented WNW-ESE, U-shaped, sloping flat base (W 0.90m, D 0.30m)

Fill 1822 mid grey-brown silty clay becoming more loamy towards surface, occ. flint gravels, occ. calcareous grits, occ. manganese flecks, occ. charcoal flecks, occ. iron oxidation

Ditch 1823* oriented WNW-ESE, steep, straight sides, flat base (W 0.85m, D 0.35m)

Fill 1824 mid grey-brown silty clay becoming more loamy towards surface, occ. flint gravels, occ. calcareous grits, occ. manganese flecks, occ. charcoal flecks, occ. iron oxidation

- Ditch** 1825* oriented WNW-ESE, steep, straight sides, flat base (W 0.80m, D 0.42m)
Fill 1826 mid grey-brown silty clay becoming more loamy towards surface, occ. flint gravels, occ. calcareous grits, occ. manganese flecks, occ. charcoal flecks, occ. iron oxidation
- Ditch** 1827* oriented E-W, steep, straight sides, flat base (W 0.92m, D 0.42m)
Fill 1828 mid grey-brown silty clay becoming more loamy towards surface, occ. flint gravels, occ. calcareous grits, occ. manganese flecks, occ. charcoal flecks, occ. iron oxidation
- Ditch** 1829* oriented WNW-ESE, straight sides, moderately steep S side, steep N side, flattish base (W 1.12m, D 0.42m)
Fill 1830 mid grey-brown silty clay becoming more loamy towards surface, occ. flint gravels, occ. calcareous grits, occ. manganese flecks, occ. charcoal flecks, occ. iron oxidation
- Ditch** 1831* oriented WNW-ESE, moderately steep concave sides, slightly concave base (W 0.95m, D 0.52m)
Fill 1832 mid grey-brown silty clay becoming more loamy towards surface, occ. flint gravels, occ. calcareous grits, occ. manganese flecks, occ. charcoal flecks, occ. iron oxidation
- Ditch** 1833* oriented WNW-ESE, steep straight sides, flat base (W 0.81m, D 0.38m)
Fill 1834 mid grey-brown silty clay becoming more loamy towards surface, occ. flint gravels, occ. calcareous grits, occ. manganese flecks, occ. charcoal flecks, occ. iron oxidation
- Ditch** 1835* oriented NE-SW, moderately steep, straight sides, flattish base (W 1.13m, D 0.30m)
Fill 1836 mid grey-brown silty clay becoming more loamy towards surface, occ. flint gravels, occ. calcareous grits, occ. manganese flecks, occ. charcoal flecks, occ. iron oxidation
- Ditch** 1837* oriented WSW-ESE, steep, straight sides, concave base (W 0.85m, D 0.54m)
Fill 1838 mid grey-brown silty clay becoming more loamy towards surface, occ. flint gravels, occ. calcareous grits, occ. manganese flecks, occ. charcoal flecks, occ. iron oxidation
- Ditch** 1839* oriented WNW-ESE, moderately steep, concave sides, slightly concave base (W 0.85m, D 0.50m)
Fill 1840 mid grey-brown silty clay becoming more loamy towards surface, occ. flint gravels, occ. calcareous grits, occ. manganese flecks, occ. charcoal flecks, occ. iron oxidation
- Ditch** 1841* oriented E-W, moderate to steep sides, flattish base (W 1.20m, D 0.32m)
Fill 1842 mid grey-brown silty clay becoming more loamy towards surface, occ. flint gravels, occ. calcareous grits, occ. manganese flecks, occ. charcoal flecks, occ. iron oxidation
- Ditch** 1843* oriented WNW-ESE, moderately steep, concave sides, slightly concave base (W 1.15m, D 0.52m)
Fill 1844 mid grey-brown silty clay becoming more loamy towards surface, occ. flint gravels, occ. calcareous grits, occ. manganese flecks, occ. charcoal flecks, occ. iron oxidation
- Ditch** 1845* oriented WNW-ESE, steep straight sides, flat base (W 1.00m, D 0.58m)
Fill 1846 mid grey-brown silty clay becoming more loamy towards surface, occ. flint gravels, occ. calcareous grits, occ. manganese flecks, occ. charcoal flecks, occ. iron oxidation
- Ditch** 1847* oriented WNW-ESE, steep straight sides, slightly concave base (W 1.07m, D 0.55m)
Fill 1848 mid grey-brown silty clay becoming more loamy towards surface, occ. flint gravels, occ. calcareous grits, occ. manganese flecks, occ. charcoal flecks, occ. iron oxidation
Finds ph pot
- Ditch** 1849* oriented WNW-ESE, moderate to steep, straight sides, concave base (W 0.88m, D 0.48m)
Fill 1850 mid grey-brown silty clay becoming more loamy towards surface, occ. flint gravels, occ. calcareous grits, occ. manganese flecks, occ. charcoal flecks, occ. iron oxidation
Finds ph pot

- Ditch** 1851* oriented WNW-ESE, moderately steep to steep straight sides, slightly concave base (W 0.65m, D 0.50m)
Fill 1852 mid grey-brown silty clay becoming more loamy towards surface, occ. flint gravels, occ. calcareous grits, occ. manganese flecks, occ. charcoal flecks, occ. iron oxidation
- Ditch** 1853* oriented WNW-ESE, steep, straight sides, concave base (W 0.97m, D 0.54m)
Fill 1854 mid grey-brown silty clay becoming more loamy towards surface, occ. flint gravels, occ. calcareous grits, occ. manganese flecks, occ. charcoal flecks, occ. iron oxidation
- Ditch** 1855* oriented WNW-ESE, steep, straight N side, moderately steep S side, flat sloping base (W 0.76, D 0.36)
Fill 1856 mid grey-brown silty clay becoming more loamy towards surface, occ. flint gravels, occ. calcareous grits, occ. manganese flecks, occ. charcoal flecks, occ. iron oxidation
- Ditch** 1857* oriented WNW-ESE, steep concave sides, concave base (W 0.57m, D 0.48m)
Fill 1858 mid grey-brown silty clay becoming more loamy towards surface, occ. flint gravels, occ. calcareous grits, occ. manganese flecks, occ. charcoal flecks, occ. iron oxidation
- Layer** 1859* mid yellow-brown, moderately, firm sandy-clay, flint gravels and calcareous grits evenly dispersed (D 0.20-0.30m)
- Ditch** 1906* oriented E-W, steep, concave to straight sides, concave base (W 0.97m, D 0.42m)
Fill 1907 mid brown-grey, firm loamy clay, moderately frequent, evenly distributed flint gravels
- Ditch** 1908* oriented E-W, U-shaped (W 0.89m, D 0.30m)
Fill 1909 mid brown-grey, firm loamy clay, moderately frequent, evenly distributed flint gravels

Construction Section 19

Context 1900 unstratified finds, plot 142

Context 1901 unstratified finds, plot 143

Finds flint, RB pot

Context 1902 unstratified finds, plot 144

Finds flint

Context 1903 unstratified finds, plot 145

Finds flint

Context 1904 unstratified finds, plot 146

Finds flint

Context 1905 unstratified finds, plot 147

Finds flint, RB pot

Ditch 1906* oriented E-W, steep concave straight sides to concave base, clear edges (W 0.97m, D 0.42m), recorded in office from field notes

Fill 1907 mid-brown/grey firm loamy clay, freq small flinty stones

Ditch 1908* oriented E-W, U-shaped profile, clear edges (W 0.89m, D 0.30m).recorded in office from field notes, cut by furrow

Fill 1909 mid-brown/grey firm loamy clay, freq small flinty stones

Layer 1910* (?natural) mid blue-grey, loamy clay, calcareous fragments and flecks, flint gravel-cobbles, occ. large calcareous concretions, cut by ditch 1912

Layer 1911 (natural) mid orange-brown, coarse sand

Ditch 1912* oriented NE-SW, wide V-shaped with rounded base (W 1.70m, D 0.85m), cuts Layer 1910

Fill 1912 dark grey-brown, clayey loam with occ. calcareous and flint gravels, occ. decayed tree roots

Ditch 1913* oriented NW-SE, U-shaped with moderately steep, straight, concave sides, concave base (W 0.58m, D 0.25m)

Fill 1913 mid to dark grey-brown, clayey loam, occ. flint gravel and calcareous grits, decayed tree roots

Ditch 1914* oriented WNW-ESE, U-shaped with steeper S side, concave base (W 1.30m, D 0.70m)

Fill 1914 mid orange-brown, sandy loam with occ. flint gravel and calcareous grits, one large burnt limestone on S side

Ditch 1915* oriented NE-SW, moderately steep sides, flat base (L 5.50m, D 0.80m)

Fill 1915 mid to dark brown-grey, sandy-clay loam with occ. flint gravel and calcareous grits, decayed tree roots

Ditch 1916* oriented E-W, U-shaped with steep sides and concave base (W 1.10m, D 0.75m)

Fill 1916 mid orange-brown, sandy loam with occ. calcareous grit and flint gravels, decayed tree roots

Construction Section 20

Context 2000 unstratified finds, plot 148
Finds RB pot

Context 2001 unstratified finds, plot 149
Finds flint

Context 2002 unstratified finds, plot 150
Finds flint

Context 2003 unstratified finds, plot 151

Context 2004 unstratified finds, plot 152

Context 2005 unstratified finds, plot 153

Context 2006 unstratified finds, plot 154
Finds flint, ph pot, RB pot, med/pmed pot

Context 2007 unstratified finds, plot 155
Finds SF 5251 (flint hand-axe), flint, RB pot, postmed brick

Context 2008 unstratified finds, plot 156
Finds flint, RB pot, med/pmed pot

Depression 2009 irregular shape, shallow sloping sides approx. (L 5.50m, W 3.50m, D 0.16m) visible as crop mark, cuts Layer 2016

Fill 2012 light orange-red, compact burnt sand, vitrified in places, occ. rounded flint gravels

Finds CBM, flint, RB pot burnt stone

Fill 2011 black, compact ashy sand, vitrified in places, occ. burnt rounded and sub-angular flint gravels

Finds CBM, flint, burnt stone

Fill 2010 light orange-red, friable sand, occ. rounded and sub-angular flint gravels

Finds CBM, flint, burnt stone

Ditch 2013* oriented WNW-ESE U-shaped with concave sides and base (W 1.00m, D 0.60m), cuts Layer 2016

Fill 2013 mid orange-brown loamy-sand with occ. flint gravel and calcareous grit

Finds CBM

Ditch 2014* oriented WNW-ESE, symmetrical moderate steep sides, U-shaped with concave base (W 1.75m, D 0.70m) cuts Layer 2016

Fill 2014 dark grey-brown, sandy-clay loam with flint gravel and calcareous grits, occ. tree roots

Layer 2015* mid grey-brown loamy-sand/sandy-clay loam (L 80.00m, D 0.40m)

Finds CBM

Layer 2016* (natural) mid blue-grey, firm loamy-clay, fossiliferous, chalk inclusions (variable depth D +2.00m), cut by Scoop 2009, ditches 2013 and 2014 and pits 2019 and 2021

Layer 2017* (natural) mid brown-orange coarse sand

Pit 2019* shallow straight sides, flat base (W 2.8m, D 0.36m) cuts Layer 2016

Fill 2023 mid red-brown, soft clayey-sand, red bricks, degraded bricks, some baked, vitrified brick under yellow clay, cinder, occ. charcoal (brick dump)

Finds post-med brick

Pit 2021* shallow, straight sides, flat base (W 2.10m, D 0.5m) cuts Layer 2016

- Fill* 2022 mid brown-grey with rusty brown mottle, soft, fine sandy-loam, occ. burnt clay, fired clay and brick fragments, decayed roots
- Fill* 2018 mid red-brown, soft clayey-sand, red bricks, degraded bricks, some baked, vitrified brick under yellow clay, cinder, occ. charcoal (brick dump)
- Finds* post-med brick, cinder

Construction Section 21

Context 2100 unstratified finds, plot 157

Finds flint, RB pot

Context 2101 unstratified finds, plot 158

Finds SF 5262 (flint arrowhead), flint, RB pot, med/pmed pot

Construction Section 22

Context 2200 unstratified finds, plot 159

Context 2201 unstratified finds, plot 160

Context 2202 unstratified finds, plot 161

Finds flint

Layer 2203* (natural) mid brown-yellow, soft, coarse sand, occ. flint gravel (D +2.00m)

Construction Section 23

Context 2300 unstratified finds, plot 162

Context 2301 unstratified finds, plot 163
Finds flint

Context 2302 unstratified finds, plot 164

Context 2303 unstratified finds, plot 165
Finds SF 5271 (coin)

Context 2304 unstratified finds, plot 166
Finds ph pot

Layer 2305 (natural) pale yellow-white, (becoming more yellow towards upper 0.5m) soft, fine to medium sand, bands of mid orange-brown slightly clayey sand up to 0.03m thick, cut by tree-throws 2306, 2308, 2310, 2312, 2314

? **Pit/ tree-throw 2306*** V-shaped, moderately steep N side, concave, steep, straight S side, concave base (W 2.15m, D 0.75m), cuts Layer 2305

Fill 2307 dark brown-red, soft, slightly clayey sand, occ. ironstone fragments, occ. charcoal flecks, occ. flint cobbles

Finds flint

? **Tree-throw 2308*** steep sides, straight S side, convex N side, slightly concave base, (W 1.10m, D 0.48m), cuts Layer 2305

Fill 2309 dark brown-red, (mid red-brown towards N side) soft slightly clayey sand, occ. ironstone fragments on or towards base, occ. flint cobbles.

Finds flint

? **Tree-throw 2310*** V-shaped, steep sides, concave, slightly undulating N side, straight S side, concave base, (W 3.10m, D 1.10m), cuts Layer 2305

Fill 2311 dark brown-red, soft slightly clayey sand, occ. ironstone fragments, occ. rounded flint gravels

Finds flint

? **Tree-throw 2312*** steep, concave S side, moderately steep N side, concave, flat base, (W 1.55m, D 0.55m), cuts Layer 2305

Fill 2313 dark brown-red, soft slightly clayey sand, occ. flint gravels, v. occ. ironstone

? **Tree-throw 2314*** slightly irregular, moderately steep concave sides, flattish, sloping base (W 3.10m, D 0.55m), cuts Layer 2305

Fill 2315 mid red-brown, soft slightly clayey sand, occ. ironstone fragments, v. occ. flint gravels

Finds SFs: 5272 (ph pot), 5273 (flint)

Layer: 2318 mid to dark orange-brown, oxidised, sandy loamy peat, overlies layers 2319, 2324, 2329

Layer: 2319 coarse white sand, under layer 2318, over layer 2320

Layer: 2320 medium to coarse grey sand, under layer 2320, over fill 2321

Stream channel 2317* oriented ENE-WSW, gently sloping, concave sides, concave base (W 5.50m, D 1.30m), under layer 2320, cuts Layer 2331

Fill 2322 fine grey sand

Fill 2321 dark brown to black peat

Layer: 2324 dark black-brown, sandy peat, ?same as layer 2329, under layer 2318, over layer 2325

Layer: 2325 bands of white sand 0.02-0.05m thick, under layer 2324, over fill 2326

Stream channel 2323* oriented ENE-WSW, gently sloping sides, concave base (W 7.00m, D 1.20m), under layer 2325, cuts Layer 2331

Fill 2327 gravely sand, grey silty bands, frequent flint gravels, ?same as fill 2330

Fill 2326 mid black-grey, soft, humus rich peaty silt

Stream channel 2328* oriented ENE-WSW, gently sloping, undulating sides, concave base (W 6.70m, D 0.30-1.50m), under layer 2329, cuts Layer 2331

Fill 2330 gravely sand, grey silty bands, frequent flint gravels, reworked sand and gravel from Layer 2331, ?same as fill 2327

Layer: 2329 dark black-brown peat, ?same as layer 2324, under layer 2318, over fill 2330

Layer 2331 (natural fluvio-glacial) coarse sand, flint gravel and cobbles (D variable upto 1.50m) cut by stream channels 2317, 2323, 2328

Construction Section 24

Context 2400 unstratified finds, plot 167

Context 2401 unstratified finds, plot 168

Context 2402 unstratified finds, plot 169

Context 2403 unstratified finds, plot 170

Context 2404 unstratified finds, plot 171

Grave 2405* rectangular, oriented N-S, mod. steep straight sides, S straight, N undercut, base fairly flat with a central dip, edges clear (W 2.35m, D 1.00m)

Fill 2406 mid-grey/brown slightly loamy soft sand, freq small flinty stones, occ. chalky stones, v occ. sandstone or limestone frags

Burial 2407 extended supine, legs together, feet turned up, truncated obliquely above left hip and across right humerus, no trace of coffin

Layer 2408 mid-grey/brown sandy clay loam, occ. flinty stones, limestone or sandstone frags (W 40m, D 0.45m), possible hillwash

Finds ph pot

Grave 2409* unexcavated, rectangular, oriented N-S (parallel to Grave 2405), cuts Layer 2413

Finds ph pot, bone

Grave 2410* unexcavated, rectangular, oriented N-S (immediately NW of Grave 2409)

?Ditch 2411* unexcavated, oriented E-W at right-angles to graves 2405, 2409, 2410, appeared to terminate to W of graves 2405, 2409, cuts Layer 2413

?Grave 2412* unexcavated, oval, oriented N-S, grave of child/cremation pit/pit

Layer 2413* (colluvium) mid grey-brown, moderately firm silty clay, occ. flint gravels (extends 10-15m along plot)

Context 2414 surface finds from vicinity of graves

Finds ph pot

Appendix 15

Flint from Tingrith

Lynne Bevan and Julie Candy

The Flint by Lynne Bevan and Julie Candy

Introduction

The assemblage consisted of 18,107 items of humanly-struck flint, weighing a total of 61,764 grams. The majority, 14,446 items weighing 45,611 grams, was recovered by excavation. Tables 1 and 2 show the relative numbers and weights of flints recovered during excavation and various phases of fieldwalking.

	Exc.	F/walking	Surface	W.Brief	Total
LTNMG 96	14,446	1,775	785	-	17,006
SA 96	-	839	-	-	839
SM1 96	-	199	18	-	217
SAY 97/29	-	-	-	33	33
ST-A 96	-	5	-	-	5
UNALLOC.	-	-	-	-	7
Total	14,446	2,818	803	33	18,107

Table 1: Numbers of Flints from Fieldwalking and Excavation

	Exc.	F/Walking	Surface	W.Brief	Total
LTNMG 96	45,611	4,291	8,445	-	58,347
SA 96	-	2,348	-	-	2,348
SM1 96	-	430	32	-	462
SAY 97/29	-	-	-	538	538
ST-A 96	-	69	-	-	69
UNALLOC.	-	-	-	-	
Total:	45,611	7,138	8,477	538	61,764

Table 2: Weight of Flints (in grams)

Methodology

The flint was examined, classified and catalogued initially with the aid of a hand lens at x10 magnification, using the Birmingham University Field Archaeology Unit (BUFAU) flint recording sheets. The dimensions of all cores, formal tools and complete flakes were recorded. Flint was weighed by context and grid square, and, whenever possible, individual weights were recorded for formal tools and cores. All formal tools, retouched pieces, and pieces with possible utilisation were later re-examined at x10-x30 magnification for low-resolution use-wear. Where apparent, the incidence, character and position of use-wear was noted and entered onto a database with the other information. The results from the microwear report (see Candy, this volume) are considered in the following discussion.

Illustrated examples of the main tool types are shown in Figures 1-4. Selection was based upon the quality and degree of completeness of individual pieces, rather than selecting particular groups, in order to provide a representative sample of the collection as a whole rather than dealing with intra-square tool comparisons. In the

interests of clarity, non-illustrated material is referred to by individual location/finds number only when necessary, although a full record is available in the site archive.

Artefactual Composition of the Assemblage and Dating

The chronologically-mixed nature of the excavated assemblage, which is similar in composition to that of the fieldwalking assemblages, suggests that post-depositional disturbance, most likely caused by ploughing, has displaced flint assemblages generated during at least three, or possibly more, separate phases of activity on the site in prehistory. For this reason, the assemblages have been considered together rather than as separate entities, although in spatial terms the excavated assemblage proved more illuminating. Seven kilometres to the north-east of Tingrith, at the site at Ruxox Farm, Mauldon a similarly-mixed assemblage recovered by fieldwalking was attributed to plough disturbance of 'at least two occupation levels' (Fadden 1972, 81). Both sites are situated on similarly-light soils which have been subject to intensive ploughing.

The earliest phase(s) of activity at the Tingrith site occurred during the Later Mesolithic period. This was followed by some activity during the Neolithic period, but the bulk of the assemblage, particularly the debitage, is believed to have been generated during the Early to Late Bronze Age.

While a certain degree of bias might have been generated by the selective excavation of certain squares only, it has still been possible to identify areas of greater and lesser flint density within the main grid, and, in some instances to extrapolate areas where different activities took place at different times based upon the presence of chronologically-diagnostic tool and waste types (Figures 11-12) combined with microwear analysis (see Candy, this volume).

The artefactual composition of the assemblage is shown in Table 3. Most of the assemblage was not generally chronologically-diagnostic. Datable exceptions included a number of blade cores (e.g. Figure 1:1-2), microliths (Figure 2:6-16), and a burin, characteristic of the Later Mesolithic period, and some Post-Mesolithic material, including several bifacially-worked pieces such as a discoidal knife (Figure 3:22), a flake knife (Figure 4:28), nine thumbnail and 16 discoidal scrapers (e.g. Figure 4:25), four barbed and tanged arrowheads (e.g. Figure 4:29 and 31), and a tanged arrowhead (Figure 4:30). The later tools are indicative of post-Mesolithic activity during the Neolithic and Bronze Ages. It was not possible to assign the majority of other retouched and/or utilised pieces, especially single-episode tools, to a specific chronological period.

A high incidence of complete or partial re-cortication was noted among the identifiably Mesolithic material. Re-cortication (also known as 'patination' and 'cortication'), a gradual opaque 'whitening' which results from 'a complex range of factors, including chemical action, weathering, water and even light' (Edmonds 1995, 192) on de-corticated struck flint, is usually regarded as a process connected with soil conditions at a localised level. However, it has been suggested that re-cortication might have been more generally related to soil conditions prior to Neolithic de-forestation, resulting in a higher incidence of re-cortication among Mesolithic flint

than flint from subsequent periods (Lawrence Barfield *pers. comm.*). Although this correlation generally holds true at the Tingrith site, since the most of the blade cores and several of the microliths were heavily, if not completely, recorticated, other diagnostically-later items such as the Late Neolithic discoidal knife (Figure 3:22) were also recorticated to some extent. The incidence of re-cortication and the difficulties of separating the Mesolithic and non-Mesolithic components of the debitage are discussed below.

Dating problems aside, the composition of the assemblage was heavily-weighted in favour of unretouched flakes, which comprised over 80%, and unretouched blades, which comprised over 15% of the total assemblage. The remainder of the assemblage consisted of lumps (1.3%), cores and core fragments (1.2%) and the retouched tools listed below, each class of which accounted for under 1% of the total assemblage.

Class	Quantity
Arrowhead	5
Awl	8
Blade Core Fragment	1
Blade Core Trimming	7
Blade Core	37
Blade-Like Flakes	2754
Burin	1
Core	103
Core Fragment	80
Core Trimming	13
Denticulate	9
Denticulate/Point	1
Flake	14484
Hammerstone	3
Knife	3
Lump	238
Microburin	2
Microlith	35
Misc. Pointed Tool	15
Retouched Blades	55
Retouched Flakes	156
Scraper	90
Scraper/Point	1
Serrated Blades/Flakes	6
Total:	18,107

Table 3: Artefactual Composition of the Assemblage.

Raw Material

The flint used was generally translucent, light to dark-grey and brownish-grey in colour, with some examples of an opaque blue-grey resulting from partial recortication. Occasional pieces of Greensand chert and pieces of a coarse, cream-coloured opaque material which was more like a coarser-grained rock than flint were noted in the assemblage, but these materials were too small in number to allow any spatial or numerical comparisons to be made.

When present, the cortex was thin, brown, and compacted, characteristic of pebble flint from secondary deposits, the most probable source being local river gravels. Despite a prevalence of internal voids and crystalline inclusions which have resulted in a high incidence of hinge fractures, the quality of the flint was generally good and its appearance was almost exclusively glossy and fresh.

Recortication

Almost exactly two thirds of the collection (12,001 flints) displayed some degree of recortication. Of this total 2,432 pieces were completely white as the result of total recortication. An analysis of the number of recorticated pieces (including semi and totally recorticated) per flint class was undertaken in order to establish whether any correlation existed between recortication and approximate date of tool type (Table 4). The results showed that there is a tendency for the diagnostically-Mesolithic flint classes (microliths, blades, blade-like flakes and Mesolithic-type cores) to incorporate a much higher proportion of recorticated pieces, at least 80%. Conversely those classes associated with later prehistory (barbed and tanged arrowheads, thumbnail and discoidal scrapers and denticulates), contained a much lower proportion, generally less than 40%. This supports the assumption that diagnostically-earlier struck flints are more likely to display recortication.

Nearby, at Ruxox Farm, Maulden, recortication was used as a general guide to the dating of a similarly-mixed fieldwalking assemblage with some success, since the diagnostically-Mesolithic flints all tended to be totally or heavily-recorticated while the diagnostically-later flints were 'mostly' un-recorticated (Fadden 1972, 81). However, none of the diagnostically-Mesolithic flints from Beadlow Manor, Clophill, two kilometres further north-east of Ruxox Farm, exhibited any recortication (Fadden 1973, 131), illustrating the fact that while the recortication=Mesolithic rule generally holds true among Bedfordshire material, as stated earlier, there are some exceptions.

With regard to the less chronologically-diagnostic tool classes in the Tingrith assemblage, such as side, and side and end scrapers, it was hoped that percentages of re-cortication might provide some impression of dating. Despite a bias which creates an artificially-high percentage of recortication among the more poorly-represented tool classes, the data tend to support the hypothesis that the majority of the collection was generated from activities which took place during later prehistory rather than the Later Mesolithic.

Flint Class	No. recorticated	% of flints by class
Discoidal Scraper	3	18.8%
Arrowhead	1	20%
Thumbnail Scraper	2	22.2%
Side Scraper	2	33.3%
Scraper	8	34.8%
Retouched Flake	69	44.2%
Denticulate	4	44.4%
Misc. Pointed Tool	7	46.7%
Non-Meso Core	65	45.8%
Side & End Scraper	12	60.0%
End Scraper	10	62.5%
Lump	149	62.6%
Hammerstone	2	66.7%
Knife	2	66.7%
Burin/microburin	2	66.7%
Non-Retouched Flake	9096	62.8%
Retouched Blade	38	69.1%
Blade Core	31	81.6%
Meso Core Fragment	10	83.3%
Microlith	30	85.7%
BI Core Trim/Rejuv.	6	85.7%
Meso Core	25	86.2%
Awl	7	87.5%
Non-Retouched Blades	2410	87.5%
Core Trim/Rejuv. Flake	12	92.3%
Denticulate/Misc. Point	1	100%

Table 4: *Quantity and Percentage of Recorticated Flints by Flint Class.*

The spatial distribution of recorticated pieces was assessed by means of a comparison of the data pertaining to the key grid-squares (Table 5). Most of the grid-squares conformed roughly to the overall average for recorticated pieces within the collection (66%), although 29B has a significantly-lower percentage at 38.37%. This could be due to either localised environmental factors within the soil or perhaps the existence of an assemblage which differs in component/date to the overall pattern.

Grid Square	Number of Recorticated flints	% of Total
17C	847	56.78%
29B	920	38.37%
31F	876	71.16%
32F	728	67.91%
37E	1355	66.06%
38E	1142	70.15%

Table 5: *Quantity of Recorticated Flint in Key Grid Squares*

Core and Waste Categories

Cores

Of the 241 cores and core fragments (including core trimming/rejuvenation flakes), identified in the assemblage, 86 were (or were from) prepared blade cores of Mesolithic type. Of these, 13 were core fragments and seven were core trimming/rejuvenation flakes. The average weight of this type of core was just over 31grams. Mesolithic-type cores were characterised by a series of narrow detachments from one, two or, occasionally, more platforms. Some blade cores were pyramidal, with a single platform (Figure 1:1), others were bi-polar, with two platforms from opposing ends of the core (Figure 1:2), and others exhibited a series of platforms across the body of the core (Figure 1:3,4), revealing that in many instances the core had been utilised beyond its apparent usefulness, an indication of resource stress. Most flake cores (e.g. Figure 1:3) and some blade cores (e.g. Figure 1:4) had multiple platforms, although the blade cores were Later Mesolithic in date and the flake cores were later. Like the blades within the collection, these cores frequently exhibit recortication, to the extent of displaying a colour within the range of white to a light blueish-grey.

The less chronologically-diagnostic cores, which are probably of Bronze Age date, either tended to have flake, rather than blade, detachments removed from a series of randomly-placed platforms across the flint's surface (Figure 1:3) or they were 'pebble cores' consisting of split pebbles with a series of broad flake detachments from the broken end (e.g. Figure 1:5). With the exception of two unusually-large pebble nodule cores, weighing 259 grams and 513 grams respectively, both from fieldwalking, the average flake core weight was 52.5 grams and the average pebble core weight was somewhat higher, at 71.6 grams.

Flake cores with multiple platforms and pebble cores are both characteristic of later prehistoric flintworking; for example, in the assemblage from the Late Bronze Age riverside zone at Runnymede Bridge, Egham, Surrey (Bevan forthcoming). At Mount Sandal, Coleraine, Ireland, in a similarly-mixed assemblage to that from Tingrith, multi-platformed flake cores were used to determine the focus of post-Mesolithic activity (Woodman 1985, 53).

Hammerstones

Three hammerstones were recovered, all of which were made from pebbles. A totally-recorticated hammerstone made from a quartz pebble and exhibiting signs of intensive use (31F, SF 66) is of potentially Later Mesolithic date. This has been included in the distribution plot of Mesolithic material within the main grid (Figure 11). The other two hammers have been included with the post-Mesolithic tools and waste categories (Figure 12). In addition, several of the cores exhibited traces of wear characteristic of re-use as hammerstones.

Technology

Flint cores and pebbles are not an unusual choice of material for hammerstones since they would have been locally-available and, in the case of the re-used cores, an expedient tool for use in flintworking. Such hard hammers are often associated with later prehistoric flint assemblages and are known to produce pronounced bulbs of percussion. However, the relative percentages of diffuse and pronounced bulbs visible among the flake assemblage, which are almost identical suggest, that soft hammers of antler, bone and perhaps wood must also have been used, although these materials were not preserved archaeologically (Table 6a). Soft hammers appear to have been used to a greater extent in blade production since the incidence of diffuse bulbs is significantly higher (Table 6b). This might indicate a period-specific preference with more controlled flintworking being conducted with direct or indirect percussion using antler, bone or wooden hammers during the Later Mesolithic period.

Class	Bulb	Number	%
Flake	Uncertain	60	8.3%
Flake	Diffuse	326	45.1%
Flake	Pron.	337	46.6%

a: Flake Bulbs (Pron. = pronounced).

Class	Bulb	Number	%
Blade	Uncertain	11	7.1%
Blade	Diffuse	88	56.0%
Blade	Pron.	58	36.9%

b: Blade Bulbs (Pron. = pronounced).

Table 6: A Comparison of Flake and Blade Bulbs.

Further comparison of other attributes of flakes and blades revealed similar ratios of feather and hinge terminations for each class of artefact, with hinge terminations being slightly lower than feather terminations in each instance (Table 7). While feather terminations are a characteristic of successful and skilled flintworking, hinge terminations can result from either poor craftsmanship or a raw material of unpredictable quality. That the relative percentages are almost identical for both blades and flakes suggests that, in this case, the raw material appears to have been the main cause of hinge fractures during all periods of activity on the site. This is supported by a high incidence of crystalline inclusions and other potential faults noted during the recording process, as well as a number of hinge fractures visible on many of the Later Mesolithic blade cores which had otherwise been prepared and reduced with more skill than the later multi-platformed flake cores and rough pebble cores.

Class	Term.	Number	%
Flake	Uncertain	65	9.0%
Flake	Feather	382	52.8%
Flake	Hinge	276	38.2%

a: *Flake Termination (Term. = termination).*

Class	Term.	Number	%
Blade	Uncertain	11	7.0%
Blade	Feather	86	54.8%
Blade	Hinge	60	38.2%

b: *Blade Termination (Term. = termination).*

Table 7: *A Comparison of Flake and Blade Terminations.*

A comparison of flake and blade platforms revealed similar percentages of different platform types (Table 8), with a higher incidence of absent blade platforms resulting from use and post-depositional breakage (Table 8b). Corticated platforms were, as would be expected, higher among the flakes, many of which had been detached from unprepared flint pebbles. The fairly high incidence of plain platforms among both flakes and blades suggests that platforms were usually well-prepared, which would be expected particularly among the blades, most of which are believed to have been generated during the Later Mesolithic.

Class	Platform	Number	%
Flake	Uncertain	60	8.3%
Flake	Absent	125	17.3%
Flake	Corticated	101	14.0%
Flake	Faceted	41	5.7%
Flake	Plain	396	54.8%

a: *Flake Platforms.*

Class	Platform	Number	%
Blade	Uncertain	11	7.0%
Blade	Absent	48	30.6%
Blade	Corticated	5	3.2%
Blade	Faceted	3	1.9%
Blade	Plain	90	57.3%

b: *Blade Platforms.*

Table 8: *A Comparison of Flake and Blade Platforms.*

Flake Dimensions

The tabulation and analysis of flake dimensions can be useful in determining, in a broad sense, whether flintworking took place during earlier or later prehistory on the premise that narrow blade-like flakes were generated during the Later Mesolithic/Early Neolithic, and thereafter waste flakes became much broader (Pitts 1978). This relatively simple method, which involves plotting the dimensions of

individual complete flakes on to a numbered grid so that a pattern develops, is applicable to fieldwalking and otherwise unstratified assemblages, provided that the measured sample is sufficiently large. Ideally, comparisons can be made with a similar sample derived from a local excavated assemblage of known date. This method has been used successfully by one of the authors to determine the predominantly Mesolithic character of fieldwalking assemblages from the vicinity of Kinver Edge in the West Midlands, by comparing the data to that derived from an excavated Later Mesolithic site at Lightmarsh Farm, Near Kidderminster (Bevan 1995a and 1996). This method was also successfully used at Wasperton, Warwickshire to determine the predominantly Late Neolithic to Early Bronze Age date of the unstratified ring ditch assemblage (Bevan 1995b).

Measurement of all complete flakes in the Tingrith assemblage enabled compilation of length: breadth scattergrams of the key grid squares from the excavation, which contained some of the largest collections of struck flint, in order to determine, in this case, whether the majority of the flint had been worked during the Later Mesolithic or the Bronze Age, based upon the incidence of chronologically-diagnostic tools and core types within this mixed assemblage. Scattergrams of complete blades were also compiled for some key contexts for comparative purposes. The results appear in Figures 5 and 6.

A general patterning indicative of broad, rather than particularly slender, flakes was noted among the key grid squares, with flakes from certain squares tending to be shorter and squatter (e.g. 31F and 32F). Although a generally longer and more blade-like flake component was apparent in the Tingrith flake scattergrams (comparable to those compiled for the blades shown in Figure 6), the general size range and patterning were very close to those from the Late Bronze Age riverside zone at Runnymede Bridge, Egham, Surrey (Bevan forthcoming). While Later Mesolithic material is obviously present among the Tingrith debitage, it appears from the scattergrams that the bulk of the assemblage is Post-Mesolithic, and contemporary with the multi-platformed and pebble cores and predominantly Bronze Age tool forms described above.

Burnt Flint

A total of 2370 pieces of burnt flint was identified within the collection. This represents 13.09% of the total assemblage. The relative percentages of burnt flint by flint class and the distribution of burnt flint in key grid squares are summarised below (Tables 9 and 10):

Flint Class	Total of Burnt Pieces	Total in Assemblage	% Burnt
Flake	1978	14647	13.5%
Blade	347	2809	12.35%
Lump	21	238	8.82%
Core/Core debris	18	241	7.47%
Scraper	4	90	4.44%
Hammerstone	1	3	33.33%
Miscellaneous	1	15	6.67%

pointed tool			
TOTAL	2370	18043	13.09

Table 9: Quantity and Percentage of Burnt Flints by Class.

Key Grid Squares	Total Burnt Pieces	Total Flint	Percentage Burnt
17C	242	1492	16.22
29B	180	1620	11.11
31F	179	1231	14.54
32F	134	1072	12.5
37E	317	2051	15.46
38E	308	1628	18.92

Table 10: Quantity and Percentage of Burnt Flint by Key Grid Square.

While, on one level, the much higher incidence of burning among the waste flakes obviously reflects the high waste:tool ratio of the collection, on another level, this was probably connected with the practice of flint-knapping around hearths or the establishment of new hearths on former knapping areas. Since in many non-western societies, discard tends to take place away from habitation (e.g. Binford 1978; Simms 1988; Gould 1980), the flint might have become disassociated from the hearths by deliberate removal. Alternatively, post-depositional processes might have obliterated any traces (e.g. stones, charcoal) of such hearths that might otherwise have survived *in situ*. While examination of the spatial distribution of burnt pieces revealed no discernible clustering which might have been suggestive of the location of hearths, closer study of the flint from Grid Square 31F revealed a high incidence of burning among waste flakes (from Nos. 21, 22, 24 and 25) which might indicate the location of hearths. However, some degree of post-depositional burning from subsequent settlement or other activities on the site cannot be ruled out.

There was some variation in relative percentages of burnt flint between the key grid squares, with the highest amount – nearly 19% - occurring in Grid Square 38E (Table 10). It might be significant that this square (and the neighbouring square 37E) was a potential focus of Later Mesolithic awl-related activities. The association between stone tool making and hearths is well-attested in the ethnographic record (e.g. Binford 1980), as indeed is the association between females and hearth-related activities (e.g. Grøn 1995; Bevan 1997; Moore forthcoming).

Tool Categories

Microliths

Thirty-five microliths were present within the assemblage, the majority of which consisted of obliquely-blunted points (15) and backed points (14). Three isosceles triangles were identified, a backed blade and two unidentifiable fragments. Table 11 shows the relative numbers of microlith types and Figure 7 shows their distribution within the main grid. While obliquely-blunted points (e.g. Figure 2:7-9) are common in Early Mesolithic assemblages, the generally small size of the microliths at Tingrith attests to a Later Mesolithic date. In terms of size, they are comparable to three Later Mesolithic microliths in the predominantly Early Mesolithic assemblage from New Plantation, Fyfield and Tubney, Oxfordshire (Bradley and Hey 1993, Fig. 11:F12 and Fig. 12:F14, F15). The presence of geometrically-shaped microliths such as isosceles triangles (Figure 2:6) in the Tingrith microlith assemblage is also indicative of a Later Mesolithic date.

In view of the fragmentary nature of these pieces a selective approach has been taken to illustration, with representative examples of the main types of microlith illustrated in Figure 2:6-16.

Type	Quantity
Obliquely Blunted Point	15
Backed Point	14
Isosceles Triangle	3
Backed Blade	1
Unallocated	2
Total	35

Table 11: Microlith Types Represented

Scrapers

Ninety scrapers were identified within the assemblage, of which 58 derive from excavation, 25 from fieldwalking/surface collection, three from the watching brief and four were unstratified. Table 12 summarises the different types of scraper which were present and Figure 8 shows their distribution within the main grid. A combined scraper/point is not included in this section and is discussed below under 'Composite Tools'.

Type	Quantity	Average Weight (g).
Thumbnail	9	1.9
Discoidal	16	20
End	16	24
Side	6	10.3
Side & End	20	28
Unclassified	23	12.04
Total	90	

Table 12: Scraper Types

Scrapers are not generally chronologically-diagnostic tools. However, there are two typically Early Bronze Age forms of scraper in the collection: discoidal scrapers, of which 16 examples were identified, and one of which has been illustrated (Figure 4:25), and 'thumbnail' scrapers, nine examples of which were identified and two of which are illustrated (Figure 4:26, 27). Thumbnail scrapers tend to be small, with a rounded or roughly-polygonal shape in plan, and exhibit a high ratio of retouched edge to flint surface area. This distinctive form of scraper is prevalent among Beaker-related industries (Healy 1986) and is not to be confused with typologically-Mesolithic 'thumb' and 'button' scrapers known from central England (Saville 1972/3, 19 and Saville 1973/4, Fig. 16:7, 198-199) which, although small and generally round, tend to be more steeply-retouched than the examples identified here. Neither of these Mesolithic types were identified among the Tingrith assemblage.

Twenty-three scrapers were described as 'unclassified' since, mainly for reasons of fragmentation, they did not conform to any of the formal scraper groups defined. Other scrapers were classified as end (e.g. Figure 4:23,24), side, and side and end scrapers. Less-chronologically-diagnostic than the other two groups, these scrapers are frequently characterised by the presence of regular retouch along the whole of either the side or end, or both the side and end of the scraper. Some of the 16 end scrapers were similar to the typically-Mesolithic forms illustrated in Wymer's *Gazetteer of Mesolithic Sites in England and Wales* (1977, Fig. 2: 18-19). However, a later prehistoric date cannot be ruled out, both in view of the re-cortication issue discussed above, as well as stylistic parallels within known later assemblages. For example, many of these scrapers might be of Late Bronze Age date based upon similarities with material from hut platforms at Black Patch, Sussex (Drewett 1982, Fig. 35:1-3, 5-7, 13, 14-16, 374-376).

Arrowheads

Five arrowheads were recovered, only one of which was complete (Figure 4:29). The arrowheads were related to Stephen Green's arrowhead typology of 1980 which was subsequently updated in 1984. The complete arrowhead conforms to Ballyclare Type C (Green 1980; Green 1984, 28-29), a comparatively-rare type of arrowhead in lowland Britain, which probably originated from Ireland and which is 'associated with Early Bronze Age dating' (Green 1980, 138). Green has also suggested that these distinctive, large-sized arrowheads, were regarded as 'prestige objects or else as specialised missile point types, perhaps used in hunting larger, or different game'

(Green 1980, 118), concluding that a 'ceremonial' use was more likely than a utilitarian function (Ibid. 138). The example shown in Figure 4:29 is a particularly-fine specimen, made from a translucent beige-coloured flint which does not exhibit any evidence of having been used. A small fragment from another arrowhead of potentially the same type was also found (Grid Square 37E/25, SF 131, not illustrated), the relatively-close proximity of which, and the fact that it was made in the same coloured flint, suggests that they might have been part of a pair or set.

Other arrowheads consisted of a possible un-barbed Sutton B Type arrowhead (Figure 4:30) and two barbed and tanged Sutton A Type arrowheads (Figure 4:31 and 38E/13, SF 48, not illustrated), all of which were broken to some extent (Green 1984, 28-29). An interesting aspect of the un-barbed arrowhead (Figure 4:30) is that it was pressure-flaked *through* a milky-white recortication that appears to have affected the whole surface of the flint flake selected. The resulting two-tone effect might have been intentional, perhaps for aesthetic reasons. Sutton Type arrowheads are much more common than the Ballyclare Types, spanning 'the full chronological and cultural span of the occurrence of barbed and tanged arrowheads' and occurring 'with particular frequency in the graves of Beaker archers' (Green 1980, 138). Moreover, the occurrence of Sutton Type arrowheads here is not unusual in terms of their widespread distribution in southern England. Arrowheads are, however, generally associated with off-site, rather than site-based, activities (Schofield 1987) and while their presence attests to activity in the general area during the Early Bronze Age, the main focus of this activity is difficult to identify or to relate to other Bronze Age tools found on, and in the area of, the site. It is even possible that some of the arrowheads, particularly the illustrated examples (Figure 4:29-31), might relate to funerary activity in the area of the site, although this theory cannot be proven archaeologically. A general contemporaneity with the discoidal and thumbnail scrapers is, however, likely. Figure 12 shows arrowhead distribution within the main grid.

Other Pressure-Flaked Items

Other pressure-flaked items consisted of a discoidal knife, a form of tool associated with the Later Neolithic period (e.g. Edmonds 1995, 96), the surface of which was devoid of cortex (Figure 3:22), and three small, partially pressure-flaked knives, one of which has been illustrated (Figure 4:28). The two other knives (30B/19, SF 29 and 167, SF 156), neither of which has been illustrated, were both made from a translucent beige flint with a fresh appearance. Although less effort had been made to achieve a specific shape, such as that of the curved, ovoid shape apparent on the illustrated example (Figure 4:28), both pieces had been bifacially-worked to some extent. The forms and techniques used for the production of these four items are characteristic of the Neolithic period, although closer chronological resolution is only possible for the discoidal knife (Figure 3:22).

Denticulates

A total of nine denticulates, and a composite denticulate/miscellaneous pointed tool (29B, 21, discussed below), were identified. One of the denticulates has been illustrated (Figure 3:19). While there is a degree of doubt regarding whether the denticulation on some of the smaller of the denticulated pieces was deliberate, the

more obvious examples are made from large flakes and core fragments characterised by a series of contiguous notches along one or two edges. Denticulates are a form of tool usually associated with the Late Bronze Age (Stone 1937, Plate vi; Harding 1991; Figure 45, 84-85; Bevan forthcoming), but they have also appeared in lithic concentrations dated to either the Late Neolithic or the Early Bronze Age at Spong Hill, North Elmham, Norfolk (Healy 1988, Figures 48: L99 and 49: L114, 58-59). Denticulated scrapers from Grimes Graves were also regarded as 'a distinctively Bronze Age type' (Saville 1981a, 21). The tools might have fulfilled an engraving function, and might have been used in pottery decoration, bone or antler-working. Otherwise, the points could have been used as boring tools. The fairly-regular form of the tools suggests a multiple function, or that they were more-versatile, composite tools. The general form and chronological attribution of denticulates suggests that they were more likely to have been contemporary with some of the later projectiles and scraper forms rather than belonging to the Later Mesolithic industry.

Awls and Miscellaneous Pointed Tools

A total of eight awls, a burin, two microburins and 15 miscellaneous pointed tools (or piercers) were identified within the collection. An awl is a pointed tool usually associated with boring and leather-working, including hide-processing (e.g. Figure 3:18). Most of the awls (five of the eight, including the illustrated example) were found within the 10 metre by 10 metre square area of 37E and 38E, raising the possibility of the localised use of this tool type, although the microwear results indicated that they had been used predominantly for scraping or perhaps engraving (see Discussion and Candy this volume). The high incidence of recortication observed among seven of the eight awls (Table 4) suggests a Later Mesolithic date for this tool type.

One burin, a tool associated with bone and antler working (Bordaz 1989, 71), was recovered from square 49G. Its small size and general shape suggest a Later Mesolithic date (see Candy this volume for microwear report) but its poor condition precluded illustration. Two microburins were also identified (23C, 32F). Microburins were by-products of microlith manufacture and seldom fulfilled a specific function (Bordaz 1989, Fig. 42, 94). The definition 'miscellaneous pointed tool' encompasses all of those pieces which did not conform to the classic awl shape yet which appeared to possess either a deliberately-worked point or seemed to have a natural spur which had been utilised in a boring, scraping or gouging action (e.g. Figure 3:20).

The miscellaneous pointed tools were more-widely distributed and a greater number were recovered through fieldwalking. In terms of their spatial distribution, most of these tool types were excavated from grid-squares with a generally high flint density. One piece recovered from the topsoil in grid square 50F exhibited some polish on the point, suggesting that it had been used for bone or antler working. Harding has noted the proportional dominance of piercers as typical of late Bronze Age assemblages in southern England (1991, 85), and it is possible that a number of pointed tools were of later Bronze Age date. While the pointed tools discussed here presumably fulfilled a piercing/ boring function, the small number identified departs from this general model. While the awls may have been connected with site function, perhaps localised hide or bone working during the Later Mesolithic in the area of 37E and 38E (see

Figure 11), the relatively-low incidence of miscellaneous pointed tools might indicate a preference for bone or metal points during later prehistory.

The distribution of awls, burins and miscellaneous pointed tools together with scrapers have been plotted within the main grid to give an impression of areas of possible occupation *foci* (Figure 9).

Composite Tools

Two apparently composite pieces were encountered, both from grid square 29B (Figure 12). The first was defined as a denticulate/miscellaneous pointed tool as it displayed both notching and a point (29B/ 21, not illustrated). The second piece was categorised as a scraper/borer (29B 23, SF 91, Figure 3:21) and its shape, combined with the pattern of retouch and utilisation, suggests that this implement served as both an end scraper and a borer, with a 'scraper' edge at one end and a well-defined point at the other. This is similar to the 'multiple tool... a combined scraper and point' identified among Bronze Age material at Grimes Graves (Saville 1981, 25).

Blades

A total of 55 blades and 2,754 unretouched blade-like flakes was recorded, 15.5% of the entire collection, of which 2,004 were from excavated contexts. A total of 180 pieces displayed evidence of utilisation.

Serrated Blades and Flakes

Serration, the presence of regular, tiny notches along the edge of a struck flint, was noted on six pieces, two of which were blades, the rest flakes. All were from excavated contexts and are mostly those grid-squares where the highest concentrations of both tools and debitage were located. Current debate on serration centres on whether it was intentional or whether it was caused by edge-damage from being used for a certain function, for example use as a sickle on plant material (Andrew Brown *pers. comm.*). Polish was not observed on any of the serrated flints, only one of which, a yellow-grey, long blade excavated from 28B really had the shape and size necessary for such a function (see microwear report, Candy this volume). It may be noted, however, that the same edge-wear pattern was observed on all the serrated pieces suitable for microwear analysis and was indicative of a scraping function taking place on medium-hardness materials.

Retouched Flakes

The term 'retouched flake' was applied to any flake which exhibited some degree of retouching, whether in the form of just a few scalar removals or the extensive retouch of the whole of one or two edges. The majority of the 156 pieces identified within the collection had been retouched on one edge only, while a smaller number had been retouched on two or three edges. Analysis of the positioning of the retouch on the flakes showed no bias towards a certain area of the flint, but retouch was more likely to be located towards the distal end of the flake (Table 13). Virtually all the pieces

(91.7%) had also been utilised and exhibited some degree of edge wear, frequently on more than just the retouched edge.

LEFT / RIGHT DISTAL				
20				
LEFT DISTAL	23	3	19	RIGHT DISTAL
LEFT SIDE	33		31	RIGHT SIDE
LEFT PROXIMAL	8		12	RIGHT PROXIMAL
3				
LEFT/RIGHT PROXIMAL				

Table 13: Table Illustrating the Positioning of Retouch on Flakes (arranged according to shape of flake).

The characteristics of the retouched flakes varied considerably, with a range of colours, shapes and sizes recorded. Twelve pieces had been retouched through a layer of recortication, indicating the re-use of older struck flakes. Eight pieces appeared to have been deliberately notched, while nine pieces exhibited a very small, fine pattern of retouch. This fine retouch suggests that high skill, care and precision was not just reserved for formal tools. The occurrence of such 'deliberately modified pieces' supports Bradley's observation regarding the high incidence of this general tool class on later Bronze Age sites at a time when the formal tool repertoire was decreasing (1984, 165-167).

The colours of the retouched flakes were quantified and compared with the values recorded for the non-retouched flakes in order to see if there were any significant differences. The fairly specific colour descriptions used during the recording stage were placed within the broad groupings of 1). Beige-Brown colours, 2). Beige-Brown-Grey, 3). Grey colours, 4). Blue-Grey colours and 5). Completely Recorticated (White). Significant differences were observed. Figure 10 illustrates much higher values for beige-brown, brown-grey pieces and grey pieces within the retouched flake group. There is a similar number of blue-grey flints in both groups, while there is a much smaller quantity of white flints amongst the retouched flakes. The popularity of brown-grey flint probably reflects the most common colours of flint pebbles available, and perhaps flint in this colour range tended to be of a higher quality and was more-easily worked. Aesthetic reasons may also have been a factor in selection. Indeed, translucent beige and brown pieces may have been selected for their attractive sheen, as well as for their quality. Almost half of the retouched flakes from Tingrith derive from the six key grid-squares (Table 14).

Grid Square	Quantity of retouched flakes
17C	6
29B	11
31F	12
32F	13
37E	19
38E	8
TOTAL	69

Table 14: Quantities of Retouched Flakes in the Key Grid Squares

The data were analysed in order to see whether any coherent, spatially-linked groups of retouched flakes were present within the collection. 31F and 38E were both found to contain two pieces which exhibited retouch through a layer of recortication. Within a single one metre square sub-square (32F 16) three pieces had been very finely retouched. They all weighed 2-3 grams and had all been used in a scraping action. It is tempting to see these pieces as representative of a contemporaneous episode of flint-use. The other single one metre square sub-divisions which contained more than two retouched flakes include: 31F 14; 32F 19; 37E 4; and 37E 11. These sub-squares also contained several tools and many utilised pieces.

Catalogue of Illustrated Pieces

1. Single-platformed, pyramidal blade core, with hinge fractures, blue-grey in colour resulting from partial recortication. 29B, 11.
2. Opposed platformed core, with narrow blade detachments, opaque blue-grey/white, almost totally recorticated and partially burnt. 49G, 3.
3. Multi-platformed, light grey, partially-recorticated flake core, with hinge fractures. 49G, 3.
4. Multi-platformed blade core, with a large crystalline inclusion, light brown flint. 56D, 5.
5. Core, with broad flake detachments made from a split pebble, medium-grey flint. 7c, 23.
6. Isosceles triangle, with total white recortication. 12, SF159.
7. Obliquely-blunted point, blunted at left side, light grey in colour, with partial white re-cortication. 31F, 11, SF 75.
8. Obliquely-blunted point, blunted at left side, light grey in colour, with partial white recortication. 44D, SF 14.
9. Obliquely-blunted point, blunted at right side, with micro-serration on left side, light grey in colour, with partial white recortication. 31E, SF 9.
10. Backed point, with distinct 'needle' tip and some retouch at lower right edge, light grey flint. 41F, 14.
11. Backed point, with distinct 'needle' tip and retouch on both sides, light beige in colour, with partial white recortication. 38E, SF 56.
12. Backed point, with retouch on left side, light beige in colour, with partial white recortication. Area 4, SF 146.

13. Backed point, with retouch on left side, white in colour, totally recorticated. 28B, 22, SF 78.
14. Backed blade, with retouch and traces of utilisation at tip and bottom left side, light beige flint. 28B, 11.
15. Backed blade, with retouch and traces of utilisation on both sides, tip broken, light grey flint. 41F, 3.
16. Backed blade, with retouch and traces of utilisation at right side, light orange flint. 41F, 3.
17. Point, retouched on left side of tip, light grey flint. 155.
18. Awl, opaque light grey flint. 37E, 3, SF 116.
19. Denticulated flake, opaque light grey flint. A2, 'surface'.
20. Pointed tool/borer, medium-grey flint. A1, 'surface'.
21. Composite scraper/borer, light grey opaque flint. 29B, 23, SF 91.
22. Discoidal knife, light grey opaque flint. No location number.
23. End scraper, with a notched edge worked on the underside, dark grey flint. 38E, 20, SF 63.
24. End scraper, dark grey flint. Area 1, +, SF 136.
25. Discoidal scraper, medium grey flint, slightly burnt. 31F, 5, SF 31.
26. Thumbnail scraper, light grey flint. 43, SF 167.
27. Thumbnail scraper, light grey flint. A1, 'surface'.
28. Knife, with pressure-flaking on left side and partial recortication on lower right, medium-grey flint. 42B, 11, SF 68.
29. Large barbed and tanged arrowhead, translucent beige flint, conforms to Ballyclare Type C in Green's arrowhead typology (1984, 28-29). 29B, 1, SF 89.
30. Tanged arrowhead without barbs, medium-grey flint, pressure-flaked through surface re-cortication, conforms to Sutton B type in Green's arrowhead typology (1984, 28-29). 40F, SF 12.
31. Barbed and tanged arrowhead, with part of one barb broken, white from total recortication, conforms to Sutton A type in Green's arrowhead typology (1984, 28-29). 17C, 1, SF 104.

Distribution of Tools and Waste

The following discussion will attempt to establish whether any significant spatial patterning is present among tool and waste categories.

1. Mesolithic-type Cores

The distribution of the Mesolithic-type cores (e.g. Figure 1:1,2,4) was examined in order to identify any tool-making areas (Figure 11). Not surprisingly, slightly-higher densities of blade and Mesolithic-type cores were found in grid squares which produced the greatest quantities of flint. The largest cluster derived from the 5 metre by 5 metre grid square 31F where ten of these core types were found (one from fieldwalking, the rest through excavation), as well as three microliths, a microburin and a potentially-Mesolithic hammerstone (Figure 11). Table 15 gives a more precise spatial indication of the positions of the cores. Other grid squares which contained more than three blade and Mesolithic-type cores were 38E, with eight, and 29B, with four. High incidences of primary flakes were also recorded in these grid squares,

ranging from 20 (31F) to 48 (38E) and 38 (29B), although due to similarities in the raw material it is difficult to relate the primary flakes to the Mesolithic or later cores discussed below.

1	2	3	4	5
6 O	7 X X	8 O	9	10 XX O
11 O	12 X XO	13	14	15 X
16 X	17 X	18	19	20
21	22	23	24	25 O

Table 15: The Relative Positions of Mesolithic and Non-Mesolithic Cores in Grid Square 31F
Key: X = Meso-type core, O = Non-Meso Core

2. Spatial Distribution of Blades

Also considered of relevance to any attempt to identify particular locations of Mesolithic activity is the spatial distribution of blades. Blades were well represented in the Tingrith collection, accounting for 15.5% of all the flint. In order to assess whether any spatial patterns were present within the distribution of the blades, the proportion of blades to flakes was calculated for all the excavated 5 by 5 metre grid squares (Table 16). The range is considerable. In 22F, for example, no blades were present amongst the debitage. In contrast, within the excavated sample from 42B blades make up nearly 48% of the total debitage. The data from the nearby grid-squares 41F, 43A, 43B, 43D and 46D present similarly-high percentages, suggesting that there is a particular focus of Mesolithic activity within this area of the site, despite there being lower quantities of identifiable-Mesolithic tools and waste in these squares.

There would appear to be a general progression of increasing blade density from south to north, with a relative paucity of this class of debitage coming from grid-squares 03 to 27, more or less average quantities occurring from 28 to 32 and generally greater proportions being present from 37 to 56. These results, which are presented in Table 13, were compared against the data from the fieldwalked material. Essentially, less extreme contrasts are present, although grid squares 01 – 27 did produce a slightly lower ratio of blades to flakes than those which lie to the north. This corroborates the data from the excavated collection.

Grid Square	No. of Blades	No. of Flakes	% of Blades within debitage
03D	1	57	1.75
07C	1	87	1.15
10C	12	92	13.04
13A	2	98	2.04
13E	3	69	4.35
15B	1	93	1.08
17B	7	132	5.30
17C	80	1356	5.9
22F	0	67	0
25B	4	123	3.25
27D	7	129	5.43
28B	159	1409	11.28
29B	105	1329	7.90
29C	24	127	18.90
29D	17	123	13.82
30A	17	87	19.54
30B	17	113	15.04
31B	13	61	21.31
31F	158	1020	15.49
32F	122	909	13.42
37D	39	148	26.35
37E	367	1636	22.43
38E	245	1084	22.60
39C	14	118	11.86
41F	39	124	31.45
42B	410	860	47.67
43A	8	46	17.39
43B	31	93	33.33
43D	28	115	24.35
46D	34	89	38.20
49G	21	92	22.83
56D	18	174	10.34

Table 16: The Numbers of Excavated Blades and Flakes in the Grid Squares.

3. Non-Mesolithic Cores

This category includes all those cores which did not possess any of the characteristics associated with typical Mesolithic-type cores, principally multi-platformed cores (e.g. Figure 1:3,4) and pebble cores (e.g. Figure 1:5). A total of 125 examples of these cores was recorded, including 62 fragmentary pieces and 13 core trimming/rejuvenation flakes. A range of attributes in terms of number of striking platforms, number of detachments, colour, extent of cortex and recortication and dimensions was noted.

In common with the spatial distribution of the Mesolithic-type cores, these cores were represented throughout the main area of fieldwalking and excavation (Figure 12). The greatest concentration occurred within the grid square 28B which contained ten of these core types and associated core-debris. A high incidence of primary flakes (49) was also recorded in this square, attesting to on-site core reduction. Other concentrations were also noted within squares 29B, 32F, 31F and 38E which

contained seven, seven, six and six pieces respectively. High incidences of primary flakes were also recorded in these squares, ranging from totals of 18 and 20 (31 and 32F) to 38 and 48 (29B and 38E).

The least-modified of the non-Mesolithic cores were pebble cores, of which 24 intact pebble cores and six pebble core fragments were identified amongst the collection. Typical characteristics of the pebble cores present within the collection included their rounded, pebble shape, extensive presence of cortex, and, frequently, the minimal use of the core, with sometimes just a single instance of flake detachment or smashing occurring. An examination of their distribution revealed no particular spatial characteristics of any significance, although a distinct cluster may be identified from the adjacent grid squares 37D and 37E (Figure 12). A total of six pebble cores derived from this area and it should be noted that five of these cores were excavated from just two one metre square sub-divisions within this area (in groups of three and two). This suggests the localised exploitation of this form of flint core within this area. It is also significant that a high incidence of primary flakes was recorded in these two squares (40 and 48 respectively), attesting to on-site primary reduction.

Refitting opportunities were assessed throughout the flint analysis and recording process but the only possible refit involved two halves of an end scraper from grid squares 31B (SF 30) and 31F (SF 69). A further examination of the flint from grid squares containing core concentrations was also undertaken, in order to see if any refitting could be performed, though without success. However, in several grid-square assemblages, cores and occasional pieces of debitage were observed to possess very similar characteristics, to the extent that it seemed reasonable to hypothesise that they derived from the same original flint nodule. In one of the metre square sub-divisions of 38E, for example, several blades could be identified with one of the cores, while in 17C a core trimming/rejuvenation flake appeared to match a blade core excavated from the same sub-division.

The very small number of identifiable cores in the collection, especially when the Later Mesolithic component is disregarded, indicates a generally much later focus of activity on the site than previously expected (see Discussion).

4. *Microliths*

Most of the microliths from Tingrith were located between grid squares 28 and 44 (a zone approximately 80 metres long). Within this zone, most were found in those key grid-squares which contained the highest overall flint density; 28B and 29B, 31F and 32F (from which a microburin, a tool associated with microlith-production was also recovered), 42B, and, in particular, 37E and 38E from which eleven microliths were recovered (see Figure 11). These key grid squares also contained the largest numbers of Mesolithic-type cores and core fragments and, in 37E and 38E, five of the eight awls identified.

Further examination of microlith distribution reveals some degree of sub-type clustering (Figure 7). For example, three obliquely-blunted points were excavated from 29B, while a total of four backed points and one backed blade was located in squares 37B, 38E and 39E. In addition to the microliths shown in Figures 7 and 11,

four other microliths (an isosceles triangle and three backed points) were found outside the main grid, including a backed point which was found at the extreme western end of one grid, while an isosceles triangle microlith was discovered in the same grid, immediately to the west of the principal LTNMG north-south grid.

5. Denticulates

In addition to the nine formal denticulates was one piece which also appeared to have a worked point. This small, light blue-grey tool was excavated from grid square 29B and was defined within the database as a denticulate/miscellaneous pointed tool. Six denticulates were found through excavation, while the remaining three were recovered from fieldwalking. Apart from the excavation of two denticulates from the same 5 metre by 5 metre grid square (46D), each individual tool was recovered from a different location within the site. The even spread of a fairly-small number of denticulates inhibits the identification of a meaningful spatial signature.

6. Scrapers

Since scrapers are a class of retouched artefact usually associated with occupation *foci*, together with awls and burins (Schofield 1987), these tools have all been plotted within the main grid area, irrespective of period, to give an impression of occupation density (Figure 9). Not surprisingly, the greatest concentrations correlate with the largest assemblages within the key grid squares discussed below. In another figure designed for purposes of comparison, all scrapers have been plotted by type within the main grid (Figure 8), from which it can be seen that again the greatest concentrations of scrapers (irrespective of period) occur within the grid squares with the largest flint assemblages. However, greater numbers of the less-chronologically-diagnostic of the scrapers are present in those grid squares where Later Mesolithic activity has been identified (17C, 31F and 32F and particularly 37E and 38E) but since these grid squares also contained quantities of post-Mesolithic material, more precise dating is not possible (Figure 12). The Bronze Age scraper types also appear in Figure 12 with other post-Mesolithic tools and waste.

Thumbnail Scrapers

As with the other scraper sub-types, these tools were mostly found within the high-density grid squares. It is perhaps noteworthy that none at all was recovered from the southern third of the Tingrith grid system (LTNMG and SA96), indicating perhaps that Bronze Age activity was located to the northern two thirds of the gridded area (Figure 8 and 12).

Discoïdal Scrapers

The 20 discoïdal scrapers present in the collection were more or less scattered throughout the site, occurring in the high-flint-density localities of the excavated grid-squares of 17C, 31F and 32F, 37E and 38E and the mid-density 41F (Figures 8 and 12). Occasional finds of single discoïdal scrapers were retrieved during fieldwalking.

The area-based fieldwalking resulted in the finding of two scrapers in Area 1 and a further three in Areas 2-5. This suggests a possible nucleus of settlement/activity.

End, Side, and Side and End Scrapers

These were similarly distributed within the high-density locations detailed above, with a particular concentration (seven) occurring within 38E (Figure 8). Five of these seven scrapers are of the side and end variety. A further six were found during the area sample fieldwalking.

Un-classified Scrapers

These minimally-flaked forms, with a relatively low average weight, may be indicative of the opportunistic use of flake debitage for the production of scrapers. These scrapers were found principally within the high flint density locations of 17C, 28B, 29B, 31F, 32F, 37E and 38E.

Discussion

This discussion deals firstly with the later prehistoric component of the assemblage, which is much larger in size and of less value in spatial terms than the more restricted later Mesolithic component, the discussion of which forms the conclusion of this report.

The Post-Mesolithic Assemblage

The majority of the struck flint was generated during later prehistory. A proportion of this, but arguably only a small one, is diagnostically of Neolithic date (Figure 12), principally the Late Neolithic discoidal knife (Figure 3:22), the pressure-flaked tools (including Figure 4:28), and the possible sickle fragment (see *Serrated Blade and Flakes* and microwear report, Candy, this volume). While it can be difficult to distinguish between Later Mesolithic and Early Neolithic blade cores, in this instance there is little doubt that most, if not all, of the blade cores (and blades and blade-like flakes) belong to the Later Mesolithic phase(s) of activity on the site, in view of their high incidence of recortication and general homogeneity. This is supported by an absence of leaf-shaped arrowheads, measured against a prevalence of microliths among the retouched component of the assemblage.

Based upon the presence of multi-platformed flake cores and pebble cores, combined with the occurrence of diagnostically-Early Bronze Age projectiles and scraper forms, it appears that the majority of the assemblage, particularly the waste flakes, is of Bronze Age date (Figure 12). However, not all of the post-Mesolithic and post-Neolithic assemblage can be viewed as contemporary with the diagnostically-Early Bronze Age tool types such as the discoidal and thumbnail scrapers which, along with awls and burins, are tools characteristic of occupation *foci* (Schofield 1987). Scrapers are also strongly-associated with the presence of females (e.g. Bevan 1997) and the high incidence of use-wear observed among these tools attests to longer-term settlement in the area of a more sexually-mixed population during the Early Bronze

Age than during the Later Mesolithic phase(s) of occupation (discussed below) or the subsequent Middle/Late Bronze Age assemblages, although in the latter instance this impression might be erroneous one, resulting from less period-diagnostic scraper forms.

During the Later Bronze Age, as observed in the flint assemblage from the riverside zone at Runnymede Bridge, flint procurement strategies changed from preparing formal cores of even the most basic kind to the smashing of flint pebbles, which resulted in a low incidence of cores combined with a high incidence of thick flakes and 'struck chunks', among which re-fitting was very limited (Bevan forthcoming). As part of the apparent decline observed in flintworking in the later Bronze Age (Ford *et al.* 1984) there was also a tendency towards using unretouched flakes for expediency rather than expending time creating formal tools, as was also noted in the Later Bronze Age assemblage from the riverside zone at Runnymede Bridge (Bevan forthcoming). All of the factors connected with this characteristically-Late Bronze Age 'smash and grab' technology (few cores, few formal tools, and a high incidence of unretouched flakes exhibiting wear traces) can be observed in the Tingrith collection. Combined with a number of miscellaneous pointed tools, denticulates and composite tools, all of which are characteristic of later prehistoric assemblages, this suggests that the majority of the Tingrith assemblage dates to the Middle/Late Bronze Age, although the exact proportion is unquantifiable. Flintworking may have been the principal activity carried out at Tingrith during later prehistory, perhaps to the extent that this was the major reason for the site's occupation, but the spatial arrangement of tool-making and other activities is even more difficult to reconstruct than that for the earlier periods, not least in view of the limited tool repertoire and the mixed nature of the deposits.

Although artefactual similarities in the assemblage with tools from the Late Bronze Age assemblage at Mildenhall Fen in West Suffolk are not that marked, it is possible that there is some degree of contemporaneity, based upon the generally low standard of flintworking observed at the two sites, where surface nodules were being utilised rather than mined flint (Clark 1936). Flint assemblages collected during fieldwalking in the Great Ouse Valley, approximately 20 kilometres to the north-east of Tingrith ranged in date from the Late Neolithic to the Middle Bronze Age, with the majority of material being dated to the Early and Middle Bronze Age (Woodward 1978). A high incidence of Early Bronze Age thumbnail scrapers was noted in the collections, as well as some borers, burins and gravers of similar date (Ibid. 44). Occupation appears to have been sited on the gravels adjacent to the river during the Early and Middle Bronze Age in the Biddenham area, with some encroachment on an area of ring ditches during the Middle Bronze Age which might be explained by pressure on land use, and at Roxton, Early Bronze Age occupation was sited 'well above the flood plain of the river and at the junction of two environmentally different areas' where the gravel terrace meets the glacial clays (Ibid. 49-50). Although these sites are located outside the Greensand ridge, the preference for riverine, sometimes high-ground occupation of the kind seen at Tingrith seems to have been a feature of later prehistoric settlement in the region.

Evidence for later prehistoric activity on a more local level comes from Ruxox Farm, Maulden where, in addition to the Later Mesolithic assemblage, Neolithic and Bronze

Age tool types have been recovered (Fadden 1970 and 1972). Here Fadden attributed an absence of features or pottery to 'the light, easily eroded soil where artefacts of all periods continually arrive on the land's surface' (Fadden 1972, 4). The chronologically-mixed nature of the assemblage at Tingrith attests to the reoccupation of a favoured location through time, an occupation which appears to have extended into the Middle Iron Age based upon the discovery of a quantity of scored ware pottery (David Bonner *pers. comm*).

The Later Mesolithic Assemblage

In contrast to the bulk of the flint assemblage, the diagnostically Later Mesolithic component appears concentrated in certain grid squares, although the extent of the debitage is difficult to quantify (Figure 11). Compared to the more-convincing evidence for episodes of flintworking, and perhaps longer-term habitation, on the site during the Bronze Age, the Later Mesolithic presence appears much more ephemeral, potentially reflecting shorter, perhaps seasonal, occupation. In functional and spatial terms, it has been possible to isolate this part of the assemblage with more success and to plot areas of more intensive (or potentially different) activities.

The closest affinities for the Later Mesolithic component of the assemblage are found among the assemblage from Peacock's Farm, Shippea Hill in the Cambridgeshire fenland which included a high proportion of obliquely-blunted points (Clark 1955, Fig. 2:1-11, 20-3, 8), some points with oblique basal retouch (Ibid., Fig. 2:12,14,30), and an isocetes triangle (Ibid., Fig. 2:37). Micro-burins, essentially by-products of microlith production, were also found among the material from Peacock's Farm, as were narrow blade cores, the majority of which were single and double-platformed (Clark 1955, Figs. 3 and 4, 9-10). At Peacock's Farm the other retouched items, particularly the scrapers, which might have been contemporary with the Mesolithic material or with either the Neolithic or Bronze Age elements of the collection, were chronologically-ambiguous. At Peacock's Farm 'convex scrapers', long end scrapers with percussion-retouch rather than 'scale flaking typical of the Early Bronze Age assemblage', were attributed to the Mesolithic on the basis of their 'lustrous surface and intermediate to heavy patina' (recortication) (Clark 1955, 11). The degree of recortication among the Tingrith scraper assemblage (only 65 of which were not of obviously Bronze Age types) was significantly lower than that observed among the diagnostically-Mesolithic material. While a number of convex end scrapers similar to those from Peacock's Farm was present, there was no demonstrable spatial correlation between any potentially Mesolithic scrapers and diagnostically-Mesolithic material, such as microliths and blade cores, except perhaps in Grid Squares 37E and 38E where an awl concentration was recorded (Figure 11).

It is also entirely possible that the Later Mesolithic assemblage was never geared towards the large-scale production or use of flint scrapers, as, for example, may have been the broadly-contemporary assemblage from West Stow, Suffolk, which was dominated by microliths and burins (Pieksma and Gardiner 1989). In this sense, the assemblage, although too small for relative percentages to be calculated with confidence, might be tentatively described as one of Mellars' Type A microlith-dominated assemblages, characterised by a high-incidence of microliths compared to other retouched forms and a correspondingly-low incidence, or absence, of scrapers

(1976, 386-389). Small blade cores, reflecting microlith manufacture, and burins are also present in Type A assemblages which 'appear to reflect a strong bias in favour of primary subsistence activities (presumably hunting) and against the usual range of 'maintenance' or 'domestic' activities (e.g. skin preparation, bone working etc)' (Mellars 1976, 388). Based upon the relative scarcity of scrapers, tools traditionally-associated with hide-processing, which might have been more likely to have taken place during the winter months, Mellars proposed short-term, summer-season occupation for Type A assemblages (from both upland and lowland sites) which 'can be attributed with some confidence to the second half of the Mesolithic' (Mellars 1976, 395).

While attribution of scrapers to the Later Mesolithic assemblage is problematic, other diagnostically-Later Mesolithic tools have been plotted by grid square and their associations have been studied. While occurring in small groups of up to three items, many of the microliths appear to have been made by the same hand, including the three obliquely-blunted points from Grid Squares 28B and 29B. That they were potentially part of the same industry is very likely, but their purpose is less clear since any organic hafting material was not preserved at Tingrith. That they were found in such small groups suggests collective hafting in composite tools, such as saws or harpoons, but they might equally have been used individually as projectile armatures or as scraping, boring, or scribing tools.

In his study of Maglemosian sites, Grøn makes the point that few microliths found on settlement sites exhibited damage 'from use as projectile points, compared to the often very large relative number of microliths with no wear traces at all' (1995, 10), suggesting that 'many damaged points were discarded and replaced during the hunt, far from the settlements' (Grøn quoting Nuzhnyi 1990, 114, 122). Grøn suggests 'that the microliths found on the sites represent the intra-site aspect of hunting: production and maintenance of hunting weapons, removal of projectile remains from meat etc'. This accords well with the low level of microwear identified among the microlith assemblage (see Candy, this volume), and the relatively low incidence of breakage (much of which might be explained by post-depositional damage). A combination of the above factors suggests that the microlith assemblage represents the debris generated by microlith manufacture, chance losses of microliths, or discard of microliths at small hunting camps, rather than off-site losses during hunting.

It is obvious that, when compared to the lithic debris generated by a long-term settlement such as that of the Later Mesolithic assemblage from Oakhanger, Hampshire (Oakhanger VII), which included 1458 microliths, nearly 2000 scrapers and over 1000 cores (Rankine and Dimbleby 1960), the Mesolithic component of the Tingrith assemblage does not reflect a settlement here of any longevity. Instead, the Tingrith assemblage appears to have resulted from activities of a more ephemeral nature, although the material recovered is of a higher density than that recovered from other local Mesolithic sites (see below). Such satellite camps might have been repeatedly revisited over time, although it is unlikely that any occupation was of a very long duration.

The apparent paucity of scrapers, generally a tool associated with the hide-working activities of females (Hayden 1992; Grøn 1995; Bevan 1997) supports the possibility

that occupation of the site(s) was mainly limited to a small band of hunters who were probably males, based upon the almost exclusive association of males with hunting and projectile weapons in ethnographic literature (Grøn 1995, 53), although the common assumption that only males used projectiles during the Mesolithic has been challenged (Finlay 1997). An exception to this very general observation is the concentration of awls in Grid Squares 37E and 38E where a typologically-Mesolithic scraper on a flake was found, along with several other potentially-Mesolithic side, and side and end scrapers. This concentration, which also includes blade cores, is more suggestive of hide-processing activities which might have involved a larger family group.

Spatial Aspects of the Assemblage

While certain chronologically-diagnostic components of the flint assemblage can be isolated, plotting activity or habitation episodes spatially is of limited value with such a mixed assemblage, most of which is composed of waste material and a number of non-diagnostic tool types. However, some clustering can be observed among the larger assemblages from key grid squares, and sometimes a recurring chronological bias can be identified among the flint assemblages, with an obvious Mesolithic presence followed by perhaps an Early (or Middle/Late) Bronze Age presence in the same square (Figures 11 and 12). For example, despite the presence of a pebble core and a quantity of undiagnostic waste flakes, Grid Square 17c appears to have been a focus of Mesolithic activity, where an obliquely-bunted point (4/SF 105), several Mesolithic-type cores, including a pyramidal core, and blades were found. Much of the debitage, including several of the blades, appears to have originated from the same blade cores although no refits were possible. The Mesolithic focus in 17C also appears to continue towards the south-west, since three Mesolithic cores were found just outside Grid 2 where it extends beyond the excavated area.

Square 31F was again a focus of Mesolithic activity, where ten blade cores were identified, a potentially-Mesolithic hammerstone and two microliths, and the high incidence of burning among tools and debitage suggested the one-time existence of a hearth here. Grid Squares 37E and 38E appear to have been another focus of Later Mesolithic activity, since five of the eight awls identified in the assemblage were found there as well as eight Mesolithic-type cores and five backed points. A potentially-Mesolithic retouched and utilised flake and a typical Mesolithic scraper on a flake were also identified in the assemblage which was composed mainly of broad flakes and also included pebble cores and an early Bronze Age type scraper. Awls are not generally datable, but, while one of the awls, a large dark grey example, was potentially post-Mesolithic in date, the majority of them would not have looked out of place in a Later Mesolithic assemblage. Their presence is generally suggestive of an activity area connected with hide-working (perforating skins for sewing), although microwear analysis suggests that these tools were employed for scraping and perhaps even engraving tasks (see Candy this volume). For this reason, bone-working, or more likely woodworking (in view of the hardness of materials suggested by the microwear study), might have been the dominant activity practised there.

In comparison, Grid Squares 28B and 29B appear to have been a focus for both Later Mesolithic and post-Mesolithic flintworking. Here, Mesolithic material included three

very similar, obliquely-blunted points, a backed point, a retouched blade and a serrated blade. The evidence for Late Bronze Age flintworking is more marked, based upon the quantity of broad flakes and smashed cores recovered. A Mesolithic core and a matching, but non-joining, blade came from Grid Square 42B, from which the highest blade percentage was recovered, but, again, the bulk of the waste material comprised large, smashed pebble cores and barely-modified pebble nodules typical of Late Bronze Age flintworking techniques.

The Tingrith Mesolithic Assemblage in a Local Context

Mesolithic material of a very similar nature to that recovered from Tingrith has been recovered from Priestley Farm, Flitwick which lies four kilometres to the north-east of the site (Fadden 1991). Here, topsoil and, unfortunately any traces of occupation, had been removed prior to the installation of a gas feeder pipeline, but the freshness of the flint recovered strongly indicated a working area truncated by the pipe trench and topsoil clearance (Fadden 1991, 94). Although the date of the material is not made clear in the report, a similarly Later Mesolithic date to that observed at Tingrith seems likely, based upon close artefactual parallels among the blades and blade cores (*Ibid.* Fig. 2, 93). Neolithic and Bronze Age material was scarce among the small assemblage from this site which, located on high land on the fertile Greensand ridge near the River Flit, would have provided an ideal location for a Mesolithic camp.

While the artefactual composition of the Priestley Farm assemblage was limited, the mixed Mesolithic/Neolithic-Late Bronze Age assemblages from Ruxox Farm, Maulden (Fadden 1970; Fadden 1972) included a number of burins of both Mesolithic and post-Mesolithic date (Fadden 1972, Figs. 1 and 2). No microliths were present in the assemblages, but the large number of burins, particularly among those flints attributed to the Mesolithic period, is generally regarded as indicative of wood, bone or antler working activities. For example, at the Mesolithic encampment of Vaenget Nord on the Danish island of Zealand, microwear analysis demonstrated that burins were associated with bone-working (Price and Peterson 1987, 96).

Other small Mesolithic assemblages have been recovered in the region, including the remains of a 'working floor' from Beadlow Manor, Clophill which is approximately nine kilometres north-east of Tingrith but in closer proximity to Ruxox Farm, Maulden (Fadden 1973, 131). Here, similarities with the Ruxox Farm material have been noted, both in terms of the flints and the site locations – both on the lower Greensand ridge bordering the River Flit – as possible evidence of wider Mesolithic settlement (Fadden 1973). Two microliths were found at Beadlow Manor, but neither was sufficiently complete to allow comparison with the examples from Tingrith (Fadden 1973, Fig1:4,8). Nearer to Tingrith, four identifiably Mesolithic tools were found during extensive fieldwalking in the Ampthill area in 1972, at Flitton, and near Westoning (Fadden 1975). Again, the distribution of finds is on the Greensand, near the River Flit (*Ibid.*, 2).

Despite some difficulties in relating the much-larger tool repertoire from Tingrith to the more-limited assemblages from sites to the north-east, some kind of general contemporaneity between the sites would be logical. Compared to the smaller

assemblages, which appear to have resulted from short-stay sites or even isolated knapping activities, Tingrith appears to have been a favoured area for settlement. The apparent difference between the burin-orientated assemblage from Ruxox Farm, Maulden, and that from Tingrith, a site where microliths were common but only one burin was identified, is of particular interest in view of the microwear results. At Tingrith, microwear analysis confirmed that the main functions among the awls and pointed tools were scraping and, to a lesser extent, boring (perhaps including engraving), involving medium-hardness materials (see Candy this volume). The low incidence of boring, even among the awl concentration observed in Grid Squares 37E and 38E, might actually indicate a similar site function to that carried out at Ruxox Farm, despite the apparent artefactual differences. Bone, antler or wood working would have been the most logical site functions at Ruxox Farm (although without the benefit of microwear study this remains a supposition), and these, or similar, activities, might equally have been carried out at Tingrith in squares 37E and 38E where the awl concentration was identified. Contemporaneity between the two sites, as well as others in the same area, is possible and it is tempting to interpret these two assemblages as evidence of related sites in a mobile cycle of encampments designed to take advantage of, and process, seasonally-available resources in a favourable riverine environment on and around the Greensand ridge. This patterning within the landscape conforms to the general model of preferred Mesolithic site location - south-facing slopes and vantage points on sandy soils (Clarke 1976, 475; Jacobi 1978b, 77; Mellars 1976, 380, Saville 1981, 61). To the north, among fieldwalking assemblages from the east Warwickshire plateau, a similar Mesolithic preference for 'higher-ground sandy locations' was noted, while river valley activity appeared to be more restricted, although the evidence might have been obscured by alluviation (Saville 1981b, 61).

In conclusion, the recovery of chronologically-mixed assemblages from both Ruxox Farm and Tingrith indicates the reoccupation of favourable locations over time. While our interpretation of these phases of activity is limited by chronological mixing, problematic debitage and a paucity of other finds, it has been possible to identify possible occupation *foci* among the much larger assemblage from Tingrith, an important site on both a local and regional level, illuminating an area where prehistoric activities had been previously considered to be ephemeral and largely Mesolithic. In spatial and functional terms, the Later Mesolithic component of the assemblage has proved more useful, revealing other dimensions to a sparse collection of local working floors and setting them in a wider context, as possibly different aspects of an annual cycle of related, special-purpose camps.

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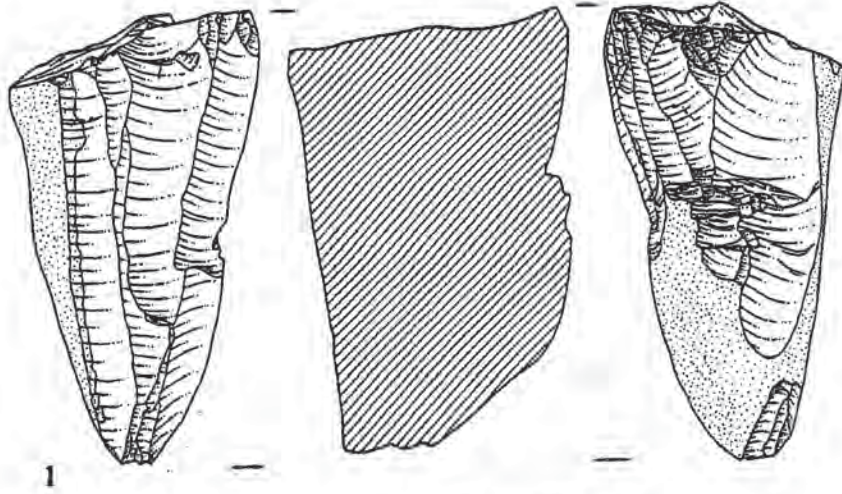
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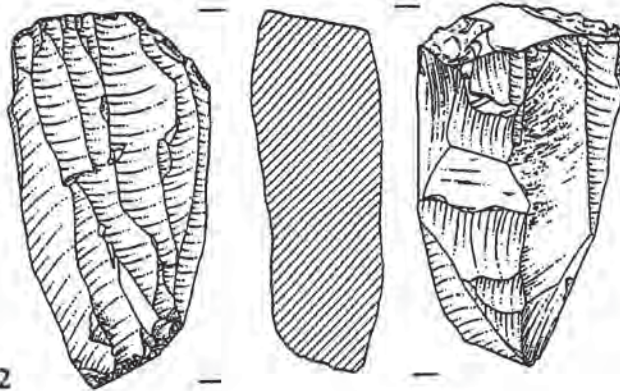
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Catalogue of Illustrated Pieces

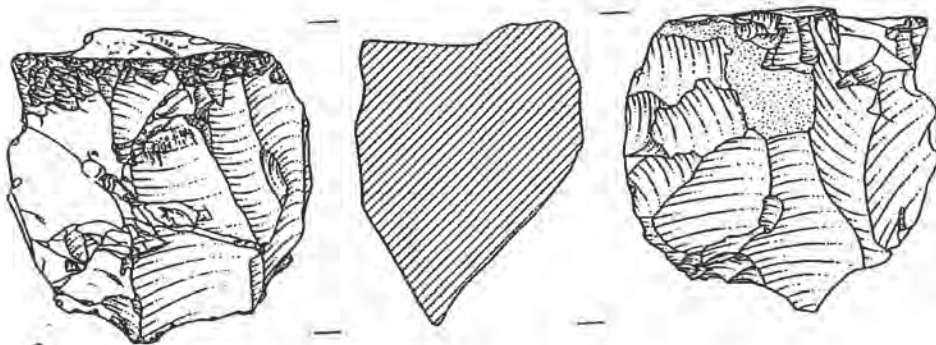
1. Single-platformed, pyramidal blade core, with hinge fractures, blue-grey in colour resulting from partial re-cortication. 29B, 11.
2. Opposed platformed core, with narrow blade detachments, opaque blue-grey/white, almost totally re-corticated and partially burnt. 49G, 3.
3. Multi-platformed, light grey, partially-re-corticated flake core, with hinge fractures. 49G, 3.
4. Multi-platformed blade core, with a large crystalline inclusion, light brown flint. 56D, 5.
5. Core, with broad flake detachments made from a split pebble, medium-grey flint. 7c, 23.
6. Isosceles triangle with total white re-cortication. 12, SF159.
7. Obliquely-blunted point, blunted at left side, light grey in colour with partial white re-cortication. 31F, 11, SF 75.
8. Obliquely-blunted point, blunted at left side, light grey in colour with partial white re-cortication. 44D, SF 14.
9. Obliquely-blunted point, blunted at right side with micro-serration on left side, light grey in colour with partial white re-cortication. 31E, SF 9.
10. Backed point, with distinct 'needle' tip and some retouch at lower right edge, light grey flint. 41F, 14.
11. Backed point, with distinct 'needle' tip and retouch on both sides, light beige in colour with partial white re-cortication. 38E, SF 56.
12. Backed point, with retouch on left side, light beige in colour with partial white re-cortication. Area 4, SF 146.
13. Backed point, with retouch on left side, white in colour, totally re-corticated. 28B, 22, SF 78.
14. Backed blade, with retouch and traces of utilisation at tip and bottom left side, light beige flint. 28B, 11.
15. Backed blade, with retouch and traces of utilisation on both sides, tip broken, light grey flint. 41F, 3.
16. Backed blade, with retouch and traces of utilisation at right side, light orange flint. 41F, 3.
17. Point, retouched on left side of tip, light grey flint. 155.
18. Awl, opaque light grey flint. 37E, 3, SF 116.
19. Denticulated flake, opaque light grey flint. A2, 'surface'.
20. Pointed tool/borer, medium-grey flint. A1, 'surface'.
21. Composite scraper/borer, light grey opaque flint. 29B, 23, SF 91.
22. Discoidal knife, light grey opaque flint. No location number.
23. End scraper, with a notched edge worked on the underside, dark grey flint. 38E, 20, SF 63.
24. End scraper, dark grey flint. Area 1, +, SF 136.
25. Discoidal scraper, medium grey flint, slightly burnt. 31F, 5, SF 31.
26. Thumbnail scraper, light grey flint. 43, SF 167.
27. Thumbnail scraper, light grey flint. A1, 'surface'.
28. Knife with pressure-flaking on left side and partial re-cortication on lower right, medium-grey flint. 42B, 11, SF 68.
29. Large barbed and tanged arrowhead, translucent beige flint, conforms to Ballyclare Type C in Green's arrowhead typology (1984, 28-29). 29B, 1, SF 89.
30. Tanged arrowhead without barbs, medium-grey flint, pressure-flaked through surface re-cortication, conforms to Sutton B type in Green's arrowhead typology (1984, 28-29). 40F, SF 12.
31. Barbed and tanged arrowhead with part of one barb broken, white from total re-cortication, conforms to Sutton A type in Green's arrowhead typology (1984, 28-29). 17C, 1, SF 104.



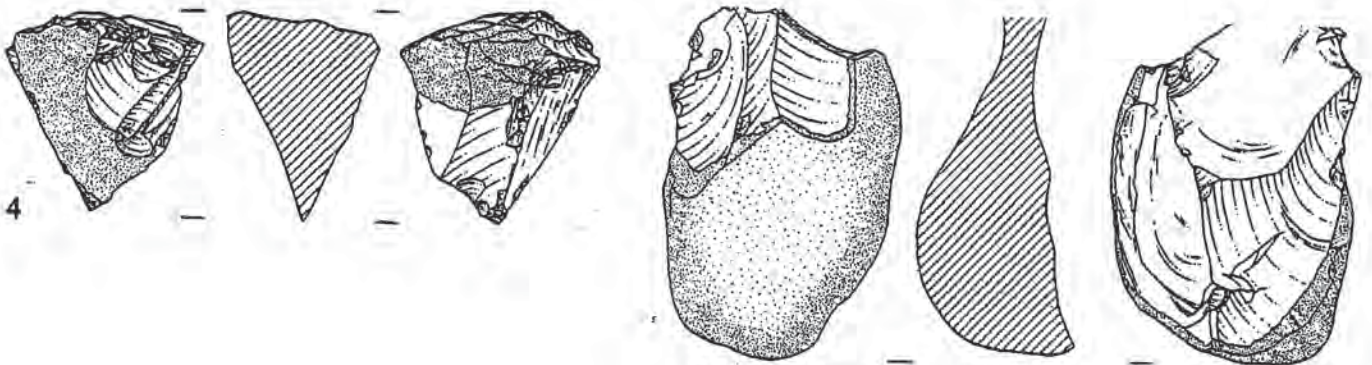
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Figure 1

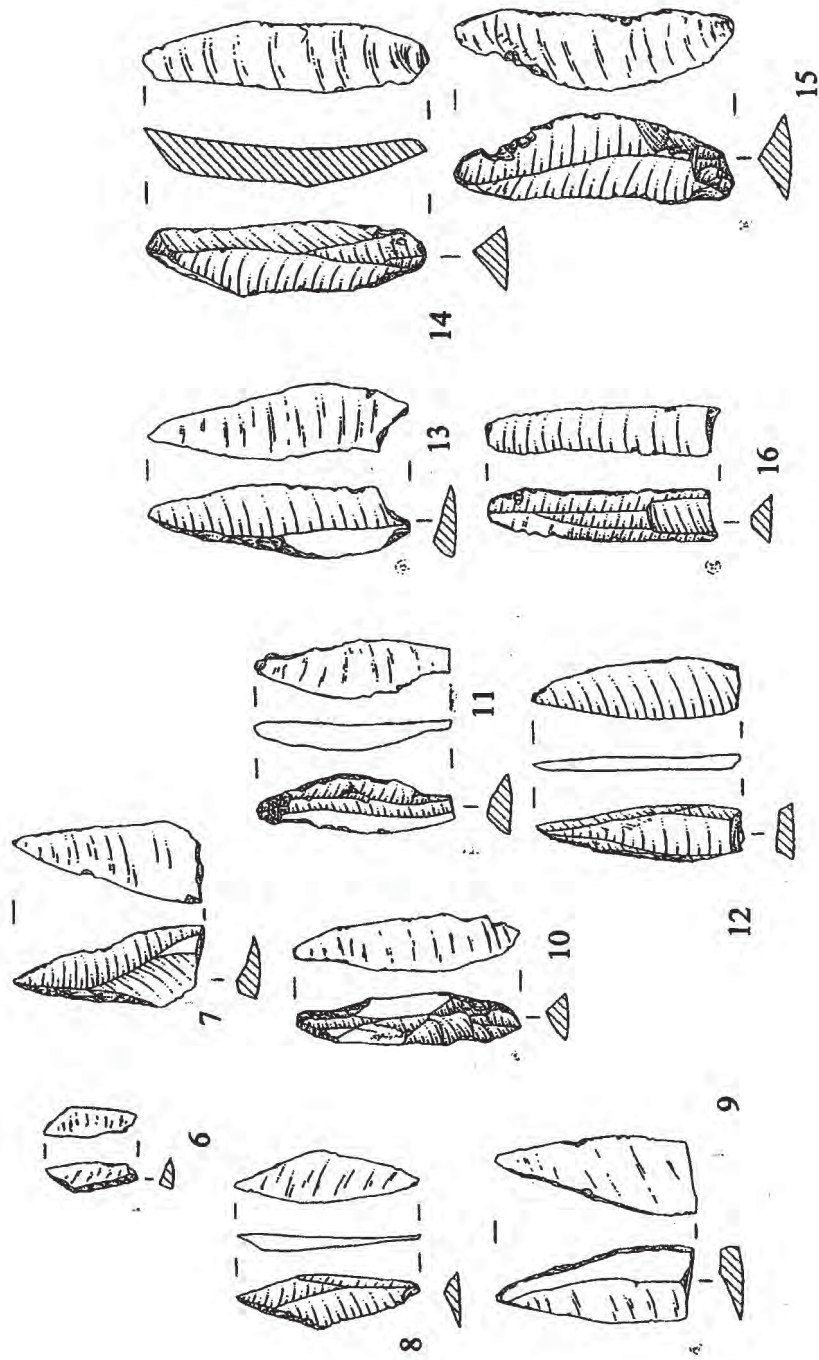
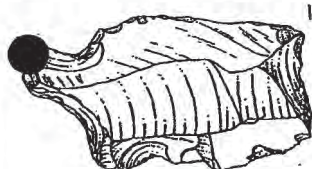
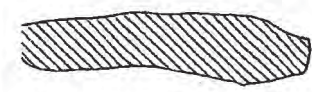
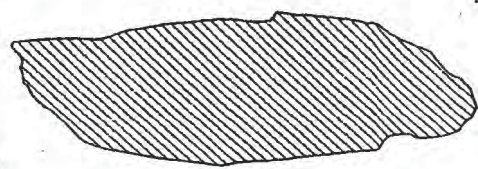
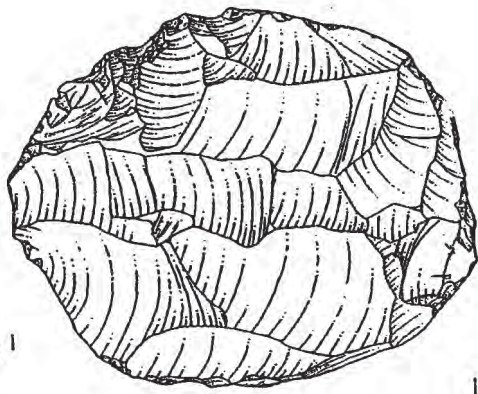


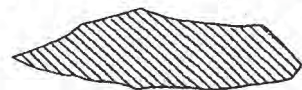
Figure 2



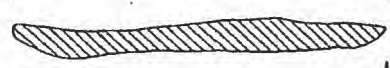
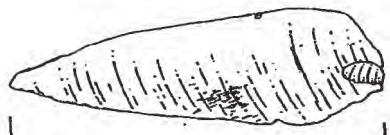
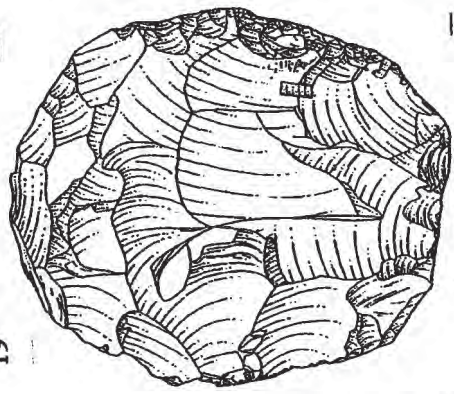
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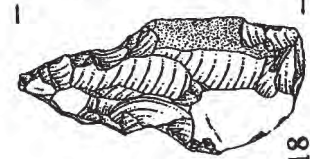
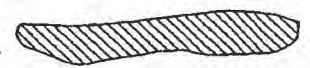
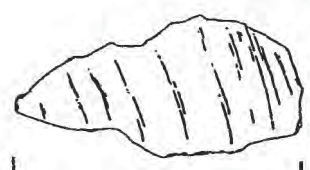
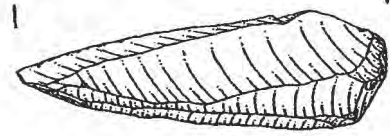
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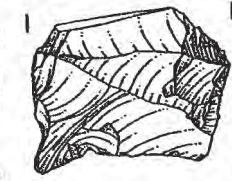
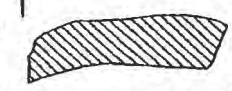
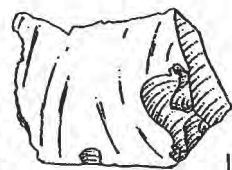
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18



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Figure 3

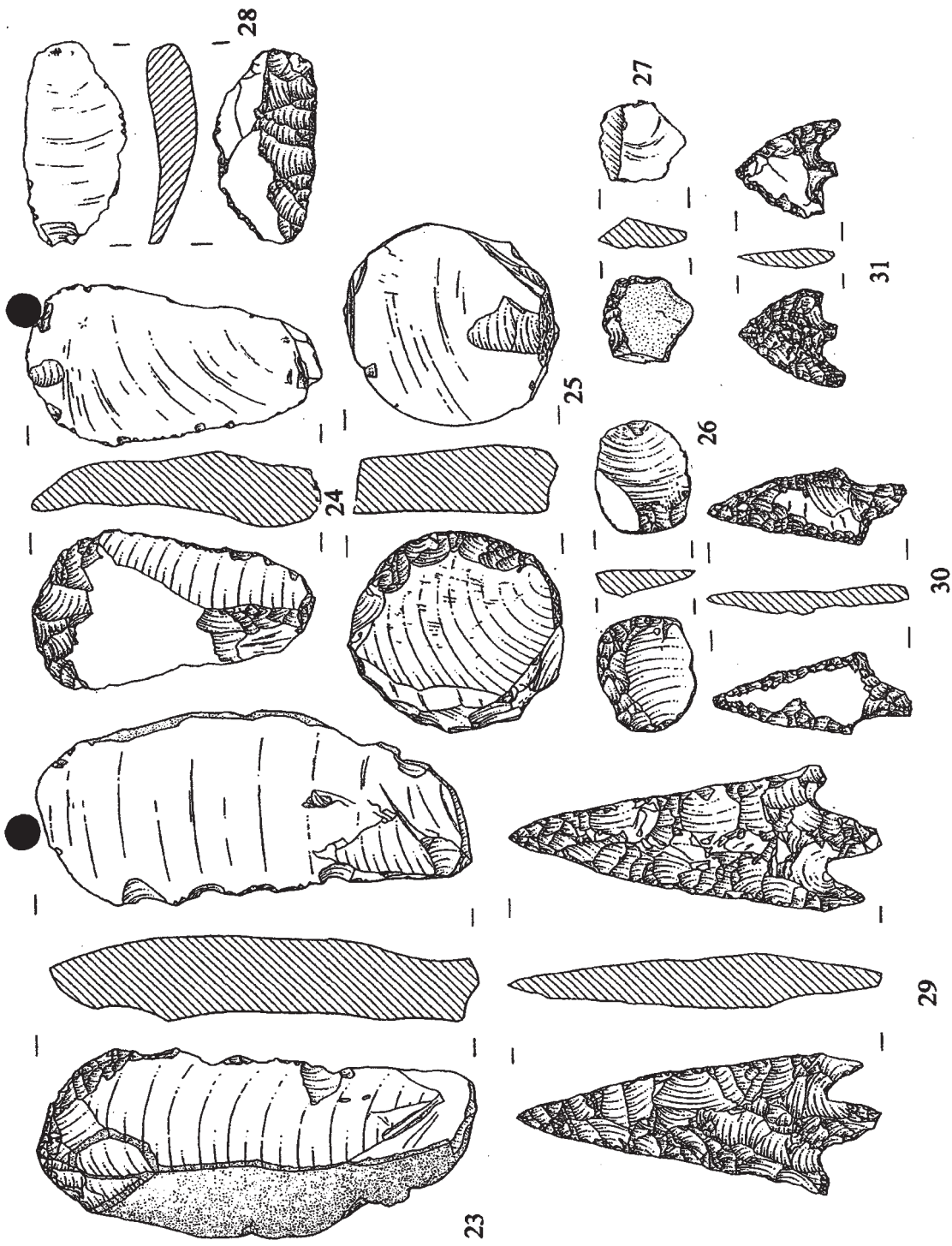


Figure 4

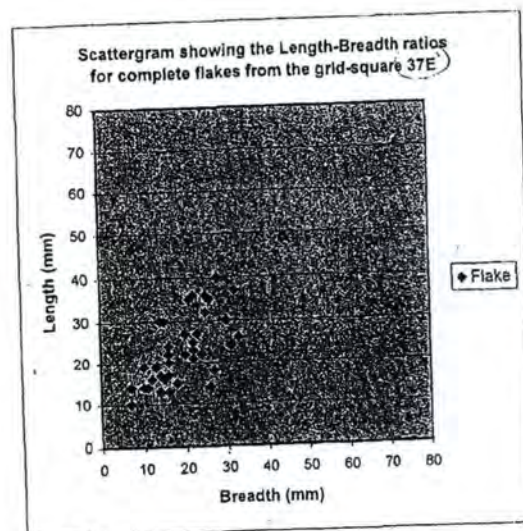
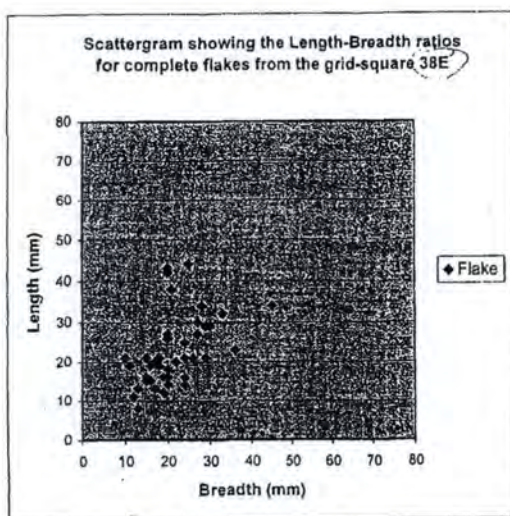
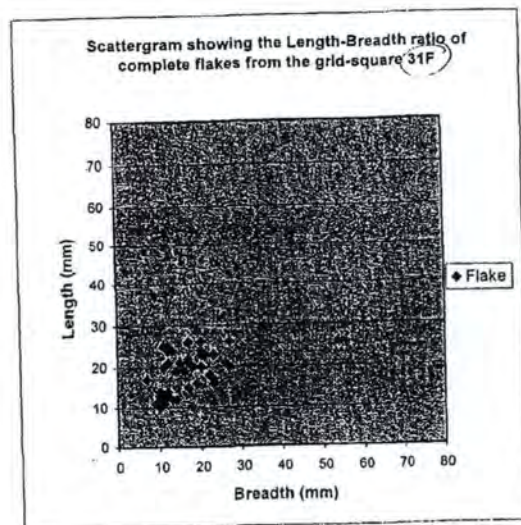
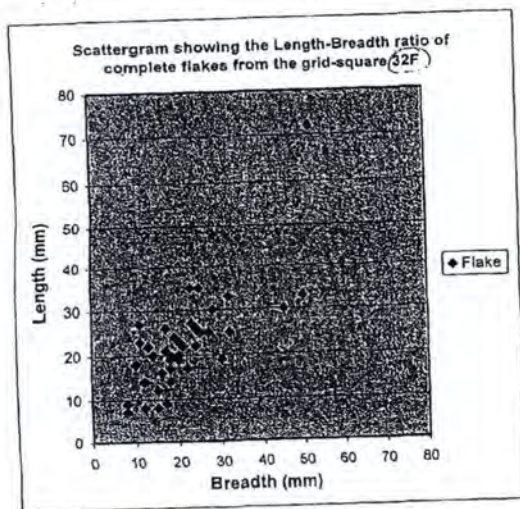
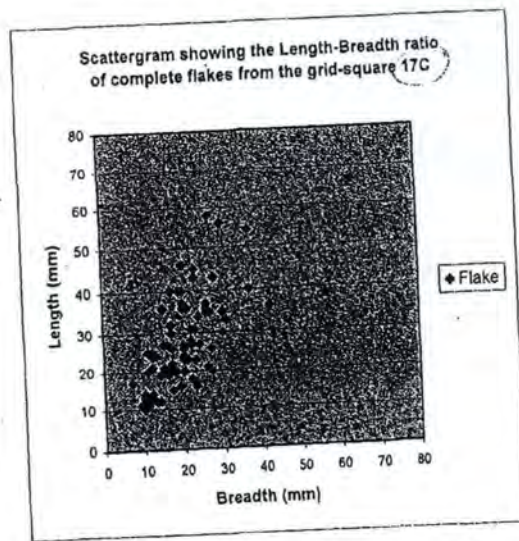
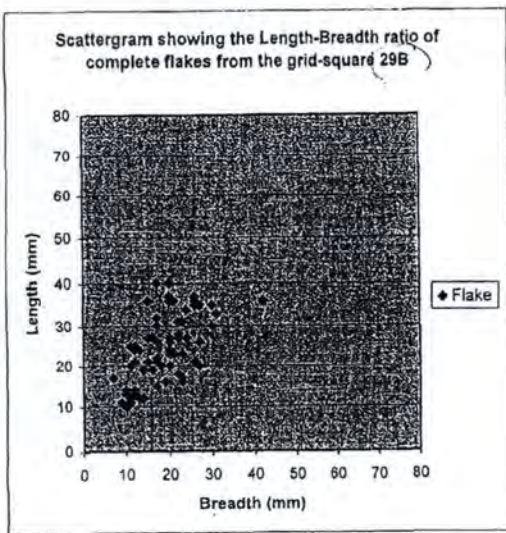


Figure 5: Scattergrams of flake dimensions in key grid squares

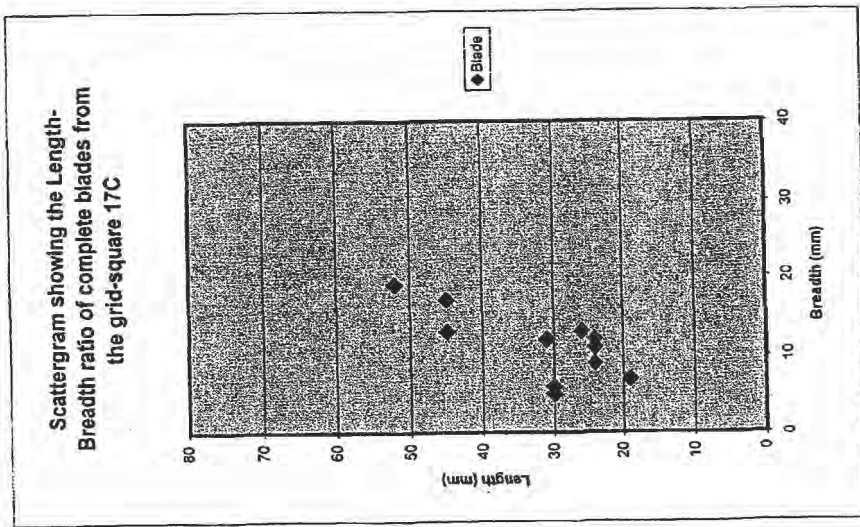
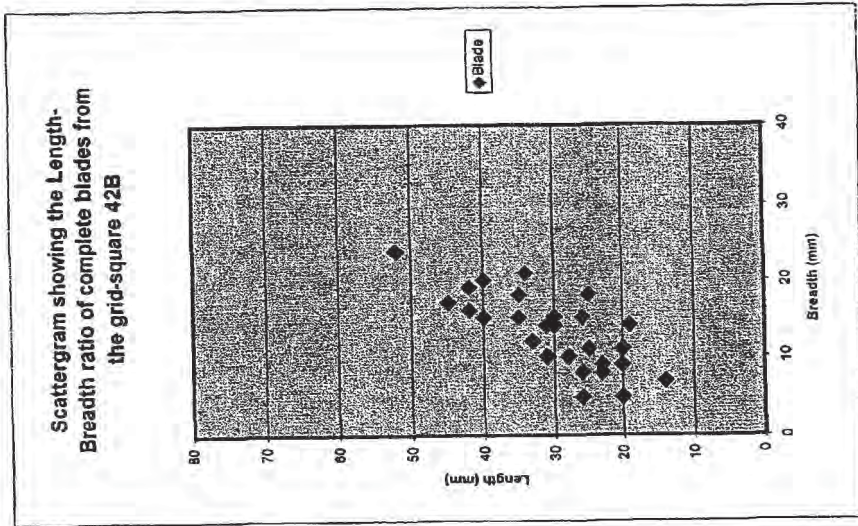
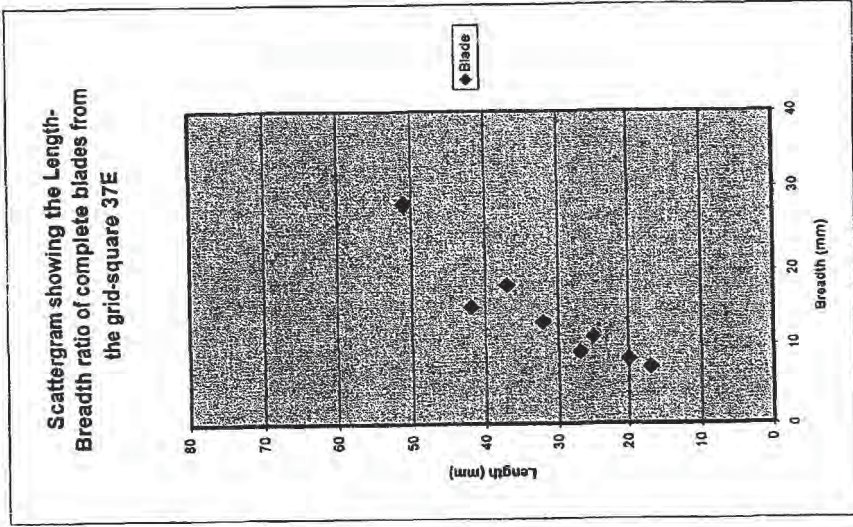


Figure 6: Scattergrams of blades from key grid squares

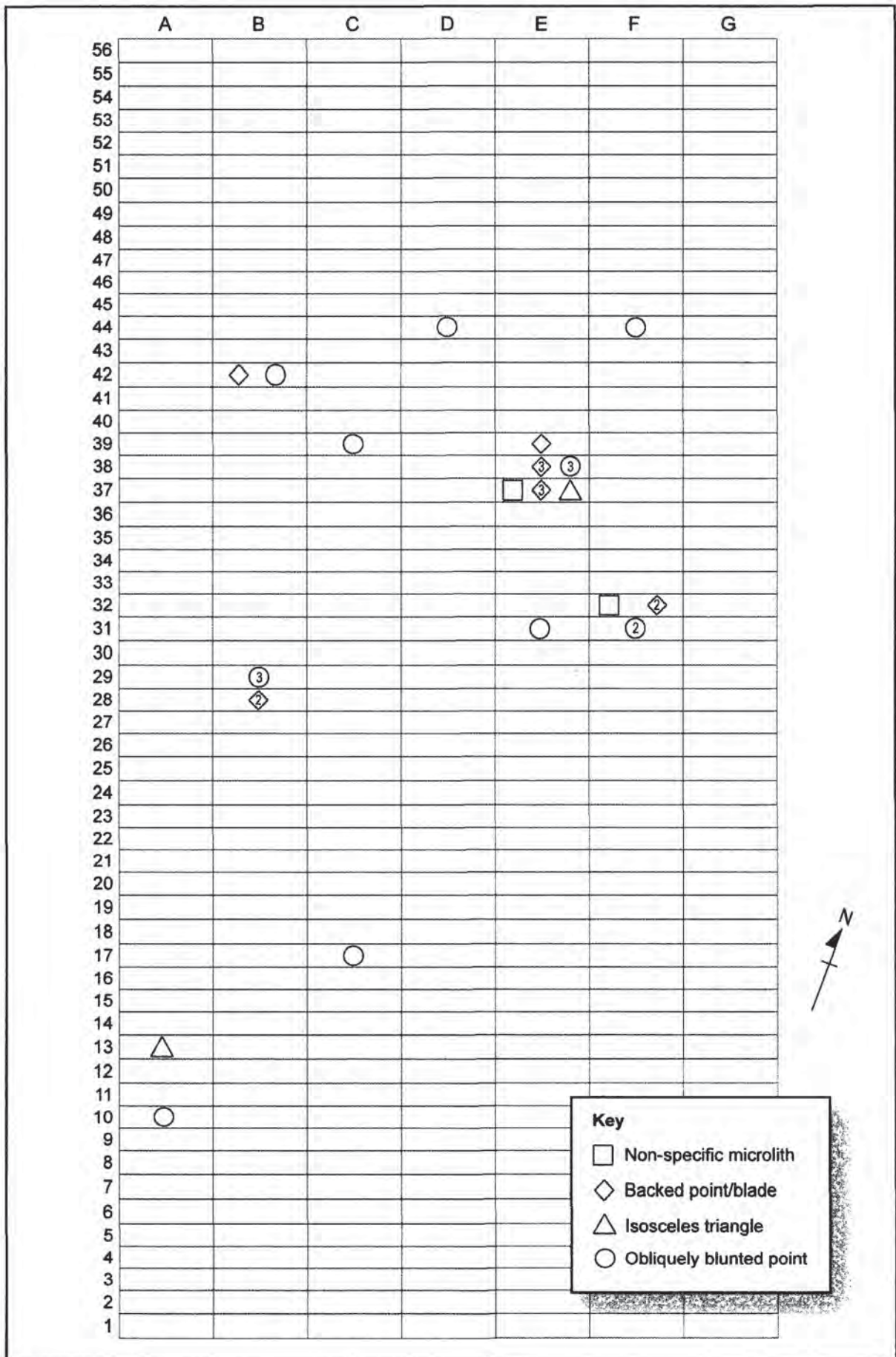


Figure 7: Distribution of microlith sub-types in the excavated grid squares.

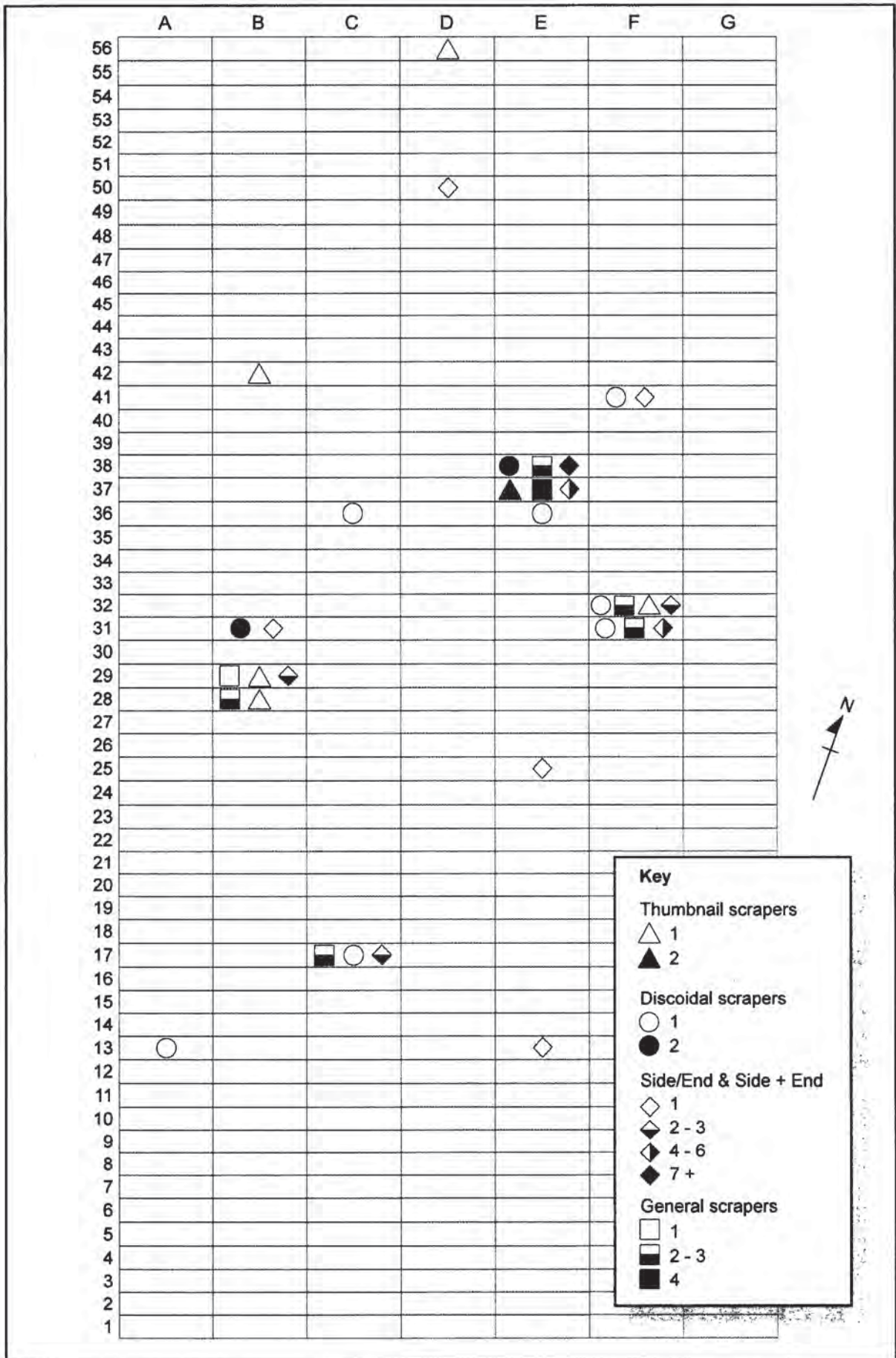


Figure 8: Distribution of scraper types by grid square, excavation and fieldwalking data combined.

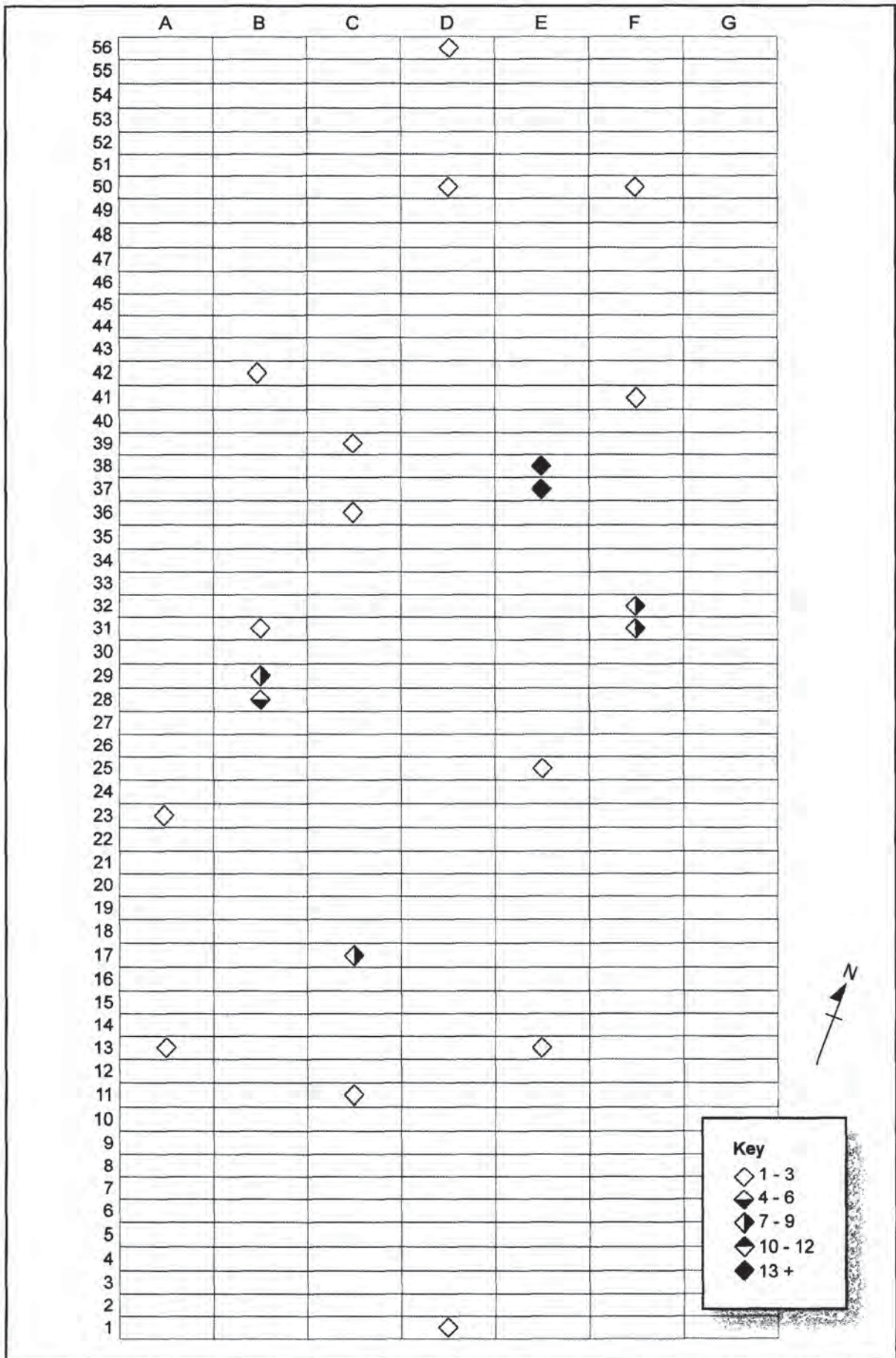


Figure 9: Distribution of scrapers, awls and miscellaneous pointed tools by grid square, excavation and fieldwalking data combined.

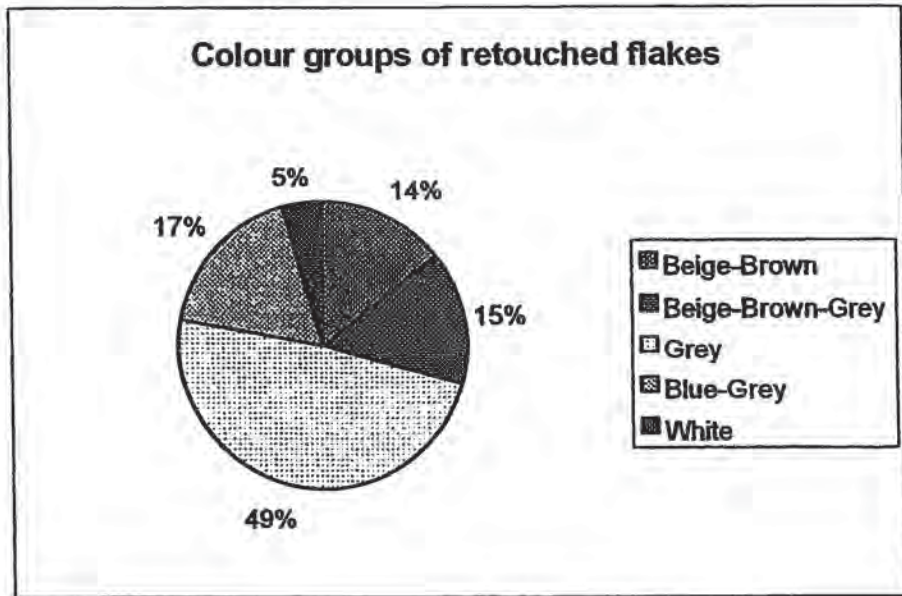
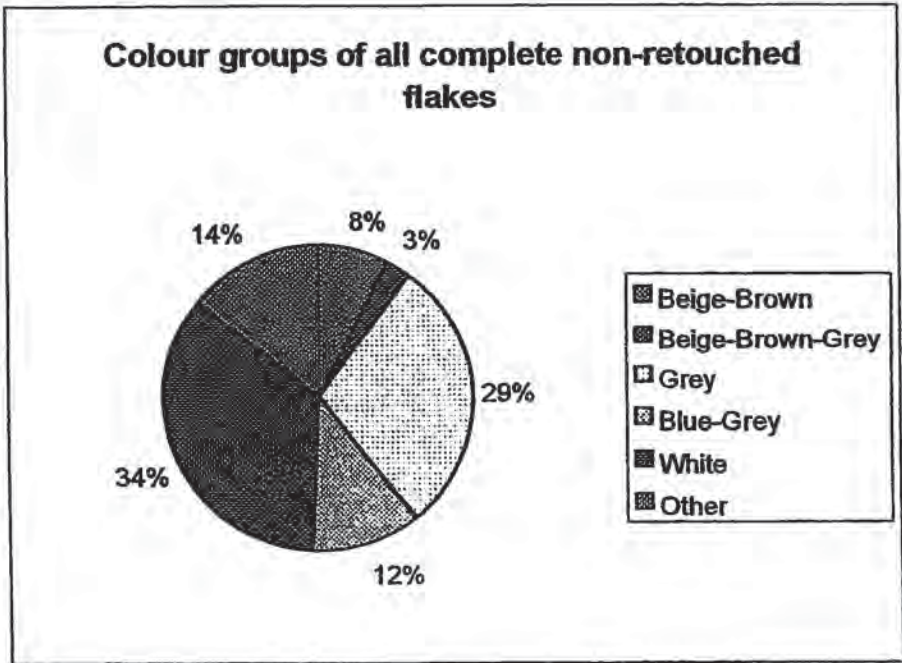


Figure 10: Colour groups of retouched and non-retouched flakes.

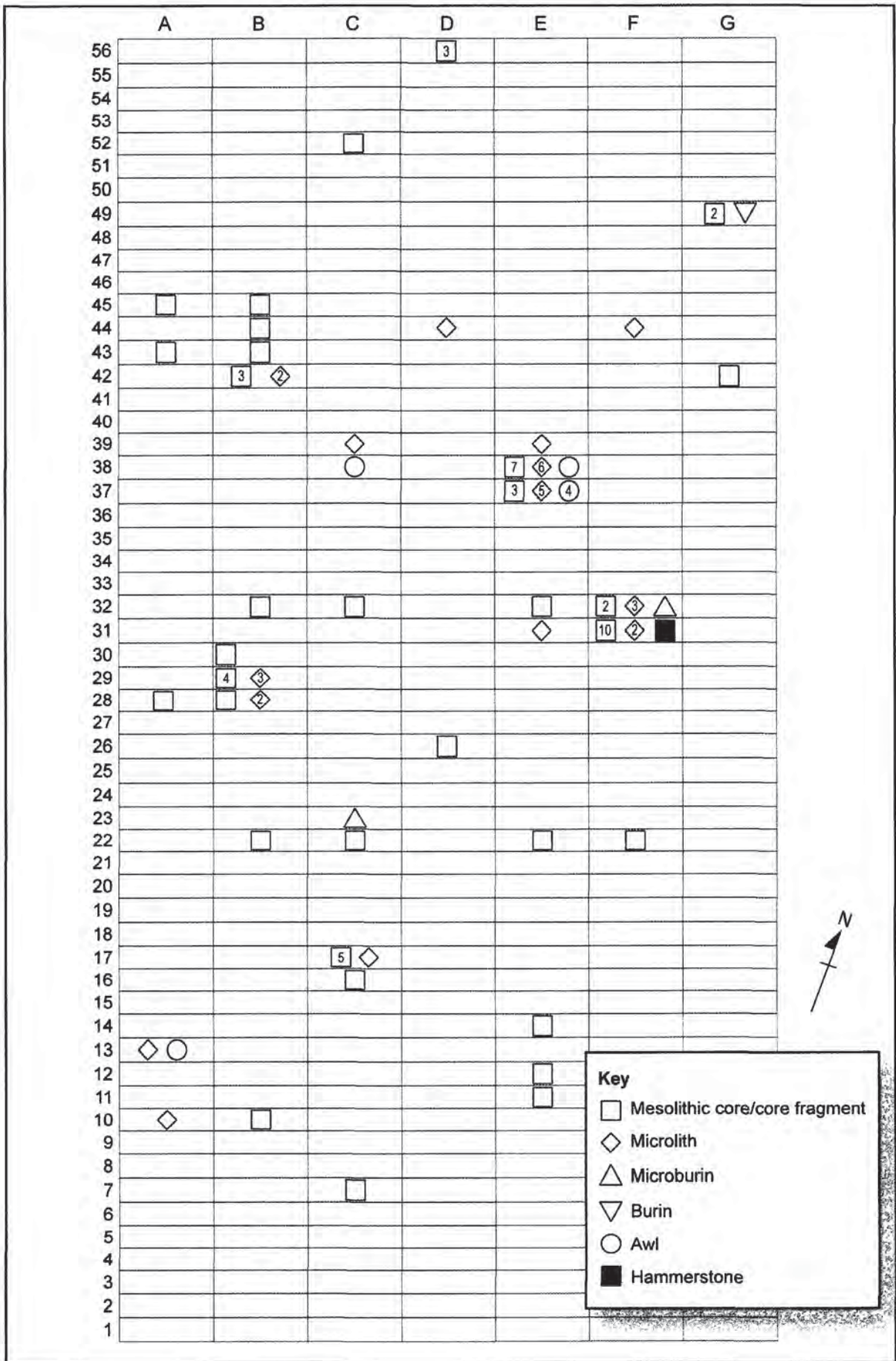


Figure 11: Distribution of Mesolithic tools and waste by grid square.

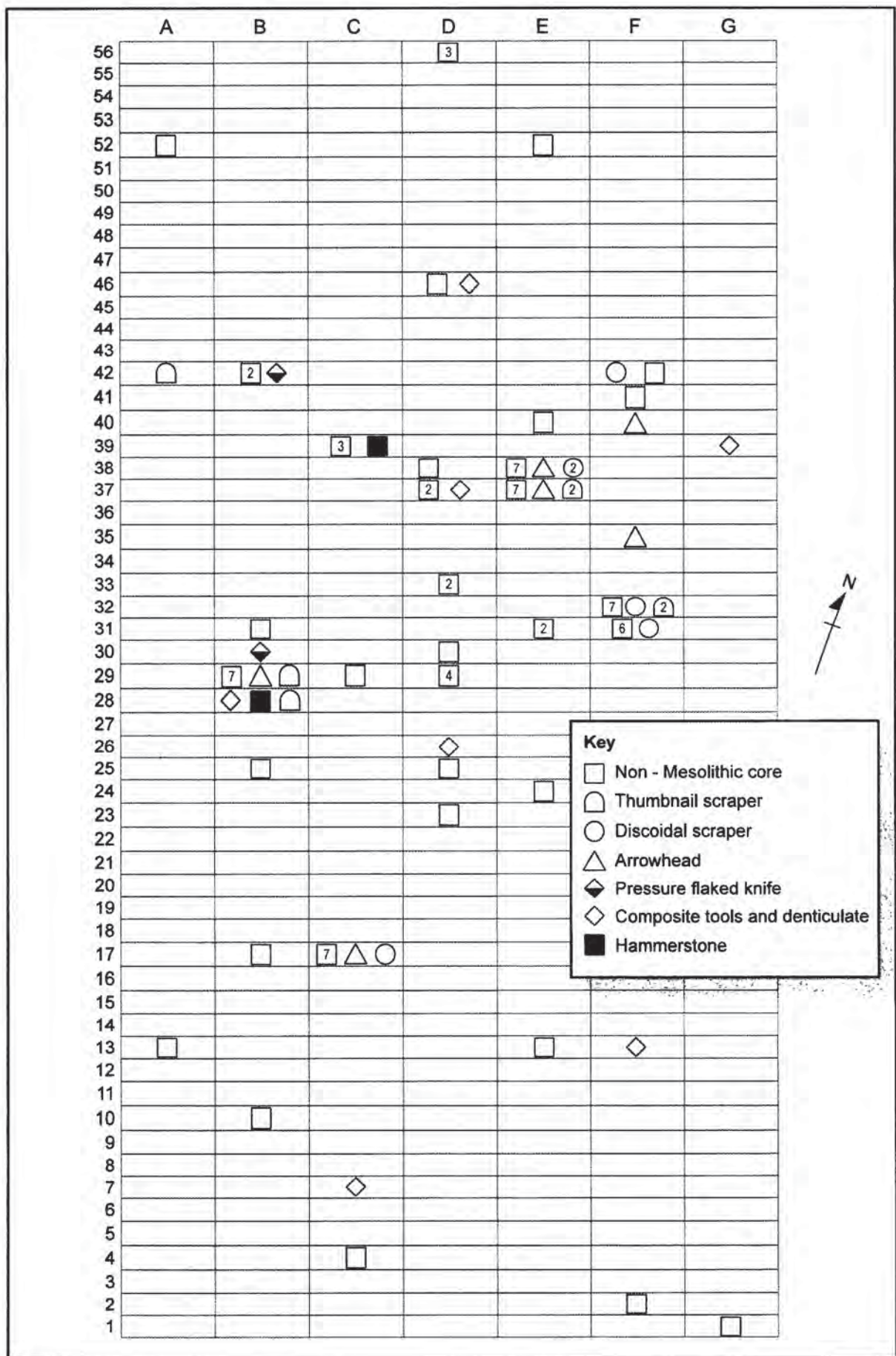


Figure 12: Distribution of Neolithic and Bronze Age tools and cores by grid square.

Appendix 16

Tingrith: flint microwear analysis

Julie Candy

Tingrith Flint Microwear Study by Julie Candy

Methodology

Low resolution microwear analysis was performed on a sample comprising 730 pieces of the Tingrith flint collection. This sample consisted of all pieces that during recording had been considered to be either retouched or utilised.

The study was primarily concerned with the identification and classification of edge-wear damage, although the presence of other characteristics such as polish was noted on occasional pieces. Some pieces were excluded from the study, as their edge damage was deemed to represent post-depositional wear such as plough-damage. Following the advice of Andrew Brown, edge-wear damage was recorded in terms of its position on the flint, according to the sort of use it represents (cutting/whittling, scraping or boring), and in relation to the hardness of material worked (hard, medium or soft). Although no attempt has been made to correlate the flint with specific materials, it is envisaged that there is a correlation between the three 'hardness' groups and certain materials. These materials include: hard woods, bone and antler (hard), hide and green woods (medium) and raw meat or plant materials (soft). It is acknowledged that the 'soft' group may be under-represented due to the fragility of the sharpest, and thus weakest, edges which display the characteristic 'half-moon' pattern of edge-wear (Andrew Brown *pers. comm.*).

The results of the study are presented below. The different classes of flint are discussed in terms of the quantity which displays edge-wear and retouch, the intensity of use per flint (number of sides that have been used), the presence of any unusual characteristics, and finally a summary of material hardness/action proportions. The second part of the results section discusses the spatial aspects of the Tingrith collection.

Results

Classes of Flint

Flakes

Flakes comprise the largest proportion of the microwear sample, with 386 pieces undergoing examination. Of these, 272 individual edges were found to have use-wear but no retouch, 143 edges had both retouch and edge-wear, and 13 edges displayed retouch but with no edge wear. Some flakes possessed other characteristics, such as: retouch through recortication -13; serration - four; notching -10; utilisation on a point - three; polish - four; and fine retouch -11. A total of 262 flakes had been utilised on just one side, 99 flakes on two sides and 25 had edge-wear patterns on three sides. This may be represented by percentage values 67.8%, 25.7%, and 6.5%. The classification of episodes of edge-wear according to use action and hardness of material is summarised in Table 1. These results indicate that the vast majority of the edges examined in the microwear sample (89.5%) had been used on medium hardness materials. Hard and soft materials are represented by 10% and 0.5% of the sample respectively. The predominant action indicated by the flake sample is scraping at 60.9%, with cutting/whittling at 38.9%, and boring at 0.2%. The majority of the flints

in this sample are characterised by edge-wear patterns, which testify to the scraping of medium-hardness materials (54.4%).

	Hard	Medium	Soft	Total edges
Cutting/ Whittling	16	150	1	167
Scraping	27	254	1	262
Boring	0	1	0	1
Total edges	43	405	2	430

Table 1: Microwear Results - Flakes

Blades

Blades represent the second largest category of the microwear sample, with a total of 180 pieces displaying evidence of utilisation (Table 2). One hundred and thirty six blade edges were found to possess edge-wear with no retouch, 56 displayed both retouch and edge-wear, and three edges were retouched but did not display any evidence of actual use. Other characteristics noted include: retouch through recortication – seven; serration – two; notching – three; polish – two; and fine retouch – two. In terms of intensity of use per blade, 121 had been utilised on just one side, 53 on two, and six on three. This ratio - 67.2%:29.4%:3.3% - is very similar to that calculated for the flakes, with just a slightly-smaller proportion of three-sided utilised blades being present. Of the blades, 90.3% had been used on medium-hardness material, 5.3% on hard and 4.4% on soft. The higher-than-average percentage of pieces used for the working of soft materials may reflect the suitability of this tool type for the working of plant matter and meat. Alternatively, it may reflect a higher post-depositional durability of edges on blade-shaped flints. Scraping and cutting/whittling are much more evenly-represented amongst the blades, at 47% and 43% of the examined edges respectively. No instances of boring were noted.

	Hard	Medium	Soft	Total edges
Cut/ Whittling	5	89	7	101
Scraping	6	97	2	105
Boring	0	0	0	0
Total edges	11	186	9	206

Table 2: Microwear Results - Blades

Cores and Core Debris

This group comprises all cores, core fragments and core rejuvenation flakes (Table 3). A total of 19 were utilised – ten edges possessed edge-wear damage with no retouch, ten had been retouched and displayed edge-wear. Only one edge had been retouched, but lacked signs of edge-wear. One piece had been retouched through recortication and one possessed some polish. The data indicate that the intensity of use ratios compares well with the flakes and blades. Thirteen had been used on just one edge, five on two and just one on three edges (68.4%:26.3%:5.3%). Medium-hardness material again predominates in this group at 90%, as does scraping (66.6%). There are no examples of boring or the working of soft materials in this class group.

	Hard	Medium	Soft	Total edges
Cutting/ Whittling	0	6	0	6
Scraping	2	12	0	14
Boring	0	0	0	0
Total edges	2	18	0	20

Table 3: Microwear Results - Core and Core Debris

Discoidal and Thumbnail Scrapers

These scraper types are considered separately, as they are particularly chronologically-diagnostic (Table 4). A total of 28 exhibited use-wear characteristics, with seven edges displaying no retouch, 18 exhibiting retouch and edge-wear damage, and four with retouch but no edge-wear. These scraper types exhibit a greater intensity of use per number of edges; 11 were utilised on just one edge, eight on two edges, and six on three edges, a percentage ratio of 44%:32%:24%. The predominant material worked evidenced from the data is again of medium hardness (85.7%) and, unsurprisingly, the main action present is scraping (85.7%). There are no examples of boring present.

	Hard	Medium	Soft	Total edges
Cutting/ Whittling	0	3	0	3
Scraping	1	15	2	18
Boring	0	0	0	0
Total edges	1	18	2	21

Table 4: Microwear Results - Discoidal and Thumbnail Scrapers

Other Scrapers

This category includes all the other scraper types (Table 5). A total of 60 had been utilised, with nine individual sides displaying edge-wear but no retouch, 31 exhibiting both retouch and use-wear, and nine possessing retouch but without edge-wear. Two had been retouched through recortication and three had utilised points. The intensity of use values is fairly typical of most of the collection, with 41 utilised on a single edge, 15 on two edges, and six on three. One denticulated side and end scraper had four edges which had either been retouched or utilised, or both. The percentage ratios are 65%:23.8%:9.6%:1.6%. Medium-hardness materials are again overwhelmingly-represented at 90.4%, as is scraping at 85.7%. Boring and the working of soft materials do not feature at all in this category.

	Hard	Medium	Soft	Total edges
Cutting/ Whittling	1	8	0	9
Scraping	5	49	0	54
Boring	0	0	0	0
Total edges	6	57	0	63

Table 5: Microwear Results - Other Scrapers

Awls, Burins and Miscellaneous Pointed Tools

The burin, eight awls and 13 miscellaneous pointed tools that exhibited evidence for use-wear are considered together as a single category (Table 6). In total, 14 edges had been utilised, 13 had been retouched and displayed edge-wear, and two had retouch but no sign of utilisation. Fourteen instances of utilisation on a point reflect the nature of these tool types. Two pieces were notched and one exhibited polish. The data concerning intensity of use indicate that flints in this category are more likely to have been worked on more than one side, in other words these tool types were not used merely on their points but also served other purposes. Nine were utilised on one side, eleven on two, three on three sides and one awl had been utilised on four sides (37.5%:45.8%:12.5%:4.2%). The results indicate that 89.6% of the worked edges were used on medium-hardness materials. Soft materials are not represented at all. As may be expected, the evidence for boring is much greater in this category, accounting for 17.2% of the points examined. The other flint points that exhibited use-wear patterns consistent with a scraping action may be explained by functions such as engraving.

The single burin identified in the collection appears to possess four edges which all display both fine retouching and use-wear patterns. One side had been used to cut or whittle and three had been used to scrape. All the edges had been used on a medium-hardness material.

	Hard	Medium	Soft	Total edges
Cutting/ Whittling	2	7	0	9
Scraping	0	15	0	15
Boring	1	4	0	5
Total edges	3	26	0	29

Table 6: Microwear Results - Awls, Burins and Miscellaneous Pointed Tools

Denticulates and Knives

The ten denticulates and three knives of the collection, all of which demonstrated use-wear and/or retouch characteristics, have been grouped together as a single category (Table 7). Six edges exhibited use-wear and no retouch, ten had been retouched and utilised, and one edge had been retouched but showed no microwear traces. Of the denticulates, in addition to notching (which is an anticipated characteristic of this tool category), one demonstrated utilisation on a point and one possessed traces of polish. The values calculated for intensity of use indicate a more even balance of pieces that had been worked on either one or two sides (six pieces each). Only one denticulate had been worked on three sides (46.2%:46.2%:7.6%). In keeping with many of the other categories discussed above, evidence for boring and the working of soft materials is not present. Medium-hardness materials account for 86.6% of the examined edges. Scraping also predominates at 66.6%.

	Hard	Medium	Soft	Total edges
Cutting/ Whittling	1	4	0	5
Scraping	1	9	0	10
Boring	0	0	0	0
Total edges	2	13	0	15

Table 7: Microwear Results - Denticulates and Knives

Serrated Flakes and Blades

Polish was not observed on any of the serrated flints, all of which were subjected to microwear analysis (Table 8). It may be noted, however, that the same edge-wear pattern was observed on all the serrated pieces suitable for microwear analysis and was indicative of a scraping function taking place on medium-hardness materials.

Class	Sub-Area	Comments	Colour	Weight	Utilisation	Area of Utilisation	Type of Utilisation
Flake	27D		Beige	2	Yes	RS	SM
Flake	29D		Light Beige	0.1	No		
Blade	31F		Light Blue-Grey	2	Yes	LP	SM
Flake	31F		Light Beige	16	Yes	LS	SM
Flake	42B		Brown-Grey	1	Yes	RS	SM
Blade	28B	?SICKLE	Yellow-Grey	10	Yes	LS	

Table 8: Microwear Results - Serrated Flakes and Blades

Microliths and Microburins

Many of the microliths in the Tingrith collection were either too abraded or too extensively recorticated to accurately identify or classify microwear traces. Of the 32 Tingrith microliths, only two were deemed suitable for use-wear analysis. Both had been retouched on only one side and neither exhibited any traces of edge-wear. Neither of the microburins exhibited any signs of retouch, which is not surprising since the term 'microburin' essentially refers to a waste product of the microlith manufacturing technique (Bordaz 1989, 94),

Spatial Aspects

Due to the mixing of chronologically-diagnostic tools discussed above, it has not been possible to entirely isolate discrete activity areas dated to specific prehistoric periods. Therefore an analysis of the results of the microwear study was undertaken in order to try and determine whether significant spatial characteristics existed within the data. First, the distribution of unusual characteristics, such as the presence of polish, retouch through recortication and very fine retouch, was examined. Secondly, a comparative study was made from the data deriving from the grid-squares 17C, 29B, 31F, 32F, 37E and 38E.

Unusual Characteristics

1. Polish

Polish was observed on nine pieces of flint from the Tingrith collection. The distribution is largely scattered, with the only small observable cluster of these pieces occurring within the close grid squares 29B and 31B. Three flints - two flakes and one core fragment - excavated from these squares exhibit polish. None was retouched, and they all had been used in the working of medium-hardness materials.

2. Retouch through Recortication

A total of 23 flints exhibited retouching through a pre-existing layer of recortication. Three flints - one side and end scraper and two flakes - were excavated from the same one metre square sub-division (31F 14). All exhibited edge-wear and all had been used to scrape materials of medium hardness. The scraper and one of the flints were blue-grey in colour, while the other flake was light blue-grey in colour. It is tempting to see these closely-located flints as representing a broadly-contemporaneous episode of flint working/use. Nine flints displaying retouch through recortication derive from the excavation of adjacent grid squares 37E and 38E. Like their counterparts in 31F, these flints - four flakes, four blades and one blade core - all exhibited retouch and edge-wear consistent with the scraping of materials of medium hardness. Two of the blades in 38E are of virtually-identical dimensions. With the exception of one of the blades, all of these flints were of a light blue-grey or blue-grey colour.

3. Fine Retouch

Fine retouch (characterised by very small, neat, regular scalar removals) was observed on a total of 14 flints - 11 flakes, two blades and one microburin. One small cluster, comprising three flakes, derives from the same one metre square sub-division (32F 16). These three were all used to scrape materials of medium hardness, with the exception of one edge that appeared to have been utilised on a hard material. A total of six pieces was excavated from the adjacent squares 37D, 37E and 38E, with two flakes coming from the same one metre square subdivision (37D 23). Again, the data from the microwear study indicate that all of this group had been used on materials of medium hardness. Scraping also predominates, although there are a few instances of cutting/whittling. Perhaps a more significant factor that unifies these six pieces that exhibit fine retouch is their colour - most are of a light brown or translucent beige - grey colour. It is again tempting to suggest that these flints form a related group within this particular locality.

Comparative Study: 17C, 29B, 31F, 32F, 37E and 38E

These grid squares were selected for reasons of the sheer quantity of flint which derive from these areas, from both excavation and fieldwalking. They also contained a significant proportion of retouched pieces and diagnostic tools. As mentioned above, the examination of tool types and diagnostic features of the flint did not define these localities in terms of a particular period. Indeed, the assemblages appear to be of a relatively mixed character. This analysis is intended to highlight any significant or unusual aspects present within these grid squares through the medium of the data collated during the microwear study. Four aspects of the data were considered, the results of which are summarised in Tables 9a-9d: a) The proportion of retouched and/or utilised pieces to non-worked material; b) The intensity of use, i.e. number of pieces with one, two, three or more retouched/utilised edges; c) The ratio of actions present (cutting/whittling, scraping, boring); and d) the ratio of hardness of material worked (hard, medium, soft).

a) The proportion of retouched/utilised pieces to non-worked material

All of the grid squares examined contained less than 5% retouched/utilised pieces. 17C contained the least, with just 2.6%, while 31F had the most, at 4.2%.

b) The intensity of use

The six grid squares may be divided into two broad categories in terms of intensity of use per flint. The first category comprises 17C and 38E, two grid squares which both contain a large proportion of retouched/utilised flints which had only been worked or used on one side (79.5% and 75% respectively). The second group, 29B, 31F, 32F and 37E, had a significantly-smaller proportion of 'one-sided' pieces (ranging from 50-59.4%) and a correspondingly-greater percentage of flints which had been worked or utilised on two, three, and occasionally four, edges. The data show that grid-square 17C represents the least intensity of use per flint, while 31F and 29B demonstrate the greatest intensity of use.

c) Action

The typical pattern amongst the grid squares examined is for scraping to outweigh cutting/whittling, at approximately two-thirds to one-third (31F, 32F and 37E). This ratio is surpassed by 38E where the proportion of scraping to cutting/whittling stands at 72%:28%. The two remaining grid squares illustrate a slightly different pattern. Indeed, for 17C the ratio is more or less even (53.4%:43.1%), while for 29B, cutting/whittling actually outweighs scraping (43.1%:53.4%). There would appear to be north-south progression, in which scraping predominates in the northernmost grid squares while cutting/whittling has a much greater representation in the southernmost squares. Boring is represented only in 29B and 32F (3.5% and 3.6% respectively).

d) Hardness

The working of medium-hardness materials vastly outweighs hard and soft materials in all the grid squares examined. This is particularly the case for 37E, where 100% of the retouched/utilised flints had been used on medium materials. Square 29B demonstrates the most variability, with the ratio of hard:medium:soft standing at 19%:75.8%:5.2%

<i>Grid Square</i>	<i>%</i>
17C	2.6
29B	3.2
31F	4.2
32F	4.1
37E	3.4
38E	2.9

Table 9:a) Proportion of retouched/utilised pieces to non-worked material

<i>Grid Square</i>	<i>% 1 side</i>	<i>% 2 sides</i>	<i>% 3 sides</i>	<i>% 4 sides</i>
17C	79.5	15.4	5.1	0
29B	52.2	36.9	10.9	0
31F	50	34.6	15.4	0
32F	57.8	33.3	6.7	2.2
37E	59.4	31.9	7.2	1.5
38E	75	22.9	2.1	0

Table 9:b) Intensity of Use

Grid Square	% Cutting/ whittling	% Scrape	% Bore
17C	48.6	51.4	0
29B	53.4	43.1	3.5
31F	38.2	61.8	0
32F	36.4	60	3.6
37E	38.8	61.2	0
38E	28	72	0

Table 9:c) Action

Grid Square	% Hard	% Medium	% Soft
17C	10.8	86.5	2.7
29B	19	75.8	5.2
31F	8.8	89.7	1.5
32F	5.5	94.5	0
37E	0	100	0
38E	2	96	2

Table 9:d) Hardness

Appendix 17

Tingrith: Pollen analysis of the valley peat sequence

Robert Scaife

Tingrith: Pollen Analysis of the Valley Peat Sequence

Robert G Scaife

I.) Introduction

Although there have been some recent pollen studies in the Bedford region there are still few pollen data available from which inferences regarding late-Devensian and Holocene vegetation and environment can be made. Where these do occur, these do not have adequate radiocarbon, absolute dating control. Thus, generalisations regarding Holocene vegetation changes in this region have in the past relied largely upon a more regional understanding of the environmental characteristics of the more studied regions of the Fenland to the east. This deficiency and the lacunae in our knowledge of past vegetation changes in this region is in part due to the paucity of suitable peat forming environments. This is now, to some extent, being rectified through the analysis of peat and sediments found in some of the counties principal river valleys (Scaife 2000a, 2000b). The Tingrith site is in the valley of the ***. Here, a peat sequence located during the pipeline development has provided a record of the Late-Devensian stadial and early Holocene (Flandrian Ia-b) period of dynamic vegetation and environment from the close of the last glacial cold stage. After a substantial hiatus in peat formation, there is evidence of the early Neolithic environment (Flandrian chronozone III) from *circa* 4,800 to Early Bronze Age at *c.* 3670 BP. A total of seven radiocarbon dates have been obtained for this profile providing a valuable pollen biostratigraphy for this region.

II.) Pollen Method

Samples of 2ml volume (taken from monoliths obtained during excavation) were prepared using standard procedures for the extraction of sub-fossil pollen and spores (Moore and Webb 1978 and Moore *et al.* 1991). Procedures are given in more detail in appendix 1. Pollen counts of generally 400 grains per level (the pollen sum) were made where preservation made this possible. Marsh and aquatic taxa and spores of ferns were counted in addition to this basic pollen sum. Absolute pollen frequencies were calculated using the addition of a known number of exotic markers to the known volume of sample (Stockmarr *Lycopodium* tablets). Pollen identification and counting was carried out using an Olympus biological research microscope fitted with Leitz optics and with phase contrast facility. Data obtained are presented in standard pollen diagram form plotted using Tilia and Tilia Graph (figure ***) with percentages calculated as follows:

Sum =	% total dry land pollen (tdlp)
Marsh/aquatic =	% tdlp+sum of marsh/aquatics
Spores=	% tdlp+sum of spores
Misc.=	% tdlp+sum of misc. taxa.

Taxonomy used in general follows that of Moore and Webb (1978) modified according to Bennett *et al.* (1994) for pollen types and Stace (1992) for plant descriptions.

III.) Lithostratigraphy

The stratigraphy (136 cm) comprises predominantly highly humified detrital peat with little or no structure in the upper levels becoming increasingly minerogenic in the lower half of the profile. The stratigraphy was described from the monoliths, in the laboratory as follows.

Depth in cm

0-46	Black, highly humified (but less than below) detrital peat.
46-49	Black detrital peat with sand inclusions/inwash.
49-69	Black detrital peat with occasional wood/twig fragments (52 cm, 65cm.).
69-90	Silty peat with silt lenses.
90-106	Black, highly humified detrital peat; no structure.
106-109	Transition between grey sandy silt and overlying peat.
109-119	Grey sandy silt.
119-114	Sand lens.
114-122	Humic sandy silt.
122-128	Sand lens.
128-136	Grey, humic sandy silt.
136---	Basal sands.

IV.) Radiocarbon Dating

Seven samples were submitted to Beta Analytic of Florida for radiocarbon measurement. These were 'standard' peat samples obtained from the monolith profiles at horizons of environmental change indicated by pollen analysis and stratigraphy. Radiocarbon dates are given in date BP with errors quoted at 1 sigma and where appropriate such as for the upper peat in calibrated form (according to Stuiver *et al.* 1993). These measurements have provided dates for the principal hiatus in the peat and for the changes in the successional vegetation of the early Holocene. Further data are given in discussion and in table I.

V.) Biostratigraphy: Pollen Zonation

Six local pollen assemblage zones (l.p.a.z. and local pollen assemblage sub-zones l.p.a.s.z.) have been recognised. From the base of the profile at 136 cm upwards these are characterised as follows.

l.p.a.z TING:1 136 cm - 98 cm: Poaceae-Cyperaceae-non arboreal pollen. Poaceae (to 70%) and Cyperaceae (to 60%) are dominant within the diverse range of herb taxa which are present. These include indicator taxa-*Helianthemum*, *Artemisia*, *Saxifragaceae*, *Saxifraga stellaris* type, *Polygonum bistorta* type and *Armeria* 'A' and 'B' line. There are also high values of *Rumex* spp., *Galium* and *Asteraceae* types in this zone. Trees comprise *Betula* (15-20%) and *Pinus* (c.15%). *Picea* and *Abies* occur sporadically (?derived). Shrubs comprise

Depth cm.

0-3	3670+/-60 BP	(Beta-118063)	Top of peat profile.
10-13	4790+/-60 BP	(Beta-143285)	Base of upper peat at hiatus.
38-42	8950+/-50BP	(Beta-143286)	<i>Pinus</i> (Boreal) maximum- <i>Corylus avallana</i> , <i>Ulmus</i> , <i>Quercus</i> introduction and establishment.
58-62	9560+/-70BP	(Beta-143287)	End <i>Betula</i> maximum/start of pine expansion.
72-74	9730+/-70BP	(Beta-143288)	Start of pre-Boreal birch expansion
80-85	9950+/-80BP	(Beta-112215)	<i>Juniperus</i> maximum. Devensian - early Holocene transition.
115-120	10,930+/-80BP	(Beta-143289)	Start of Younger Dryas Zone III. stadial.

Table 1: Radiocarbon dates given in years BP and corresponding environmental stratigraphic change.

Betula cf. nana, *Juniperus* (1-2%), *Empetrum nigrum* and *Salix*. A pollen assemblage sub-zone has also been recognised at the base of the profile.

l.p.a.s.z. TING:1.a. 136 cm - 126 cm: Lesser *Pinus* values than above but with *Betula* (c.18%) and a small peak of *Betula cf. nana*. There are some variations between the herbs in this pollen sub-zone and above.

l.p.a.z. TING:2 98 cm - 70cm. *Betula-Pinus-Juniperus-Filipendula-Poaceae*. This zone has been defined by expansions of *Betula* (increasing to c.30%) at the top of the zone, *Juniperus* (to 5%), *Corylus avellana* type (but sporadically) and *Filipendula* (to 25%). *Betula cf. nana* decreases. Conversely, there are reductions in *Pinus* (although subsequently expansion in sub-zone B) and herbs noted in l.p.a.s.z TING:1.). *Poaceae* and *Cyperaceae* remain the dominant herbs but with some reduction in percentages (40-50% and 30-40% respectively). Marsh taxa comprise *Cyperaceae* (30-40%) with *Typha latifolia* (peak to 5%) and *T. angustifolia* type (5%).

l.p.a.z. TING:3 70cm - 54 cm. *Betula*. *Betula* peaks to its highest values (85-90%) whilst there is a reduction of *Pinus* (5-7%). *Quercus* is incoming with small values while *Corylus avellana* type increases. There are reductions in *Juniperus* and herb types (*Galium*, *Asteraceae* types including *Artemisia*), *Caltha* type, *Ranunculus* type, *Poaceae* (to 5%). Spores become important with *Dryopteris* type increasing to sustained high percentages (40-60%).

l.p.a.z. TING: 4 54 cm - 30cm. *Pinus*. *Betula* values decrease sharply (l.p.a.s.z. TING:4.a.) while *Pinus* expands to its highest values (85-90%) along with *Corylus avellana* type. There is an overall reduction in herb percentages (*Filipendula*, *Poaceae*, *Cyperaceae*) and herbaceous diversity.

l.p.a.z. TING:5 30cm - 15cm. *Pinus-Ulmus-Quercus-Corylus avellana* type. This zone is delimited by the progressive reduction in *Pinus* (down to 15%) with increases in *Ulmus* (to c.18%), *Quercus* (10-12%), and *Corylus avellana* type (to high values-53%). *Alnus* is incoming. There are further reductions in herbaceous diversity with *Poaceae* at lowest percentages at the top of this zone.

l.p.a.z. TING: 6 15cm - 0 cm. *Ulmus-Quercus-Tilia-Fraxinus-Alnus-Corylus avellana* type. Radiocarbon dating demonstrates a clear hiatus between zone TING: 5 and TING: 6. This zone is characterised by expansion of *Alnus* (75%), *Tilia* (to 15%), *Fraxinus* (1-2%) and sporadic occurrences of *Populus*, and *Ilex aquifolium*. *Pinus* remains (10-20%) is present but at much lower levels than in l.p.a.z. TING: 5. There is an expansion of herbs with peaks of *Poaceae* (30-40%) with *Plantago lanceolata* (1-2%) and Cereal type (1-2%).

VI.) Discussion and Inferred Vegetation History.

The hiatus in the peat accumulation although not visible in the humified peat stratigraphy, divides the profile into two markedly different periods of vegetation history; (i.) the late Devensian (Windermere interstadial and Loch Lomond Readvance-Zones II and III) and early Holocene and (ii.) the early late Holocene (Flandrian Chronozone III), Neolithic period.

VI.a.) The Late Devensian: 11,000 - 10,000 BP

Local pollen assemblage zone 1 spans the late-Devensian glacial stadial period (Zone III; Younger Dryas; Loch Lomond readvance). A radiocarbon date of 10,930 BP (Beta-143289) at 115-120 cm firmly place this level at the generally accepted beginning of this stadial period. This immediately raises the question as to whether the preceding late glacial interstadial is present (Zone II; the Allerod; Windermere interstadial). I.p.a.s.z. TING: 1.a is possibly attributable to this warmer, interstadial (Allerod) period. This pollen sub-zone shows the presence of tree birch but within a herb dominated environment. Pine values are less in this sub-zone due to less long distance transported pollen which become more important in the open tundra environment of Zone III. Dwarf birch (*Betula nana*) was also more important at this possible Zone II (Allerod) to Zone III (younger Dryas) transition.

For the most part, I.p.a.z. TING:1 is dominated by herb pollen which is representative of an open herb environment which is characteristic of the late Devensian stadial, a period of intense cold tundra and permafrost. The diverse assemblages of herbs are representative of plant communities occupying the diverse range of niches available. These include tall herb communities, short turf, disturbed ground due to frost heaving and solifluction, marsh and fen and halophytic and steppe plants. The latter are an interesting phenomenon previously noted in earlier full Devensian deposits nearby in Huntingdonshire (Bell 1969,1970). These taxa include possible steppe plants such *Artemisia* (mugwort) and especially halophytes (salt loving and/or tolerant) including *Armeria* 'A' and 'B' line (thrift and sea lavender) and possibly some Poaceae (those grains of >45 microns - not cereal at this time !). The growth and survival of these plants is attributed to the high incidence of surface salts caused by the preponderance of mineral soils and climatic conditions (hot summers and cold winters) producing localised salt pans. These allowed the growth of such salt loving or tolerant plants (e.g. thrift and sea plantain) which now grow in coastal habitats or in montane refugia above the tree line.

Thus, the pollen data from zone TING:1 suggest a generally open herbaceous environment possibly with scattered tree birch. This represents the cold and harsh permafrost conditions of the Loch Lomond stadial (Younger Dryas) from c. 11,000 to 10,000 BP. In spite of these conditions, the flora was one of rich herbaceous diversity comprising predominantly light demanding (heliophilous) plant communities. These were similar in many aspects to those plant communities seen today on heathlands and chalk grasslands in England and elements of the Alpine flora; for example, the Alpine hay meadows and disturbed mineral ground. There is some evidence of more extensive birch woodland at the base of the pollen profile representing woodland colonisation during the late-glacial stadial (Windermere/Allerod) warmer period. Archaeologically, this was the environment of the Upper Palaeolithic.

VI.b.) The Early Holocene: c.10,000 - c.8500 BP

I.p.a.z. 2 is radiocarbon dated at 9950+/-80 BP (Beta-112215) and appears as the transitional phase between the open herbaceous flora of the Late-Devensian period described above (zone 1) and the onset of dynamic, successional vegetational changes as the principal early Holocene tree taxa colonised this region. That is, the boundary between the late-glacial and pre-Boreal period. Characteristically, temperature increase at c. 10,000 BP marking the close of the Devensian is mirrored by an initial expansion of *Juniperus communis* (juniper) and *Filipendula* (meadow-sweet) along with a diminution of some typical late-Devensian indicator taxa (for example *Betula nana* and *Artemisia*). Although there is a clear expansion

of the former, these values are less than observed in other comparable sequences (e.g. at Biddenham Loop; Scaife 2000a, 2000b). It has been suggested that *Juniperus* already present, but in a stunted/prostrate form was able to colonise readily after increase in temperature at *circa* 10,000 BP whereas other trees (excepting perhaps birch) and shrubs may not have been present during the extreme conditions of the late-glacial (Iversen 1944). Here, this is perhaps demonstrated by the response of *Betula* (birch), *Pinus* (pine) and *Corylus avellana* type (hazel), the latter from lowest values at the base of the zone. These expansions, however, precede the birch maximum of l.p.a.z.3. It is suggested therefore that during the period 9,950 \pm 80 BP (Beta-112215) and 9560 \pm 70BP (Beta-143287) these taxa were becoming increasingly closer to the region. In the case of birch, arrival and dominance occurred at *c.*9,600 BP. This transitional period at *c.*10,000 BP to 9,700 BP is also indicated by increased sediment input to the valley bottom possibly indicating wetter conditions and greater over-land flow.

The dominance of *Betula* in l.p.a.z. TING: 3 is typical of birch in its pioneer, colonising role during the early Holocene (pre-Boreal, Flandrian Chronozone Ia). Here, this has been dated to between 9,730 \pm 70 BP (Beta-143288) and 9,560 \pm 70BP (Beta-143287) with the maximum estimated at 9,650 BP. During this period birch woodland was dominant over the landscape while the depositional environment remained one of sedge fen perhaps with some willow. The closing, successional woodland was responsible for the initially reduced long distance pine pollen component to the site (in the lower part of the zone). *Juniperus* of zone 2 also became progressively less important and was finally out-competed and shaded out by the encroaching birch woodland.

Apart from the dominance of birch in zone 3, this period is also significant in that there is the start of continuous, albeit in small numbers, of *Corylus avellana* (hazel), *Quercus* (oak), expanding values of *Pinus* and overall decrease in herbaceous diversity and percentages. This again represents the progressively nearer growth of these taxa (Deacon 1964; Birks 1989). *Pinus* became dominant (l.p.a.z. TING:4) from 9560 \pm 70BP (Beta-143287) attaining maximum pollen values by 8950 \pm 50BP (Beta-143286). This is clear evidence of the Boreal dominance of pine woodland (Godwin 1956,1975; Scaife 1980,1982; Bennett 1984) which spread across the country giving diachronous pollen records (Birks 1989) (Flandrian chronozone Ib.). It is interesting that there is a sand component in the stratigraphy which may be evidence of podzolisation which might be expected from higher polyphenol content of pine needles aiding the podzolisation process. The expansion of pine slightly precedes the significant rise in importance of hazel starting from 8950 \pm 50BP (Beta-143286). However, in zone TING:5, pine with hazel become dominant forming the boreal pine-hazel woodland of Godwin (1940,1956,1975) that is, the Boreal period (Mangerud *et al.* 1974) also designated as Flandrian chronozone Ib (West 1970). *Pinus*, however, saw some reduction in growth area due to not only the expansion of hazel but also the start of major incursion by *Quercus* (oak) and *Ulmus* (elm) and perhaps along wetter river valleys of *Alnus* (alder). This expansion occurs slightly later than the expansion of hazel. The date of this is interpolated at *c.*8,500-8,800 BP being some 10cm above the date of 8950 \pm 50BP for the hazel expansion. Herb pollen percentages are at typically their lowest values and are consistent with the dominance of woodland shading out these communities.

These pollen data in conjunction with radiocarbon dates has, therefore, provided an absolute chronology for the dynamic, successional, vegetation changes which saw the establishment of forest during the early Holocene after the close of the last cold stage (glacial period). These

biostratigraphical chronozones are important in a broader geographical framework providing datum points at this locality. These may be plotted with other data from which interpolated isopollen maps can be constructed (see for example, Birks 1989).

VI.c.) The Sedimentary Hiatus (c.8,000 - 5,000 BP).

At the top of l.p.a.z. TING:5, there is a clear change (into l.p.a.z. TING: 6). The radiocarbon date of 4790 \pm 60BP (Beta-143285) demonstrates that there is a hiatus between these two zones of some 3000 years spanning the middle Holocene. It is not clear why there should have been a cessation of peat formation during the late Boreal (Flandrian Ic) and middle Holocene (the Atlantic Flandrian chronozone II). Whilst there is evidence of a drier phase during the late Boreal period when lake levels fell (Godwin 1975), peat became degraded. The succeeding Atlantic period was, however, one of increased wetness/humidity when peat accretion might have been expected. It is most likely that local ground water conditions controlled by local surface hydrology and vegetation evapotranspiration rates will have dictated the creation of anaerobic conditions and thus peat formation. The dominance of deciduous woodland from the late Boreal and during the Atlantic periods may have increased evapotranspiration and thus lowered ground water level (i.e. no peat formation). The date of 4790 \pm 60BP marks the early Neolithic period, in which there is evidence for local prehistoric woodland clearance, agriculture, death of elms from disease (at c. 5,500-5,000 BP). These factors may have been responsible for local increase in groundwater and re-formation of conditions suited to peat accumulation. Similar mechanisms have been suggested from earlier work in southern England (Moore and Willmot 1979; Scaife 1980).

Whether or not these factors were responsible, the upper peat sequence of l.p.a.z. TING:6 is of late Prehistoric, Neolithic age bracketed by the two radiocarbon dates of 4790 \pm 60BP (Beta-143285) and 3670 \pm 60BP (Beta-118063).

VI.d.) The late Holocene, Neolithic Period: c.4900 - 3600-BP.

In spite of the hiatus in peat accumulation, this upper zone usefully provides pollen and vegetation data for the local environment of the Neolithic. The vegetation present at this time contrasts markedly, as might be expected, with the environments of the early Holocene, Mesolithic discussed above. Here, the on-site environment of deposition was dominated by alder carr woodland. The ground flora is not well represented but most likely and typically consisted of grasses and sedges such as *Carex paniculata* (tussock sedge) and less well represented pollen of other ground flora (for example *Chrysosplenium oppositifolium*; golden saxifrage).

The terrestrial, dry-land flora on well developed soils was dominated by oak, elm, ash, lime and hazel woodland. However, lime especially, is greatly under-represented in pollen spectra due to its entomophily and flowering in summer when trees are in full leaf (negating pollen dispersal further) (Andersen 1970,1973). The dominance of *Tilia* during this period has is evident from many analyses of southern and eastern English sites (Birks *et al.* 1975; Moore 1977; Scaife 1980, 1988, 2000; Waller 1994a, 1994b; Greig 1982; Vishnu Mitre 1971). It is now generally held that *Tilia* (likely *Tilia cordata*) was the dominant or at least co-dominant tree taxon over large areas of south east and eastern England from the beginning of the Flandrian chronozone II until its demise through forest clearance during the later prehistoric period. Pollen values here suggest that lime/lindens formed an important component of the local woodland at Tingrith. *Fraxinus* is similarly a markedly under-represented taxon and the small percentage values here also suggest that it was a component of the local woodland.

Frequently, ash developed after the primary elm decline as a secondary woodland component following human (Neolithic) activity became more widespread. However, elm, oak and hazel were undoubtedly also important constituents of the woodland. *Betula* and *Pinus* have almost constant occurrences but the small values of birch, their high pollen production and wind dispersion, possibly imply that these were extra-local and possibly even extra-regional vegetation elements. In the case of *Pinus* the source area may have been the Breckland of East Anglia where it has been suggested that an outlier of pine remained into the late Holocene (Godwin 1975).

Cereal pollen in this upper zone is diagnostic and although the percentage values are small, this does demonstrate that arable agriculture was being practised. Given the dominance of woodland, and the small spatial extent of the peat basin/floodplain, the pollen catchment was most likely of small extent and that this cultivation was taking place in proximity to the site. The expansion of herbs (including grasses and *Plantago lanceolata*; ribwort plantain) are also evidence of human activity and localised clearances. As noted above, the removal of trees for occupation and agriculture and elms by disease may have reduced evapotranspiration rates, increase surface run-off and resulted in locally higher ground water table and re-incursion of peat formation from 4790 \pm 60 BP. This peat was subsequently covered by river alluvium which may be attributed to further woodland clearance and agricultural intensification during the Bronze Age (from c.3670 BP).

VII.) A Summary of the Vegetation Chronology.

Pollen analysis and radiocarbon dating of the Tingrith peat profile has provided evidence of vegetation and environmental changes which have taken place during three distinct periods. First is the late (Devensian) glacial from 11,000 BP to 10,000 BP and second, extending into the mid-Early Holocene at c. 8500 BP. Archaeologically these equate with the upper Palaeolithic and early Mesolithic periods respectively. Third, after a stratigraphical hiatus in, there was a later accumulation which spans the late-Holocene, Neolithic period. The principal vegetation changes described in text (above) are summarised as follows.

-The Late-Glacial Interstadial (the Allerod; Lake Windermere interstadial; Zone II). Some scattered birch woodland and dwarf shrubs including *Betula nana*; dwarf birch) with higher values than above and juniper (l.p.a.s.z. TING:1a)

- The Late-Devensian Stadial (Younger Dryas; Zone III; Loch Lomond re-advance). Open herbaceous environment and dwarf shrubs possibly including *Betula nana*. (10,930 \pm 80BP. Beta-143289). l.p.a.z. TING:1

- Devensian glacial/Holocene interglacial transition. Maximum of *Juniperus* and *Filipendula* expansion and increasing *Betula* and *Pinus*-possibly extra regional but with increasing values as sources became closer due to migration (9,950 \pm 80BP; Beta-112215). l.p.a.z. TING:2.

- Pre-Boreal Period (Flandrian 1a. Rapid expansion of colonising (pioneer) *Betula* woodland from 9730 \pm 70BP (Beta-143288). Also the start of *Corylus avellana* type and *Quercus* from possibly long distance/extra regional sources but becoming closer due to post-glacial migration from refugia. L.P.A.Z. TING:3.

- *Pinus* colonisation. Early Boreal (Flandrian Ib). *Betula* ousted as *Pinus* arrived from the east and south east from 9560 \pm 70BP (Beta-143287). Peaking at a time when *Corylus avellana* becomes important to give the Boreal pine/hazel woodland (Godwin 1940, 1956, 1975a). I.p.a.z. TING:4

-Arrival of *Quercus* and *Ulmus* and establishment of woodland which along with the increasing importance of *Corylus avellana* progressively out-competed *Pinus* from 8950 \pm 40BP (Beta-143286). Heliophilous herbaceous vegetation was progressively shaded out by the increasing dominance of closed canopy woodland. I.p.a.z. TING:5

-Hiatus in peat accumulation at c.8500 BP (undated) possibly due to climatic dryness typical of the Boreal continental period (Flandrian chronozone Ib-c).

-Re-incursion of peat at 4790 \pm 60 BP (beta-143285). Late Hholocene (Sub-Boreal; Flandrian III) Evidence of *Quercus*, *Ulmus*, *Tilia*, *Corylus avellana* dominated woodland but with evidence of Neolithic cereal cultivation/agriculture. The on-site community comprised alder carr woodland. Anthropogenic activity may have been responsible for higher tables through reduction in evapotranspiration rates and increased ground water levels and surface run-off creating again anaerobic conditions suited to peat accumulation. I.p.a.z. TING:6

-Cessation of peat formation and/or truncation of the peat at 3670 \pm 60 BP (late Neolithic/Early Bronze Age).

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Appendix 1: Pollen Procedure and Methodology

Standard pollen procedures have been used for the extraction of the preserved pollen and spores. These procedures are detailed in Moore and Webb (1978) and Moore *et al.* (1991). This was carried out in the Department of Geography, University of Southampton.

- Samples of 2ml size.
- Deflocculation with 10% NaOH
- Sieving at 150 μ for removal of the coarse fraction
- Sieving at 10 μ (residue kept) for removal of clay
- Hydrofluoric acid (boiling) digestion of silica
- Erdtman's acetolysis (Sulphuric acid/Acetic Anhydride 1:9)
- Washing/centrifuging
- Staining with aqueous safranin and mounting in glycerol jelly.

Pollen was examined, identified and counted using an Olympus biological research microscope fitted with Leitz optics at magnifications of x400 and x1000 with normal transmitted and phase contrast illumination. An extensive pollen reference/comparative collection is available for identification of difficult/critical taxa. Plant taxonomy follows that of Stace (1991) and for pollen (in general) Moore and Webb (1978) modified according to Stace/*Flora Europaea* (Bennett *et al.* 1994). Absolute pollen frequencies were calculated using addition of 'exotic' *Lycopodium* (Stockmarr) tablets to a known volume of sample.



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