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1 SUMMARY

An archaeological excavation has been completed on land between Hallgate and Wood Street, Doncaster. Evidence has been recovered for three phases of activity during the Roman and medieval periods. These include use of the site as a 1st/2nd century cemetary and cremation site, and the medieval production of pottery. In each case it is clear that the activities represented also extended into the surrounding areas.

2 INTRODUCTION

2.1 Planning Background

The site is subject to development proposals by the Tetley Pub Company Ltd for use as a licensed premises. The proposal (planning application no. 93/33/3057) involved the use of 9 Wood Street , 53/54 Hallgate and the intervening land. The plan involves the conversion of the existing street frontage buildings. This part of the proposals was not considered to have any archaeological implication. The building fronting Wood Street is Grade 11 listed but the proposals involved only internal conversion, where few if any internal features remained. The outward appearance is not due to be changed to any degree. The proposal also involved the demolition of a series of single-storey structures in the intervening land to be followed by the construction of new buildings on the site. An extensive drainage scheme was also involved in this plan. This part of the proposals clearly involved a considerable amount of ground disturbance and so a potential archaeological impact was identified.

As a result of this identified threat a recommendation was made by the South Yorkshire Archaeology Service that provision be made for he archaeological investigation of the site, prior to the start of the development. This recommendation was accepted by the Planning Authority of Doncaster Metropolitan Borough Council. This is line with Department of the Environment recommendations as laid out in Planning Policy Guidance note 16 (PPG16).

The South Yorkshire Archaeology Service provided a brief for this work, detailing what work was required and how the results were to be presented. While it was the responsibility of the developer to commission the work the SYAS was responsible for monitoring it. The brief required that initial site investigation should take the form of an archaeological field evaluation. This is defined as a "....programme of intrusive and/or non-intrusive fieldwork designed to supplement and improve existing information to a level at which planning recommendations can be made" (D. Baker 1993). The Tetley Pub Company Limited commissioned the South Yorkshire Archaeology Field and Research Unit to carry out this work and this was completed in October 1994. A report was completed and copies submitted to the developer and to the South Yorkshire Archaeology Service (S.Atkinson 1994). The field evaluation was aimed at identifying the presence/absence, location, nature, date and state of

preservation of any archaeological features on the site. Given the nature of the site it was agreed that this should be done through the excavation of three trial trenches upon completion of the demolition of the existing single storey buildings.

The field evaluation demonstrated that Roman and medieval archaeological features were located throughout the evaluation area. It also showed that these were relatively well preserved, associated with a large amount of artefactual material and were close enough to the present ground surface to be affected by the proposed development.

On the basis of this information the South Yorkshire Archaeology Service recommended that in order to comply with the terms of the planning permission, and in line with PPG16, the full excavation of the remains would be required prior to the development. This was as a result of their preservation being incompatible with the details of the development proposals. The Planning Authority of Doncaster Metropolitan Borough Council accepted this recommendation and decided to fully enforce the appropriate condition. The Tetley Pub Company Ltd commissioned the South Yorkshire Archaeology Field and Research Unit to complete this work with all fieldwork being undertaken between 3 January and 10 February 1995. The extent of the excavate area was determined on the basis of practical requirements, the location of the known archaeology and the nature of the proposals.

2.2 Archaeological Background

Two main components to the archaeology of the site were identified during the evaluation. These were a series of Roman burials involving both inhumation and cremation, and a medieval pottery kiln of 11/12 century date. Both of these elements fit well with previous knowledge of the layout and land use of the Roman and medieval town of Doncaster.

I) The Roman Town

Doncaster was first established as a settlement centre as a result of the establishment of a Roman fort on the site of the present day St. George's Church. This marks the most easterly possible crossing point of the Don and the highest navigable point on the river, making the site a natural intersection between land and river transport. The Roman road leading north from Lincoln to Castleford crossed the river at this point. The area not only had the economic magnet but the ease of access by road and river would have encouraged the growth of the town.

Very little is known about the full extent of the Roman Civil settlement and very few structural remains have survived. All that is visible *in-situ* now is a length of the outer wall of the Roman fort in the grounds of St. George's Church. P. C. Buckland (Buckland et al 1988) has plotted the location of stray finds of Roman origin. Assuming that these mark the approximate extent of occupation then the Roman settlement would appear to have been similar in extent to the medieval town. A series of ditches have been located which may represent outer defences. The road

represented now by Hallgate/high Street/Frenchgate would have been the main north-south route through the town.

The site of the excavation under discussion here would therefore have been immediately outside of the town, on the main road towards Lincoln, and eventually London. It has been shown in other towns of Roman Britain that this was a typical location for a cemetery (Wacher 1974). While not occupying space within the town the site would have been highly visible, particularly visitors and travellers. It has been suggested that this reverence of ancestors was an important part of Roman society, with the nature of an individuals lineage being reflected in their current status. The ostentatious display of an ancestors tomb would therefore play an important part in raising the profile of the living. This is reflected in the often large and intricately carved tombstones which are found from this period. A prominent location which was also easily accessible would have been essential for this sort of display.

ii) The Medieval Town

The plan of the medieval town is strongly reflected today in the street plan of he town centre. Streets such as Baxtergate, Scot Lane, Fisher Gate and High Street follow the routes of the medieval roads. The line of the town ditch survives on the line of Market Road, Cleveland Street, and Printing Office Street. It is also thought that there was some suburban development beyond this ditch. The earliest location is likely to have been on either side of Hallgate, which formed the main road.

The excavations on the site in question did not however, reveal any evidence for medieval settlement . The activity on the site was clearly associated with the production of pottery, though there may have been settlement towards the street frontage. Only very rarely has any evidence of pottery kilns been found within medieval towns. This must be considered as unsurprising given the obvious dangers of carrying out such a highly combustible process within a largely wooden built settlement. It was more common for pottery kilns to be located in rural areas or immediately outside of the settled area. They were therefore close enough for the potter to get his products to market without representing a major public risk.

The site at Hallgate could not be considered suitable from the point of view of raw materials. Fuel and clay would have had to have been transported into the site while there is no surface water present in the area. It must be assumed, therefore, that the advantage of the proximity to the market at Doncaster must have outweighed these considerations. An examination of the distribution of Hallgate wares shows that this was used to market the pottery over a relatively wide area of Yorkshire and Lincolnshire.

The dating of the industry has not been well-defined. Pottery sherds of the Hallgate industry have been found at Sandal Castle from 12th century contexts and this represents the earliest known date for the industry. The end date for this industry is not known, though it appears to have diminished in the late 13th century and does not feature in contexts later than the early 14th century.

2.3 Organisation of the Work

The field evaluation and excavation were both carried out by staff of the South Yorkshire Archaeology Field and Research Unit. Staff directly involved in the project were:

Simon Atkinson - Project Manager
Andrea Burgess
Tim Allen
Mark Brennand
Stacey Hallett
Bob Smith
Jo Wainwright
Guy Holman

Simon Atkinson was responsible for all work on site and for the completion of the report on the work. Andrea Burgess held specific responsibility for the excavation, and post-excavation treatment of all human remains, cremated and inhumed.

2.4 Research Design

Three components to the archaeology on the site were identified by the field evaluation as being worthy of investigation. These were as following:

1. The Roman Cemetery

The field evaluation revealed the presence of a number of burials in the form of cremations and inhumations. These were from secure contexts which could be identified as Roman in date from associated artefactual material. In deciding on the research design for the excavation it was noted that very few previously known of human burials had been located for the civil settlement of Roman Doncaster. Those that had been found were not done so under archaeological conditions. It had therefore only been possible to recover the minimum amount of information from the remains.

The excavation of cemeteries under archaeological conditions has provided a great deal of information on the general health of the populations which they represent and it was hoped that this would prove the case in this site. It was therefore proposed that the human remains be uncovered and recorded *in-situ* before being removed with care. Particular note was to be taken of any indication of the method of burial, including the presence of grave goods. Once removed from site the human remains were to kept under stable conditions until they could be analysed. This was to be aimed recording each individuals sex, age at death and any information on pathology and case of death if possible. Dependant on the amount and detail of this information

available it was hoped to be able to make general conclusions on the population represented or on how the cemetery was used.

2. Medieval Pottery Kiln

The Hallgate pottery industry of Doncaster is a recognised centre of medieval pottery production known to have been active from the 12th to early 14th centuries. Pottery of this type has been identified from sites over a relatively wide area of Lincolnshire and Yorkshire. Despite this there has been relatively little excavation of the sites involved in the production of this material. Only three kiln sites have been investigated (Buckland et al 1979) by excavation. These were uncovered during watching briefs of construction work, where conditions may not be ideal for archaeologists seeking to record archaeological remains in detail.

An initial examination of the artefactual material recovered from the kiln during the field evaluation was made by Dr C. G. Cumberpatch. In his opinion the material may have represented a new type of Hallgate ware, not previously recovered from Doncaster. The most likely date he suggested for this was 11th to 12th century. This would bring back the earliest known date for this pottery industry and would therefore represent an important component in understanding the economic development of medieval Doncaster.

It was therefore proposed that a full excavation of the kiln, together with any associated features take place. This was to record the structure of the kiln, in order that it could be fitted into a known typology, to recover any evidence on how the kiln was used, retrieved all artefactual material for analysis, and determine the nature of any associated activities in the vicinity of the kiln. An analysis of the artefactual material from kilns could be used in order to determine the source of the raw materials, date the use of the kiln, and identify other sites where the product of the kiln was exported.

3. Large Boundary Ditch

A large ditch was located on an approximately north-south alignment and which did not appear to relate directly to the other periods of occupation of the site. It was hoped that the excavation of a large section through this feature would allow an identification of its nature and date of its origin.

It was intended that all artefactual material be recovered during the excavation of this feature in order that a date can be obtained. In the event of no datable artefacts being recovered or the artefacts being contextually unreliable for dating, then it was intended that charcoal samples be collected, if available, in order that a date could be obtained by C14 analysis.

2.5 Archive Deposition

It is intended, with the permission of the client, that the archive generated by this project will be deposited at Doncaster Museum.

3 METHOD

3.1 Excavation

All initial excavation was carried out by machine, under archaeological supervision. This was aimed at removing the topsoil and overburden from the excavation without disturbing the underlying archaeology. The trial trenches had remained open after the completion of the field evaluation and these were used as a guide to the depth of material which it was necessary to remove. At this stage the spoil created was removed from the site for dumping. This work was completed over two days, immediately prior to the start of the christmas holiday period. The site was therefore prepared for the start of the archaeological investigation on 3 January 1995.

All subsequent excavation was by hand with the site being initially cleaned by shovel-scraping and trowelling. After this upper level was recording by the completion of a full photographic record and scale plans over the whole area, the modern intrusions were excavated out. This is in keeping with standard practice of removing the most recent material first, but also allowed an examination of the depth of stratigraphy related to the underlying features.

This work revealed that there was a depth of mixed material overlying the preserved archaeological features (1000-1003). A small number of post-medieval cut features were located at this level. After these features had been excavated the mixed material was removed in spits in order that the upper layers of the underlying cut features became visible.

Subsequently these features were excavated and recorded in stratigraphic order (latest first). Linear features were investigated by the excavation of successive lengths in order that the sections could be drawn to scale at regular intervals. Non-linear features were excavated in half-sections in order that the section could be drawn. Where possible the opposite half was then removed. All features were drawn to scale in both plan and section. In general, the single context planning method was used throughout. A number of small exceptions were made to this on the grounds of lack of time and convenience. All plans were located horizontally using a grid over the site and tied into the surrounding buildings. It was not required that this grid be located into the national grid. The grid was marked by a series of wooden pegs driven into the ground. A nail at the top of each peg marked the exact point. All plans and sections were located horizontally by the use of a level (metres AOD) transferred from a bench mark located on a municipal office building in Wood Street (NGR SE577001).

All artefactual material was recovered from the excavated areas. In the case of large or brittle objects such as complete pots or human skeletal material then as much as possible was exposed before the object was wrapped in order that it could be removed in one piece. In the case of artefacts found where the context was of particular importance, such as cremation urns or grave goods, then the object was photographed *in-situ.*

A full photographic record was kept throughout. This involves the use black and white as well as colour slide film . As well as specific photographs previously mentioned, shots were also taken of each individual feature, as well as groups of features where relevant. More general shots of the site were also taken.

Articulated human skeletal material was initially excavated in order to expose the maximum amount of each individual. Then record photographs were taken and a written sheet made out in order to record all relevant details. The remains were then removed in pieces and wrapped in aluminium foil in order to keep them together and in a stable condition. Soil samples were collected from the fill surrounding the skeleton. This was in order to collect any further bone fragments and test for the presence of any organic remains.

Written record sheets were also completed for each deposit, cut, and structure. This included a physical description of the subject material as well as an initial interpretation of it's significance to the site.

3.2 Post-Excavation

Initial post-excavation work consisted of checking and cross-referencing all of the written records, in order that they were complete and correct. The artefactual material was cleaned in an appropriate manner, recorded and placed into standard archive boxes. Bulk samples were sieved and all material of interest removed. This included bones, small pottery fragments, and carbonised seed remains. The site drawings were reproduced in ink to an archive standard.

Upon completion of this initial checking and cleaning an assessment was made of the records collected in order to decide how to proceed with the analysis and report preparation. The quality of each data type was assessed on the basis of whether analysis was worthwhile in terms of contributing knowledge of the site.

Upon completion of this, work began on the analysis of the excavated material. Of the artefactual material; the pottery, cremated material and human bone were selected for analysis. Other artefact types consisted of small assemblages of often poorly reserved material. It was not considered that analysis of such peripheral material would contribute to achieving the aims of the research design. Obviously all material has been packaged and labelled for storage.

4. THE STRATIGRAPHIC EVIDENCE

4.1 Phase 1 - THE ROMAN CEMETERY

Much of the extent of the site was occupied by evidence for a cemetery of Romano-British date. This is believed to represent only a small part of the full original extent of the cemetery and it may have been located on the edge of the area used for burial. This is suggested because the density of burial is relatively low, with evidence of only nine articulated inhumations and 5 cremations being recovered from the full extent of the excavated area. Also, the presence of a cremation pit may suggest a peripheral location within the grounds of the cemetery.

4.11 Inhumations

A total of nine articulated burials were found together with disarticulated remains from 11 separate contexts. Of the articulated remains, there was no discernible pattern in terms of burial practice which could be deduced. This could partly be as a result of the relatively small size of the sample and the variable preservation of the remains, but also may represent a lack of uniformity in the style and practice of inhumation burial.

Two of the inhumations contained grave goods, a fragment of amphora with an unidentified iron object in one case and two small complete Romano-British greyware pottery vessels in the other. No significant pattern could be seen in the alignment of the skeletons, though the largest number, at four, were buried with the head pointing to the south-east. Two were buried with their heads to the east, and one each to the north-west, north-east and south-west.

An analysis of the human skeletal remains has been completed by Andrea Burgess, the report on which is included as appendix 1 of this report. In all but one case where the sex could be determined, the individuals were male, and in no cases where they aged at less than 18 years. This is the only possible indication for any possible differential burial practice for different sections within the population. However, given that the size of the sample is not considered sufficiently large to be statistically significant it would not be correct to draw any firm conclusions from this.

Skeleton 104 was located within grave cut 114, which was sub-rectangular in shape and with a maximum depth of 0.39 metres. The break of slope was sharp at the top with the sides then being angled at approximately 45° down to a rounded base. The fill of the grave consisted of slightly reddish brown silty sand. The skeleton within this fill was partially preserved and consisted of the skull with the upper part of the spine as well as some other bones. Much of the remainder of the spine also partially survived in the form of a brown discolouration of the sand at the base of the grave cut. This grave was cut by two later features. These consisted of a ditch (cut 1022) and a further grave cut (113) which contained a poorly preserved fragment of skull.

Three skeletons were located within the north-eastern corner of the site. This was an area of intercutting features, including small ditches as well as the graves, in which all features were heavily truncated. The fills of the features were all also generally homogenous, making differentiation of the individual features difficult. The soil within this area consisted of silty sand, with a lower clay content than elsewhere on the site. This appears not to have been suitable for the preservation of the bone, as all of the skeletons were found in a fragmentary state. This was exacerbated by the physical truncation of the skeleton by later activity.

Skeleton 1053/10 was found within grave cut 1052, which consisted of an ovoid with slightly squared ends. Later truncations through this grave left a visible length of approximately 0.90 metres, a width of 0.86 metres and a maximum depth of 0.35 metres. The breaks of slope where sharp, leading to steeps sides and a slightly rounded base. The truncations through this feature consist of cut 1049 at the northern end, by the foundation trench for a modern brick wall (1045) to the south and by the medieval kiln (1110) to the west and south-west.

The fill of this grave consisted of an orange brown sandy silt with a small amount of gravel. The skeleton within this grave consisted of parts of skull, collar bone, arms and legs. This skeleton was found in direct association with a fragment of amphora and two unidentified iron objects. Other sherds of Romano-British pottery were recovered from within the grave fill.

Skeleton 1096/4 was located within a rounded rectangular cut (1095) with very steep sides and a flat base. Later truncations to this cut meant that it was left with a length of 0.95 metres, a width at the base of 0.40 metres and a depth of 0.57 metres. This grave had been truncated by the grave cut 1053, previously described, and by the medieval kiln (cut 1110). The fill of the grave consisted of yelllowish brown silty sand with a high proportion of rounded gravel. The preservation of the skeleton was very poor, with only skull and arm fragments surviving.

Skeleton 1119/4 was located within a rounded rectangular shaped cut (1118) measuring 1.32 metres long, 0.57 metres wide and with a depth of 0.18-0.24 metres. The sides of this cut were steep, leading down to a flat base. It was filled by an orange/brown silty sand with a low proportion of rounded gravel, particularly at the base of the grave. Later truncation through this feature involved cuts 1115, a shallow gully, and cut 1120, representing part of a ditch. The skeleton within the grave was also poorly preserved, consisting of the skull as well as leg bones.

Skeleton 1128/1 was unusual amongst the inhumation burial found during this excavation as it was located on the western side of the area, away from the remainder of the burials. It was located within grave cut 1127, which was within the fill of an earlier pit of unknown function (cut 1113). Cut 1127 consisted of a rectangle with rounded corners, and was truncated to the east and north. The length of this cut was 1.10 metres, the width 0.50 metres and the depth was 0.18 metres. The breaks of slope were sharp, leading to smooth sides and a rounded base. Several large limestone blocks were positioned along the western edge of the cut, which may represent the remains of a stone lining around the edge of the cut. This may be related to a layer of

similar blocks of stone which covered the top of the grave cut. This contained limestone blocks of up to 0.30 metres in length. Burnt limestone and charcoal fragments were also contained within this material.

This stone material represents another element in which the grave can be differentiated from the other inhumations. It was the only such burial located within a structure of any sort. It was also the best preserved of the skeletons, despite the physical truncation by cut 1020 to the north-east. Truncation of the grave cut had also occurred to the south-east by ditch cut 1080.

Cut 1168 was a grave located within the south-eastern part of the site and containing two skeletons, 1169/1 and 1169/4, positioned with one over the other. This was truncated by the edge of the site and extension of the excavated area was not possible as a result of the presence of the brick wall marking the edge of the property. As the heads of the skeletons were pointing towards the wall, the exposed portions of the skeletons consisted only of the lower limbs. The exposed portion of this grave had a width and a depth of 1.30 metres. Skeleton 1169/1 was the upper of the burials and so must have been buried later than the other. The preservation was poor and the bones, consisting of part of both lower limbs, were severely truncated. The lower, and earlier, skeleton (1169/4) consisted of the same parts of the same bones but these were better preserved than the other skeleton. This skeleton appeared to have been laid face down and some grave goods were located around the right knee. These consisted of two Romano-British greyware pottery vessels, a small jar covered by an upturned dish, and an unidentified iron object located close by.

Two further inhumation burials were located immediately to the south of grave cut 1168. This was also an area of truncated features with homogenous fills making differentiation difficult. Skeleton 1210/2 was found within an oval grave cut (1209) with a visible length of 0.45 metres, width of 0.55 metres and a depth of 0.20 metres. The sharp breaks of slope and steep sides, led to a flat base. The skeleton was very poorly preserved within the silty sand of the grave fill. Only skull fragments and part of one arm and one leg were found to be surviving.

The final inhumation burial (1213/1) was located within a sub oval grave cut (1214), very little of which was visible as a result of later truncation and the edge of site. The visible part of this cut had a length of 0.45 metres, a width of 0.40 metres and a depth of 0.36 metres. The preservation of this skeleton was also very poor, with the grave fill being very similar to that that described for skeleton 1210/2. In this case only parts of the lower limbs were found to be surviving.

4.12 Cremation Burials

Five cremation burials were recovered during the excavation, including three within cremation urns, one found with part of a flagon and one without any pottery. In addition, cremated bone fragments were recovered from 13 other contexts, six of which were within a cremation hearth in which it is believed that the cremations were burnt.

Cremation urn 1027/1 was found in the eastern part of the site within a small, subcircular cut (1026). This cut had a maximum width of 0.40 metres and a depth of 0.20 metres. A sharp break of slope was observed at the surface and had even sides leading to a pointed base. It was truncated on the western edge by the construction cut (1045) for the foundations to a modern brick wall. The fill of this cut (1027) was immediately underlying the mixed layer, 1003, which covered the entire site. It is therefore possible that this feature may have been truncated to some extent at the surface. Deposit 1027 consisted of dark brown sandy silt. The cremation urn, consisting of a Romano-British greyware vessel, was placed in an upright position and had been damaged on the western edge by the modern wall truncation. It was removed carefully in one piece, and soil samples were collected from the surrounding fill.

Cremation 1030/1 was found within a circular cut located on the eastern edge of the site. The diameter of this feature was approximately 0.27 metres and the depth was 0.20 metres. The cremation urn fitted neatly into this cut. It consisted of a fine greyware cooking vessel type of pot. This burial was immediately overlain by deposit 1003 and was also truncated on the western side by the later Romano-British ditch 1022. The urn was removed in one piece, and the entire fill of the cut was retained as a sample for the recovery of any further cremated material.

An earlier cremation was located beneath, and was cut into by cremation 1030/1. This was contained within a shallow cut (1083) with a length of 0.76 metres, width of 0.62 metres and a depth of 0.25 metres. This feature was truncated to the south and south-west by the modern wall (1045) and the Romano-British ditch (1022). The fill of this cut contained a mix of material, much of which had been burnt. An amount of cremated human bone was placed in the centre of the cut and covered by the upper part of a highly burnt flagon. A copper alloy ring was also found within this feature, possibly part of a broach.

A single cremation site was found without any associated pottery, within a small shallow, circular cut (1084). The fill (1085) consisted of grey brown silty sand with a high proportion (approximately 20%) of cremated bone and charcoal.

The remainder of the cremated bone was found within the cremation hearth, located on the western edge of the site. This feature consisted of an oval-shaped pit, cutting into the fill of an earlier Romano-British ditch. This later pit fitted so neatly into the width of the ditch that it is thought likely that the ditch was at least partially visible at the time that the hearth was excavated. The cut (1157) for the hearth had a length of 1.20 metres, width of 1.10 metres and a depth of 1.10 metres. The break of the slope was very sharp, leading to steep sides and a flat base. Six separate fills were recorded within this cut. The only the lower of these, which was very shallow, is thought to have accumulated during the use of the hearth. This, perhaps, suggests that the hearth was cleaned out periodically during it's use.

The lower fill (1208) consisted of a reddish brown silty sand with a very high proportion (approximately 40%) of charcoal flecks. This layer had a depth of 0.10 metres and it lined the full extent of the interior of the feature. This suggests that it had formed as a result of *in-situ* burning. The next layer lying immediately over this

material filled much of the feature and must have been mostly deposited after the hearth had gone out of use. This was a fairly mixed layer containing reddish brown as well as yellowish brown silty sand. The maximum depth of this material was 0.60 metres. Patches of burnt material were also found within this layer, concentrated within the lower part of the fill. The lower part of this fill also contained at least three cremated femurs. These were heavily burnt but were intact while remaining *in-situ*. An attempt was made to lift these in their intact state, but they were too fragile and disintegrated on contact. The remaining four deposits were relatively narrow deposits forming a tertiary layer capping the fill of the hearth. Deposit 1156 consisted of light orange brown silty sand with a few charcoal flecks. Deposits 1138, 1135 and 1132 formed a capping layer over the hearth, comprising redeposited silty sand material with evidence of burning. These had a combined depth of approximately 0.20 metres. All of the six deposits found within this feature and described above were sampled in order to recover evidence for cremated material or plant remains. It was found that each of the deposits contained an amount of cremated human bone. It was on the basis of this, the cremated bone found at the base of 1156, and the evidence of *in-situ* burning of layer 1208 that the interpretation of a cremation hearth was made.

4.13 Associated Features

Two main Romano-British ditches were recorded within the excavated area. the earliest of these was within Phase 1 of the occupation of the site, being the earliest feature recovered on the site and heavily truncated by later cut features. This ditch (1147/1219) was positioned approximately on an E-W axis, though it appeared to curve at certain points, and was identified from a series of sections formed by a number of truncations. The ditch had a width of 2.40 metres and a maximum depth of 1.00 metres. The smooth and regular sides of this ditch led to a flat base. The fill (1146/1218) of this ditch consisted of an orange brown silty sand with an approximately 10% proportion of gravel and a few flecks of charcoal. .

A narrow gully (1161/1198) was located within the south-eastern corner of the site. This measured 0.80 metre in width at the surface and had a maximum depth of 0.50 metres. Sharp breaks of slope at the surface led to a rounded base. This gully was found to be cutting through, and is therefore later than, a grave (1169). It was also truncated by the larger ditch 1022 and a further cut 1160 representing a stone surface.

Further linear features were located in the western part of the site. The earliest of these in this part of the site consisted of what appeared to be a palisade trench (1139) with post holes located along the centre line of the trench. Within the short length of this feature which could be included within the excavated area there were two of these post holes, located at a distance of 0.50 metres apart. The width of the palisade trench was 0.50 metres, with the post holes having a diameter of 0.60 metres, with a maximum depth of the feature of 0.47 metres. This feature was located on a SW-NE alignment, though it is not clear from the short length which was exposed what area was being enclosed, if it was a palisade trench. The fill of this consisted of a dark reddish brown silty sand with a small amount of rounded gravel.

formed surface. This was associated with a post hole cut (1155) which was directly overlying the earliest post holes. This had a width at the surface of 0.88 metres and a maximum depth of 0.30 metres. The steep sides of this features led to a rounded base. The post hole was filled by a deposit (1143) of orange brown sandy silt. It contained a series of lenses of charcoal and burnt clay. The overlying deposit (1142) which appears to represent the abandonment of the feature is thought to be the same material and also contains lenses of charcoal.

4.14 Dating

The dating of the site can be divided into three main phases, with the first two being Romano-British and the third being medieval. It is clear that the cemetary was in use during phase 1 of the occupation of the site.

The dating of phases 1 and 2 is based on an assessment of the Roman pottery which has been completed by Margaret Darling (see appendix 2). The earlier phase, associated with the burials, is represented by 580 out of 1888 Roman sherds and is thought to extend through the 2nd century. The best evidence for the dating of the burials is from grave 1128, which overlies a layer containing datable pottery. A date within the latter part of the 2nd century is suggested for this burial.

4.2 Phase 2 - LATER ROMAN FEATURES

A series of other features of Romano-British date were also investigated within the excavation area. These included linear as well as non-linear features, many of which were inter-cutting and therefore clearly not contemporary. Some also cut through some of the burials, indicating that a phase of Romano-British occupation is represented after the use of the site as a cemetery had discontinued.

4.21 Linear Features

A ditch was located on an approximately N-S axis, along the eastern edge of the site. This feature (cut no. 1098/1022) had a width of up to 1.80 metres and a maximum depth of 0.95 metres. Gradual breaks of slope at the surface led to smooth sides and a very slightly rounded base. The fill of this feature consisted of a dark brown sand silt. Some gravel was found within this fill, particularly towards the base.

This feature was cut at the southern end by a smaller and later ditch (1102) which appears to have been dug along the same line as 1022/1098, but diverged at this point. This had a width of 1.00 metres and a depth of 0.50 metres. This had a sharper break of slope and was steeper on the western edge, leading to a rounded base. The fill (1101) was extremely difficult to distinguish from the fill of the earlier ditch, being similar in colour and content. The earliest ditch located on this line (cut no. 1140) had been entirely truncated at the surface and was therefore only visible in section. The fill

of this ditch (1141) was very difficult to distinguish from the adjacent deposits, and consisted of dark grey brown silty sand. It was most clearly able to identify this material from the presence of a higher proportion of small rounded stones within this deposit.

These ditches formed the stratigraphically latest feature within this south-western part of the site. It was found to be cutting through the burials and other linear features of the area. It would therefore appear that it is datable to the period after the cemetery, or this part of it, had gone out of use. This is supported by the pottery evidence as detailed in appendix 2 of this report.

A narrow gully (cut no. 1201) was located alongside the western edge of this ditch. This was a steep-sided and flat-based feature with a width of 0.37 metres and a depth of 0.24 metres. The fill (1202) consisted of a dark orange brown silt sand with a fairly low proportion (less than 10%) of small rounded pebbles. A 7.00 metre length of this gully was exposed within the excavated area.

It would appear that this gully was succeeded by a series of post-holes which were found to be cutting into the fill of this gully. Five post-holes (cut nos. 1187, 1190, 1179, 1167 and 1174) were found cutting into the fill of the gully. A further three (1163, 1181 and 1192) were found in close proximity to the other post-holes. The diameter of these post-holes varied from 0.80 metres down to 0.22 metres, with a maximum depth of 0.50 metres. In each case the fill of the post-holes consisted of grey brown silty sand.

This series of features may represent a fence or similar type of feature. The alignment of the series of post-holes and the gully, directly alongside the ditch 1022/1098, suggests a close association between the features. It can be suggested that they formed a single boundary, with a ditch and associated fence or palisade to the west. No evidence of a bank was visible, though any such feature would certainly have been obscured by the later disturbance on the site which led to the formation of the overlying mixed layers.

A series of narrow gullies were found within the north-eastern corner of the site, together with the burials previously described in section 4.11. In common with the burials of this area, the linear features were heavily truncated, containing homogeneous fills which were difficult to distinguish from each other. These factors combined to make any interpretation or meaningful description of the nature of these features impossible. In total, five lengths of linear feature were identified from within this area (cut nos. 1049, 1089, 1106, 1115 and 1120). Each of these were on average only approximately one metre in length and 0.5 metres wide. They were also shallow, with rounded bases. The function of these features is not known, and no pattern could be seen in them as a result of the high level of truncation and disturbance.

For ease of understanding plans and sections of the kiln, as well as the report on the pottery, the following contexts recorded during the evaluation and excavation can be regarded as equivalent. All three digit numbers where assigned during the evaluation, and four digit numbers during the excavation.

Evaluation	Excavation
305	1105
307	1111
309	1117
310	1112
304	1122
308/311	1110

The kiln consisted of three cuts (1110) arranged in a linear fashion, representing a central furnace, with two opposing flues. As no internal structures were located within the furnace, this kiln fits into the category of type 2a as defined by J. Musty (Musty 1974). This is the same type as excavated at other sites within the Hallgate area, particularly that excavated by Paul Buckland (Buckland *et al* 1979). This kiln would be operated by stacking the pots to be fired within the central furnace, covered by a superstructure which would probably have been made of clay or turfs. In common with most other excavated kilns from the medieval period (McCarthey and Brooks 1988), no evidence of the superstructure was found. Fires would have been lit within the flues and the heat drawn into the furnace from these. Ventilation would then have been used to control the flow of heat into the furnace and release of smoke and gases from it. A temperature of 800°-1000° is required to fire the pottery, and this must be reached slowly to avoid damage to the pots. After firing the kiln must be allowed to cool, and so the whole process can take several days.

Further information on the ceramic material found within the kiln is contained within the report on the medieval pottery produced by Dr. C.G. Cumberpatch. This includes details on the clay used, the form and method of construction of the vessels as well as comparisons with material from other sites.

The overall length of the feature was 4.6 metres, including the three separate cuts. The central furnace was oval in shape with a length of 1.80 metres and a width of 1.30 metres. The maximum depth of this cut was approximately 0.50 metres. The southern flue had a length of 1.60 metres and a width of 1.00 metres, compared to the northern flue with a length of 1.20 metres and maximum width of 0.95 metres. This flue also had a more narrow opening, with a width of 0.52 metres. Five separate deposits were recorded within the kiln, two of which were believed to have formed during the operation of the kiln. The lower of these (1122) appeared to consist of natural sand which had been burnt by the heat of the kiln. This had produced an orange/red colour with areas of darker purple. The depth of this layer varied from 0.05-0.07 metres. Some pottery was found within this layer, but this is believed to represent pottery

sherds being pressed into this loose material. This layer was restricted to the central furnace of the kiln and after excavation to this layer, it clearly marked the extent of the furnace.

Immediately overlying 1122 in the stratigraphic sequence was 1112, consisting of a slightly silty sand. This layer was found at the base of the northern and southern flues, but also slightly overlapping 1122. This material was very dark, and mostly black, as a result of direct burning. Some charcoal was present, though only in small quantities, with most of the evidence for this being in the black staining. The contrast in the pattern of burning of the different areas is believed to reflect the method of operation of the kiln. A black staining, with some charcoal, represents *in-situ* burning of the fuel at the northern and southern ends of the kiln. The red staining of the central furnace represents indirect burning, with heat being drawn in, but none of the fuel being used to generate it. After firing, the spent fuel may have been raked out, spreading the black staining outwards and keeping it away from the central furnace.

Successive overlying deposits are believed to have accumulated after the abandonment of the kiln. This phasing is suggested as a result of the unlikelihood that the kiln could be used with this material present and the lack of any evidence for burning after their deposition. The earliest, and lowest, of these (1117) which sealed 1122 and 1112 consisted of orange/brown sand and gravel. It had a maximum depth of 0.15 metres. A considerable proportion of pottery was found within this layer, presumably representing pots left in the base of the kiln following it's final firing.

Deposit 1111 was immediately overlying 1117 and is therefore next in the stratigraphic sequence. This layer was largely restricted to the extent of the central furnace and consisted of mixed sand and silt with some residual evidence of burning. The depth of this layer, which also contained pottery sherds, was between 0.10 and 0.15 metres.

The final, sealing, layer (1105) which covered the full extent of the kiln consisted of a grey brown silt with some gravel. This was described as mixed material, similar to the overlying mixed deposit which covered the entire site (1003). The upper part of this deposit had been severely truncated by a cut (1045) for a modern brick wall which ran along the length of the kiln.

4.31 Associated Features

A number of cut features were found in the immediate vicinity of the kiln. Some of these contained pottery of similar type to that found within the kiln and so it is likely that these features are contemporary and related to the use of the kiln. There are two basic feature types in this area; pits and post-holes.

Two intercutting, shallow pits (cuts 1054 and 1064) were located against the western edge of the site in this area. The stratigraphically later of these pits was cut 1064, a broad but relatively shallow pit with a diameter of 2.40 metres and a depth of 0.90 metres. This pit was roughly circular in plan, and had very steep sides and a flat base.

It was filled by a mid grey brown silty sand with 20-30% rounded gravel. No obvious functions to this feature were apparent during the excavation, though the unusual structure of the feature suggested that a specific function was intended. No evidence of burning was visible within this feature. A total of 80 sherds of medieval pottery, including kiln material, was recovered from within the fill of this feature.

Pit 1064 was cutting an earlier feature (pit 1054), which was also a broad, shallow feature. It had a length of 2.50 metres and a visible width of 1.30 metres within the excavated area. The maximum depth of this pit was 0.20 metres. The sides of this feature were not so steep-sided as those of 1064 and the base was slightly more rounded. The fill was, however, very similar, also being a mid grey brown silty sand. A total of 73 sherds were recovered from this feature, with a similar range of types as in pit 1054. The western edge of this feature contained a smaller, deeper cut with steeper sides (cut 1061). This was oval in plan, with a length of 0.70 metres and a maximum depth of 0.40 metres below the base of pit 1054.

Two post-holes were also found, one located to the north of the pits and one to the east. The northern post-hole (1068) had a diameter at the surface of 0.80 metres. The main part of the post-hole was located at the eastern edge of this area, having a diameter of 0.40 metres and a maximum depth of 0.55 metres. This feature had two fills, with one of these (1075) being a capping layer of mixed dark grey brown silty sand containing burnt sand and red clay. There was no evidence of *in-situ* burning and so it is believed that the burnt material, as well as the clay were derived from elsewhere. Underlying this layer, and forming the main fill of the post-hole was a grey brown silty sand layer (1069). This contained no burnt material, but a relatively high proportion of rounded gravel. No artefactual material was recovered from this feature.

A post-hole to the east (1066) was truncated on the eastern side by a modern truncation (1045). The post-hole had a diameter of 1.20 metres and a maximum depth of 0.80 metres. This feature also had two fills, with the upper of these (1076) being a mid grey brown silty sand. Underlying this was the main fill of the post-hole (1067) which was similar in composition but lighter in colour than the overlying material.

4.32 Dating

A full and detailed discussion of the ceramic types recovered from the features described above is included in the report on the medieval pottery produced by Dr C. G. Cumberpatch (appendix 3). The dating of this element of the site has been based wholly on the ceramic material. The pottery has been carefully considered in relation to assemblages recovered from other sites. Two aspects of the pottery were considered to be particularly crucial in terms of dating the material. These were the construction techniques and, more importantly, the nature of the glaze used. The vessels found at Hallgate were all of coil construction, a method which is known to precede wheel-throwing in the medieval period. The date at which this occurred seems to have varied in diffrent pottery production centres. Dr. Cumberpatch therefore concluded that the nature of the glaze was more instructive in this case. The material found had been glazed using the "splash" method, in which the glaze is

applied in powdered form, as opposed to the suspension method using a liquid form of glaze. A decline in the use of splash glazing appears to have occurred during the 12th century. It is therefore suggested that the ceramic material found within the kiln and associated features dates to the later 11th century or earlier 12th century.

4.4 LARGE BOUNDARY DITCH

A large, central ditch was located running across the site on an approximately north-south axis. This was found to consist of two phases with cut 1056, forming a re-cut into the upper fills of the original ditch cut 1080. Both were heavily truncated on the western edge by a modern intrusion 1020. The total depth to the base of cut 1080 was approximately 1.80 metres. The width at the surface of the ditch is not known as a result of the modern intrusion, though an extrapolation based on the surviving section would suggest an original width of approximately 3.00 metres. The re-cut 1056 had a depth of 0.80 metres. Ditch 1080 had a U-shaped profile, with a rounded base and fairly even sides at an angle of approximately 45°. Cut 1056 had a flatter profile, with a broad and relatively even base.

Cut 1056 contained a single fill (1057) which consisted of mid orange to grey brown sandy silt, with 10-20% of small rounded pebbles. The original ditch cut (1080) contained eight separate fills, each below 1056. These were, in descending order, 1079, 1081, 1082, 1088, 1093, 1094, 1099 and 1100. Each of these consisted of silty sand, with differentiation being made on the basis of clolour and the presence of pebbles.

Deposit	Colour
1079	Mixed orange/grey brown
1081	Mid orange brown
1082	Light orange brown
1088	Light orange brown
1093	Dark grey brown
1094	Mid red/grey brown
1099	Light grey brown, darker lenses
1100	Light grey brown, darker lenses

In viewing the section, the central deposits (1079, 1081, 1082, 1088, 1093, 1094) appear to slope downwards towards the east. This suggests the possibility of a bank which would have been located on the western side. Clearer evidence for such a structure rarely survives in such a context, though in this case the modern truncation (1020) will have destroyed any such evidence.

The two basal layers (1099 and 1100) showed no evidence for such a slope. These are likely to be primary deposits, probably having been formed while the ditch was in use.

4.41 Dating

Dating of this feature is based on the assessment of pottery recovered from the deposits within the ditch. In this case, it is believed to be complicated that at the southern end of cut 1080, it was found to truncate a Roman pit. Two sherds of Roman pottery were found within deposit 1082 and a further two in deposit 1099. It is considered likely that these are derived from the Roman pit through which the ditch was excavated. Therefore, the dating of the features is derived from the medieval pottery which was also found within the ditch. These are thought to be more diagnostic as it is far less easy in this instance to explain how medieval material would be found in a Roman feature then *vice versa*.

A number of sherds of shell-tempered ware were found within this feature and analysed by Jane Young of Lincoln City Archaeology Unit (see pottery report, appendix 3 including table 8). Two sherds were found within deposit 1099, though unfortunately it was not possible to date either of these. This would have provided the most secure possible date for the use of ditch 1080. The immediately overlying deposit (1094), however, contained a sherd of Lincoln Fine-Shelled ware which can be dated to the late 10th-mid 12th centuries. Deposit 1088 contained a sherd of Early medieval shelled ware dated to the mid 12th to early 13th century. A total of seven sherds were recovered from deposit 1057 with the bulk of these being dated to the 12th and 13th centuries.

It is therefore suggested that the shell tempered ware provides the most likely date for the construction of this feature. The original excavation of ditch 1080 is likely to be dated to the late 10th century at the earliest, and may have been during the 11th or earlier 12th century. Subsequent re-cutting of the ditch appears to have occurred some time later, in the later 12th or 13th century.

4.42 Discussion

In the context of the site, it would appear that the original construction of the ditch occurred in the same sort of time period as the start of use of the kiln also found on the site. This must have an implication for a consideration of the function of the feature. Though the full profile of this feature could not be recorded, it would appear that it had a depth of around 1.80 metres and a width of 3.00 metres. This is clearly a significantly large feature, of a scale normally associated with a defensive function, or relating to a major boundary of some sort. In this case, the ditch is located to far to the east to represent the town wall, and fit with existing knowledge on the layout of the medieval town. It is therefore not suggested that this is what it represents. In any case, the town ditch is likely to have been rather larger. Its contemporary date with the kiln may suggest that it is related in some way to the pottery production known to have been carried out throughout the immediate area. It is possible that it was used to delineate the area in which kilns could be operated. Very little is known about such major sub-divisions within the town and surrounding area, so this can only be considered as a tentative suggestion.

5. DISCUSSION

The results of this excavation demonstrate the site as being of significant local and regional importance, as well as being of national interest. This is the first time that any part of a Romano-British cemetary has been excavated in Doncaster, and it confirms the location of the town cemetary in the 2nd and 3rd centuries. Of great interest is the presence of cremation and inhumation within the same site, alllowing a comparison of the pottery found with each. The pottery found in association with the cemetary is also of interest in itself (see appendix 2, section 9). A close study of it is crucial to clarifying the chronological sequence of other, contemporary, sites in the region.

The medieval pottery kiln was found in an area known for it's medieval pottery industry, though only a limited number of kilns have been excavated in the immediate vicinity. Only a limited amount of information was recovered on the nature of the operation of the kiln. This was as a result of the very simple structure to the kiln, with no surviving evidence of any internal features or superstructure. An extensive pottery assemblage was recovered from the kiln. A study of this by Dr C.G. Cumberpatch has shed significant new light on the development of the Hallgate medieval pottery industry.

The final element of the site is the large boundary ditch (cut 1080). This appears to be sufficiently large to have represented a significant structural element of this part of the medieval town. However, it is difficult to judge from this short length, what function it may have served. It is therefore likely that we will have to wait for further excavation in the area in order to determine it's significance.

BIBLIOGRAPHY

Baker, D. 1993 **Model Briefs and Specifications** Association of County Archaeological Officers

Buckland, P.C.; Dolby, M.J.; Hayfield, C.; and Magilton, J.R. 1979 **The Medieval Pottery Industry at Hallgate, Doncaster** Doncaster Museums and Arts Service, Doncaster

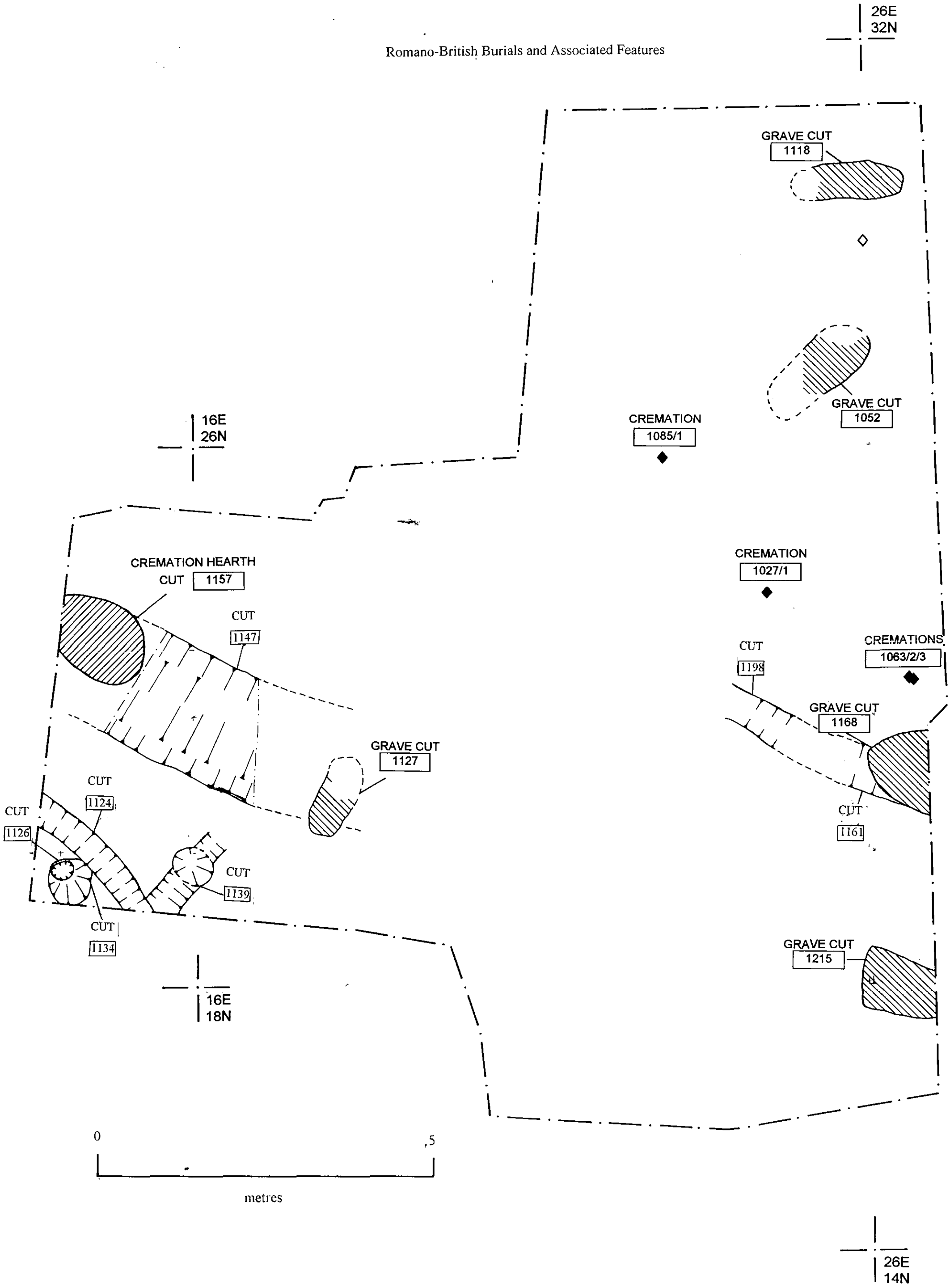
Buckland, P.C.; Hayfield, C.; and Magilton, J.R. 1988 **The Archaeology of Doncaster 2; The Medieval and Later Town** B.A.R. British Series 202

McCarthy, M.; and Brooks, C. 1988 **Medieval Pottery in Britain AD 900-1600** Leicester University Press

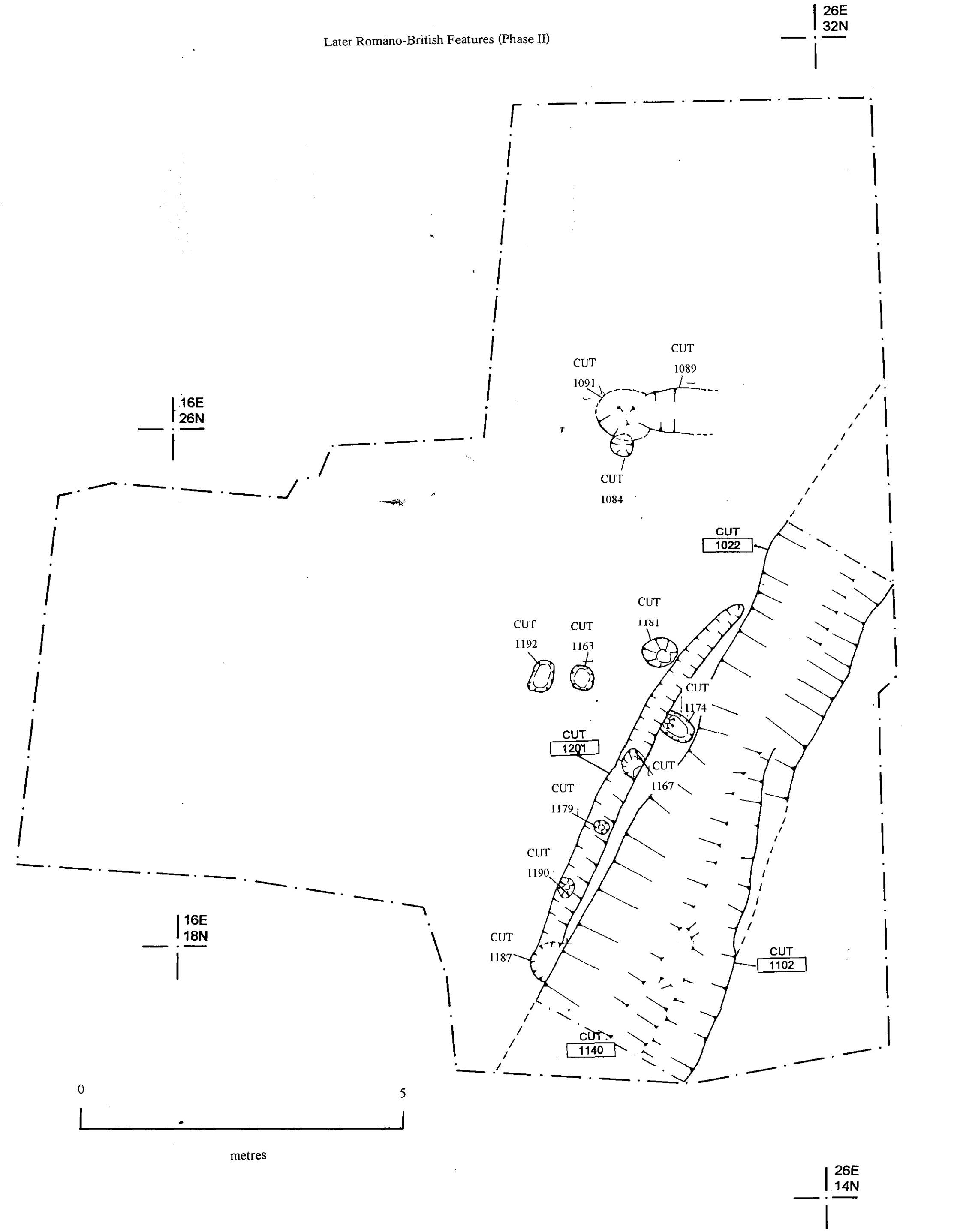
Musty, J. 1974 Medieval Pottery Kilns, 41-66 in Evison, Hurst and Hodges 1974 **Medieval Pottery from Excavations** London

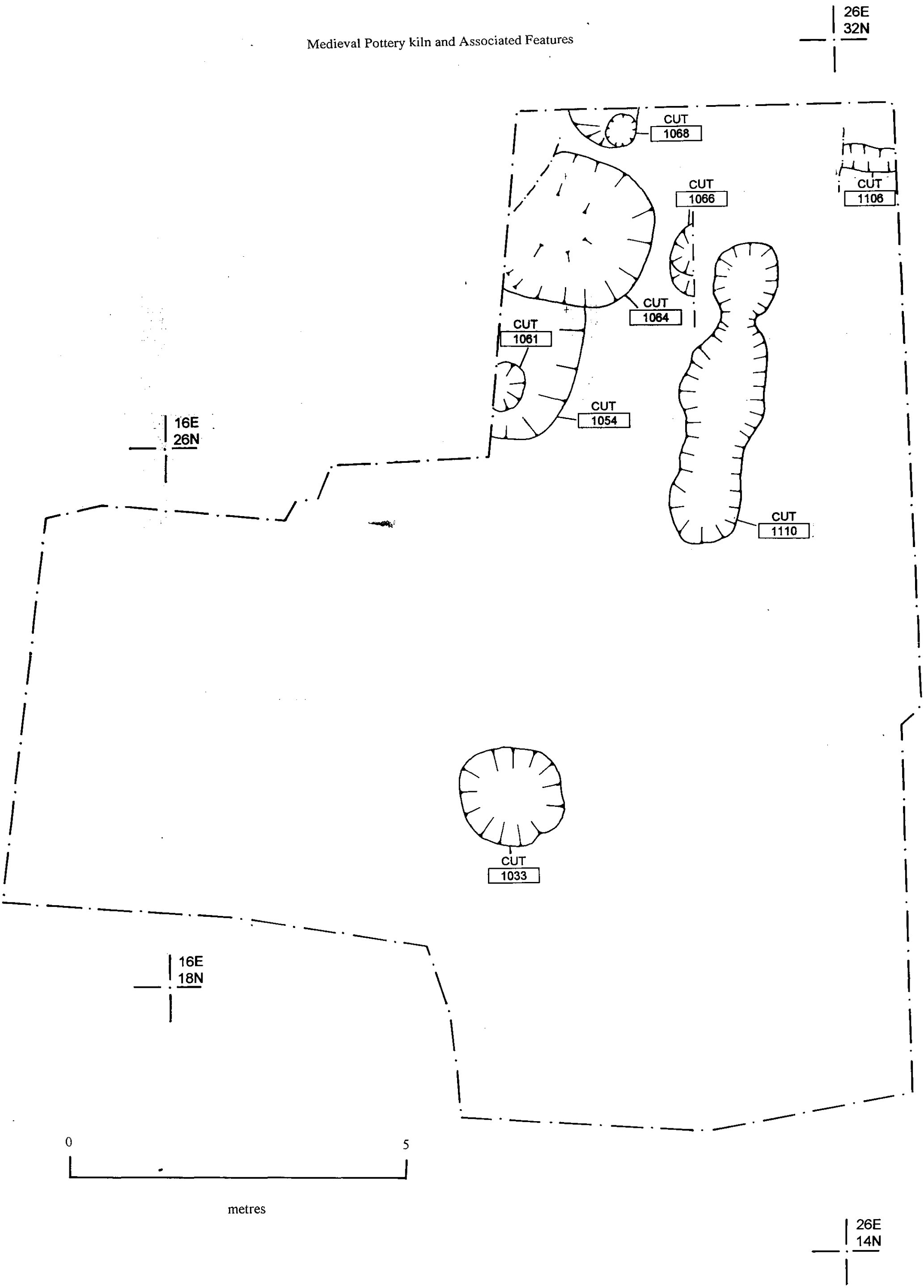
Wacher, J 1974 **The Towns of Roman Britain** London

Romano-British Burials and Associated Features



Later Romano-British Features (Phase II)

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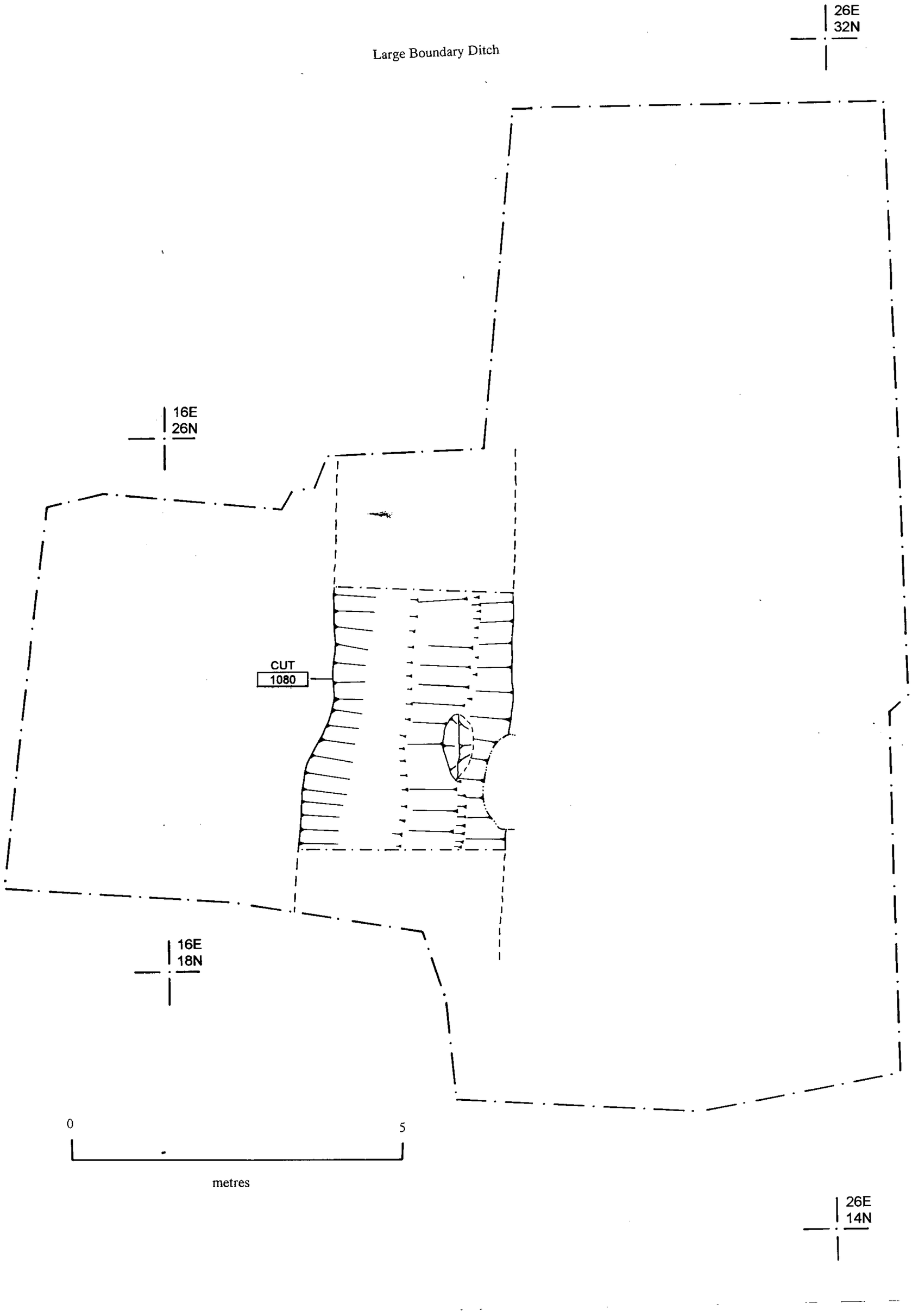
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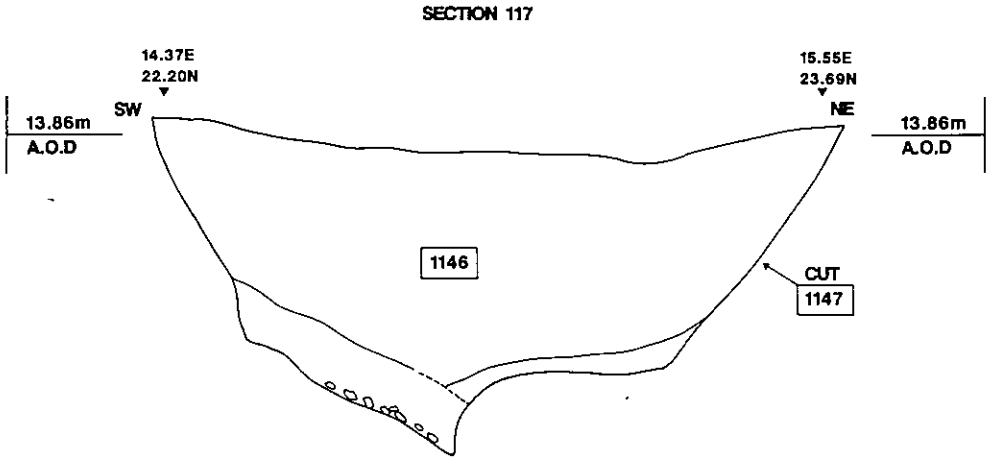
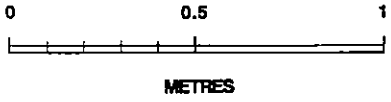
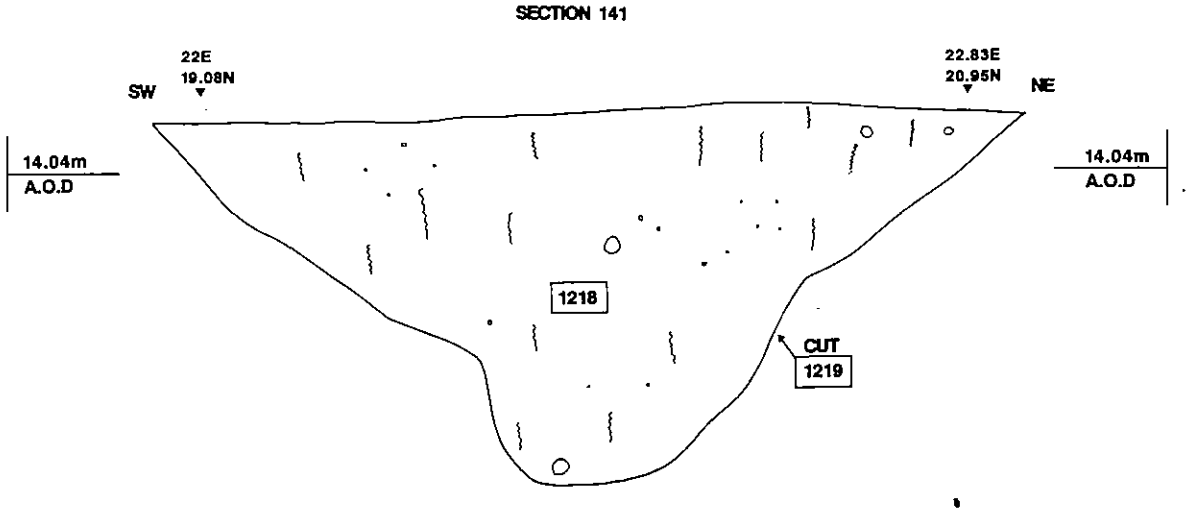


Section through cut 1147





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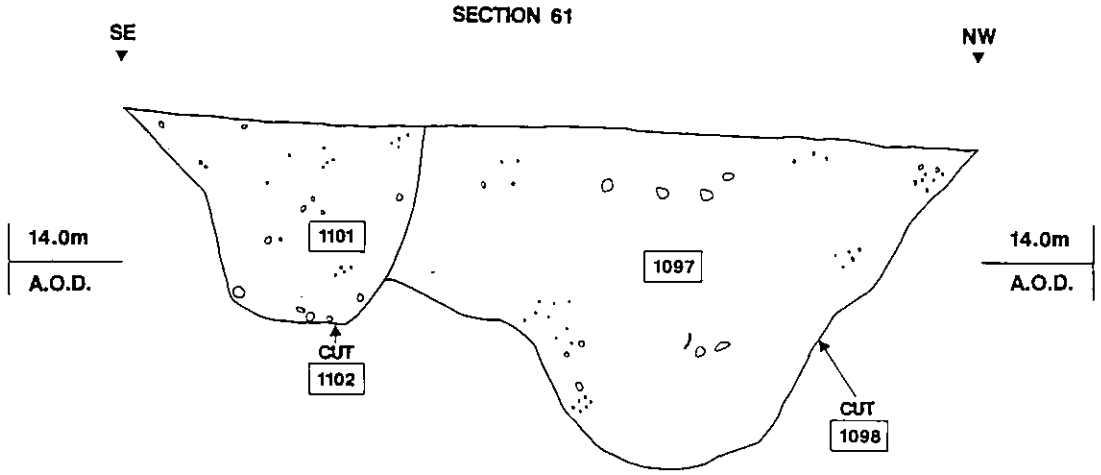
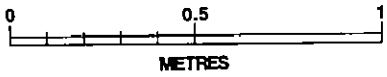
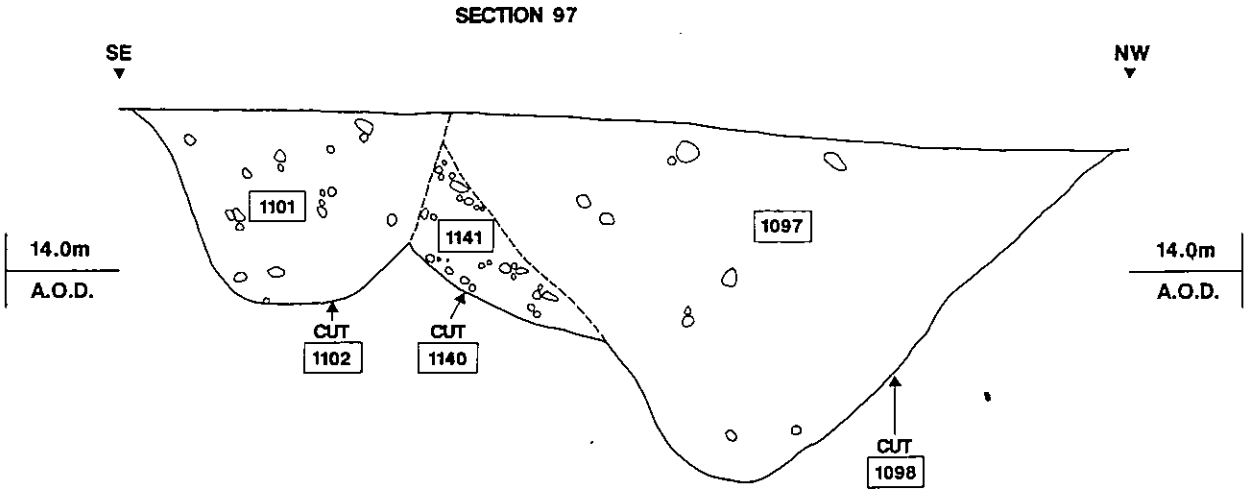
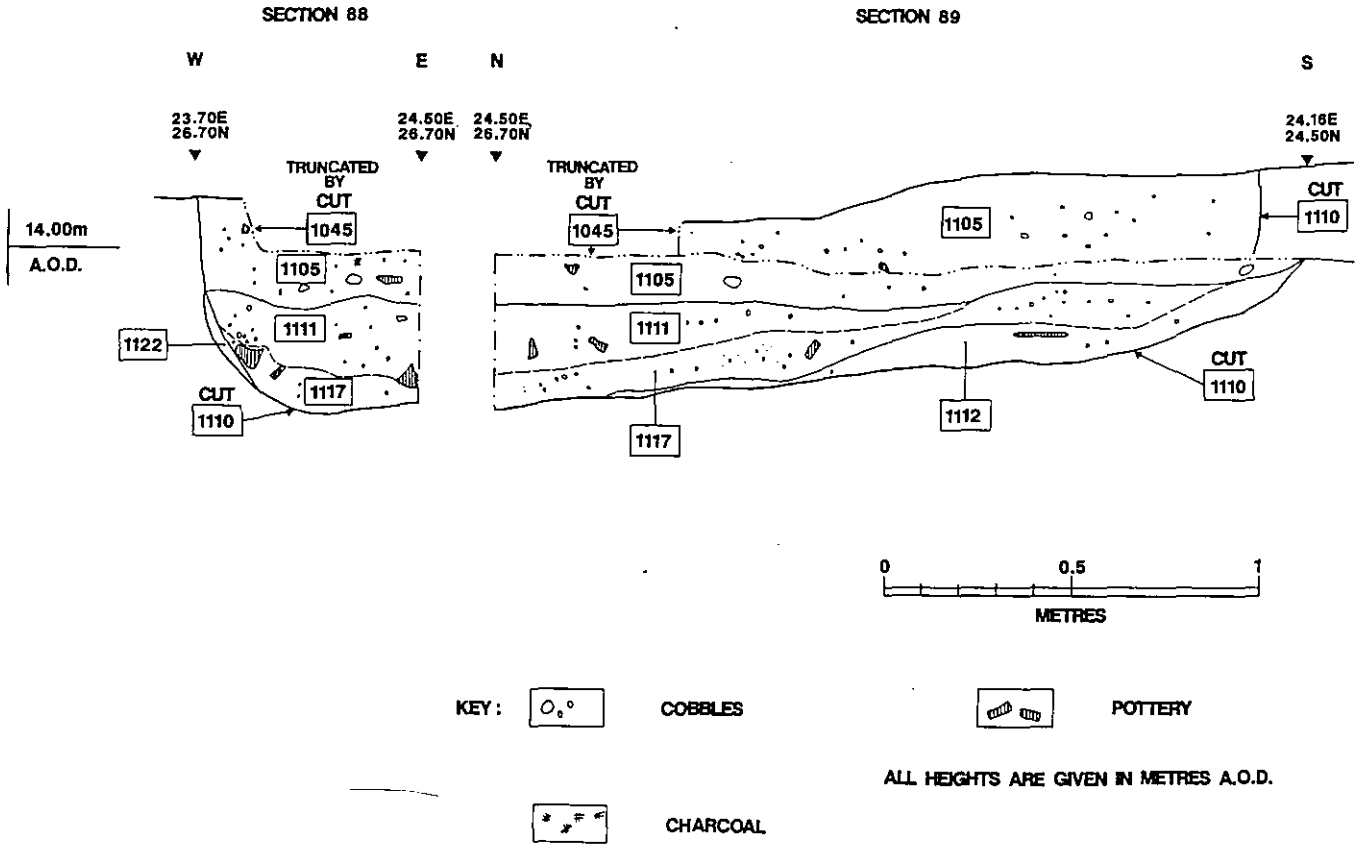


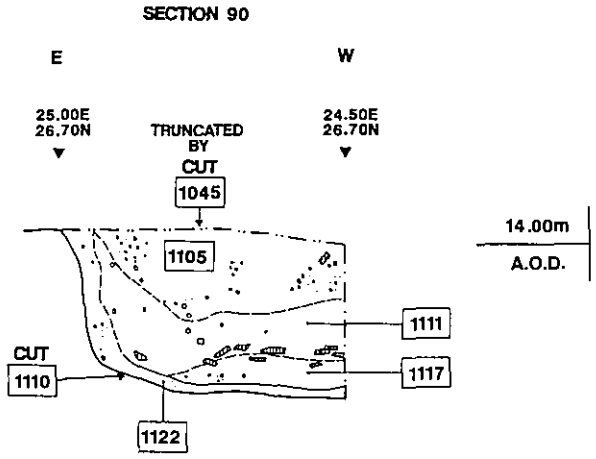
Section through cut 1102 and 1098





Section through cut 1098, 1102 and 1140





Section through pottery kiln

APPENDIX 1
SKELETAL REMAINS

DONCASTER HALLGATE
ANALYSIS OF THE HUMAN SKELETAL REMAINS
A. Burgess

INTRODUCTION

Human skeletal remains were recovered from Doncaster Hallgate during two separate periods of archaeological work; an evaluation in October 1994 followed by a full excavation of the same area in January 1995. These two sets of remains have been treated as one single sample (differentiated by the site codes). In total the skeletal material from Doncaster Hallgate consists of nine articulated inhumations and ten contexts containing disarticulated human bones.

In general the condition of the bone was poor and fragmentary. The burial environment has caused erosive changes to the cortical surfaces of many bones and damage to those skeletal elements comprised of the less dense cancellous bone. The conditions have particularly effected the preservation of the long bone epiphyses and the post-cranial axial elements of the skeleton (pelves, scapulae vertebrae).

Each of the nine inhumations had been truncated, to some extent, by later intrusive cut features. This, combined with the poor preservation described above, means that none of the individuals represented here are more than approximately 50% complete. However, in six cases the mandible and/or maxilla with associated dentition are present, providing a large amount of potential information which can be directly compared between these six cases.

METHODOLOGY

SEX DETERMINATION

Standard macroscopic methods defining male and female morphological features were used (Bass, 1984; Steele and Bramblett, 1988; White, 1991). The general absence of pelvic elements in this sample meant that the determination of sex was based upon cranial analysis only in all but two cases. Sex determination utilising cranial and post-cranial traits can be 95-100% accurate but this drops to 80% when based upon cranial characteristics only.

AGE DETERMINATION

In well preserved skeletal samples a series of ageing techniques can be applied to the material. However, the generally poor post-cranial preservation of this sample meant that the most appropriate ageing scheme was that which uses the dentition. Dental development (Ubelaker, 1984), and dental attrition scales (Miles, 1963; Brothwell, 1965) were suitable for use on six individuals, these methods are the most accurate indicators of age-at-death (Lovejoy *et al.*, 1985) and are particularly relevant to early British populations. Cranial suture closure methods may have been suitable in some cases but were not used as they incorporate an extremely high level of inaccuracy. In small samples a population-specific ageing scheme, which compares relative ages within the group, cannot be established. The use of age categories in analysing cemetery data is now considered to be more accurate than conventional numerical

ageing (Stirland, 1988). For this reason the Hallgate skeletal remains have been aged numerically, but then placed within a deliberately broad age range to enable non-specific age comparison between individuals.

Adolescent	13 - 24 years.
Young Adult	25 - 44 years.
Mature Adult	45 + years.

Definition of age categories

SUMMARY OF RESULTS

1) The Articulated Inhumations

SKELETON No	AGE	AGE GROUP	SEX	PATHOLOGIES	Notes
DHG 94 104	24-34	Young Adult	M	dental pathologies	
DHG 95 1053/10	18-25	Adolescent	M	dental pathologies	
DHG 95 1096/4	25-35	Young Adult	?	dental pathologies	
DHG 95 1119/4	20-25	Adolescent	?M		
DHG 95 1128/1	45+	Mature Adult	F	dental pathologies	
DHG 95 1169/1	?	Adult	?		post-cranial only.
DHG 95 1169/4	?	Adult	?M	osteoarthritis	post-cranial only.
DHG 95 1210/2	24-28	Young Adult	?		
DHG 95 1213/1	?	Adult	?		post-cranial only.

Table 1: Summary of Articulated Inhumations.

THE POPULATION

The poor preservation of fragmentary and incomplete remains, combined with the extremely small sample size, places constraints upon the potential for analysis and discussion. Whilst the individuals in the sample can be discussed, demographic study of a population of this size is not strictly viable.

The condition of the human remains precluded sex determination in four out of the nine inhumations. However the generally well preserved dentition allowed age assessment in all but three cases.

Despite this being a small sample of a cemetery population a broad range of age groups are represented, from (older) adolescent to mature adult. The absence of infants, children and young adolescents is of note, none of the inhumations studied are of individuals aged less than 18 years. Whilst this does not necessarily mean that these categories were not a part of the cemetery population as a whole, their exclusion from this, albeit small, area in particular may in itself be significant, and may possibly indicate a dichotomy in the burial practices between adults and sub-adults at this site. However, the restricted sample size prevents any detailed interpretation - this would require further investigation of the cemetery area.

THE HEALTH OF THE POPULATION

Due to the the poor post-cranial preservation discussed above, an examination of the health of this sample concentrated on the dentition. The dental pathologies noted were a series of conditions commonly found in archaeological populations.

Calculus is the least severe of these conditions and effected three individuals (DHG 94 104, DHG 95 1053/10 & 1128/1). This is the mineralisation of plaque deposits upon the teeth, and is a result of allowing plaque to accumulate, which today would be considered unsightly but is not a health problem in itself. However, calculus build up is often the precursor of periodontal disease, causing irritation to the gums and leading to inflammation. The skeletal reaction to this is resorption of the alveolar bone which can lead to loss of teeth. Slight periodontal disease is present in two individuals (DHG 94 104 & DHG 95 1128/1) and is associated with calculus deposits in both cases. These conditions have been recorded on individuals from all the age ranges. Neither of these cases are severe enough to have caused major health problems.

Dental caries were recorded on two individuals. Six lesions on DHG 95 1096/4 and two on DHG 95 104. Caries are infectious lesions created by bacterial activity, the exact causes are still unknown but are thought to be linked to dietary factors. The destruction of the hard tissue of the tooth is irreversible, resulting in pain as the nerves are exposed and eventually to abscesses and the loss of the effected tooth. Destruction of a tooth crown was noted in two individuals - DHG 95 104 (two teeth effected) and DHG 95 1096/4 (single tooth effected). This is the long term result of untreated caries. Both of these individuals are young adults, it is not unusual for caries to be absent from mature adults as the severe attrition found in older adults may physically remove the evidence of carious lesions.

Osseous lesions were only noted on two individuals, again these conditions are common amongst archaeological populations. Degenerative arthritis was noted on the knees in two adult cases - the femoral articular surfaces of DHG 95 1169/4 and 1210/2. This was most extreme in the former case and would have caused severe pain. These changes are symptoms of ageing and physiological wear and tear.
The only other osseous pathology was a small area of porosity located on the cranium of DHG 95 1210/2, this is a sign of the body's response to infection. The incomplete condition of the skeletal remains means that this infection cannot be identified to a specific disease.

To summarise, the Hallgate sample displays a common range of health problems, the majority of which are only moderately severe and as such would have perhaps been more notable in their absence. A cause of death is not apparent in the skeletal remains of any individual.

2) The Disarticulated Remains

CONTEXT No	ELEMENT	SIDE	AGE	SEX	Notes
DHG 94 104/3	Scapula body	R	?Adult	?	fragment only
DHG 94 112/1	Temporal	?	?Adult	?	fragment only
DHG 94 112/2	Sacral ala	R	?Adult	?	fragment only
DHG 94 112/2	Neural arch	?	?Adult	?	fragment only
DHG 94 304/5	Talus	L	Adult	?	assoc. with DHG95 1053/10
DHG 95 1116/1	?	?	?	?	v. fragmentary
DHG 95 1116/5	?	?	?	?	v. fragmentary
DHG 95 1003/17	Cranial vault	?	?	?	?Human? 2 fragments
DHG 95 1055/1	Femoral diaphysis	R	?Adult	?	3 fragments
DHG 95 1023/6	Mandibular M3	R	18-24	?	
DHG 95 1086/1	Scapula body	?	?	?	?Human?

Table 2: Summary of Disarticulated Skeletal Elements.

Examination of the disarticulated human remains did not produce any further information about the sample as a whole. As no skeletal element is repeated, the minimum number of individuals (MNI) represented here is technically only one. All of the elements were developmentally mature, and the attrition pattern of the mandibular third molar produced a single numerical age at death of 18-24 years. The absence of any sub-adult bones is in accordance with the information gained from the articulated remains. No pathologies were present.

RESULTS

DHG 94 104

Fragmentary and incomplete. Truncated through thoracic vertebrae (T1-T3 are present). Moderate to good preservation of cranium and dentition. Poor preservation of post-cranial remains.

Age and sex:

Despite the absence of the pelvic bones, sex determination is possible. Inhumation 104 has robust cranial characteristics with typically 'male' features, notably 'male' are the menton and gonion aspects of the mandible.

The dentition is complete and the full eruption of the third molars indicates an adult stage of development. Assessment of molar attrition produces an age range of 24-34 years (Miles, 1963), which is in agreement with the estimate of 25-35 years obtained by using Brothwell (1965), and places this individual in the 'young adult' category.

Pathologies:

This individual displays a common range of dental problems, some of which are extreme examples of these conditions.

Interproximal caries are located on two maxillary teeth: the mesial surface of the left third molar and the distal surface of the right second premolar. The lesions on the molar are extreme, effecting approximately 80% of the mesial surface.

The maxillary left second molar and right first molar are broken at the cemento-enamel junction leaving only the roots in position and the pulp cavity exposed. The destruction of the entire crown of a tooth can be the result of untreated caries. Here, the presence

of carious lesions on adjacent molars further indicates that this was the cause of the loss of the crown.
The root of the right first molar is exposed buccally through the maxillary bone, with the presence of calculus upon the root indicating that this had occurred before death. Alveolar remodelling is associated with the area of this tooth, indicating an area of healed infection.
Less severe dental pathologies are also present. Calculus is present on the lingual surface of all mandibular incisors and molars, and on the buccal surfaces of the maxillary left first incisor through to left first premolar. Slight alveolar remodelling and resorption has effected the maxillary incisors, diagnostic of periodontal disease.
These dental health problems rare today but are common in archaeological populations, it is likely that the caries and subsequent crown destruction would have been the cause of much pain.
Aside from dental disease the only osseous pathology noted in this individual was the abnormal morphology of the mandible. The left vertical ramus is twisted medially, however the mandibular condyle maintains the correct position for articulation of the tempero-mandibular joint, and therefore normal jaw function. There is no sign of osseous remodelling and it is likely that this is either a slight congenital deformation of bone morphology or the result of a completely healed childhood fracture (an examination of x-rays would be necessary to verify this).

DHG 95 1053/10
A well preserved inhumation which is 30-50% complete. The cranium is fragmentary but well represented and includes the dentition. The long bones and fragments of pelvis are present but the other axial elements are absent. A truncation had removed the distal femurs and the proximal fibulas and tibias.
Age and sex:
The cranial vault shows the robust 'male' characteristics; large mastoid process and pronounced glabellar profile. The mandibular characteristics are more gracile in comparison and are not diagnostic of 'male' or 'female'. However, the more reliably accurate pelvic traits are 'male', with narrow sciatic notch and large acetabulum.
Age at death is again obtained from the dentition. Dental development has not yet reached the stage of the eruption of the third molars which usually occurs around the age of 21 years. Dental attrition patterns correlate with an age of 18-25 years which compares well with the developmental age. The complete fusion of the humeral head epiphysis narrows down the age at death to the top end of this range (McKern and Stewart, 1957 in Steele and Bramblett, 1988), i.e. 20-25 years and places this individual in the 'adolescent' age group.
Stature:
168 cm. / 5'6" (Trotter & Gleser, 1952:498), based on humeral length of 325 mm.
Pathologies:
Slight calculus is present on the mandibular molars on both the buccal and lingual surfaces, and the maxillary premolars on the buccal surface.

DHG 95 1096/4
This inhumation is very poorly preserved and incomplete. Fragmentary cranial remains with some dentition are included, however the post-cranial remains are only represented by a fragmentary left scapula and humerus. The inhumation was truncated at the distal humerus down and all elements below this are absent.

Age and sex:
The cranial vault and mandible are extremely fragmentary, therefore macroscopic methods of determining sex are not applicable in this case.
Despite some post depositional damage to the enamel of the dentition age assessment is possible. The presence of third molars indicates a developmental age of over 21 years. Dental attrition of the molars is consistent with an age of 25-35 years, placing this individual into the 'young adult' category.
Pathologies:
Again, the incompleteness of the remains allows only an examination of the individual's dental health. Attrition of the maxillary left first incisor has led to the exposure of the pulp cavity. Dental caries are present in six locations. The maxilla has slight interproximal caries on three adjacent teeth - the mesial surface of the left second premolar, distal and mesial surfaces of the left first premolar and the distal surface of the left canine. The mandible has interproximal caries on the distal surface of the second incisor and more extreme occlusal carious lesions on the right first molar.

DHG 95 1119/4
This inhumation has a moderately preserved but incomplete cranium with poorly preserved post-cranial remains. It was truncated from mid femur down.
Age and sex:
Sex determination is based upon cranial remains only. The observable traits of the thick, robust cranial vault were 'male', in particular the large mastoid process and marked nuchal lines. As with DHG 95 1053/10 the mandibular characteristics are relatively gracile when compared to the cranial vault. However, the definitely 'male' traits outweigh the more ambiguous mandibular features and this individual is probably male.
The virtually complete dentition with three third molars indicates an adult developmental stage of around 21 years. This is consistent with the molar attrition scales which are in agreement at an age of 18-25 years. Taking into account the developmental stage, the numerical age of this individual is 20-25 years, placing him into the 'adolescent' category.
Pathologies:
None.

DHG 95 1128/1
The skeletal remains are well preserved and the most complete (at approximately 50%) of the inhumations from this site. Again the axial elements tend to be absent but the cranium and long bones are particularly well preserved. This burial had been truncated from the distal femur down.
Age and sex:
Cranial and post-cranial remains were used for sex determination. The fragmentary left pelvis has a wide sciatic notch, a 'female' trait. The mandibular characteristics are also typically 'female' as are the small mastoid process and mostly gracile cranial features. A rough, lined nuchal area is the single 'male' trait. Metric analyses of the humeral head diameter of 39 mm. also describes this individual as female (Steele and Bramblett, 1988).
The near complete dentition (the mandibular incisors are absent) shows extreme attrition. Miles (1963) method correlates this pattern with an age at death of 42-48

years, and Brothwell's (1965) scheme with an age of 45 years and over. At 45+ years this is an 'old adult'.

Stature:

148 cm. / 4'11" (Trotter & Gleser, 1952:498), based on humeral length of 265 mm.

Pathologies:

Extreme dental attrition can remove the indications of other dental conditions, for example occlusal caries in particular could have been removed completely in cases such as this. There are no carious lesions on this dentition but both maxillary second premolars have lost the tooth crown. As mentioned for DHG 94 104 this may be the extreme result of untreated caries.

Moderate to extreme calculus is present on the lingual surfaces of all mandibular teeth and buccal surfaces of those on the right side. On the maxilla calculus is present on molars and is more extreme on the buccal surfaces. This is a common condition, particularly for an individual in this age group. Periodontal disease is indicated on the maxilla, this is a result of the calculus accumulation.

Although this is an 'old adult' only three third molars are present - the maxillary right is absent. There is little space in the jaw for another tooth and, as the third molar is the most developmentally variable of all the teeth, it is likely that it is either impacted or congenitally absent (an x-ray examination of the mandible would be required in order to distinguish between these).

DHG 95 1169/1

There is moderate preservation of post-cranial remains with only the inferior long bones present. The bones have suffered post depositional damage to the epiphyses. This inhumation was truncated through the femur and all elements above this are absent.

Age and sex:

The poor and incomplete condition of this inhumation prevents an assessment of sex. Although eroded, the epiphyses of the long bones appear to have completely fused indicating skeletal maturity. The age at death is therefore 'adult' (non-specific to either 'young' or 'old').

Pathologies:

None.

DHG 95 1169/4

Again, there is moderate preservation of post-cranial remains (inferior long bones, talus and calcaneus) only. The bones have suffered post depositional damage to the epiphyses. This inhumation was truncated through the femur and all elements above this are absent.

Age and sex:

The poor and incomplete condition of this inhumation prevents an assessment of sex. However, the long bones are extremely large and robust, indicating that this individual is probably male.

As with 1169/1, the eroded epiphyses of the long bones appear to have completely fused indicating skeletal maturity. The age at death is therefore 'adult' (again non-specific to either 'young' or 'old').

Pathologies:

This individual demonstrates very clearly the degradation of articular surfaces associated with degenerative osteoarthritis. Osteophytic lipping occurs on the articular

surfaces of all the long bones. The most extreme example occurs on the right distal femur where eburnation is evident - the characteristic shiny, smooth surface indicating severe arthritis, caused by bone wearing upon bone when the adjoining cartilage has been destroyed.

DHG 95 1210/2

Very poor preservation of skeletal remains, this individual is represented by fragmentary, incomplete cranial remains, fragmentary left radius and fragmentary right femur.

Age and sex:

Again the condition of these remains precludes sex determination. The parabolic shape of the dental arcade is possibly female, however it has already been shown that within this population (DHG 95 1053/10 and 1119/4) mandibular traits alone cannot be considered diagnostic.

Developmentally the dentition is adult, i.e. aged over 21 years. Molar attrition schemes correlate very well, giving 24-28 years (Miles, 1963) and the earlier stage of 25-35 years (Brothwell, 1965). The numerical age at death is therefore 24-28 years, placing 1210/2 into the 'young adult' category.

Pathologies:

The interior of the frontal bone displays slight porosity associated with an inflammatory response (lesion is approximately 16 mm. diameter), however this in isolation is a non-specific indication of disease. This individual also had degenerative arthritis, shown by slight osteophytic lipping on the right distal femur.

DHG 95 1213/1

Very poor preservation of the following post-cranial remains only; the inferior long bones, two tarsals and one metatarsal. This inhumation had been truncated through the proximal femur and all elements above this were absent.

Age and sex:

The inferior long bones were represented by the shaft only, preventing sex determination.

The general size of the long bones combined with the fused epiphyses of the fragmentary talus indicate the complete skeletal development of an adult.

REFERENCES

Bass, W.M. 1984 Human Osteology: A Laboratory and Field Manual of the Human Skeleton. Missouri: Missouri Archaeological Society.

Brothwell, D. R. 1965 Digging Up Bones. Oxford: Oxford University Press.

Lovejoy, C.O., Meindl, R.S., Mensforth, R.P. & Barton, T.J. 1985 Multifactorial determination of skeletal age at death: A method and blind test of accuracy. In American Journal of Physical Anthropology 68:1-14.

Miles, A.E.W. 1963 The dentition in the assessment of individual age in skeletal material. In D.R. Brothwell (ed.) Dental Anthropology: 121-209. Oxford:Pergamon.

Steele D.G. & Bramblett, C.A. 1988 The Anatomy and Biology of the Human Skeleton. Texas: Texas A & M University Press.

Stirland, A. 1988 Physical anthropology: The basic bones. In C.A. Roberts, F. Lee & J. Bintliff (eds.) Burial Archaeology. Current Research, Methods and Development. 51-64. B.A.R. British Series 211. BAR: Oxford.

Trotter, M. & Gleser, G.C. 1952 Estimation of stature from the long bones of American whites and negroes. In American Journal of Physical Anthropology 10:463-514.

Ubelaker, D.H. 1984 Human Skeletal Remains: Excavation, analysis and interpretation. Washington DC: Taraxacum.

White, T. 1991 Human Osteology. San Diego: Academic Press.

APPENDIX 2
ROMAN POTTERY REPORT

ARCHIVE AND ASSESSMENT REPORT ON THE ROMAN POTTERY

from

HALLGATE, DONCASTER DHG95

by

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for

SOUTH YORKSHIRE ARCHAEOLOGY FIELD AND RESEARCH UNIT

2 JULY 1996

REPORT ON THE ROMAN POTTERY FROM HALLGATE, DONCASTER DHG95

Margaret J Darling

2 July 1996

1 INTRODUCTION

The pottery[1] has been recorded in the archive format as recommended by the Study Group for Roman Pottery, quantities being sherd count and weight. Sherds and chips from samples have been recorded separately (context with suffix 'S') to avoid complications on fragmentation analysis. The archive computer database is listed in Appendix 1 and is available on disk. Expansions of fabric and form codes are given in the relevant sections below. Specifically local forms have been coded using Annable 1960 as a convenient reference. Specialist pottery (samian, mortaria) have been separated for further attention, and vessels needed for illustration have been assigned drawing numbers and kept separate.

The importance of the site is clearly the occurrence of burials, both cremations and inhumations, after which there appears to be a break before later Roman activity. At this primary stage of post-excavation work, no phasing is available, but a rough division has been made on the basis of the pottery and the evidence from the site matrix. The quantities archived are as under:

Table 1 Quantities by provisional phase

Phase	Sherds	%	grams	%
1 Burial phase	580	30.7	9793	34.1
2 post-burials; later Roman	1069	56.6	14538	50.7
Evaluation trenches	239	12.7	4347	15.2
Totals	1888		28678	

The burial phase contains two complete unbroken cremation urns, producing a lower percentage on count, while the later Roman phase has quantities of amphora sherds probably disturbed from the burial phase, giving a higher weight percentage.

2 CONDITION

The condition of the pottery is generally good, scrappy and abraded sherds being more evident in the upper layers. Some of the burial phase pottery has been excessively burnt. No problems of deterioration in storage are anticipated.

3 DATING

A full list of all contexts archived, with quantities, pottery dates, note of sherd links between contexts, and any general comments is given in Appendix 2. Dating small groups from Doncaster is hampered by the lack of well-dated stratified deposits from the city, and by the individual character of some of the locally made pottery, particularly the wide-mouthed bowls, which are rare elsewhere and appear to be long-lived with little typological change.

The general impression from the pottery is that the site has two distinct phases, the early phase of burials probably extending through the 2nd century, and a later phase of mostly 3rd to 4th century activity, although this is unlikely to have extended far, if at all, into the 4th century. The NVCC vessels are all beakers, flagons and the occasional box; there are no late bowls or dishes. The latest mortaria are hammer-head types, and one possible wall-sided vessel. There are one or two probably late BB1 vessels, but they could fit into the late 3rd century. A single high beaded grey bead-and-flange bowl occurs, and apart from jars, late

[1] A small quantity of pottery which was separated, some from field walking and evaluation trenches, has not been included in the figures, but this does not materially alter the analysis.

Roman shell-gritted ware includes at least one bowl or dish. The main interest of the pottery lies firmly in the cemetery period.

4 BURIALS

THE CREMATIONS

1165. Light cream-brown cremation urn with painted wavy line decoration. The context immediately below, 1208 the fill of the cremation pit, contained a single chip from a colour-coated rough-cast beaker in a fine cream-white fabric, tentatively identified (given the size of the chip) as a Cologne product, importation of which probably started c AD130. No close parallels have been traced for the urn, which is a type of butt-beaker of the gallo-belgic tradition, and a broad date of later 1st into the early 2nd century seems likely (a beaker from Baldock is similar, Rigby 1986, fig 128, No 290. It is also similar to a vessel from Frenchgate, Doncaster, associated with a rusticated jar (Buckland & Magilton 1986, fig 35, no 81). The overlying contexts, 1156-1135, provide only broad dating evidence of similar range. 1132 has a GREY bodysherd with possible lattice, while a mortarium from 1109 probably dates to the early to mid 2nd century.

1063. This yielded an oxidized white-slipped fire-shattered flagon (cf Gillam 4) for which a late 1st to early 2nd century date is applicable. A cream fabric flagon of similar type and date came from gully 1177.

1030. Complete grey cremation urn in a fairly coarse fabric with an everted rim, and high shouldered form. This is a relatively long-lived form from the Flavian to Trajanic periods, and has no burnishing on the interior of the rim.

1027. Partial survival of about 50% of an everted rim jar with linear rustication, some burnishing on the interior of the rim, and moulded footring. The thin everted rim and high-shouldered form suggest this is early 2nd century; the Rossington Bridge rusticated jars appear less shouldered and have thicker rims. This had two sherds from another rusticated jar, a grey latticed body sherd (marked 1025) and an oxidized segmental bowl similar to Annable 66 (from bag 3). A high risk of contamination of the finds in bag 3 of this context was noted.

None of these three cremations had earlier finds to aid the dating. The conservative range is late 1st to early 2nd century; the latest date would probably be Trajanic to Hadrianic, c AD125, decade either side.

THE INHUMATIONS

The best evidence for dating comes from the grave 1128 which overlies deposits containing a quantity of pottery, 314 sherds, 5.235kg, giving an average sherd weight (excluding amphorae and mortaria) of 16.1g/sherd.

Grave 1128: The lowest part of the fill of cut 1113 underlying the grave contains BB1L (1200) and a grey flanged bowl, burnished on top (but not internally) akin to Annable 43 (1194). Cxt 1195 contains the first instance of sherds from a rough-cast beaker, possibly a local product, a sherd from an OX bowl, probably a hemispherical form, a local BB1 cookpot for which a M2 date seems probable, a wide-mouthed bowl as Annable 130, which appears to derive from the main Cantley kilns, and would generally be dated mid or even later 2nd century. The next context above, 1170, has a grey fabric latticed cooking pot, and a sherd of mica dusted ware, probably locally made. This has joins with 1143 above, where again a GREY cooking pot occurs, together with large sherds from a wide-mouthed bowl which joins to sherds in 1142. Context 1142 is a larger group, with a wide variety including two OX hemispherical bowls, a Parisian vessel with an important new stamp, a local oxidized hook rim mortarium spout, a BB1 beaker (EM2), a wide-mouthed bowl as Annable 131 with wavy line scored decoration, and a GREY flanged bowl with burnished intersecting arcs. This last vessel would suggest a later date, mid to late 2nd century. The group was fairly fragmented despite some large sherds (as with the wide-mouthed bowl), and there was some abrasion. The inhumation 1128 was placed into this material, and therefore should be mid to late 2nd century or later in deposition. None of the sherds from 1128 appear to be from grave vessels.

Grave 1169: The inhumation 1169 overlies no other finds. Apart from a couple of sherds from rusticated jars and a burnt flagon sherd, the dating has to come from the two vessels forming the grave

goods, a segmental bowl and a beaker, the former in notably poor condition compared to the almost pristine nature of the beaker (the bowl sherds are all marked 1142/4 but are bagged as 1169 bag 5). The segmental bowl could be any date from the Hadrianic period onwards to AD200; the beaker is a long-lived type but would fit an early to mid 2nd century date.

Grave 1053: Inhumation 1053 overlies earlier finds, but these are negligible, and give only a broad late 1st to 2nd century date, the latest being a fragment of local BB1 cooking pot from 1086. The grave contained part of the neck of a C186 amphora, sherds from three different rusticated jars, and from a GREY narrow-necked vessel and CR flagon bodysherds. The mixture of sherds does not suggest that any were from grave goods.

Grave 1044: The stratigraphically earlier grave 1044 produced in the evaluation (306) a fine near complete rusticated beaker, probably the sole grave furnishing. Context 306 also contained burnt sherds from a C186 amphora and CR flagon.

Sherds from a Camulodunum 186 amphora (contents fish based) first occur in these two graves; the quantity of such sherds higher in the stratification could be from a single vessel, probably contemporary with the cremations.

The main evidence for the date of the inhumations comes from 1128 which overlies datable pottery which provides a *terminus post quem*, and its deposition was probably in the latter part of the 2nd century. The association of the rusticated beaker with grave 1044 (from 306) suggests the practices of inhumation and cremation probably overlapped, although it is worth bearing in mind that the practice of putting old vessels into graves is well documented. Inhumation is generally thought to belong more to the latter part of the 2nd century, and the rite of cremation certainly continues, as seen from groups from Doncaster (Buckland & Magilton, 1986, fig 39, nos 240-43; 247) and elsewhere. The pottery from the site and its stratified occurrence suggests the burial phase probably did not extend far, if at all, into the 3rd century.

The evidence is consistent with the earliest burials being cremations, with the rite changing to inhumation during the 2nd century, probably in the latter part. The ditch 1219 equated with 1147 contained pottery which appears contemporary with the burials, notably a large part of a native type cooking pot from 1218, while 1146 had only a base of the type common on rusticated jars.

5 LATER ACTIVITY

Sherds from the burial phase are distributed through the upper strata of the site. Some of the post-holes post-dating the burials contain residual sherds, but 3rd to 4th century sherds also occur, suggesting these mark the change of use.

The ditch cut 1080 contained a relatively small group of pottery (42 sherds, 431g, only 10g/sherd) including dales ware jars, as also in the post-hole cut 1181, for which a later 3rd century date is probable.

The well cut 1207 contained 180 sherds, 2617g, with no dales ware, but had late NVCC beakers, a Rhenish ware (MOSL) beaker, a mortarium of 3rd century probably from the Cantley kilns, later wide-mouthed bowls, all indicating a later 3rd century date. There was a quantity of earlier 2nd century pottery, including samian, a poppy head beaker, and fragments from the neck of a rare BB flagon, probably a local product. This has an average sherd weight of 14.7g (excluding amphorae and mortaria). The later re-cut pit 1034 produced 173 sherds, average sherd/wt 13.4g, including a high beaded grey bead-and-flange bowl, suggesting deposition in the 4th century.

The ditch cut 1098=1022 was another larger group (202 sherds, 2072g) with several dales ware jars, a fragment from a shell-gritted bowl or dish, late NVCC beakers, a late BB1 cooking pot, suggesting this could be one of the latest features on the site. Fragmentation varied from a low 8.5g/sherd from 1022 to 10.1g/sherd from 1098).

6 OVERVIEW OF THE FABRICS

The fabrics from the site as a whole, including samples, are given in Table 2.

Table 2 All fabrics

Fabric	Code	Sherds	%	grams	%
Amphorae	AMPH	1	0.05	16	0.05
BB1	BB1	26	1.21	430	1.48
BB1 Local	BB1L	55	2.56	630	2.16
Camulodunum 186 amphorae	C186	33	1.53	3394	11.65
Colour-coat	CC	3	0.14	25	0.09
Coarse	COAR	1	0.05	8	0.03
Cream	CR	88	4.09	793	2.72
Cream/reduced surface	CRRD	1	0.05	3	0.01
Dressel 20 amphorae	DR20	8	0.37	418	1.44
Dales ware	DWSH	57	2.65	801	2.75
Grey fine	GFIN	2	0.09	2	0.01
Grey	GREY	1435	66.71	18150	62.32
Grey with oxidized fabric	GRRB	1	0.05	11	0.04
Cologne CC	KOLN	1	0.05	1	0.00
Mica-gilt	MICA	5	0.23	12	0.04
Mortaria Cantley	MOCA	16	0.74	188	0.65
Mortaria Mancetter/Hartshill	MOMH	7	0.33	228	0.78
Mortaria Oxon	MOOX	1	0.05	17	0.06
Mortaria	MORT	11	0.51	519	1.78
Mosel CC	MOSL	3	0.14	13	0.04
Nene Valley CC	NVCC	36	1.67	120	0.41
Oxidized	OX	109	5.07	1190	4.09
Oxidized cream-brown	OXL	25	1.16	825	2.83
Oxidized white slip	OXWS	105	4.88	379	1.30
Parchment	PARC	1	0.05	6	0.02
Parisian type	PART	5	0.23	10	0.03
Rough-cast	RC	28	1.30	179	0.61
Samian Central Gaul	SAMCG	65	3.02	405	1.39
Samian South Gaul	SAMSG	2	0.09	9	0.03
Shell-gritted	SHEL	3	0.14	12	0.04
Vesicular	VESIC	17	0.79	330	1.13
Totals:		2151		29124	

The fabrics can be examined on the basis of the broad split of the site between the earlier burials phase, and the later Roman activity. Table 3 shows the percentages of fabrics by phase, based on weight.

Table 3 Fabrics by phase, percentages weight (* = presence below 1%).

Fabric	Code	Burials 1	Later 2	Evaluation
Amphorae	AMPH	0	*	0
BB1	BB1	*	2.35	*
BB1 Local	BB1L	2.6	2.33	*
Amphorae C186	C186	4.82	8.99	37.15
Colour-coated	CC	0	*	0
Coarse	COAR	*	0	0
Cream	CR	1.93	3.55	1.98
Cream reduced surface	CRRD	0	*	0
Dressel 20 amphorae	DR20	1.47	1.54	1.15
Dales ware	DWSH	0	3.45	6.88
Grey fine	GFIN	*	*	0
Grey	GREY	64.25	64.61	46.61
Grey oxidized fabric	GRRB	0	*	0
Cologne CC	KOLN	*	0	0

Mica-gilt	MICA	*	0	0
Mortaria Cantley	MOCA	0	1.29	0
Mortaria Mancetter/Hartshill	MOMH	0	1.27	1.01
Mortaria Oxon	MOOX	0	0	*
Mortaria	MORT	2.64	1.48	1.04
Rhenish ware	MOSL	0	*	*
Nene Valley CC	NVCC	0	*	*
Oxidized	OX	5.73	3.92	1.33
Oxidized cream-brown	OXL	7.58	*	*
Oxidized white slip	OXWS	3.67	*	0
Parchment	PARC	0	*	0
Parisian type	PART	*	*	0
Rough-cast	RC	1.12	*	0
Samian Central Gaul	SAMCG	*	2.37	*
Samian South Gaul	SAMSG	*	0	0
Shell-gritted	SHEL	*	0	*
Vesicular	VESIC	2.57	*	0
Totals		99.99	100.01	100.02
Sample size		9793g	14538g	4347g

It should be emphasized that 53% of the burial phase (on both count and weight) came from deposits underlying the inhumation 1128. This burial phase contains most of the flagon fabrics, CR, OXWS and OXL, the rough-cast beaker sherds, the VESIC fabric, probably from early cooking pots, and mortaria more likely to be of 2nd century date. The local BB1 occurs in both phases of the site, but sherds of Dorset BB1 are mainly in the later phase; the local BB1 and a single sherd of BB1 from the burials phase came from cut 1113 below inhumation 1128. A Parisian type body sherd with an important new stamp occurred in the burial phase, from the same location underlying inhumation 1128. Specifically later pottery is confined to the later phase, as DWSH, MOCA, MOOX, MOSL, NVCC and PARC. A single body sherd of PARC parchment ware from a closed vessel with horizontal painted line came from the later phase.

Virtually all the ordinary grey wares appear to be probably from local sources, many of the forms being those produced by local kilns. The oxidized vessels appear to belong to the earlier phase, and are probably also from local kilns. The few sherds of mica-gilt (MICA), the rough-cast (RC) beaker sherds and the fabrics used for flagons (OXL and OXWS) could derive from the same source. The cream (CR) sherds are mostly flagons (but a jar and bowl also occur), and seem more likely to be from elsewhere in the province. The pottery of the later phase is more diversified with imports from elsewhere in Britain, NVCC, DWSH, PARC, and various mortaria, and from abroad, Rhenish and samian. Samian and mortaria sherds have been extracted for further study.

SAMIAN

Of the 67 sherds only two may be from South Gaul, and the Central Gaulish sherds probably cover the 2nd century, including late 2nd century vessels. There are two fragments of name stamps, and a few sherds from decorated vessels. These should be submitted to a samian specialist.

MORTARIA

Probably about 18 mortaria are represented, the dominant source being the Mancetter-Hartshill kilns (6-8), and possibly other kilns in the Midlands (3), extending from the 2nd to 3rd century, five appear to be late Cantley products, including hammer head types, one is probably a local product of earlier 2nd century date, and there is a single sherd from an Oxfordshire white mortarium. Where sherds can be roughly dated, they divide almost equally between earlier 2nd century and later Roman. There is a fragment of a stamp on a hooked type from the local kilns in oxidized fabric with a cream slip which will need specialist identification.

AMPHORAE

Publication of the pottery is largely a question of drawing work, some additional work on the fabrics to define them clearly with comparison to local kilns, more defined integration with the site and other evidence (finds and environmental), and the preparation of a text report giving more detail and analysis overall. Some 85 vessels are noted as being either essential or useful to illustrate the assemblage. A listing is in Appendix 4; a selection should be made from this list; not all will need to be drawn.

BIBLIOGRAPHY

Annable, F.K., 1960 *The Romano-British Pottery at Cantley Housing Estate*, Doncaster Museum Publication 24.

Buckland, P.C. & Magilton, J.R., 1986 *The Archaeology of Doncaster 1. The Roman Civil Settlement*, BAR Brit. 148.

APPENDIX 1

DATABASE

FIELDS:
Cxt, Fabric, Form, Dec/Surf, Vess, Draw?, Dno, Details, Joins, sherds, grams

1000,MOMH?,MWS,-,-,-,-,FRAG X RIM ONLY; NO TG,-,1,41
1000,CR,F?,-,-,-,-,BS,-,1,33
1000,GREY,JLS,-,-,-,-,RIM ONLY;USUAL TYPE,-,1,17
1000,GREY,B,-,-,-,-,UPR.RIM; ?CARINATED TYPE,-,1,11
1000,GREY,-,-,-,-,-,FTM,-,1,65
1000,GREY,-,-,-,-,-,BSS,-,6,109
1000,ZDATE,-,-,-,-,-,03-Apr,-,-,-
1001,GREY,BWM143,-,-,-,-,ABR RIM FR,-,1,36
1001,GREY,BWM,-,-,-,-,ABR DAMAGED RIM FR,-,1,46
1001,GREY,-,SWL,-,-,-,BS,-,1,3
1001,GREY,BD,-,-,-,-,BS,-,1,38
1001,GREY,-,-,-,-,-,BSS,-,10,138
1001,GREY,-,RIB?,-,-,-,BS PIMPLY FAB X ?SHLDR,-,1,11
1001,ZDATE,-,-,-,-,-,L2-3,-,-,-
1002,SAMCG,31,-,-,-,-,RIM/WALL,-,1,21
1002,SAMCG,-,-,-,-,-,BS,-,1,3
1002,GREY,-,-,-,-,-,BS,-,1,12
1002,CR,F?,-,-,-,-,BS FINE CREAM,-,1,6
1002,ZDATE,-,-,-,-,-,L2/PR,-,-,-
1003,DWSH,JDW,-,-,-,-,RIM FR;3 BSS,-,4,30
1003,ZDATE,-,-,-,-,-,M3+,-,-,-
1003,ZZZ,-,-,-,-,-,OTHER SHEL=?MED,-,-,-
1015,DWSH,-,-,-,-,-,BS,-,1,8
1015,ZDATE,-,-,-,-,-,M3+,-,-,-
1016,SAMCG,31?,-,-,-,-,RIM,-,1,6
1016,OXL,F?,-,-,-,-,FTRG,-,1,7
1016,GREY,-,-,-,-,-,BASES/BSS,-,7,224
1016,ZDATE,-,-,-,-,-,ML2?,-,-,-
1017,GREY,-,-,-,-,-,BS,-,1,39
1017,ZDATE,-,-,-,-,-,RO,-,-,-
1021,SAMCG,-,-,-,-,-,FLAKE,-,1,1
1021,BB1L?,BD,-,-,-,-,BS,-,1,15
1021,OX,JB,-,-,-,-,CURVE RIM;GRITTY CRBN FAB,-,1,34
1021,ZDATE,-,-,-,-,-,02-Mar,-,-,-
1023,SAMCG,31?,-,-,-,-,RIM,-,1,3
1023,MORT,M,-,-,-,-,CR BS;ABR;QTZ TRIT;MOMD/MOMH?,-,1,15
1023,NVCC,BKPA,PA,1,-,-,BSS TWINLINE LA;GRYISH FAB,-,2,11
1023,NVCC,BKFO,ROUL,-,-,-,BS;RB FAB,-,1,3
1023,CR,F?,-,-,-,-,BSS,-,3,16
1023,CC,-,-,-,-,-,CHIP LT RB FAB;DK CC,-,1,1
1023,OX,CLSD?,COWL,1,-,-,BSS;FINELY COMBED DEC,-,2,6
1023,VESIC,CLSD,-,1?,-,-,BSS,-,3,35
1023,BB1L,L,-,-,D?,-,LID RIM;NOT DEF H'MADE,-,1,13
1023,BB1L,BD,-,-,-,-,BS,-,1,5
1023,GREY,-,-,-,-,-,BS GRITTY HD FAB W ?GROG/TILE COPY DERB?,-,1,16
1023,OX,BK,-,1,D?,-,UPR RIM W BEAD;FINER FAB;NOT DEF BKFN,-,2,9
1023,OX,BKEV,-,-,-,-,TINY RIM FR,-,1,1
1023,PART,-,-,-,-,-,TINY BS;FINE PLAIN,-,1,1
1023,OX,-,-,-,-,-,MISC BSS,-,8,33
1023,DR20,A,-,-,-,-,BS;ABR,-,1,35
1023,GREY,BFB,-,-,-,-,RIM/WALL FR,-,1,16
1023,GREY,DPR,-,-,-,-,RIM/WALL FR,-,1,16
1023,GREY,BKEV,-,-,-,-,DAMAGED RIM/SHLDR,-,1,10

1023,GREY,JCUR,-,4,-,-,RIM FRS;CURVED,-,4,22
1023,GREY,BD,-,-,-,-,BSS,-,4,75
1023,GREY,J,RLIN,-,-,-,BSS,-,2,8
1023,GREY,-,LA,-,-,-,BSS,-,3,37
1023,GREY,-,-,-,-,-,BSS,-,45,411
1023,DWSH,JDW,-,-,-,-,RIM ONLY,-,1,23
1023,DWSH,JDW,-,-,-,-,RIM ONLY,-,1,6
1023,DWSH,JDW,-,-,-,-,BSS,-,4,29
1023,GREY,JLS,-,-,-,-,RIM ONLY;CANTLEY TYPE,-,1,9
1023,ZDATE,-,-,-,-,-,ML3+,-,-,-
1023,ZZZ,-,-,-,-,-,1 PROB MED OXID SH 6G,-,-,-
1025,GREY,JEV,RLIN?,-,D?,-,RIM-RUST Z & BS;AS ANNABLE 215,-,3,47
1025,GREY,DGR,-,-,D?,-,RIM/PT WALL;SIM ANNABLE 13,-,1,7
1025,GREY,BD,-,-,-,-,BS W CHAMFER,-,1,4
1025,GREY,J,LA,-,-,-,BS,-,1,3
1025,ZDATE,-,-,-,-,-,E2?,-,-,-
1027,GREY,JEV,RLIN,1,D,17,COMP PROF;C 50% POT & 5 CHIPS,-,21,461
1027,GREY,CLSD,-,LA,-,-,BS MARKED 1025-1,-,1,1
1027,GREY,J,RLIN,-,-,-,BSS NOT CERT X URN;BAG3,-,2,11
1027,OX,BSEG,-,-,D,41,RIM/MOST WALL AS ANNABLE 66;BAG3,-,1,19
1027,ZDATE,-,-,-,-,-,E2?,-,-,-
1027,ZZZ,-,-,-,-,-,BAG3 MKED V HIGH RISK CONTAM X WALL CONST,-,-,-
1028,SAMCG,31?,-,-,-,-,BS,-,1,3
1028,ZDATE,-,-,-,-,-,M2?,-,-,-
1029,CR,F?,-,-,-,-,BS PROB F,-,1,48
1029,ZDATE,-,-,-,-,-,L1-2,-,-,-
1030,GREY,JEV,RIL,-,D,19,CREM.URN COMPLETE,-,1,775
1030,ZDATE,-,-,-,-,-,E2?,-,-,-
1032,DWSH,JDW?,-,-,-,-,RIM FR ONLY PROB DW,-,1,3
1032,GREY,-,-,-,-,-,FLAKE,-,1,1
1032,ZDATE,-,-,-,-,-,M3+,-,-,-
1035,SAMCG,37,-,-,-,-,RIM ONLY,-,1,8
1035,SAMCG,31?,-,-,-,-,RIM ONLY,-,1,5
1035,SAMCG,-,-,-,-,-,FTRG FR,-,1,3
1035,MORT,M,-,-,-,-,FLAKED BS RB/GRY CORE;FINE SLAG TG,-,1,10
1035,MORT,MHH,-,-,D,33,PLN MHH RIM/WALL;QTZ/BLK TG;BURNT RB ?SLIP,-,1,69
1035,RC,BKFO,RCC,1,-,-,BSS,-,2,4
1035,OXWS,B31?,-,1,D,34,RIM/PT WALL,-,1,8
1035,NVCC,BKPA,ROUL;PA,1,-,-,BSS;LA DEC;LATE GRY/RB FAB DK CC,-,2,10
1035,NVCC,BK,-,2,-,-,BSS;LATE RB FAB,-,2,5
1035,OXL,FCO,-,-,D,35,RIM/NECK;LT RB FAB CR/BN SURFS,-,1,41
1035,OXWS?,F,-,-,-,-,2R HDLE BURNT,-,1,8
1035,CR,F,-,-,-,-,BURNT BS,-,1,12
1035,PARC,CLSD,PA,-,-,-,BS FINE GRY FAB;CR EXT;PT HORIZ & WAVY LINE,-,1,6
1035,CC,CLSD,-,-,-,-,BSS;?BURNT;LGER BK OR F,-,2,24
1035,OX,B196,-,1,D,36,RIMS/WALL;SM BOWL;ANNABLE 196,-,3,119
1035,GREY,BSM,-,-,D?,-,RIM/WALL AS ANNABLE 198,-,1,33
1035,GREY,BSM,-,-,D?,-,RIM/WALL AS ANNABLE 198,-,1,13
1035,GREY,BSM,-,-,-,-,RIM AS ANNABLE 198 ETC,-,1,6
1035,GREY,BSM,-,-,-,-,RIM AS ANNABLE 198 ETC,-,1,8
1035,GREY,BSM,-,-,-,-,RIM AS ANNABLE 198 ETC,-,1,10
1035,GREY,BSM,-,-,-,-,RIM AS ANNABLE 198 ETC,-,1,9
1035,GREY,BSM,-,-,-,-,RIM/WALL AS ANNABLE 198 ETC;DAMAGED,-,1,22
1035,GREY,BFB,-,-,-,-,RIM/PT WALL,-,1,27
1035,GREY,BFB,-,1,-,-,RIM/WALL,-,2,45
1035,GREY,BFBH,-,-,-,-,RIM ONLY,-,1,7
1035,GREY,BWM164,-,-,-,-,RIM,-,1,38
1035,GREY,BWM162,-,2,-,-,RIMS/PT WALL GRITTY FB;OXID SURFS,-,3,73

1035,GREY,L,-,-,-,-,RIM FR;GRITTY FAB;LT GRY;BLK INCLS,-,1,9
1035,GREY,L,-,-,-,-,RIM FR;THIN WALL;FINER QTZ FAB,-,1,4
1035,GREY,BKFO,-,-,-,-,BS,-,1,8
1035,GREY,DGR,-,-,-,-,RIM FR ONLY,-,1,6
1035,GREY,BG301,-,-,D?,-,RIM AS G301 (LINC B333),-,1,20
1035,GREY,JLS,-,-,D?,-,RIM CF ANNABLE 86;ALMOST JDLS,-,1,22
1035,GREY,JNN,BWL?,-,-,-,RIM,-,1,9
1035,GREY,JNN?,-,-,-,-,RIM/SHLDR;LOW NECK,-,1,16
1035,GREY,JCUR,-,4,-,-,RIMS ONLY,-,5,61
1035,BB1L,CP,-,-,-,-,BS,-,1,21
1035,BB1L,BD,-,-,-,-,BS (?BB1 OX SURFS),-,1,14
1035,OX,OPEN,-,-,-,-,BS;BURNISH INT,-,1,7
1035,OX,-,-,-,-,-,BSS MISC,-,10,61
1035,GREY,-,LA,-,-,-,BSS,-,6,78
1035,GREY,-,NOTC,-,-,-,BS NOTC BELOW BURNISH ZONE,-,1,3
1035,GREY,-,BS,-,-,-,BSS CURVIL.BL DECOR,-,7,65
1035,GREY,-,-,6,-,-,PLAIN BASE,-,6,191
1035,GREY,-,-,-,-,-,BASE GROOVE UNDER,-,1,23
1035,GREY,-,-,-,-,-,BASE STRING,-,1,21
1035,GREY,-,-,-,-,-,BASE FTM HIGH,-,1,17
1035,GREY,-,-,-,-,-,BSS,-,72,880
1035,DWSH,JDW,-,1?,-,-,RIM FRAGS BAG 1,-,2,14
1035,DWSH,JDW,-,-,-,-,BS BAG 10,-,1,11
1035,DWSH,BDPR,-,-,-,-,PLAIN RIM FRAG BAG 10,-,1,7
1035,DWSH,BD,-,-,-,-,BASE RB FAB BAG 10,-,1,43
1035,DWSH,JDW,-,2,-,-,RIM FRAGS BAG 12,-,2,21
1035,DWSH,JDW,-,-,-,-,BSS,-,9,112
1035,ZDATE,-,-,-,-,-,L3-4,-,-,-
1035,ZZZ,-,-,-,-,-,F.FRAGMENTED;SECONDARY,-,-,-
1036,GREY,-,-,-,-,-,BS,-,1,7
1036,ZDATE,-,-,-,-,-,RO,-,-,-
1038,GREY,BKEV,-,-,-,-,RIM/SHLDR FRAG,-,1,3
1038,GREY,J,RLIN?,-,-,-,ABR BS,-,1,4
1038,GREY,-,-,-,-,-,ABR BSS,-,6,26
1038,ZDATE,-,-,-,-,-,2?,-,-,-
1041,SHEL,-,-,-,-,-,COARSE BS;BURNT EXT;?DW,-,1,2
1041,OX?,-,-,-,-,-,SM BS,-,1,1
1041,OX,-,-,-,-,-,CHIPS,-,2,1
1041,ZDATE,-,-,-,-,-,RO,-,-,-
1041,ZZZ,-,-,-,-,-,X SAMPLE 7;IF DW M3 ON?,-,-,-
1044,OX,-,-,-,-,-,TINY CHIP,-,1,1
1044,ZDATE,-,-,-,-,-,RO,-,-,-
1044,ZZZ,-,-,-,-,-,TINY CHIP PR GLAZE SAMP10;X WORMS;GRAVE=306,-,-,-
1046,RC,BKRC,RCC,-,-,-,BS CR FAB; ?NVCC,-,1,1
1046,GREY,BDFL,-,-,-,-,RIM FR ONLY,-,1,7
1046,GREY,J,RLIN,-,-,-,BS,-,1,11
1046,GREY,-,-,-,-,-,FTM,-,1,27
1046,GREY,-,-,-,-,-,BSS,-,4,49
1046,DWSH,-,-,-,-,-,BS,-,1,3
1046,ZDATE,-,-,-,-,-,M3,-,-,-
1046,ZZZ,-,-,-,-,-,RC CHIP DATE?,-,-,-
1048,GREY,JCUR,-,-,-,-,RIM/SHLDR BURNISH SHLDR/INT RIM,-,1,20
1048,GREY,JCUR,-,-,-,-,RIM FR,-,1,4
1048,NVCC,LBX,-,-,-,-,BS;ABR,-,1,2
1048,GREY,-,-,-,-,-,BS,-,1,2
1048,OX,-,ROUZ,-,-,-,ORANGE BS;ABR,-,1,1
1048,OX,-,-,-,-,-,BS;ABR,-,1,2
1048,ZDATE,-,-,-,-,-,3,-,-,-

1048,ZZZ,-,-,-,-,-,ABR SHS,-,-,-
1050,BB1L,CP,-,-,-,-,BS BASAL (NOT AS 1086),-,1,16
1050,GREY,-,-,-,-,-,BS,-,1,4
1050,OX,-,-,-,-,-,FLAKE,-,1,1
1050,GREY,BWM?,-,-,-,-,THICKER BS;GROOVED AS BWM?,-,1,13
1050,ZDATE,-,-,-,-,-,ML2?,-,-,-
1050,ZZZ,-,-,-,-,-,FRAG IMBREX TILE,-,-,-
1051,NVCC,F,-,-,-,-,SUB-R HDLE FRAG,-,1,4
1051,MOMH,MH,-,-,-,-,ABR RIM FRAG,-,1,20
1051,GREY,BFB,-,-,D?,-,RIM/WALL,-,1,27
1051,GREY,J,-,-,-,-,RIM ONLY;SKETCH,-,1,11
1051,GREY,JCUR,-,-,-,-,RIM ONLY,-,1,8
1051,GREY,JBKCUR,-,-,-,-,RIM ONLY,-,1,3
1051,GREY,-,-,-,-,-,BSS,-,13,91
1051,GREY,-,-,-,-,-,FLAKE W HOLE PRE-FIRING;10MM DIAM,-,1,2
1051,OX,-,-,-,-,-,FLAKE,-,1,2
1051,ZDATE,-,-,-,-,-,L3-4,-,-,-
1053,C186,A,-,-,-,-,NECK FR/BS;BAGS 1&15,-,2,472
1053,GREY,JEV,RLIN,1,D?,15,RIM & BSS J.BAGS 2&15,-,2,47
1053,GREY,J,RLIN,2,-,-,BSS,-,2,8
1053,GREY,CLSD,-,-,-,-,BS;NARROW DIAM ?NECK F OR J,-,1,7
1053,OXL,F?,-,-,-,-,BURNT BS,-,1,5
1053,OX,JBK,-,-,-,-,FLAKED RIM FR,-,1,3
1053,CR,F?,-,-,-,-,BSS(BAGS 1;2;10;14;15)FLAKE;ONE 2-3MM WALL,-,8,25
1053,VESIC?,-,-,-,-,-,CHIP X SAMPLE24,-,1,1
1053,ZDATE,-,-,-,-,-,E2,-,-,-
1053,ZZZ,-,-,-,-,-,NOTED AS ASSOC W SKEL 1053/10,-,-,-
1055,SAMCG,31,-,-,-,-,RIM/WALL,-,1,25
1055,SAMCG,37?,-,-,-,-,RIM ONLY;ABR,-,1,9
1055,C186,A,-,-,-,-,BS W MED GLAZE SPLATTER,-,1,108
1055,NVCC,-,-,-,-,-,THICKISH BS;NOT DEF BK,-,1,3
1055,BB1L,CP,-,-,-,-,RIM/SHLDR;ML2 TYPE,-,1,23
1055,OX,DPR,-,-,D?,-,BURNT RIM/WALL;?SLIPPED;SLOPING WALL,-,1,10
1055,GREY,BKEV,-,1,-,-,RIM/BSS;NO GROOVE;LTGRY GRITTY;SIM EG 1169,-,3,21
1055,GREY,JNN,-,-,-,-,RIM ONLY;ANNABLE 250 ?L3,-,1,22
1055,GREY,-,-,-,-,-,BSS,-,3,14
1055,GREY,-,-,-,-,-,FTRG,-,1,9
1055,OX,-,-,-,-,-,LTRB BS;NEAR AMPH?,-,1,7
1055,ZDATE,-,-,-,-,-,L3/PR,-,-,-
1055,ZZZ,-,-,-,-,-,TEGULA FRAG,-,-,-
1057,CR,JEV,-,-,D?,11,RESID RIM/BSS/FTM BASE,-,4,77
1057,OX,-,ROUZ,-,-,-,SM.BS;FINE ROUZ,-,1,1
1057,GREY,BFBL,-,-,-,-,RIM FR ONLY,-,1,9
1057,GREY,JDW,-,-,-,-,RIM FR ONLY,-,1,7
1057,GREY,BFB,-,-,-,-,RIM/PT WALL ?SLIPPED,-,1,18
1057,GREY,-,-,-,-,-,BSS ABR,-,26,339
1057,GREY,BK,BL,-,-,-,BS;FAB NR NGGW;CHECKED,-,1,2
1057,ZDATE,-,-,-,-,-,M3-ML3,-,-,-
1057,ZZZ,-,-,-,-,-,ABRADED,-,-,-
1059,SAMCG,18/31?,-,-,-,-,RIM/WALL,-,1,11
1059,OX,-,-,-,-,-,SANDY FTRG,-,1,23
1059,NVCC,BKFOSC,-,-,-,-,NECK/SHLDR;CR FAB,-,1,3
1059,GREY,CPN?,-,-,-,-,PIMPLY FAB;CF BUCKLAND 149-151,-,1,15
1059,GREY,BFL,-,-,-,-,RIM,-,1,12
1059,GREY,BD,-,-,-,-,BS,-,1,14
1059,GREY,-,-,-,-,-,BSS,-,3,8
1059,OX,-,-,-,-,-,DAMAGED ABR FLAKES,-,3,16
1059,ZDATE,-,-,-,-,-,EM3,-,-,-

1060,CR,CLSD,-,-,-,-,BS GROOVES SHLDR & LWER,-,1,6
1060,NVCC,BK,-,-,-,-,FTM BASE;RED FAB,-,1,11
1060,GREY,BWM172,-,-,D?,-,RIM/WALL GROOVED;CF ANNABLE 172,-,1,145
1060,GREY,BKFO,-,-,-,-,BS,-,1,3
1060,GREY,BD,-,-,-,-,BSS,-,3,122
1060,GREY,-,-,-,-,-,BSS,-,8,89
1060,ZDATE,-,-,-,-,-,L3-4,-,-,-
1063,OXWS,FR,-,1,D,20,SHATTERED BURNT SHS;CF G3-4;C 90-130,-,98,346
1063,CR,-,-,-,-,-,CHIP,-,1,1
1063,GREY,-,-,-,-,-,BS FINER FAB;BURNISH EXT,-,1,3
1063,GREY,-,-,-,-,-,BS NORM GRITTY,-,2,20
1063,GREY,BK?,-,-,-,-,THIN WALL BS,-,1,2
1063,ZDATE,-,-,-,-,-,L1-E2,-,-,-
1063,ZZZ,-,-,-,-,-,2 LUMPS FIRED CLAY;FR X BAGS 1;3;4;16,-,-,-
1065,C186,A,-,-,-,-,BS,-,1,44
1065,CR,F?,-,1,-,-,BSS;ONE BURNT,-,3,37
1065,CR,F?,-,-,-,-,BS,-,1,7
1065,GREY,CLSD?,-,1,-,-,BSS;SAME ?LGE JAR,-,3,170
1065,GREY,DGR,-,-,-,-,RIM FR ONLY,-,1,4
1065,GREY,-,-,-,-,-,BSS,-,4,36
1065,OX?,-,-,-,-,-,PLAIN BASE FR;?SLIP,-,1,7
1065,ZDATE,-,-,-,-,-,3?,-,-,-
1078,SAMCG?,-,-,-,-,-,BS;ABR,-,1,1
1078,GREY,J,-,-,-,-,RIM/NECK;BURNISH INT,-,1,4
1078,GREY,-,-,-,-,-,BSS,-,2,3
1078,VESIC?,-,-,-,-,-,CHIP,-,1,1
1078,ZDATE,-,-,-,-,-,E2?,-,-,-
1079,SAMCG,B,-,-,-,-,FLAKE ABR,-,1,4
1079,GREY,BDFL,-,-,-,-,FLANGE ONLY,-,1,10
1079,ZDATE,-,-,-,-,-,M2?,-,-,-
1081,GREY,JCUR,-,-,-,-,RIM FR,-,1,10
1081,NVCC,-,-,-,-,-,CHIP,-,1,1
1081,DWSH?,-,-,-,-,-,THIN WALL BS PROB DW,-,1,2
1081,ZDATE,-,-,-,-,-,EM3?,-,-,-
1081,ZZZ,-,-,-,-,-,NVCC CHIP X SAMPLE 29,-,-,-
1081,ZZZ,-,-,-,-,-,NVCC & PROB DW=DATE,-,-,-
1082,VESIC,-,-,-,-,-,BS;?SURFACE BURNISH,-,1,4
1082,ZDATE,-,-,-,-,-,L1-2?,-,-,-
1086,CR,F,-,-,-,-,3R HDLE;BURNT,-,1,65
1086,BB1L,CP,-,-,-,-,BS BASAL,-,1,5
1086,ZDATE,-,-,-,-,-,135+,-,-,-
1088,GREY,-,LA,-,-,-,BS,-,1,5
1088,GREY,-,-,-,-,-,BSS,-,3,23
1088,ZDATE,-,-,-,-,-,130+,-,-,-
1090,BB1L?,B,BIAP,-,-,-,BS NOT DEF H'MADE,-,1,8
1090,GREY,BK,-,-,-,-,PL.LT GRY BASE;NORMAL F.GRITTY FAB,-,1,22
1090,GREY,-,LA,-,-,-,BS,-,1,6
1090,OXL?,CLSD,-,-,-,-,BS BURNT,-,1,3
1090,OX,CLSD,-,-,-,-,BS ABR,-,1,7
1090,GREY,CLSD,-,1,-,-,JNN/F? BSS GROOVES GIRTH/TOP/BOT;RB FAB/GRY AS,1092,6,47
1090,ZDATE,-,-,-,-,-,ML2,-,-,-
1092,BB1,BGF,BIA,1,D?,-,COMP PROF;LGE PART BOWL,-,6,190
1092,CR,CLSD?,-,1,-,-,BSS,-,2,24
1092,CR,CLSD?,-,1,-,-,BS PROB F,-,1,3
1092,GREY,CLSD,-,1,-,-,BSS AS IN,1090,5,37
1092,GREY,J,-,-,-,-,THIN UPR.RIM FR,-,1,4
1092,GREY,-,-,-,-,-,BSS,-,3,19
1092,GREY,-,-,-,-,-,DISTORTED BS X ?MED KILN,-,1,7

1092,ZDATE,-,-,-,-,-,M3+,-,-,-
1093,OX,-,ROUZ,-,-,-,BS;NO BURNISH;?LOST,-,1,3
1093,DWSH,-,-,-,-,-,BS OXID EXT,-,1,8
1093,ZDATE,-,-,-,-,-,EM3?,-,-,-
1094,SAMCG,37,-,-,-,-,RIM,-,1,12
1094,NVCC,BX?,-,-,-,-,BS THICKISH POSS BX;CR FAB,-,1,4
1094,CR,F,-,-,-,-,NECK/BSS JOINS,1099,4,29
1094,GREY,BD,-,2,-,-,BASE/BS;SLIGHT CHAMFER,-,2,8
1094,GREY,-,LA,-,-,-,BS,-,1,11
1094,GREY,-,BDL,-,-,-,BS,-,1,12
1094,GREY,-,-,-,-,-,BSS,-,3,43
1094,ZDATE,-,-,-,-,-,3,-,-,-
1094,ZZZ,-,-,-,-,-,DATE ON NVCC;L2 EARLIEST,-,-,-
1096,CR,F,-,-,-,-,BURNT FLAKE X BASE F NECK,-,1,4
1096,OX,-,-,-,-,-,THIN WALL CHIP,-,1,1
1096,SHEL?,-,-,-,-,-,FLAKED LT BN BS;OCCAS SHELL H'MADE,-,1,8
1096,ZDATE,-,-,-,-,-,L1-2,-,-,-
1096,ZZZ,-,-,-,-,-,SHEL BS UNIDENT.,-,-,-
1097,SAMCG,45?,-,-,-,-,PLAIN RIM;BURNT,-,1,6
1097,NVCC,BK,BA?,-,-,-,BS ?BARB LOST;CR FAB,-,1,2
1097,NVCC,BKFO,-,1,-,-,BSS;LATE GRY FAB,-,2,5
1097,NVCC,-,-,-,-,-,BS THICKER,-,1,6
1097,NVCC,BKPM,ROUZ,1,-,-,BSS;LATE FAB,-,3,7
1097,OX,BK?,-,-,-,-,BS,-,1,1
1097,OX,JNN?,-,-,-,-,NECK SL.CORDON;FINE FAB,-,1,14
1097,MOMH,MHK,-,-,D?,-,RIM/SPOUT,-,1,115
1097,MOCA,M,NAME,-,D,22,RIM FR;H'BONE STAMP,-,1,10
1097,DR20,A,-,-,-,-,BS;F.SMOOTH FAB,-,1,33
1097,AMPH,A,-,-,-,-,RB BS;NOT SAME C186,-,1,16
1097,BB1,CPL,-,-,-,-,RIM ONLY;PROB SAME IN,1101,1,24
1097,GREY,JLS,-,-,-,-,RIM CANTLEY TYPE,-,1,19
1097,GREY,JLS,-,-,-,-,RIM FR ONLY,-,1,4
1097,GREY,BTR,-,-,-,-,RIM DAMAGED;ANNABLE 27?,-,1,27
1097,GREY,BWM110,-,-,-,-,RIM/PT WALL,-,1,35
1097,GREY,B196,-,-,-,-,RIM/WALL FLAKED INT;SM;ANNABLE 196,-,1,12
1097,GREY,BDFL,-,-,-,-,RIM FR,-,1,8
1097,GREY,J,RLIN,-,-,-,BS,-,1,4
1097,GREY,B?,ROUZ,-,-,-,BS;ROUZ BASAL ZONE?,-,1,8
1097,GREY,JCUR,-,2,-,-,RIM FRS ONLY,-,2,8
1097,OX,-,-,-,-,-,BSS MISC,-,4,25
1097,GREY,-,-,-,-,-,BSS MISC,-,70,762
1097,DWSH,JDW,-,-,-,-,RIM FRAG,-,1,6
1097,DWSH,JDW,-,-,-,-,BSS,-,3,21
1097,DWSH,BD,-,-,-,-,BASAL FRAG;INT SMOOTHED,-,1,29
1097,ZDATE,-,-,-,-,-,4,-,-,-
1097,ZZZ,-,-,-,-,-,1 GLAZED MED SH;F.FRAGMENTED,-,-,-
1099,SAMCG,37,-,-,-,-,RIM W TOP OVOLO ONLY,-,1,4
1099,CR,F,-,-,-,-,NECK JOINS,1094,1,16
1099,OX?,-,-,-,-,-,BS;GREYISH,-,1,7
1099,GREY,BK?,-,-,-,-,BS TWIN GROOVES BELOW SHLDR,-,1,6
1099,GREY,-,-,-,-,-,THICKER BSS LIKE LGE SHS BWM? IN,1142,6,109
1099,GREY,-,SWL,-,-,-,BS ARCADE EFFECT,-,1,14
1099,GREY,CLSD,-,-,-,-,GROOVED TYPE FTRG,-,1,7
1099,GREY,BKLS,-,-,-,-,RIM FR C 10D;AS CANTLEY J TYPE,-,1,2
1099,GREY,-,-,-,-,-,BSS/PLAIN BASE,-,4,55
1099,OX,JEV,-,-,D?,-,RIM/SHLDR ABR GRY FAB;LT BN SURF;CF FIG38;151,-,1,26
1099,ZDATE,-,-,-,-,-,EM2?,-,-,-
1099,ZZZ,-,-,-,-,-,OX JEV X SAMPLE 42,-,-,-

1101,DR20,A,-,-,-,-,BS LATER FAB,-,1,132
1101,NVCC,BK,-,-,-,-,BASE;LATER FAB;LT BN;SM FTM,-,1,9
1101,NVCC,BKFOS?,-,-,-,-,BS,-,1,1
1101,NVCC,LBX,-,-,-,-,BS,-,1,2
1101,BB1,CPL,-,-,-,-,RIM;G76:11-12 L3-4;PROB AS IN,1097,2,30
1101,OX?,CLSD,STR;AP,-,D,23,BS STR/APP BOSS;GRY FAB LT BN SURF,-,1,13
1101,OX,BSEG?,-,-,-,-,INCOMP RIM;BURNT FLANGE,-,1,23
1101,GREY,BGF,-,-,-,-,RIM/WALL,-,1,16
1101,GREY,BFB,-,-,-,-,RIM/WALL,-,1,14
1101,GREY,BDTR,-,-,-,-,RIM/PT WALL,-,1,15
1101,GREY,BWM172,-,-,-,-,RIM ONLY,-,1,37
1101,GREY,JLS,-,-,-,-,RIM ONLY,-,1,10
1101,GREY,JEV,-,1,-,-,RIM/SHLDR;CANTLEY TYPE,-,2,62
1101,GREY,BCUR,-,2,-,-,RIMS SM BOWLS,-,2,17
1101,GREY,CP,-,-,-,-,RIM;WHEEL,-,1,10
1101,GREY,BD,-,-,-,-,BASE;SL CHAMFER;WHEEL,-,1,28
1101,GREY,JBEV,-,-,-,-,RIM,-,1,4
1101,GREY,BK,-,-,-,-,FTM BASE,-,1,14
1101,GREY,BD,-,-,-,-,DAMAGED ROUND RIM,-,1,7
1101,VESIC?,-,-,-,-,-,ABR SHS;FTM/BS;BLK SURF,-,2,24
1101,GREY,CP,-,-,-,-,RIM FR;FINER;NEAR BB2,-,1,7
1101,OX,OPEN,-,-,-,-,GREY CORE BS X ?BOWL,-,1,14
1101,OX,-,-,-,-,-,MISC BSS,-,3,29
1101,GREY,-,-,-,-,-,MISC BSS,-,53,415
1101,DWSH,JDW,-,2,-,-,RIM FRAGS,-,2,17
1101,DWSH,JDW,-,-,-,-,BSS,-,2,8
1101,ZDATE,-,-,-,-,-,L3-4,-,-,-
1105,C186,A,-,-,-,-,BSS,-,8,333
1105,VESIC,-,-,-,-,-,ABR FLAKES;GRYCORE;RB CORTEX,-,3,14
1105,BB1L,BD,-,-,-,-,BS,-,1,4
1105,GREY,DGR,-,-,-,-,ABR RIM FRAG,-,1,7
1105,GREY,CLSD,-,-,-,-,RIB HNDLE FRAG,-,1,5
1105,GREY,F,-,1,D,42,RIMS J,-,2,21
1105,CR,F,-,1?,-,-,FTRG;3RIB HDLE;BS,-,3,112
1105,GREY,J,RLIN,1,-,-,BSS JOINS,1117,3,27
1105,GREY,B?,-,-,-,-,RIM FR ONLY,-,1,11
1105,GREY,JEV,-,-,-,-,RIM/SHLDR;PROB RUST,-,1,18
1105,GREY,-,-,-,-,-,BSS,-,6,65
1105,GREY,CLSD,-,-,-,-,FTM BASE,-,1,12
1105,OXL,CLSD,-,-,-,-,BS,-,1,1
1105,OX,-,-,-,-,-,FLAKED ?FTRG,-,1,4
1105,VESIC,-,-,-,-,-,DK GRY CHIP;ABR,-,1,1
1105,GREY,-,-,-,-,-,BSS,-,2,13
1105,ZZZ,-,-,-,-,-,BONE FRAG X 1105/2,-,-,-
1105,ZDATE,-,-,-,-,-,L2-3/PR,-,-,-
1109,MORT,MHK,-,-,-,-,RIM FR ONLY;BEAD BELOW RIM;PROB SAME,1137,1,50
1109,MORT,MHK,-,-,-,-,RIM FR ONLY,-,1,16
1109,GREY,J?,-,1,-,-,FTM SHS;SMOOTHED BASAL Z,-,2,35
1109,GREY,J,RLIN,-,-,-,BS,-,1,8
1109,GREY,-,-,-,-,-,BS ABR,-,1,9
1109,ZDATE,-,-,-,-,-,EM2,-,-,-
1111,C186,A,-,1,-,-,RIM FR;BSS,-,3,669
1111,CR,F,-,-,-,-,BS,-,1,5
1111,BB1,CPL?,-,-,-,-,RIM FR ONLY,-,1,3
1111,GREY,JEV,RLIN,-,D?,-,RIM/SHLDR/TOP RLIN,-,1,38
1111,GREY,JCUR,-,-,-,-,RIM FR ONLY;ABR,-,1,7
1111,GREY,-,-,-,-,-,BS,-,1,3
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1114,SAMCG,33,-,-,-,-,BS,-,1,7
1114,SAMCG,CU11,-,-,-,-,FLANGE,-,1,5
1114,SAMCG,-,-,-,-,-,-,CHIP,-,1,1
1114,BB1,DFL,BIAP?,-,-,-,RIM/PT WALL,-,1,22
1114,CRRD,CLSED,-,-,-,-,BS CR FAB LTGRY SURF;SIMILAR LEG,-,1,3
1114,GREY,BDFL,-,-,-,-,RIM,-,1,8
1114,GREY,BD,-,-,-,-,BASE SLIGHT CHAMFER,-,1,25
1114,GREY,CLSD,COWL,-,-,-,THIN WALL BS;COWL BELOW SHLDR GROOVE,-,1,7
1114,GREY,CLSD,SCRA,-,-,-,BS H'BONE SL BELOW TWIN GROOVES,-,1,4
1114,GREY,-,-,-,-,-,BASE STRING,-,1,15
1114,GREY,-,-,-,-,-,BASE PLAIN,-,1,6
1114,GREY,-,LA,-,-,-,BSS,-,5,15
1114,GREY,-,-,-,-,-,BSS,-,19,64
1114,GREY,J,RLIN,-,-,-,BS,-,1,1
1114,BB1L,CP?,-,-,-,-,BS,-,1,2
1114,RC,BKRC,RCC,-,-,-,BS AS 1195 ETC,-,1,1
1114,GRRB,JFLS,-,-,-,-,RIM FR GRRB AS ANNABLE 70-71,-,1,11
1114,ZDATE,-,-,-,-,-,EM2,-,-,-
1116,GREY,J,-,-,-,-,RIM FR ONLY;SM.DIAM ?10,-,1,8
1116,ZDATE,-,-,-,-,-,E2?,-,-,-
1117,OX,-,-,-,-,-,BS & FLAKE,-,2,1
1117,GREY,J,RLIN?,-,-,-,BS,-,1,3
1117,GREY,-,-,-,-,-,BSS; ABR,-,3,13
1117,NVCC,BK,-,-,-,-,CHIP LATE FAB;DK CC SAMPLE 59,-,1,1
1117,MORT,MHK,-,-,-,-,FR RIM AREA;BEAD BELOW;CR FAB,-,1,55
1117,MOMH,M,-,-,-,-,PART RIM ONLY,-,1,8
1117,C186,A,-,1,-,-,BSS,-,2,139
1117,GREY,JCUR,-,-,-,-,RIM FR ONLY,-,1,3
1117,GREY,J,RLIN,1,-,-,BSS JOINS,1105,2,37
1117,GREY,-,-,-,-,-,BSS,-,2,22
1117,ZDATE,-,-,-,-,-,ML3/PR,-,-,-
1119,CR,FR,-,1,-,-,RIM FR ONLY/2 BSS,-,3,14
1119,ZDATE,-,-,-,-,-,L1-2,-,-,-
1121,GREY,BCAR?,-,-,D?,-,UPR RIM D13-14;?BCAR;SKETCH,-,1,11
1121,ZDATE,-,-,-,-,-,M2?,-,-,-
1122,C186,A,-,-,-,-,BS,-,1,14
1122,ZDATE,-,-,-,-,-,L1-2,-,-,-
1123,BB1,BFB,-,-,D?,-,RIM/PT WALL;ABR,-,1,29
1123,GREY,-,-,-,-,-,BSS,-,3,58
1123,OX,-,-,-,-,-,NECKED BS;SL.CORDON SHLDR,-,1,5
1123,DWSH,JDW,-,-,-,-,BASE & BSS,-,4,86
1123,ZDATE,-,-,-,-,-,L3-4,-,-,-
1128,GREY,J,-,-,-,-,BS PROB X RUST J IN,1194;1221,1,3
1128,OXWS,CLSD,-,-,-,-,CHIP,-,1,1
1128,GREY,BKEV,-,-,-,-,THIN WALL RIM;SKETCH,-,1,2
1128,GREY,JCUR,-,2,-,-,RIM FRS;CP TYPE,-,2,9
1128,GREY,-,-,-,-,-,BASES J & JB?,-,2,94
1128,GREY,-,-,-,-,-,BSS,-,9,31
1128,ZDATE,-,-,-,-,-,EM2?,-,-,-
1132,DR20,A,-,-,-,-,FLAKED BURNT BS,-,1,28
1132,CR,F?,-,-,-,-,BS,-,1,1
1132,GREY,-,-,-,-,-,BSS;ONE ?LA,-,3,32
1132,ZDATE,-,-,-,-,-,E2 ON,-,-,-
1132,ZZZ,-,-,-,-,-,BONE FRAG,-,-,-
1135,CR,F,-,-,-,-,BSS AS IN,1156;1136;1138,3,6
1135,ZDATE,-,-,-,-,-,L1-2,-,-,-
1136,CR,F,-,-,-,-,BSS AS IN,1156;1135;1138,3,10
1136,DR20,A,-,-,D?,-,RE-USED SMOOTHED SHLDR BS;SAMP51,-,1,116

1136,ZDATE,-,-,-,-,-,L1-2,-,-,-
1137,MORT,M,-,-,-,-,BS/CHIP;LITTLE WEAR;MIXED TG;PROB SAME,1109,2,60
1137,OX,-,-,-,-,-,-,BS F.FINE FAB,-,1,4
1137,ZDATE,-,-,-,-,-,L1-2?,-,-,-
1138,CR,F?,-,-,-,-,BSS AS IN,1156;1136;1135,4,14
1138,ZDATE,-,-,-,-,-,L1-2,-,-,-
1142,SAMCG,33,-,-,-,-,RIM,-,1,1
1142,SAMCG,33,-,-,-,-,BS,-,1,1
1142,SAMCG,33,-,-,-,-,BASAL,-,1,5
1142,SAMCG,18/31?,-,-,-,-,BS,-,1,1
1142,SAMCG,18/31?,-,-,-,-,CHIP RIM,-,1,1
1142,SAMCG,81?,-,1,-,-,BSS,-,2,9
1142,OX,L,-,-,D,5,RIMS/BS JOIN,1170,3,19
1142,RC,BKRC,RCC,-,-,-,BS AS IN 1170 ETC,1170,2,4
1142,CR,F,-,-,-,-,BSS INCL FTRG,-,4,24
1142,OXWS,F?,-,1,-,-,BSS J;GRITTY FAB,-,2,10
1142,OX,-,-,-,-,-,FTRG;SANDY FAB;FM?,-,1,26
1142,OXL,F,-,1,-,-,BSS INCL HDLE SCAR,1143,6,48
1142,OX,BHEM,ROUZ,1,D,6,RIM/WALL,-,3,263
1142,OX,BHEM,-,1,D,7,RIM/WALL,-,4,20
1142,MICA?,OPEN,-,-,-,-,SM.BS;TRACES MICA INT,-,1,3
1142,MICA?,CLSD?,-,-,-,-,SM.BS;TRACES MICA EXT,-,1,1
1142,OX,B?,-,1,-,-,BSS BURNISH LINES INT,-,2,6
1142,OX,CLSD,-,-,-,-,BS GRYISH INT,-,1,2
1142,OX,-,-,-,-,-,MISC BSS/CHIPS,-,4,10
1142,PART,B,CPS?,1?,-,-,BSS ROUND DEC BELOW NECK,-,2,7
1142,MORT,MHK,-,1,-,-,SPOUT ONLY;RED/BLK/QTZ TG? RB FAB,-,2,199
1142,BB1,BKBR,-,1,D,8,RIM/WALL;?DORSET G76-19 EM2,-,9,74
1142,BB1L,BK?,-,-,-,-,RIM FR ONLY,-,1,5
1142,BB1L,CP,-,-,-,-,RIM FR/BSS,-,3,12
1142,BB1L,BD,-,-,-,-,BS,-,1,2
1142,GREY,BWM131,SWL,-,D,9,RIM,-,1,325
1142,GREY,BWM?,-,-,-,-,LGE BSS/BASE;NOT W RIM;SAME,1143,8,1129
1142,GREY,BFL,BIA,-,D?,-,RIM/PT WALL,-,1,25
1142,GREY,BD,-,-,-,-,BASE/WALL SHS,-,3,32
1142,GREY,DGR?,-,-,-,-,RIM FR ONLY,-,1,3
1142,GREY,JCUR,-,3?,-,-,RIM FRS ONLY;CP TYPE,-,5,46
1142,GREY,JCUR,-,4,-,-,RIM FRS ONLY,-,4,14
1142,GREY,JCUR,-,3,-,-,RIM FRS ONLY;MORE EVERTED,-,3,28
1142,GREY,BK?,-,-,-,-,TINY CURVED RIM FR,-,1,1
1142,GREY,J,RLIN,2?,-,-,BSS,-,3,15
1142,GREY,JBK,RLIN,-,-,-,BS UNUS FINE CLOSE SET RLIN,-,1,3
1142,GREY,CP,LA,-,-,-,BSS,-,18,107
1142,GREY,BK?,-,-,-,-,THIN WALL BSS,-,2,2
1142,COAR,-,-,-,-,-,COARSE BLK BS;GROOVED;SAMPLE,-,1,8
1142,PART,CLSD,-,-,-,-,BS;NO DEC;LTER GRY,-,1,1
1142,GREY,-,-,-,-,-,BSS,-,76,630
1142,ZDATE,-,-,-,-,-,EM2,-,-,-
1142,ZZZ,-,-,-,-,-,QUITE FRAGMENTED;SOME ABR;SOME LGE SHS,-,-,-
1143,SAMCG,-,-,-,-,-,CHIP,-,1,1
1143,CR,F?,-,2?,-,-,BSS SMOOTH FINE FAB,-,2,4
1143,RC,BKRC,RCC,-,-,-,BS BURNT;AS IN 1195,1195,1,3
1143,OXL,F,-,1,-,-,BSS/FTRG;BURNISH BANDS;QTZ LT BN;SAME,1142,10,89
1143,OX,CLSD,-,-,-,-,BS;GRYISH INN.CORE,-,1,3
1143,BB1L,DGR,LA,1,-,-,RIM/WALL,-,2,12
1143,GREY,BWM?,-,1,-,-,LGE BSS/BASE JOINS,1142,6,762
1143,GREY,CP,LA,1?,-,-,BSS,-,4,14
1143,GREY,-,-,-,-,-,BSS,-,19,140

1143,ZDATE,-,-,-,-,-,130+,-,-,-
1146,GREY,J?,-,-,-,-,FTM,-,1,30
1146,ZDATE,-,-,-,-,-,EM2,-,-,-
1148,OX,CLSD,-,-,-,-,BS NORM FAB OX AS GREY,-,1,25
1148,GREY,J,-,-,-,-,DISTORTED BASE;STRING;BURNISH BASAL ZONE,-,1,118
1148,ZDATE,-,-,-,-,-,EM2,-,-,-
1152,GREY,JEV,-,-,-,-,RIM FR;BURNISH INT;RB FAB;?RUST,-,1,14
1152,OX,BKCOR,-,-,D,14,RIM/PT WALL;BURNISH FINER FAB,-,1,8
1152,ZDATE,-,-,-,-,-,EM2,-,-,-
1156,SAMSG,27?,-,-,-,-,CHIP,-,1,1
1156,CR,B,-,-,D,16,RIM D12?,-,1,5
1156,CR,F?,-,-,-,-,BS X TRIMMED BASAL Z;AS IN,1135;1136;1138,1,6
1156,ZDATE,-,-,-,-,-,L1-2?,-,-,-
1162,GREY,J,RLIN,-,-,-,BS,-,1,10
1162,CR,CLSD,-,-,-,-,BS,-,1,3
1162,VESIC?,-,-,-,-,-,BASE FR;SIM.CPN X 1218,-,1,14
1162,ZDATE,-,-,-,-,-,E2,-,-,-
1165,GFIN,CLSD?,-,-,-,-,THIN WALL 1-2MM,-,1,1
1165,OX,-,-,-,-,-,CHIP,-,1,1
1165,OXL,JEV,PA,-,D,18,COMP.CREM FTM CORDONED;PTED WAVY LINES,-,1,600
1165,ZDATE,-,-,-,-,-,E2?,-,-,-
1166,RC,BKRC,RCC,-,-,-,FTM UNUSED GRIT;RCC EXT ONLY;GRY FB LTRB SURF,-,1,53
1166,OX,-,-,-,-,-,BS GREY CORE,-,1,3
1166,BB1?,D,-,-,-,-,BASE;SCRIBBLE;BURNT,-,1,11
1166,GREY,-,-,-,-,-,BS W CORDON,-,1,14
1166,GREY,-,-,-,-,-,BASE PLAIN,-,1,6
1166,ZDATE,-,-,-,-,-,EM2?,-,-,-
1166,ZZZ,-,-,-,-,-,GLAZED MED SH 6G;RC NOT AS 1195 ETC,-,-,-
1169,GREY,BKEV,-,1,D,12,COMP BKR HOLE IN SIDE;FINER FAB;ASSOC BAG4,-,8,148
1169,GREY,BSEG,-,1,D,13,NR COMP;COARSE FAB;BURNT;BAG5 ASSOC 1169,-,11,475
1169,GREY,J,RLIN,-,-,-,BS BAG3,-,1,3
1169,GREY,J,RLIN,-,-,-,BASAL BS BAG8;MAYBE PT 1169/5? SIM J 1027,-,1,8
1169,CR,FR?,-,-,-,-,BS BURNT BAG9,-,1,5
1169,ZDATE,-,-,-,-,-,E2,-,-,-
1169,ZZZ,-,-,-,-,-,ASSOC B&BK;BOWL MARKED 1142/4;BAG 1169/5,-,-,-
1170,SAMCG,18/31?,-,-,-,-,RIM,-,1,5
1170,SAMSG?,18R?,-,-,-,-,BS BASAL,-,1,8
1170,OX,L,-,-,D,5,BS;JOINS RIM IN,1142,1,12
1170,OX,B?,-,-,-,-,GREY CORE FTRG;HEAVY;?BHEM,-,1,59
1170,MICA,CLSD,-,1?,-,-,BS ONE CARINATED,-,3,8
1170,OX,CLSD,-,-,-,-,BS,-,1,2
1170,BB1L,BDFL,LA?,1,-,-,RIM/BSS 4 & CHIP,-,5,29
1170,GREY,CP,LA,2,-,-,BSS,-,2,56
1170,GREY,CLSD?,-,-,-,-,UNUS BS JOINED CLAY ?F/JH,-,1,7
1170,ZDATE,-,-,-,-,-,130+,-,-,-
1171,GREY,CLSD,-,-,-,-,BS,-,1,15
1171,ZDATE,-,-,-,-,-,RO,-,-,-
1173,MOCA,MHH?,-,-,-,-,UNUS FR RIBBED;GRY CORE RB WHT SLIP,-,1,15
1173,BB1L?,B,LA,-,-,-,BS,-,1,29
1173,NVCC,BKSC,-,-,-,-,BS;LT CR BN FAB,-,1,2
1173,OX,-,-,-,-,-,BS,-,1,3
1173,GREY,-,-,-,-,-,BSS,-,4,14
1173,ZDATE,-,-,-,-,-,L3?,-,-,-
1177,CR,FR,-,1,D,40,50% RIM & NECK,-,7,76
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1178,GREY,CLSD,-,-,-,-,BS,-,1,4
1178,ZDATE,-,-,-,-,-,RO,-,-,-
1180,OX,B?,-,-,-,-,FLAKED RIM FR,-,1,4

1180,OX,CLSD?,-,-,-,-,BS GRY FAB LT RB SURFS ?FLAG,-,1,15
1180,ZDATE,-,-,-,-,-,2?,-,-,-
1180,DWSH,JDW,-,-,-,-,RIM ONLY,-,1,9
1185,NVCC,BK,-,-,-,-,BS LATE BN FAB DK CC,-,1,1
1185,GREY,BD,-,-,-,-,BS,-,1,7
1185,GREY,-,-,-,-,-,-,BS,-,1,7
1185,ZDATE,-,-,-,-,-,-,M3+,-,-,-
1186,DR20,A,-,-,-,-,BS;F SMOOTH FAB,-,1,24
1186,SAMCG,31R?,-,-,-,-,RIM,-,1,16
1186,SAMCG,31,-,-,-,-,BS,-,1,14
1186,SAMCG,31R,-,-,-,-,BS,-,1,5
1186,SAMCG,31-31R,-,3,-,-,BSS,-,3,20
1186,PART,CLSD,-,-,-,-,BS,-,1,1
1186,BB1,L,-,-,-,-,RIM FR,-,1,6
1186,GREY,BDFL,-,-,-,-,RIM FR,-,1,6
1186,GREY,DGR,-,-,-,-,RIM/WALL;NOT CLOSE BB TYPE,-,1,8
1186,GREY,JLS,-,-,-,-,RIM ONLY CANTLEY TYPE,-,1,10
1186,GREY,JCUR,LO,-,D,37,RIM/SHLDR/BS;HIGH BURNISH;3C?,-,2,25
1186,GREY,JEV,-,-,-,-,RIM ONLY;D 16?,-,1,20
1186,GREY,JCUR,-,2,-,-,RIM FRS ONLY,-,2,6
1186,GREY,BWM151,-,-,-,-,RIM/PT WALL;CF ANNABLE 151,-,1,68
1186,GREY,BD,-,1?,-,-,WALL/BASE W CHAMFER,-,2,79
1186,GREY,BD,-,-,-,-,WALL/BASE,-,1,30
1186,GREY,J,RUST,-,-,-,BS,-,1,8
1186,GREY,-,LA,-,-,-,BS,-,1,7
1186,GREY,-,-,-,-,-,-,BASE GRITTY STRING,-,1,8
1186,GREY,-,-,-,-,-,-,BSS,-,2,33
1186,ZDATE,-,-,-,-,-,-,3?,-,-,-
1188,GREY,JNN,-,-,D,21,RIM/NECK & BSS,-,4,65
1188,GREY,JCUR,-,-,-,-,RIM FR ONLY;NO INT BURNISH,-,1,11
1188,GREY,-,-,-,-,-,-,BS;BURNISH BASAL Z,-,1,8
1188,ZDATE,-,-,-,-,-,-,2?,-,-,-
1189,GREY,CLSD,-,-,-,-,BS,-,1,6
1189,ZDATE,-,-,-,-,-,-,RO,-,-,-
1193,CR,F?,-,-,-,-,BS PROB FL;FINE SMOOTH,-,1,8
1193,GREY,-,-,-,-,-,-,BS,-,1,3
1193,ZDATE,-,-,-,-,-,-,2,-,-,-
1194,GREY,BFL,-,-,D,38,RIM/WALL SKETCH,-,1,14
1194,GREY,JEV,RLIN,1,-,-,RIM/BSS,1221,6,39
1194,GREY,J,RLIN,-,-,-,BS,-,1,6
1194,ZDATE,-,-,-,-,-,-,EM2,-,-,-
1195,RC,BKRC,RCC,1,-,-,BSS LT RB FAB CR/BN INT;SOME BURNT,-,15,103
1195,OX,CLSD?,-,-,-,-,LGE BS COARSE FAB UT;RE-FIRED GREY?,-,1,94
1195,OX,B?,-,-,-,-,TINY BS SANDY QTZ;GROOVED CF B IN 1142,-,1,1
1195,OX,B,-,-,-,-,BS W CORDON SMOOTH EXT;SKETCH;FINER FAB,-,1,9
1195,OX,BHEM?,ROUZ,-,-,-,BS SANDY;SMOOTH EXT;ROUND ROUZ,-,1,4
1195,BB1L,CP,LA,1,D,3,RIMS/BSS;CURVED,-,9,189
1195,GREY,JBWM?,-,-,-,-,RIM FR 20D; CURVED EVERT;SKETCH,-,1,27
1195,GREY,JEV,-,-,-,-,RIM FR ONLY;SKETCH,-,1,9
1195,GREY,BWM130,-,-,D,4,RIM NON J BSS;CF ANNABLE130,-,9,246
1195,GREY,JEV,-,-,-,-,RIM FR ONLY,-,1,4
1195,GREY,J,RLIN,02-Mar,-,-,BSS,-,3,52
1195,GREY,-,-,-,-,-,-,BSS ONE BURNISH EXT,-,6,55
1195,GREY,-,-,-,-,-,-,UNUS BS PIERCED HOLE+ATTACH ?HDLE,-,1,8
1195,ZDATE,-,-,-,-,-,-,M2?,-,-,-
1195,ZZZ,-,-,-,-,-,DATE ON BB1L CP?,-,-,-
1200,GREY,JBKEV,-,-,D,1,RIM/SHLDR DIAM8,-,1,7
1200,BB1L,BK?,-,-,-,-,BS,-,1,1

1200,ZDATE,-,-,-,-,-,E2,-,-,-
1202,SAMCG,37?,-,-,-,-,RIM ONLY,-,1,9
1202,SAMCG,-,-,-,-,-,CHIP,-,1,1
1202,GREY,DFL,-,1,D?,-,J RIM/WALL-CHAMFER,-,2,70
1202,CR,F?,-,-,-,-,SMOOTH BS,-,1,2
1202,OXWS,F?,-,-,-,-,BS,-,1,2
1202,GREY,JCUR,-,-,-,-,RIM FR;RBFAB/DKGRY SURF,-,1,7
1202,GREY,J,-,-,-,-,RIM FR ONLY,-,1,4
1202,GREY,J,RLIN,-,-,-,BS,-,1,6
1202,GREY,CLSD,LA,-,-,-,BS INCISED LATTICE,-,1,5
1202,GREY,-,-,-,-,-,BSS/BASE FRS,-,10,94
1202,ZDATE,-,-,-,-,-,M2?,-,-,-
1205,SAMCG,31R,NAME,1,-,-,RIMS/BSS END FR STAMP,-,12,103
1205,SAMCG,37,-,-,-,-,BS OVOLO;SOME BURNING,-,1,19
1205,SAMCG,37,-,-,-,-,BS LEAF,-,1,4
1205,SAMCG,31,-,-,-,-,RIM,-,1,13
1205,SAMCG,31?,-,-,-,-,RIM;SL.BURNING,-,1,10
1205,SAMCG,31?,-,-,-,-,RIM FR,-,1,1
1205,SAMCG,-,-,-,-,-,FTRG,-,1,2
1205,SAMCG,-,-,-,-,-,CHIPS,-,2,1
1205,MOCA,MBF,-,1,D,24,RIMS/BSS;BEAD/FL TYPE,-,14,163
1205,RC,BKRC,RCC,1,-,-,BSS LT RB FAB;SOME GRY CORE,-,5,10
1205,NVCC,BK,-,-,-,-,TINY CHIP;LATE FAB,-,1,1
1205,MOSL,BKFO,-,1,-,-,BSS,-,2,12
1205,OXL,F,-,-,-,-,2R HDLE,-,1,21
1205,OXL,-,-,-,-,-,PL.BASE FR;BURNT,-,1,5
1205,GFIN,CLSD,-,-,-,-,BS; BK? FINE SMOOTH,-,1,1
1205,BB1L,F?,BV,1,D,25,NECK/CORD/SHLDR,-,2,32
1205,GREY,BLS,-,1,D,26,RIM/WALL/CHAMFER,-,2,63
1205,GREY,BWM160,-,1,D,27,RIMS/BS,-,3,177
1205,GREY,BFL,-,2?,D?,-,RIM/WALL BBT WHEEL,-,2,88
1205,GREY,BFL,-,-,-,-,RIM/PT WALL,-,1,15
1205,GREY,BFL,-,-,D?,-,RIM/WALL,-,1,28
1205,BB1L?,CP,LA;BWL,1,D,28,RIMS;4 J BSS;BB1?;ML2,-,6,119
1205,BB1,DGR,BIA,-,D,29,RIM/CHAMF;SHALE INCL;LT BN;G76? ML2E3,-,1,26
1205,BB1L,CP,-,3,-,-,BSS,-,4,21
1205,BB1L,BD,-,-,-,-,BASAL BS W SCRIBBLE,-,1,5
1205,GREY,CP,-,-,D,30,RIM/SHLDR;CF ANNABLE 214,-,4,38
1205,GREY,CP,-,-,-,-,RIM ONLY;SL.DISTORTED,-,1,13
1205,GREY,CP,-,-,-,-,TIP RIM ONLY,-,1,2
1205,GREY,CP,-,-,-,-,RIM FR ONLY,-,1,4
1205,BB1L,BDFL,-,-,-,-,FLANGE ONLY,-,1,3
1205,GREY,JCUR,-,1,D,31,RIM/BSS,-,3,51
1205,GREY,BKPH,-,1,D,32,RIMS,-,2,95
1205,GREY,JCUR,-,2,-,-,RIM/SHLDR & RIM FR,-,2,17
1205,GREY,JCUR,-,-,D?,-,THINNER WALL RIM;BURNISH INT,-,1,8
1205,GREY,JCUR,-,-,-,-,THIN WALL;NO INT BURNISH,-,1,18
1205,GREY,JEV,-,-,-,-,RIM FR;SKETCH,-,1,13
1205,GREY,DGR,LA,-,D?,-,RIM/WALL;WHEEL,-,1,13
1205,GREY,DGR,-,-,D?,-,RIM PT WALL;WHEEL;THINNER WALL,-,1,11
1205,GREY,BWM181,-,-,D?,-,RIM/PT WALL;CF ANNABLE 181,-,1,24
1205,GREY,J,RLIN,2,-,-,BSS,-,2,30
1205,GREY,-,LA,-,-,-,BSS,-,5,37
1205,GREY,BD,-,-,-,-,BSS,-,4,54
1205,GREY,BWM?,-,-,-,-,THICK BSS PROB X BWM,-,4,119
1205,GREY,-,-,2,-,-,STRING BASES,-,3,176
1205,GREY,-,-,-,-,-,FTRG,-,1,20
1205,GREY,-,-,3,-,-,PLAIN BASES,-,3,42

1205,GREY,-,-,-,-,-,PLAIN BASE W GROOVE BELOW,-,1,31
1205,GREY,-,-,-,-,-,BSS,-,39,267
1205,ZDATE,-,-,-,-,-,ML3,-,-,-
1205,ZZZ,-,-,-,-,-,FRAG TILE,-,-,-
1206,GREY,JCUR,-,-,-,-,RIM ONLY;19-20D;BURNISH INT;ANNABLE 214?,-,1,26
1206,GREY,-,-,-,-,-,LGE STRING BASE,-,1,159
1206,GREY,-,-,-,-,-,FTRG,-,1,12
1206,ZDATE,-,-,-,-,-,3,-,-,-
1208,KOLN,BKRC,RCC,-,-,-,CHIP ONLY,-,1,1
1208,ZDATE,-,-,-,-,-,130-180,-,-,-
1210,GREY,J,RLIN,1,-,-,J BSS HIGH RUSTIC,-,2,36
1210,ZDATE,-,-,-,-,-,L1-2,-,-,-
1218,VESIC,CPN,-,1,D,10,NR COMP PROF RIMS,-,4,236
1218,GREY,J,LA,-,-,-,BS,-,1,6
1218,ZDATE,-,-,-,-,-,EM2?,-,-,-
1221,GREY,JEV,RLIN,-,D,2,RIM/SHLDR & BS,1194,2,25
1221,GREY,CLSD,-,-,-,-,FTRG & BS,-,2,7
1221,ZDATE,-,-,-,-,-,E2?,-,-,-
1223,OXWS,FBF,-,-,-,-,RIM FR ONLY,-,1,4
1223,BB1L,BD,-,-,-,-,BASAL SH,-,1,9
1223,GREY,CLSD,LA?,-,-,-,BS,-,1,21
1223,GREY,-,-,-,-,-,PLAIN BASE,-,1,48
1223,DWSH,-,-,-,-,-,BS,-,1,6
1223,ZDATE,-,-,-,-,-,3,-,-,-
1023S,GREY,-,-,-,-,-,CHIPS/BSS,-,29,50
1023S,ZZZ,-,-,-,-,-,SAMPLE 14,-,-,-
1023S,GREY,-,-,-,-,-,BSS/CHIPS SAMP14,-,29,50
1035S,CR,-,-,-,-,-,CHIP,-,1,1
1035S,GREY,-,-,-,-,-,CHIPS/BSS,-,4,5
1035S,ZZZ,-,-,-,-,-,SAMPLE 13,-,-,-
1093S,GREY,-,-,-,-,-,CHIPS,-,-,-
1093S,ZZZ,-,-,-,-,-,SAMPLE 34 NO WT,-,-,-
1114S,GREY,-,-,-,-,-,CHIPS/SMALL SHS,-,8,13
1114S,ZZZ,-,-,-,-,-,SAMPLE 46,-,-,-
1117S,GREY,-,-,-,-,-,CHIP,-,1,1
1117S,CR,-,-,-,-,-,CHIP,-,1,1
1117S,ZZZ,-,-,-,-,-,TINY BONE FRAG,-,-,-
1128S,GREY,-,-,-,-,-,CHIPS,-,19,20
1128S,ZZZ,-,-,-,-,-,SAMPLE 49,-,-,-
1142S,BB1L,BD,-,-,-,-,BS,-,1,3
1142S,GREY,-,-,-,-,-,CHIPS,-,4,4
1142S,OX,-,-,-,-,-,CHIP,-,1,1
1142S,ZZZ,-,-,-,-,-,SAMPLE 60,-,-,-
1143S,CR,-,-,-,-,-,CHIP,-,1,1
1143S,GREY,-,-,-,-,-,CHIPS/SM BSS,-,14,26
1143S,ZZZ,-,-,-,-,-,SAMPLE ?,-,-,-
1205S,GREY,-,-,-,-,-,CHIPS/BSS,-,75,135
1205S,ZZZ,-,-,-,-,-,SAMPLE 74,-,-,-
1205S,GREY,-,-,-,-,-,BSS/CHIPS SAMPLE 74,-,75,135
100,SAMCG,BD,-,-,-,-,FLAKE,-,1,2
100,NVCC,BKFO,ROUL,-,-,-,BS RED FAB & CC,-,1,4
100,GREY,BKFO,-,-,-,-,BSS,-,2,12
100,GREY,DPR,-,-,D?,-,COMP PROF;ANGUL.RIM,-,1,26
100,GREY,DPR,-,-,-,-,RIM ONLY,-,1,10
100,GREY,JBK,-,-,-,-,SMALL PLAIN BASE,-,1,51
100,GREY,JCUR,-,1,-,-,RIMS ONLY,-,2,13
100,GREY,-,-,2,-,-,LGE BASE & STRING,-,2,117
100,GREY,-,-,-,-,-,BSS,-,24,222

100,ZDATE,-,-,-,-,-,L3,-,-,-
101,MOMH,MHH,-,-,-,-,RIM ONLY; PLAIN HH,-,1,22
101,SAMCG,BD,-,-,-,-,CHIP,-,1,2
101,DR20,A,-,-,-,-,BSS;POOR COND; ?EARLY FAB,-,2,50
101,NVCC,BKFOS,-,-,-,-,BS;LT BN FAB,-,1,6
101,NVCC,BKPA,PAL,-,-,-,BS;RB FAB,-,1,2
101,MOSL,BK,ROUL,-,-,-,BS,-,1,1
101,CR,F?,-,-,-,-,BS,-,1,3
101,OX,CLSD,-,-,-,-,BSS,-,2,16
101,GREY,BFB,-,-,D?,-,RIM/WALL DOWNWARD FL;CF ANNABLE 64 ETC,-,1,67
101,GREY,BK,-,-,D?,-,RIM/WALL;SKETCH;POSS FOLDED TYPE,-,1,12
101,GREY,BSM,-,-,-,-,RIMS AS ANNABLE 197?,-,2,25
101,GREY,BWM141?,-,-,-,-,RIM NEAR ANNABLE 141,-,1,28
101,GREY,BWM148,-,-,-,-,RIM NEAR ANNABLE 148,-,1,27
101,GREY,-,-,-,-,-,BSS BASES INCL STRING,-,26,309
101,DWSH,JDW,-,2?,-,-,2 RIM FRS;2BSS,-,4,30
101,ZDATE,-,-,-,-,-,L3,-,-,-
103,BB1L?,BD,LA,-,-,-,BS,-,1,13
103,GREY,BWM,-,-,-,-,RIM FR ONLY,-,1,10
103,GREY,-,-,-,-,-,BS,-,1,2
103,ZDATE,-,-,-,-,-,L2+,-,-,-
110,OX,BKPH,-,1,D,44,RIMS/SHLDR,-,2,30
110,GREY,BWM,-,-,-,-,RIM FR ONLY,-,1,14
110,GREY,JEV?,-,1,-,-,RIM FRS & BS;SOFT RB FAB;GRY SURFS,-,3,22
110,BB1,CP,-,-,-,-,PART RIM ONLY,-,1,5
110,BB1L,BD,-,1?,-,-,BSS,-,3,14
110,BB1L,CP,-,-,-,-,BS,-,1,6
110,GREY,J,RLIN,-,-,-,BS,-,1,2
110,GREY,-,-,-,-,-,BS,-,1,1
110,ZDATE,-,-,-,-,-,02-Mar,-,-,-
111,GREY,-,-,-,-,-,BSS,-,5,64
111,ZDATE,-,-,-,-,-,RO,-,-,-
201,GREY,-,-,-,-,-,BS,-,1,13
201,ZDATE,-,-,-,-,-,RO,-,-,-
204,GREY,-,-,-,-,-,BS,-,1,16
204,ZDATE,-,-,-,-,-,RO,-,-,-
206,SAMCG,-,NAME,-,-,-,CENTRE BASE;END STAMP,-,1,1
206,SAMCG,-,-,-,-,-,CHIP,-,1,2
206,MOOX,M,-,-,-,-,BS,-,1,17
206,GREY,BFL,-,-,D?,-,RIM/WALL,-,1,44
206,GREY,JNN,-,1,D,43,RIMS/NECK;CF ANNABLE 296-7,-,5,80
206,GREY,JCUR,-,-,-,-,RIM FR ONLY;BURNISH INT,-,1,3
206,GREY,-,LA,-,-,-,BS;CP TYPE,-,1,4
206,GREY,-,-,-,-,-,BSS,-,7,87
206,ZDATE,-,-,-,-,-,3?,-,-,-
207,GREY,-,-,-,-,-,BS,-,1,5
207,ZDATE,-,-,-,-,-,RO,-,-,-
213,OX,CLSD,-,-,-,-,BS;GROOVE SHLDR,-,1,8
213,MOMH,M,-,-,-,-,BS;RED TG;SAME IN,215,1,6
213,NVCC,BKBARB,BA,-,-,-,BS;CR FAB,-,1,2
213,NVCC,BKFO,ROUL,1,-,-,BSS;RED FAB;DK CC,-,3,11
213,GREY,BFB,-,-,D?,-,RIM/WALL,-,1,30
213,GREY,DGR,-,-,-,-,RIM FR,-,1,3
213,GREY,J,RLIN,-,-,-,BSS,-,2,18
213,GREY,-,LA,-,-,-,BS,-,1,11
213,GREY,-,-,-,-,-,BSS,-,8,106
213,ZDATE,-,-,-,-,-,L3,-,-,-
215,MOMH,M,-,-,-,-,BS RED TG; SAME IN,213,1,16

215,SAMCG,31?,-,-,-,-,ABR RIM,-,1,2
215,SAMCG,36,-,-,-,-,FLAKE,-,1,2
215,OX,CLSD?,-,-,-,-,BS,-,1,2
215,GREY,-,-,3,-,-,BASES,-,3,151
215,GREY,-,-,-,-,-,BSS,-,5,27
215,DWSH,JDW,-,1,D?,-,RIMS/BSS DRAWABLE,-,6,156
215,DWSH,L,-,-,D?,-,KNOB/PT WALL,-,1,113
215,ZDATE,-,-,-,-,-,M3,-,-,-
301,CR,F,-,1,-,-,BSS BURNT;SAME IN,306,2,20
301,C186,A,-,1,-,-,BSS,-,5,143
301,OX,-,-,-,-,-,BS,-,1,2
301,GREY,BDFL,-,-,-,-,RIM FR;ABR,-,1,12
301,GREY,-,-,-,-,-,FTM,-,1,2
301,GREY,-,-,-,-,-,BSS,-,5,41
301,ZDATE,-,-,-,-,-,2,-,-,-
303,CR,F,-,-,-,-,BSS,-,2,9
303,GREY,BWM142,-,-,-,-,RIM FR ABR;CF ANNABLE 142,-,1,17
303,GREY,-,-,-,-,-,BSS ABR.,-,4,34
303,ZDATE,-,-,-,-,-,L2-3?,-,-,-
305,SAMCG,37?,-,-,-,-,BS DECOR,-,1,2
305,C186,A,-,-,-,-,DAMAGED RIM,-,1,54
305,CR,F,-,-,-,-,BURNT BS AS IN,301;306,1,1
305,CR,F,-,-,-,-,3R HDLE;NOT SAME F,-,1,20
305,CR,F,-,-,-,-,BS,-,1,3
305,SAMCG,B,-,-,-,-,ABR BS,-,1,12
305,OXL,-,-,-,-,-,BS,-,1,5
305,GREY,-,-,-,-,-,BSS,-,10,66
305,SHEL,-,-,-,-,-,OXID FLAKE ?POST-RO,-,1,2
305,ZDATE,-,-,-,-,-,L2?,-,-,-
306,CR,F,-,-,-,-,BURNT BSS AS IN,301,5,30
306,C186,A,-,-,-,-,BURNT BS,-,1,41
306,GREY,BKEV,RLIN,-,D,39,COMP PROF;MOST OF BKR,-,8,140
306,ZDATE,-,-,-,-,-,L1-2,-,-,-
306,ZZZ,-,-,-,-,-,ASSOC BURIAL??=1044,-,-,-
307,MORT,MHK,-,-,-,-,FR BEAD BELOW RIM;QTZ/MIXED TG;CR FAB,-,1,45
307,BB1,CPL,-,-,-,-,RIM FR ONLY,-,1,10
307,GREY,-,-,-,-,-,FTM GROOVE BELOW,-,1,9
307,GREY,-,-,-,-,-,BSS,-,5,47
307,ZDATE,-,-,-,-,-,L3?,-,-,-
308,NVCC,BK,-,-,-,-,CHIP RED FAB,-,1,1
308,C186,A,-,-,-,-,BSS;SAME 309,-,5,373
308,C186,A,-,-,-,-,BS;SPLATTER GREEN GLAZE,-,1,180
308,GREY,B,-,-,-,-,CURVED RIM FR ONLY,-,1,10
308,GREY,-,-,-,-,-,BSS,-,3,8
308,ZDATE,-,-,-,-,-,L3/PR,-,-,-
309,C186,A,-,-,-,-,BSS LGE; SAME IN,308,2,824
309,ZDATE,-,-,-,-,-,L1-2,-,-,-
310,GREY,-,-,1?,-,-,THIN-WALL BSS,-,3,8
310,ZDATE,-,-,-,-,-,RO,-,-,-

APPENDIX 2

CUT	ID	PHASE	Cxt	Shs	gram	Date	g/sh xam	Sherd links	Comments
0		A	1128	16	140	EM2?	8.8	1194;1221	
0		A	1135	3	6	L1-2	2.0	1136;1138;1156	
0		A	1136	4	126	L1-2	3.3	1135;1138;1156	
0		A	1137	3	64	L1-2?	4.0	1109?	
0		A	1138	4	14	L1-2	3.5	1135;1136;1156	
1024	PH	A	1025	6	61	E2?	10.2		
1026	CREM	A	1027	25	492	E2?	19.7		
1031	CREM	A	1030	1	775	E2?	775.0		
1040	PIT	A	1041	4	4	RO	1.0		X SAMPLE 7;POSSIBLY M3+ IF DW
1040	PIT	A	1044	1	1	RO	1.0		
1052	GRAVE	A	1053	18	568	E2	6.0		
1052	GRAVE	A	1086	2	70	135+	35.0		
1077	PH	A	1078	5	9	E2?	1.8		
1083	CREM	A	1063	103	372	L1-E2	3.6		
1095	GRAVE	A	1096	3	13	L1-2	4.3		
1113	PIT	A	1142	188	3122	EM2	15.7	1099;1170;1143	FRAGMENTED;ABR;SOME LGE SHS
1113	PIT	A	1194	8	59	EM2	7.4	1128;1221	
1113	PIT	A	1195	50	801	M2?	16.0		DATE X BB1L CP
1113	PIT	A	1200	2	8	E2	4.0		
1115	LINEAR F	A	1116	1	8	E2?	8.0		
1118	GRAVE	A	1119	3	14	L1-2	4.7		
1131	PH	A	1132	5	61	E2 ON	8.3		
1155	PH	A	1143	46	1028	130+	22.3	1099;1142	
1157	CREM	A	1156	3	12	L1-2?	4.0	1135;1136;1138	
1157	CREM	A	1165	3	602	E2?	200.7		
1157	CREM	A	1208	1	1	130-180	1.0		
1161	GULLY	A	1162	3	27	E2	9.0		
1168	GRAVE	A	1169	22	639	E2	29.0		
1191	PIT RECUT	A	1170	16	186	130+	11.6	1142	
1201	GULLY	A	1202	20	200	M2?	10.0		
1209	GRAVE	A	1210	2	36	L1-2	18.0		
1219	DITCH	A	1218	5	242	EM2?	48.4		
1222	PH	A	1221	4	32	E2?	8.0	1128;1194	
		TOTAL		**580**	**9793**				
0		B	1223	5	88	3c	17.6		
0		B	1048	6	31	3c	5.2		ABRADED
0		B	1051	21	168	L3-4	7.4		
0		B	1059	12	102	EM3	8.5		
0		B	1109	6	118	EM2	13.0	1137?	
0		B	1114	39	197	EM2	5.1		
1022	DITCH	B	1023	98	865	ML3+	8.5		1 PROB MED OXID SH
1098	DITCH	B	1097	104	1207	4c		1101	GLAZED MED SHS;F FRAGMENTED
1098	DITCH	B	1101	86	958	L3-4	10.1	1097	
1034	CIRC WELL	B	1035	173	2367	L3-4	13.4		F.FRAGMENTED;SECONDARY
1037	PH/PIT	B	1036	1	7	RO	7.0		
1049	GULLY	B	1050	4	34	ML2?	8.5		
1054	PIT	B	1055	15	251	L3/PR	10.2		
1056	DITCH NS	B	1057	35	453	M3-ML3	12.9		ABRADED
1064	PIT	B	1065	14	305	3?	20.1		
1080	DITCH	B	1079	2	14	M2?			
1080	DITCH	B	1081	3	13	EM3?			DATE X NVCC & PROB DWSH
1080	DITCH	B	1082	1	4	L1-2?			
1080	DITCH	B	1088	4	28	130+			
1080	DITCH	B	1093	2	11	EM3?			
1080	DITCH	B	1094	13	119	3c		1099	DATE X NVCC L2 EARLIEST
1080	DITCH	B	1099	18	246	EM2?	10.1	1094';1142;1143	
1089	GULLY	B	1090	11	93	ML2	8.5	1092	
1091	PH	B	1092	19	284	M3+	14.9	1090	
1120	DITCH	B	1121	1	11	M2?	11.0		
1124	PH	B	1123	9	178	L3-4	19.8		
1147	DITCH	B	1146	1	30	EM2	30.0		
1154	SURFACE	B	1148	2	143	EM2	71.5		
1154	SURFACE	B	1152	2	22	EM2	11.0		
1167	PH	B	1166	5	87	EM2?	17.4		
1174	PH	B	1173	8	63	L3?	6.9		
1179	PH	B	1178	1	4	RO	4.0		

1181	PH	B	1180	3	28	2?	9.3		
1187	PIT	B	1188	6	84	2?	14.0		
1190	PH	B	1189	1	6	RO	6.0		
1192	PH	B	1193	2	11	2c	5.5		
1207	PIT WELL	B	1186	26	394	3?			
1207	WELL	B	1205	151	2026	ML3			
1207	WELL	B	1206	3	197	3c	14.7		
1226	PIT?	B	1185	3	15	M3+	5.0		
0		C	1000	11	276	3-4	23.5		
0		C	1001	15	272	L2-3	18.1		
0		C	1002	4	42	L2/PR	10.5		
0		C	1003	4	30	M3+	7.5		OTHER SHEL=?MED
0		C	1021	3	50	2-3	16.7		
0		C	1028	1	3	M2?	3.0		
0		C	1029	1	48	L1-2	48.0		
0		C	1060	15	376	L3-4	25.1		
1014	PH	C	1015	1	8	M3+	8.0		
1018	TR	C	1017	1	39	RO	39.0		
1020	NS F	C	1016	9	237	ML2?	26.3		
1033	PIT	C	1032	2	4	M3+	2.0		
1039	PIT?	C	1038	8	33	2?	4.1		
1045	BRICK W	C	1046	9	98	M3	10.9		
kiln	KILN	C	1105	36	648	L2-3/PR	11.3	1117	
kiln	KILN	C	1111	8	725	ML3/PR	11.2		
kiln	KILN	C	1117	16	282	ML3/PR	6.7	1105	
kiln	KILN	C	1122	1	14	L1-2	0.0		
0		C?	1177	7	76	L1	10.9		
1172	GULLY	C?	1171	1	15	RO	15.0		
		TOTAL		**1069**	**14538**				
0		C	100	35	457	L3	13.1		
0		C	101	46	600	L3	12.3		
0		C	103	3	25	L2+	8.3		
0		C	110	13	94	2-3	7.2		
0		C	111	5	64	RO	12.8		
0		C	201	1	13	RO	13.0		
0		C	204	1	16	RO	16.0		
0		C	206	18	238	3?	13.0		
0		C	207	1	5	RO	5.0		
0		C	213	19	195	L3	10.5	215	
0		C	215	19	469	M3	25.2	213	
0		C	301	15	220	2c	7.7	305;306	
0		C	303	7	60	L2-3?	8.6		
0		C	305	18	165	L2?	6.5	301;306	
0		C	306	14	211	L1-2	13.1	301;305	ASSOC BURIAL=1044
0		C	307	8	111	L3?	9.4		
0		C	308	11	572	L3/PR	3.8	309	
0		C	309	2	824	L1-2	0.0	308	
0		C	310	3	8	RO	2.7		
		TOTAL		**239**	**4347**				
		ALL		**1888**	**28678**				

Fabric	CODE	Expansion	Sherds	grams	Fabric wt
AMPH	A	Amphora	1	16	16
BB1	BFB	Bowl bead & flange	1	29	
BB1	BGF	Bowl grooved flange	6	190	
BB1	BKBR	Beaker bead rim	9	74	
BB1	CP	Cooking pot	1	5	
BB1	CPL	Cooking pot late	5	67	
BB1	DFL	Dish flanged	1	22	
BB1	DGR	Dish grooved rim	1	26	
BB1	L	Lid	1	6	
BB1?	D	Dish	1	11	430
BB1L	BD	Bowl or dish	12	84	
BB1L	BDFL	Bowl/dish flanged	6	32	
BB1L	BK?	Beaker?	2	6	
BB1L	CP	Cooking pot	28	414	
BB1L	DGR	Dish grooved rim	2	12	
BB1L	F?	Flagon?	2	32	
BB1L	L	Lid	1	13	
BB1L?	B	Bowl	2	37	630
C186	A	Amphora	33	3394	3394
CC	-		1	1	
CC	CLSD	Closed	2	24	25
COAR	-		1	8	8
CR	-		4	4	
CR	B	Bowl	1	5	
CR	CLSD	Closed	5	36	
CR	F	Flagon	63	576	
CR	FR	Flagon ringed	11	95	
CR	JEV	Jar everted rim	4	77	793
CRRD	CLSED	Closed	1	3	3
DR20	A	Amphora	8	418	418
DWSH	BD	Bowl or dish	2	72	
DWSH	BDPR	Bowl/dish plain rim	1	7	
DWSH	JDW	Dales ware jar	48	582	
DWSH	L	Lid	1	113	
DWSH	-		5	27	801
GFIN	CLSD	Closed	2	2	2
GREY	-		1014	8602	
GREY	B	Bowl	4	40	
GREY	B196	Bowl Annable196	1	12	
GREY	BCAR?	Bowl carinated?	1	11	
GREY	BCUR	Bowl curved rim	2	17	
GREY	BD	Bowl or dish	26	523	
GREY	BDFL	Bowl/dish flanged	6	51	
GREY	BDTR	Bowl/dish triangular rim	1	15	
GREY	BFB	Bowl bead & flange	9	244	
GREY	BFBH	Bowl high bead & flange	1	7	
GREY	BFBL	Bowl low bead & flange	1	9	
GREY	BFL	Bowl flanged	8	226	
GREY	BG301	Bowl Gillam 301	1	20	
GREY	BGF	Bowl grooved flange	1	16	
GREY	BK	Beaker	9	61	
GREY	BKEV	Beaker everted rim	22	324	
GREY	BKFO	Beaker folded	4	23	
GREY	BKLS	Beaker lid seat rim	1	2	
GREY	BKPH	Beaker poppy head	2	95	
GREY	BLS	Bowl lid seated	2	63	
GREY	BSEG	Bowl segmental	11	475	
GREY	BSM	Bowl small	9	126	

GREY	BTR	Bowl triangular rim	1	27	
GREY	BWM110	Bowl wide Annable 110	1	35	
GREY	BWM130	Bowl wide Annable 130	9	246	
GREY	BWM131	Bowl wide Annable 131	1	325	
GREY	BWM141?	Bowl wide Annable 141?	1	28	
GREY	BWM142	Bowl wide Annable 142	1	17	
GREY	BWM143	Bowl wide Annable 143	1	36	
GREY	BWM148	Bowl wide Annable 148	1	27	
GREY	BWM151	Bowl wide Annable 151	1	68	
GREY	BWM160	Bowl wide Annable 160	3	177	
GREY	BWM162	Bowl wide Annable 162	3	73	
GREY	BWM164	Bowl wide Annable 164	1	38	
GREY	BWM172	Bowl wide Annable 172	2	182	
GREY	BWM181	Bowl wide Annable 181	1	24	
GREY	BWM	Bowl wide mouth	22	2093	
GREY	CLSD	Closed	29	362	
GREY	CP	Cooking pot	33	251	
GREY	CPN?	Cooking pot early type?	1	15	
GREY	DFL	Dish flanged	2	70	
GREY	DGR	Dish grooved rim	9	62	
GREY	DPR	Dish plain rim	3	52	
GREY	F	Flagon	2	21	
GREY	J	Jar	48	542	
GREY	JBEV	Jar/bowl everted rim	1	4	
GREY	JBK	Jar/Beaker	2	54	
GREY	JBKCUR	Jar/Beaker curved rim	1	3	
GREY	JBKEV	Jar/Beaker everted rim	1	7	
GREY	JBWM?	Jar/Bowl wide	1	27	
GREY	JCUR	Jar curved rim	48	425	
GREY	JDW	Jar Dales ware	1	7	
GREY	JEV	Jar everted rim	47	1594	
GREY	JLS	Jar lid seated	7	91	
GREY	JNN	Jar narrow neck	12	192	
GREY	L	Lid	2	13	18150
GRRB	JFLS	Jar flanged lid-seated	1	11	11
KOLN	BKRC	Beaker rough-cast	1	1	1
MICA	CLSD	Closed	4	9	
MICA?	OPEN	Open	1	3	12
MOCA	M	Mortarium	1	10	
MOCA	MBF	Mortarium bead/flange	14	163	
MOCA	MHH?	Mortarium Hammer-head	1	15	188
MOMH	M	Mortarium	3	30	
MOMH	MHH	Mortarium Hammer head	2	42	
MOMH	MHK	Mortarium hooked	1	115	
MOMH?	MWS	Mortarium wall-sided	1	41	228
MOOX	M	Mortarium	1	17	17
MORT	M	Mortarium	4	85	
MORT	MHH	Mortarium Hammer-head	1	69	
MORT	MHK	Mortarium hooked	6	365	519
MOSL	BK	Beaker	1	1	
MOSL	BKFO	Beaker folded	2	12	13
NVCC	-		3	10	
NVCC	BK	Beaker	9	31	
NVCC	BKBARB	Beaker barbotine	1	2	
NVCC	BKFO	Beaker folded	7	23	
NVCC	BKFOS	Beaker folded scaled	2	7	
NVCC	BKFOSC	Beaker folded scale curved rim	1	3	
NVCC	BKPA	Beaker painted	5	23	
NVCC	BKPM	Beaker pentice-moulded	3	7	

NVCC	BKSC	Beaker scaled	1	2	
NVCC	BX?	Box?	1	4	
NVCC	F	Flagon/flask	1	4	
NVCC	LBX	Lid box	2	4	120
OX	-		58	282	
OX	B196	Bowl Annable 196	3	119	
OX	B?	Bowl?	6	79	
OX	BHEM	Bowl hemispherical	8	287	
OX	BK	Beaker	3	10	
OX	BKCOR	Beaker cornice rim	1	8	
OX	BKEV	Beaker everted rim	1	1	
OX	BKPH	Beaker poppy head	2	30	
OX	BSEG	Bowl segmental	2	42	
OX	CLSD	Closed	14	193	
OX	DPR	Dish plain rim	1	10	
OX	JB	Jar or bowl	1	34	
OX	JBK	Jar/Beaker	1	3	
OX	JEV	Jar everted rim	1	26	
OX	JNN?	Jar narrow necked	1	14	
OX	L	Lid	4	31	
OX	OPEN	Open	2	21	1190
OXL	-		2	10	
OXL	F	Flagon	19	170	
OXL	FCO	Flagon collar rim	1	41	
OXL	JEV	Jar everted rim	1	600	
OXL	CLSD	Closed	2	4	825
OXWS	B31?	Bowl as samian 31	1	8	
OXWS	CLSD	Closed	1	1	
OXWS	FBF	Flagon bead/flange	1	4	
OXWS	FR	Flagon ringed	98	346	
OXWS	F	Flagon	4	20	379
PARC	CLSD	Closed	1	6	6
PART	-		1	1	
PART	B	Bowl	2	7	
PART	CLSD	Closed	2	2	10
RC	BKFO	Beaker folded	2	4	
RC	BKRC	Beaker rough-cast	26	175	179
SAMCG	18/31?	Dish	4	18	
SAMCG	31	Dish	11	103	
SAMCG	31-31R	Dish-bowl	3	20	
SAMCG	31R	Bowl	14	124	
SAMCG	33	Cup	4	14	
SAMCG	36	Dish	1	2	
SAMCG	37	Bowl	8	67	
SAMCG	45?	Mortarium?	1	6	
SAMCG	81?	Bowl	2	9	
SAMCG	B	Bowl	2	16	
SAMCG	BD	Bowl/Dish	2	4	
SAMCG	CU11	Bowl	1	5	
SAMCG	-		12	17	405
SAMSG	27?	Cup	1	1	
SAMSG?	18R?	Plate	1	8	9
SHEL	-		3	12	12
VESIC	CLSD	Closed	3	35	
VESIC	CPN	Cook Pot IA tradition	4	236	
VESIC	-		10	59	330
			2151	29124	29124

APPENDIX 4

DHG95 Drawing Nos allocated

Phase, ID, Cxt, Fab, Fm, Dec, Ves, D?, DNo, Details, Joins, Shs, grams
1, Cut1113, 1200, GREY, JBKEV, -, -, D, 1, RIM/SHLDR DIAM8, -, 1, 7
1, Cut1113, 1221, GREY, JEV, RLIN, -, D, 2, RIM/SHLDR & BS, 1194, 2, 25
1, Cut1113, 1195, BB1L, CP, LA, 1, D, 3, RIMS/BSS;CURVED, -, 9, 189
1, Cut1113, 1195, GREY, BWM130, -, -, D, 4, RIM NON J BSS;CF ANNABLE130, -, 9, 246
1, Cut1113, 1142, OX, L, -, -, D, 5, RIMS/BS JOIN, 1170, 3, 19
1, Cut1113, 1170, OX, L, -, -, D, 5, BS;JOINS RIM IN, 1142, 1, 12
1, Cut1113, 1142, OX, BHEM, ROUZ, 1, D, 6, RIM/WALL, -, 3, 263
1, Cut1113, 1142, OX, BHEM, -, 1, D, 7, RIM/WALL, -, 4, 20
1, Cut1113, 1142, BB1, BKBR, -, 1, D, 8, RIM/WALL;?DORSET G76-19 EM2, -, 9, 74
1, Cut1113, 1142, GREY, BWM131, SWL, -, D, 9, RIM, -, 1, 325
1, Ditch, 1218, VESIC, CPN, -, 1, D, 10, NR COMP PROF RIMS, -, 4, 236
2, Ditch, 1057, CR, JEV, -, -, D?, 11, RESID RIM/BSS/FTM BASE, -, 4, 77
1, Grave, 1169, GREY, BKEV, -, 1, D, 12, COMP BKR HOLE IN SIDE;FINER FAB;ASSOC BAG4, -, 8, 148
1, Grave, 1169, GREY, BSEG, -, 1, D, 13, NR COMP;COARSE FAB;BURNT;BAG5 ASSOC 1169, -, 11, 475
2, Stone-surf, 1152, OX, BKCOR, -, -, D, 14, RIM/PT WALL;BURNISH FINER FAB, -, 1, 8
1, Grave, 1053, GREY, JEV, RLIN, 1, D?, 15, RIM & BSS J.BAGS 2&15, -, 2, 47
1, Cremation pit, 1156, CR, B, -, -, D, 16, RIM D12?, -, 1, 5
1, Cremation, 1027, GREY, JEV, RLIN, 1, D, 17, COMP PROF;C 50% POT & 5 CHIPS, -, 21, 461
1, Cremation, 1165, OXL, JEV, PA, -, D, 18, COMP.CREM FTM CORDONED;PTED WAVY LINES, -, 1, 600
1, Cremation, 1030, GREY, JEV, RIL, -, D, 19, CREM.URN COMPLETE, -, 1, 775
1, Cremation, 1063, OXWS, FR, -, 1, D, 20, SHATTERED BURNT SHS;CF G3-4;C 90-130, -, 98, 346
2, PH, 1188, GREY, JNN, -, -, D, 21, RIM/NECK & BSS, -, 4, 65
2, Ditch, 1097, MOCA, M, NAME, -, D, 22, RIM FR;H'BONE STAMP, -, 1, 10
2, Ditch, 1101, OX?, CLSD, STR;AP, -, D, 23, BS STR/APP BOSS;GRY FAB LT BN SURF, -, 1, 13
2, Well, 1205, MOCA, MBF, -, 1, D, 24, RIMS/BSS;BEAD/FL TYPE, -, 14, 163
2, Well, 1205, BB1L, F?, BV, 1, D, 25, NECK/CORD/SHLDR, -, 2, 32
2, Well, 1205, GREY, BLS, -, 1, D, 26, RIM/WALL/CHAMFER, -, 2, 63
2, Well, 1205, GREY, BWM160, -, 1, D, 27, RIMS/BS, -, 3, 177
2, Well, 1205, BB1L?, CP, LA;BWL, 1, D, 28, RIMS;4 J BSS;BB1?;ML2, -, 6, 119
2, Well, 1205, BB1, DGR, BIA, -, D, 29, RIM/CHAMF;SHALE INCL;LT BN;G76? ML2E3, -, 1, 26
2, Well, 1205, GREY, CP, -, -, D, 30, RIM/SHLDR;CF ANNABLE 214, -, 4, 38
2, Well, 1205, GREY, JCUR, -, 1, D, 31, RIM/BSS, -, 3, 51
2, Well, 1205, GREY, BKPH, -, 1, D, 32, RIMS, -, 2, 95
2, Pit above well, 1035, MORT, MHH, -, -, D, 33, PLN MHH RIM/WALL;QTZ/BLK TG;BURNT RB ?SLIP, -, 1, 69
2, Pit above well, 1035, OXWS, B31?, -, 1, D, 34, RIM/PT WALL, -, 1, 8
2, Pit above well, 1035, OXL, FCO, -, -, D, 35, RIM/NECK;LT RB FAB CR/BN SURFS, -, 1, 41
2, Pit above well, 1035, OX, B196, -, 1, D, 36, RIMS/WALL;SM BOWL;ANNABLE 196, -, 3, 119
2, Well, 1186, GREY, JCUR, LO, -, D, 37, RIM/SHLDR/BS;HIGH BURNISH;3C?, -, 2, 25
1, Cut1113, 1194, GREY, BFL, -, -, D, 38, RIM/WALL SKETCH, -, 1, 14
eval, -, 306, GREY, BKEV, RLIN, -, D, 39, COMP PROF;MOST OF BKR, -, 8, 140
?, fill gully, 1177, CR, FR, -, 1, D, 40, 50% RIM & NECK, -, 7, 76
1, Cremation, 1027, OX, BSEG, -, -, D, 41, RIM/MOST WALL AS ANNABLE 66;BAG3, -, 1, 19
3, Kiln fill, 1105, GREY, F, -, 1, D, 42, RIMS J, -, 2, 21
eval, -, 206, GREY, JNN, -, 1, D, 43, RIMS/NECK;CF ANNABLE 296-7, -, 5, 80
eval, -, 110, OX, BKPH, -, 1, D, 44, RIMS/SHLDR, -, 2, 30

Possibly requiring illustration

1, Betw crem&PHs, 1136, DR20, A, -, -, D?, -, RE-USED SMOOTHED SHLDR BS;SAMP51, -, 1, 116

1, Cut1113, 1142, GREY, BFL, BIA, -, D?, -, RIM/PT WALL, -, 1, 25
1, PH, 1025, GREY, DGR, -, -, D?, -, RIM/PT WALL;SIM ANNABLE 13, -, 1, 7
1, PH, 1025, GREY, JEV, RLIN?, -, D?, -, RIM-RUST Z & BS;AS ANNABLE 215, -, 3, 47
1, Gully 1201, 1202, GREY, DFL, -, 1, D?, -, J RIM/WALL-CHAMFER, -, 2, 70
2, Ditch, 1099, OX, JEV, -, -, D?, -, RIM/SHLDR ABR GRY FAB;LT BN SURF;CF FIG38;151, -, 1, 26
2, Ditch, 1023, BB1L, L, -, -, D?, -, LID RIM;NOT DEF H'MADE, -, 1, 13
2, Ditch, 1023, OX, BK, -, 1, D?, -, UPR RIM W BEAD;FINER FAB;NOT DEF BKFN, -, 2, 9
2, Ditch, 1097, MOMH, MHK, -, -, D?, -, RIM/SPOUT, -, 1, 115
2, Ditch, 1121, GREY, BCAR?, -, -, D?, -, UPR RIM D13-14;?BCAR;SKETCH, -, 1, 11
2, Gdnsoil?, 1051, GREY, BFB, -, -, D?, -, RIM/WALL, -, 1, 27
2, PH, 1092, BB1, BGF, BIA, 1, D?, -, COMP PROF;LGE PART BOWL, -, 6, 190
2, PH, 1123, BB1, BFB, -, -, D?, -, RIM/PT WALL;ABR, -, 1, 29
2, Pit, 1055, OX, DPR, -, -, D?, -, BURNT RIM/WALL;?SLIPPED;SLOPING WALL, -, 1, 10
2, Pit above well, 1035, GREY, BG301, -, -, D?, -, RIM AS G301 (LINC B333), -, 1, 20
2, Pit above well, 1035, GREY, BSM, -, -, D?, -, RIM/WALL AS ANNABLE 198, -, 1, 13
2, Pit above well, 1035, GREY, BSM, -, -, D?, -, RIM/WALL AS ANNABLE 198, -, 1, 33
2, Pit above well, 1035, GREY, JLS, -, -, D?, -, RIM CF ANNABLE 86;ALMOST JDLS, -, 1, 22
2, Well, 1205, GREY, BFL, -, -, D?, -, RIM/WALL, -, 1, 28
2, Well, 1205, GREY, BFL, -, 2?, D?, -, RIM/WALL BBT WHEEL, -, 2, 88
2, Well, 1205, GREY, BWM181, -, -, D?, -, RIM/PT WALL;CF ANNABLE 181, -, 1, 24
2, Well, 1205, GREY, DGR, -, -, D?, -, RIM PT WALL;WHEEL;THINNER WALL, -, 1, 11
2, Well, 1205, GREY, DGR, LA, -, D?, -, RIM/WALL;WHEEL, -, 1, 13
2, Well, 1205, GREY, JCUR, -, -, D?, -, THINNER WALL RIM;BURNISH INT, -, 1, 8
3, -, 1060, GREY, BWM172, -, -, D?, -, RIM/WALL GROOVED;CF ANNABLE 172, -, 1, 145
3, Kiln fill, 1111, GREY, JEV, RLIN, -, D?, -, RIM/SHLDR/TOP RLIN, -, 1, 38
eval, -, 100, GREY, DPR, -, -, D?, -, COMP PROF;ANGUL.RIM, -, 1, 26
eval, -, 101, GREY, BFB, -, -, D?, -, RIM/WALL DOWNWARD FL;CF ANNABLE 64 ETC, -, 1, 67
eval, -, 101, GREY, BK, -, -, D?, -, RIM/WALL;SKETCH;POSS FOLDED TYPE, -, 1, 12
eval, -, 206, GREY, BFL, -, -, D?, -, RIM/WALL, -, 1, 44
eval, -, 213, GREY, BFB, -, -, D?, -, RIM/WALL, -, 1, 30
eval, -, 215, DWSH, JDW, -, 1, D?, -, RIMS/BSS DRAWABLE, -, 6, 156
eval, -, 215, DWSH, L, -, -, D?, -, KNOB/PT WALL, -, 1, 113

APPENDIX 3
MEDIEVAL POTTERY REPORT

Medieval pottery from Hallgate, Doncaster, South Yorkshire

C.G. Cumberpatch BA PhD.

Medieval pottery from Hallgate, Doncaster, South Yorkshire

C.G. Cumberpatch BA PhD

Introduction

The publication of rescue excavations carried out in Hallgate and the Market Place during the 1960s (Buckland, Dolby, Hayfield and Magilton 1979, Hayfield 1984) established the presence of pottery production within the medieval town of Doncaster. The analysis of the material hinted at the presence of earlier pottery manufacture close to the sites of these excavations. The excavation of the site between 9 Wood Street and 53/54 Hallgate established the location of one of these earlier kilns and the range of material manufactured in the associated workshop. For the sake of convenience the earlier site (published by Buckland *et al* 1979) will be referred to as Hallgate while the site described here will be referred to as Hallgate 95.

The assemblage consisted of 2792 sherds from the kiln (weighing 53,170 grams), 80 sherds (1380 grams) from pit 1054, 73 sherds (1060 grams) from pit 1064 and 835 sherds from other archaeological features and deposits. Contexts 1028 and 1029, defined as 'cleaning layers' contained material clearly derived from the kiln, but, because these were associated with significant amounts of later material, they were not included in the analysis of the kiln deposits themselves. Other deposits (notably 1046 and 1184) contained mixed groups resulting from the construction of recent (19th to 20th century) features. These too were omitted from the analysis presented here, although they were examined and assigned spot dates for use by the excavator. Sherds from the unstratified and cleaning layers (U/S, 1002, 1003) were scanned briefly but not recorded in detail. Shell Tempered ware from all contexts was separated and sent to Jane Young (CLAU) for identification and dating. The results of her analysis are presented below.

The Roman pottery from the site including that found as a residual element within medieval features and the kiln (a total of 112 sherds) is discussed separately (Darling, this vol.). It should be noted that a number of amphora sherds appeared to have been used in the construction of the kiln and were coated with green glaze.

The characteristics of the assemblage

Quantification

Three methods of quantification were employed in the analysis of the assemblage from Hallgate; sherd numbers, sherd weights and the estimated number of vessels (ENV). All methods of quantification have their drawbacks (Orton, Tyres and Vince 1993, Orton 1989, Fletcher and Heyworth 1987, Blinkhorn, pers. comm.) and a wholly satisfactory measure of quantity may not exist. In the case of the Hallgate 95 assemblage the figures are intended to be used to compare the representation of different types within the assemblage; a task made easier by the limited range of vessel forms and size. The caveats expressed by the statistically informed writers cited above should be born in mind in evaluating the tables presented in this report.

Sherd weight and count are self explanatory. The sherd count relates to the absolute number of sherds, the joining of sherds (either old or fresh breaks) being ignored for the purpose of this calculation. Sherd weight was determined using a Weightmaster kitchen balance measuring in units of five grams. Joining sherds were counted only once in the calculation of the estimated number of vessels (ENV), which consequently represents the

maximum number of vessels in the assemblage. The distinction between this and the EVE should be noted. The basic data, subdivided by context, is given in tables 1 to 7 inclusive.

For the sake of clarity and ease of reproduction a number of tables have been simplified. Hallgate B, Fine Thrown Oxidised ware, Gritty ware, Humberware type, Medieval Sandy ware, Reduced Sandy ware, Shell Tempered ware, South Yorkshire Gritty ware group B, White Gritty ware and Unidentified fabrics have been omitted from a number of the tables.

Type series

Fabric DHG A

The Hallgate A fabric has been fully described by Buckland *et al* (1979:12). Briefly, the fabric is an oxidised, sandy textured ware containing small rounded to subrounded quartz grains. The colour is predominantly light red (2.5 YR 6/8), but variations around this are not uncommon. The colour, quality and extent of the glaze is highly variable, ranging from green to yellowish red (5 GY 4/6 to 5 YR 5/8). Vessels made in the Hallgate A fabric appear to have been wheel thrown, although Buckland *et al* have commented that the fine fabric might not have been conducive to the preservation of coiling marks (1979:18). Hallgate A ware appears to be equivalent to Hayfield's FD type (1985:15), but it is not clear whether he recognised the existence of the earlier, splash glazed, A1 type, described below.

Eleven sherds (90 grams) from Hallgate 95 were classified as of A type, closely resembling Hallgate A, but not identical to it. The fabric showed certain minor variations in its texture and composition which set it apart from the main group. It is probable that this variation reflects chance factors in the processing and mixing of the clay.

Fabric DHG95 A1

A hard oxidised fabric containing moderate to abundant quartz grit of a sandy grade and occasional rounded red ferrous grains. This appears to be directly related to Buckland's Hallgate A fabric, but is distinguished from it by its slightly coarser texture. Fabric A1 Reduced (A1 R) appears to be an overfired version of A1 and the relatively large number of wasters in this fabric (table 9) may reflect this.

The majority of sherds in this fabric show evidence of coiling and smoothing, sometimes involving the use of a turntable, particularly on the necks and rims of the vessels. Fabric A1 was the commonest type in the assemblage from the kiln by weight (15,555 grams), although there were more sherds of C1 (863, weighing 12,150 grams), probably a consequence of the softer character of the C1 fabric and its greater tendency to break up into small fragments.

Fifty eight sherds (1,525 grams) were classified as of A1 type for reasons similar to those described above in connection with fabric A.

Two sherds (55 grams) were classified as of A / A1 type with a fabric resembling type A but decorated with splash glaze.

Fabric DHG95 C1

A red oxidised fabric containing abundant, rounded, red ferrous grit and quartz sand giving the fabric a characteristic gritty texture. The hardness of the fabric varies considerably from a soft form which can be scratched with a fingernail to a hard, well fired type. As noted above, however, the fabric was, in general, softer than A1. DHG95 C1 appears to be the counterpart of Buckland's earliest fabric, Hallgate C, which was poorly represented in the Hallgate assemblage, but resembled that from the Market Place kiln (Hayfield 1984). It is probable that these fabrics can be related to Hayfield's GD gritty ware type (1985:15).

Variants of the basic type included the rare C2 (three sherds, 160 grams), with sparse to moderate white non-crystalline inclusions (the sandstone noted in the thin section report, below), and C3, a soft, finely tempered fabric with lower quantities of ferrous and quartz grit (167 sherds weighing 1,425 grams).

The C1 and C3 type fabrics may reflect the kind of variation as noted in the case of the A type, described above, although the presence of the white inclusions in C2 might more probably indicate a different clay source or a different source of additives.

Fabric DHG95 D

A buff and grey fabric containing prominent fine black iron inclusions and quartz. Typically glazed with a dark green glaze and decorated with combed wavy lines, this fabric is notably harder than group C. Variation within the type was represented by only one sherd, classified as D type.

Fabric DHG95 E

A fabric displaying a considerable degree of variation around a basic norm. It was generally buff to pale pink in colour and contained quartz grit and soft, pale red, iron rich inclusions. The hardness varied widely from a soft, scratchable type to a harder, well fired type. This was amongst the three commonest fabrics, with the 553 sherds weighing 11,365 grams.

A single sherd in this fabric (E R) was reduced, probably due to an accident during the firing. Rather more (51 sherds weighing 960 grams) showed minor variations within the type, and were classified as E type.

Fabric DHG95 F

A hard, pale grey fabric, similar to Hallgate E, but containing moderate to abundant fine grains of black grit, probably iron, in addition to the ubiquitous quartz. Two sherds, joining to form the neck, rim and handle of a jug (context 1117-1, figure 55) were classified as F type to allow for minor variations in the colour and texture of the fabric.

Hallgate B

Hallgate B types, as defined by Buckland *et al* (1979:12) were conspicuous by their rarity in the kiln assemblage. The five small sherds noted in table 1 were from a cleaning context (307-10) and should be considered as intrusive into the assemblage. Hallgate B has been classified as a whiteware by Hayfield (1985).

Hallgate type

Twenty six sherds (60 grams) could not be definitively described as belonging to any one of the Hallgate types, although they shared many of the traits (notably the presence of moderate quantities of red ferrous grit and/or fine black grit). These were termed Hallgate type. They were particularly common in context 1117.

White Gritty ware

A white ware containing moderate to abundant quartz grit and sparse fine black grains. The exterior finish, dry smoothed and heavily striated on the lower walls and base, together with the typical rim form suggests that it may be part of the Gritty ware tradition more commonly found in West Yorkshire. Together with the Gritty ware described below it appeared to be a local import, a conclusion supported by the petrological analysis.

Gritty ware

A single small sherd of South Yorkshire Gritty ware was found in context 305-6. This was slightly unusual in that it was decorated with splashed glaze, a trait also noted by the author amongst the assemblage from Church Walk, Doncaster, and apparently at odds with the accepted date for the early phase of the Firsby / Rawmarsh industry of the 13th or early 14th centuries (Hayfield and Buckland 1989). This should not be considered surprising given the very poor state of research into this important component of the medieval pottery industry of South Yorkshire. A further four sherds (55 grams) were found in pit 1064.

Petrological analysis
Dr. Alan Vince (University of York)

Ten samples of pottery were submitted for analysis, representing the types known to be products of the kiln together with sherds of White Gritty ware and Fine Thrown Oxidised ware. The thin section samples have been registered into the Lincoln Ceramic Petrology Laboratory Reference Collection with the codes L1986 to L1995.

Context number	Fabric type	Lincoln code number
307-2	Hallgate A1	L1986
1105-2	Hallgate A1 R	L1995
307-1	Hallgate C1	L1994
1105-2	Hallgate C2	L1993
305-5	Hallgate C3	L1992
1122-2	Hallgate D	L1991
307-1	Hallgate E	L1990
1117-1	Hallgate F	L1989
307-1	Fine Thrown Oxidised ware	L1987
1105-1	White Gritty ware	L1988

Fabric DHG95 A1 R (L1995)

An isotropic clay matrix containing abundant quartz grit. The inclusions consist of abundant rounded quartz up to 0.5mm across, sparse rounded chert, also up to 0.5mm across and rounded, vesicular, opaque inclusions.

Fabric DHG95 A1 (L1986)

An anisotropic clay matrix containing abundant quartz silt. Inclusions consist of abundant quartz sand up to 0.5mm across, sparse, rounded chert up to 0.5mm across and sparse rounded, dark brown, iron-rich inclusions, some with angular quartz inclusions.

Fabric DHG95 C1 (L1994)

An anisotropic clay matrix containing abundant quartz silt. The inclusions consist of abundant rounded quartz sand up to 1.0mm across, sparse rounded chert up to 1.0mm across and moderate, rounded, dark-brown, iron-rich inclusions some with angular quartz inclusions, up to 1.0mm across.

Fabric DHG95 C2 (L1993)

An anisotropic clay matrix containing abundant quartz silt. The inclusions consist of abundant, rounded quartz sand up to 1.0mm across, sparse, rounded chert up to 1.0mm across, moderate rounded dark-brown, iron-rich inclusions some with angular quartz inclusions and sparse sandstone with an opaque matrix (containing quartz grains up to 0.6mm across) up to 1.0mm across.

Fabric DHG95 C3 (L1992)

An anisotropic clay matrix containing abundant quartz silt. The inclusions consist of abundant rounded quartz sand up to 0.5mm across, sparse rounded chert up to 0.5mm across and sparse, rounded dark-brown, iron-rich inclusions, some with angular quartz inclusions

Fabric DHG95 D (L1991)

An anisotropic clay matrix containing abundant quartz silt. The inclusions consist of moderate rounded quartz sand up to 0.5mm across, abundant, angular quartz up to 0.2mm across, sparse rounded chert up to 0.5mm across and sparse, rounded, dark-brown, iron rich inclusions some with angular quartz inclusions.

Fabric DHG95 E (L1990)

An anisotropic clay matrix containing abundant quartz silt. The inclusions consist of moderate, rounded quartz sand up to 0.5mm across, abundant, angular quartz sand up to 0.2mm across, sparse, rounded chert up to 0.5mm across and sparse, rounded, dark brown, iron-rich inclusions some with angular quartz inclusions.

Fabric DHG95 F (L1989)

An anisotropic clay matrix containing abundant quartz silt. The inclusions consist of moderate, rounded quartz sand up to 1.0mm across, abundant angular quartz sand up to 0.2mm across, sparse, rounded chert up to 1.0mm across, sparse, rounded, dark-brown, iron-rich inclusions, some with angular quartz inclusions and sparse rounded sandstone fragments up to 1.0mm across. The latter contain well-sorted grains *c*0.1mm across in an opaque matrix.

White Gritty ware (L1988)

A highly birefringent clay matrix with few inclusions and a low iron content. The inclusions consist of moderate rounded quartz >0.5mm across, sparse sandstone up to 2.0mm across (containing rounded quartz grains up to 0.5mm across with no obvious cement) and moderate mudstone / shale / relict clay fragments up to 1.0mm across. Some of the latter are almost opaque while others have a very low iron content.

Fine Thrown Oxidised ware (L1987)

An anisotropic clay matrix with moderate muscovite laths up to 0.1mm long and moderate quartz silt. The inclusions consist of sparse, rounded, quartz grains up to 0.4mm across and sparse, rounded chert grains up to 0.4mm across.

Discussion

The kiln products all have a similar sand temper, composed mainly of rounded quartz with a little chert and a similar clay matrix, which contains abundant quartz silt. All the fabrics also contain rounded, dark-brown, iron-rich inclusions. The identity of these inclusions is uncertain - they are unlikely to be relict clay since they differ in iron content and texture from the rest of the clay matrix. They may be detrital fragments of an 'ironstone' or mudstone which entered the pottery fabric alongside quartz sand or they may be relicts of iron panning or other concretions present in the clay. Fabric A1 R is distinguished solely on the basis of the firing pattern and firing temperature which has led to it having an isotropic matrix and to the alteration of the iron-rich inclusions to vesicular masses. The remaining differences are due to the texture of the sand temper which is much coarser in fabrics C1 and C2 than in the remaining samples (*c* 1.0mm maximum compared to *c* 0.5mm maximum).

Fabric F is very similar to Fabrics A to E, although it does contain sparse sandstone fragments absent from the other kiln products.

The White Gritty ware is quite different from the kiln products and appears to have been produced using a clay with allow iron content and abundant clay relicts. This is probably a Coal Measure clay of the sort used extensively in the medieval period and later for white wares.

The sand in the Fine Thrown Oxidised ware differs mainly in texture from those used in the kiln products, but the clay matrix contains white mica (muscovite) absent from the kiln products and was therefore obtained from a separate source.

Inductive Coupled Plasma Spectroscopy (ICPS) analysis

Dr. Alan Vince (University of York) with Dr. N. Walsh (Royal Holloway College, London)

Ten samples of pottery were submitted for ICPS analysis. These samples were taken from the sherds submitted for thin section analysis and were denoted by the same set of numbers (L1986 - L1995).

The data were processed using the Microsoft Excel 5 package and sorted in turn by the frequency of each element. A note was made of the distribution of values for each element and the patterns noted. After this pairs of elements were plotted as Excel charts to see if further detail was visible when viewed two dimensionally.

Almost without exception the values recorded for the White Gritty ware sherd were extreme. This sample therefore is clearly an outlier. The Fine Thrown Oxidised ware sample often had values for the frequencies of elements at the other extreme from that occupied by the White Gritty ware. This type thus also appears to be an outlier.

Further detail was supplied by producing scattergrams, such as figure 1a plot of Al2O3 versus Fe2O3. In this plot the White Gritty ware sherd is the outlier to the right hand side. The cluster at the top of the chart is formed by fabrics C1 and C2. This diagram, and others like it, emphasise the reality of the outlying nature of the White Gritty ware. Further samples and more sophisticated analytical software would be needed before trying to determine whether detail within the main cluster was significant. The ICPS analysis confirmed that the White Gritty ware was not a local product.

The Shell Tempered ware

Ms. Jane Young (City of Lincoln Archaeology Unit)

Introduction

A total of 56 shell-tempered sherds were submitted for examination. All were examined at a magnification of x20, using a binocular microscope and compered to reference material held by the City of Lincoln Archaeology Unit. Where possible sherds were allocated to a know ware type. Samples from each group were stained using Dickson's method (which allows the discrimination of dolomite, ferroan calcite and non-ferroan calcite) to provide a rapid check on the petrology of the shell temper. The results indicated that all of the samples contained fragments of bivalve shell whose petrology is compatible with a Lincolnshire source.

Four main wares were identified, ranging in date from the Saxo-Norman to the Medieval period. The vessels appeared to be mainly jars or cooking pots, although at least four bowls were present, one of which may have been used as a curfew. The information is summarised in table 8.

Saxo-Norman wares (late 10th to mid-12th century)

Fine-Shelled ware (LFS)

Sometime in the 9th century a new ceramic tradition emerged; some features of Middle Saxon Maxey types were retained, including coil building, occasional finger-tipped decoration, flat bottoms and the same basic form shape. However the rims are definitely simple, round everted with no attempt to flatten them and the surfaces are no longer smoothed but are wiped with grass leaving faint but characteristic parallel striations horizontally around the vessels. The fabric is a fine, dense shell temper visually very similar to the first group of Maxey type wares. Vessel types consist of simple jars with rounded rims and both large and small bowls. A single base of a pedestal lamp is known. The early production is known as Early Fine-Shelled ware (ELFS) and was in use throughout the 9th and 10th centuries on some rural sites, but has rarely been found in urban centres.

By the late 10th century the fine shelled, hand made wares began to become common again both in Lincoln and on rural sites. Vessels changed little in shape from those produced in the 9th century. Through the 11th and early 12th centuries the rims became more complex and the rim to base ratio began to alter. By the later 12th century an early Medieval form had emerged with ridged shoulders and standard large Medieval cooking pot shape. Deep bowls are a common form in the Lincoln area but are rarer in the far north and south of the county. Lamps, jugs and pitchers were made but are not often found. The ware has been found as far south as Nottingham and as far north as Beverley.

Early Medieval (mid 12th to early 13th century)
Early Medieval Shelly ware (LEMS)

By the mid 12th century a new shell tempered form had emerged. Sherds can be hard to separate from LFS as, visually, small sherds are very similar. The shell used for this ware is slightly larger than that used for LFS and the vessels appear to have been slow wheel-thrown. Almost all the pottery is oxidised to a light orange to buff colour. Vessels mainly consist of wide bottomed cooking pots and shallow everted-rimmed dishes, although bowls were also made. Again the distribution of the pottery extends from Nottingham to Beverley.

Medieval (early 13th to late 15th century)
North Lincolnshire Shell Temper (NLST)

Except for the common to abundant quartz added to the fabric this ware is very similar to Potterhanworth ware which was the main shell-tempered fabric in use in central Lincolnshire throughout the medieval period. A kiln site is known at Potterhanworth about 10km to the south of Lincoln but it is probable that other production centres also existed. The shell of these medieval wares is much coarser than any of the other shell-tempered fabrics with perhaps the exception of Northern Maxey-type fabric C. Quartz is also added as temper especially in the early examples. Vessels were manufactured both by hand and on a slow wheel. The products are mainly wide based cooking pots and deep pancheon-type bowls although a variety of other forms including jugs, industrial bases and dripping pans were also made. There was little change in form except for the rim shapes throughout the period of use. NLST is found mainly in the north of the county and also in South Yorkshire.

Medieval Local Fabric A (MEDLOC)

This fabric is similar to Potterhanworth ware, but is softer and seems to be confined to the first quarter of the 13th century.

It has been noted on a kiln site in Lincoln that, despite producing a wide variety of vessels, shell-tempered pottery was still commonly in use on the site. Dating of the NLST type is only tentative at this stage as few well stratified examples have been found.

The date of the Hallgate 95 kiln

Relative dating

The dating of the pottery assemblage from Hallgate 95 is based upon the internal evidence of the pottery itself, stratigraphic and artefactual evidence from excavations elsewhere in Doncaster and similar information from other sites within the region.

As noted above, the assemblage is dominated by five fabric types and their subtypes. In their discussion of the material from Hallgate Buckland *et al* (1979), have suggested that the three fabrics (A, B and C) identified on this site represent a chronological succession from the earliest, Hallgate C, to the latest, Hallgate A, spanning a period between the latter part of the 12th century and the early 14th century (1979:59). A development of this scheme has been proposed by Hayfield (1984) in his discussion of the Market Place kiln in which a pottery fabric similar to Hallgate C was found to have been decorated with splash glaze, suggesting a date between the later 11th and first half of the 12th centuries (1984:43). The question of the dating of the technique of splash glazing will be discussed further below. A more immediate question is the implication (derived from Buckland *et al*) that variation in fabric type may have a chronological significance. The evidence from Hallgate 95 does not support this contention, and it appears that the various fabrics were manufactured (and presumably used) alongside each other. A number of pieces of evidence support this assertion.

The condition of all the sherds was remarkably good. Abrasion was limited and there were no marked differences in the degree of wear between the various types, suggesting that the filling of the kiln and associated pits was a relatively rapid event and that the deposits did not represent the slow accumulation of material over a number of years. There was certainly no evidence for an earlier fabric enjoying a 'residual' relationship with a later, as was the case with Hallgate C and A at Hallgate.

The techniques employed in the manufacture of the different vessels were similar, with the principal difference being in the use of glaze, and it is probable that this relates more to the function of the vessels than to any chronological variation. Evidence will be presented below for the production of unglazed vessels alongside glazed vessels.

The differences in vessel form (outlined in detail below) suggest that variation in fabric type is, in this case, more closely related to vessel form (and consequently to intended function) than it is to changes in the pattern of raw material exploitation by the potters; the potters appear to have been using certain clays (or clay mixes) for certain types of pots rather than simply changing from one source of clay to another.

This is not to imply that the analysis presented by Buckland *et al* is wrong; as will be discussed below there is some evidence for changes in the location of manufacture of different vessel types in the Doncaster region between the early 12th and later 13th centuries which may have led to the emergence of distinctions such as those described by Buckland and his co-authors.

Absolute dating

The absolute dating of the assemblage depends upon the character of the glaze and, to a lesser extent, the fact that vessels in all fabrics were of coiled construction.

In his consideration of methods of pottery manufacture Colin Hayfield (1980) has noted that cooking pots and peat-pots were, at some potteries, coil built until the 14th century. In contrast

> By the late twelfth and early thirteenth centuries evidence for coil-construction in jugs is scarce. The majority ... have all the appearances of being fully wheel thrown

(Hayfield 1980:32)

At Hedon (Hayfield and Slater 1984) the fineware vessels in fabric FH1, found in contexts dating to the earlier 12th century, were predominantly coil built and splash glazed. Vessels in the later FH2 fabric, (*c* 1150 to 1300) were, in contrast, generally wheel thrown, with only a few early vessels being splash glazed, suspension glazes dominating.

Perhaps more convincing than the evidence of construction methods is the character of the glaze. As noted below (and shown in tables 25 to 27) splash glazing dominated the assemblage with suspension glazes virtually restricted to the Hallgate A fabrics and the FTO type. Evidence from a number of sites suggests that the use of powdered or 'splashed' glaze flourished in Yorkshire between the mid 11th and late 12th to early 13th centuries.

Hayfield (1985:106) has characterised the later 12th century as a period of stabilisation and uniformity in pottery production, following the variation and expansion of the 11th and earlier 12th centuries. One of the aspects of this standardisation was the decline of splash glazing and the rise to dominance of suspension glazing. In Doncaster this is reflected in a date for the splash glazed wares from the Market Place kiln between the 11th and first half of the 12th century (Hayfield 1984:43). Together with the evidence from the kilns in Hallgate (Buckland *et al* 1979) and from other excavations in Doncaster (Buckland, Magilton and Hayfield 1989), this implies that the practice of splash glazing amongst the Doncaster potters was being replaced by suspension glazing during the mid to late 12th century.

Taking a broader perspective, McCarthy and Brooks (1988:35) have characterised splash glazing as typical of the 12th and 13th centuries with suspension glazing replacing splash glazing during the 13th century. In her discussion of the early medieval pottery from Flaxengate in Lincoln, Adams Gilmour has noted that splash glazed ware from potteries in Nottingham dates to the 12th and early 13th centuries (1988). In York, Brooks has dated the 'Splashed wares' to the later 11th, 12th and first half of the 13th centuries (1987:151). More recently, and citing evidence from earlier studies of pottery from York, Mainman has noted that

> 'Vessels with a splashed glaze ... seem to originate in the mid/late 11th century and have a currency throughout the 12th century (1993:585, cf. 1990:486).

In his definition of Beverley 1 ware, Watkins has commented that

> 'The earliest stratified examples of this ware on the Lurk Lane site, from the mid/late eleventh century Phase 5B, bore 'splashed' (ie powdered) glazes ... The transition to liquid

or

> suspension glazes seems to have taken place during the site's phase 6B, around the middle of the twelfth century' (1991:80).

In West Yorkshire (and specifically at Tanners Row, Pontefract) splash glazing is found on both sandy and gritty ware vessels (Cumberpatch unpublished 1) and appears to date to the 12th and early 13th centuries, although further work on the assemblage from Pontefract Castle is required to verify this date range. A broadly similar date is suggested by the evidence from the north-east of England (Cumberpatch unpublished 2).

In London, splash glazing is common on the London type wares dating to between the mid 12th and mid 14th centuries (Pearce, Jenner and Vince 1985:4-5), but absent from the later (mid 13th to 16th century) Surrey Whitewares (Pearce and Vince 1988:9). A number of post-medieval references to the use of powdered glaze, noted by Coleman-Smith and Pearson (1988), do not seem to relate to a continuous tradition of manufacture and are discussed further below.

It seems likely that splash glazing, as a manufacturing tradition, ended at different times in different potteries, but that it had generally been superseded by suspension glazes by the mid-13th century, with the Doncaster potters moving over to suspension glaze rather earlier, before the end of the 12th century. Whether this was due to the health problems which Barton has outlined (1990) or because of some other factor is not clear.

On the basis of this evidence it would seem that the pottery from the Hallgate 95 kiln and associated features was manufactured sometime between the mid 11th and earlier 12th centuries, with a 12th century date being perhaps the most likely. Some support for this conclusion might be derived from the evidence of other sites in Doncaster, particularly those with well excavated, stratified deposits. In this connection the analysis and publication of the material from the sites of Church Walk and Low Fishergate is of crucial importance.

The limited quantities of Stamford ware and Gritty ware, while suggesting an early medieval date, offer little more precision than that obtained from the local fabrics themselves (cf. Blinkhorn pers. comm., Cumberpatch unpublished 1).

The dating of the Shell Tempered ware offers some support to the date suggested above (table 8 above), although the quantities involved were very small (ten sherds) and over half was recovered from the cleaning layers (305-5, 1105-1). The presence of Lincoln Fine-Shelled ware is consistent with a 12th century date, although the North Lincolnshire type tends to be slightly later (early 13th century).

The pottery and the site

Summaries of the quantities of pottery from the kiln and from pits 1054 and 1064 are presented in tables 1 to 4. Fuller details of the kiln assemblage are given in tables 5, 6 and 7. Total numbers and weights of sherds, together with the estimated number of vessels for each context are given in the extreme right hand column while totals for the individual fabric types are given in the bottom row of the tables. Table 4 shows the percentages of different fabrics in each context within the kiln.

As described in the body of the report, the kiln was excavated in two sections, the first during the evaluation phase of the site and the second during the main phase. Three distinct stratigraphic units were detected within and around the kiln itself. The upper, sealing, layer consisted of two contexts (305 and 1105). The fill of the kiln, which accumulated, or was dumped, after its final use consisted of four contexts (310, 311, 1122 and 1112). Contexts 1117, 1111, 309 and 307 appeared to be the result of the initial collapse of the sides of the kiln after the final firing. It was suggested that context 1122-2 represented the earliest fill within the kiln, apparently representing the blocking of one of the flues before the final firing of the kiln.

Phase	Contexts
Cleaning layer	1105, 305
Phase 1	310 (cut), 311, 1122, 1112
Phase 2	1117, 1111, 309, 307

Tables 5, 6 and 7 summarise the representation of different types within the three phases distinguished during the excavation.

The latest type present in any significant amount was fabric A, which, although present in the earliest context (1122-2, four sherds weighing 90 grams), was commonest in the cleaning layers and second phase of the kiln. Together with the presence of the three sherds of Humberware (307-10), South Yorkshire Gritty ware B (305-6), this would seem to indicate the presence of intrusive material. That Hallgate A should constitute 1.74% (by number, 1.19% by weight) of the total kiln assemblage is perhaps unsurprising given the

proximity of the nearby workshop. The closely similar A type was present in smaller quantities, all but one small sherd (1111-1) coming from 1105-1, the cleaning layer. Hallgate type B, considered by Buckland *et al* to be earlier than type A, was represented by only five small sherds from the cleaning context 307-10.

A distinguishing feature of the Hallgate assemblage was the chronological distinction between the different fabrics (Buckland *et al.* 1979:59). There was no real evidence for such distinction within the Hallgate 95 assemblage. There was no evidence for differential abrasion of the various types which might have indicated residuality within the assemblage. The types which were commonest in the whole assemblage (A1, C1 and E) were present in similar proportions in both phase 1 and phase 2, while of the secondary fabrics (C3 and E), E was also present in both phases. Only the absence of C3 from phase 1 might be held to have some significance, but as there were no wasters in this fabric it is not even certain that it was a product of the same workshop. Rather, as will be discussed further below, it seems that production using different mixes of clay proceeded side by side, possibly divided by vessel form and intended function. While it would not be safe to suggest that the percentages of different types within the assemblage relate in any way to the output of the kiln, the evidence would not support a chronological sequence of fabric types. The question of function and vessel form in relation to the fabric type will be discussed in greater detail below.

The assemblage from the kiln was dominated by fabrics A1, C1 and E with smaller quantities of C3 and D (table 1). This is reflected in the contents of the pits, 1054 and 1064 (tables 2 and 3), although with the distinction that quantities of type A in the former equalled those of A1, while C3 was absent.

As noted above, attention was focused on the contents of the kiln and the associated pits (1054 and 1064). Other contexts were examined briefly and spot dates supplied to facilitate the compilation of the excavation report. A number of points concerning these contexts should be noted however. Contexts 310 and 1046 included material derived from the waste generated by the kiln, although in both cases this was mixed with later material and was thus presumably residual. 1028 and 1029 also contained material derived from the kiln but in both cases these were cleaning layers and the kiln material was mixed with sherds of later pottery.

Contexts 1048 and 1051 were interpreted by the excavators as 'garden soil'. This term, widely used to describe sandy, silty or loamy deposits, is invariably a misleading one (Cumberpatch in press). At Hallgate, as on other sites, the character of the pottery contained in the soil was not consistent with a context which had been subject to repeated cultivation. The sherds were relatively fresh in appearance and were no more abraded than the sherds from rapidly filled or 'sealed' contexts. While it is not impossible that parts of the plot had been used as gardens at some stage, it is unlikely that this use affected contexts 1048 or 1051 to any significant degree. It might be more plausible to suggest that the layers accumulated during a period of disuse, although detailed pedological analysis would be required to substantiate this suggestion.

Wasters

The only positive evidence for the types of pottery fired in the kiln (or in others close by) is that of the 119 wasters found amongst the assemblage. Table 9 shows the representation of wasters by context and fabric type from the contexts associated with the kiln. A further three wasters (all of A1 type) were found in contexts 1001-5, 1046-3 and 1184-2.

Wasters were found in all of the principal fabrics, although A1 and related fabrics were clearly dominant (70.5% of the total number of wasters). The wasters ranged from

heavily distorted vessels (figures 1 and 2) to small sherds with glaze covering broken edges. A number of overfired vessels were omitted from the figures as they may have survived as serviceable pots. In context 1112-2 the rim of a jug of fabric type D was attached to a sherd of fabric C1 (figure 3) and in context 305-6 the rim of a jug was stuck to the base of a second vessel, both of fabric A1 R.

Although there was no direct evidence that all (or indeed, any) of these vessels were fired in the kiln excavated on the site, it may be significant that context 1122-2, the layer at the bottom of the kiln contained 24 fragments of wasters, more than any other single context. Fabric A1 and related types predominated, but the group also included a waster of C1 type. This might be taken to imply that vessels in these fabrics were fired in the kiln, with the evidence for D and C having been fired together suggesting that the firing of different fabrics took place simultaneously within the same kiln. Further evidence for this will be discussed in relation to the patterns of glazing.

Wasters were commonest in the later fill of the kiln, 43.69% of the total occurring in contexts 1117, 1111, 307 and 309. It was noticeable that no wasters of fabric A or A type were found in direct association with the kiln, even in the cleaning layer.

Three wasters were found in pit 1054 (context 1055-1). Two of these were jug handles in fabric type A and the third a jug rim in fabric A1. This, together with the greater proportion of fabric type A found generally in the pit, suggests that it contained a more mixed assemblage than that from the kiln and the feature was probably open at a later date. Three wasters were also found in pit 1064, in fabrics A1 R, A1 type and Hallgate type.

Manufacturing technique

Vessels of fabric types A1, C1, C2, C3, D, E and F were of coiled construction. In a number of cases the pattern of coiling and smoothing was clearly visible, particularly on the inside of jug necks and shoulders. A number of vessels (particularly the everted rim jars) had been finished on a turntable, giving a smoother, more even finish which in some cases (*figures 4 to 10*)) resembled that of a thrown vessel. This method of finishing may account for some of the apparent anomalies in table 12 where two sherds of A1 type, one sherd of C1 and one sherd of E are recorded as wheel thrown. It does not account for the nineteen sherds of Hallgate A and two of A type which are recorded as having been hand made. It is possible that these represent an intermediate phase of production in which vessels were made by traditional coiled and smoothed techniques but using the later mixture of clays which produced the typical Hallgate A fabric. It may be of relevance that in the pit (1054), where the numbers of sherds of fabric A equalled those of A1, all the fabric A vessels were hand built.

That the practice of coil building, as opposed to throwing, pots is not a simple matter of technological progress is illustrated by the presence of wheel thrown Gritty wares and Fine Thrown Oxidised wares. Coil building continued in some parts of England until at least the 14th century, notably at Lyveden in Northamptonshire. It is thus unreliable as a chronological indicator, and may rather reflect the strength of traditions of practice within the workshop or the strength of resistance to innovation amongst producers and consumers alike.

Vessel form

Three vessel forms dominated the assemblage from the kiln. Jugs, everted rim jars and deep open bowls or pancheons were manufactured in fabrics A1, C1, C2, C3, D and E, although pancheons were relatively rare. Of the 313 recognisable forms (table 15), 205 (65.49%) were jugs or pitchers (the latter including vessels for which there was no evidence

of a spout), 84 (26.83%) were jars, 15 (4.79%) were pancheons, five (1.59%) were bowls (of various types), and the remainder, other types, many of which were of ambiguous character. The pattern was repeated in the pit, with jugs and related types dominating the group. A number of types which were of considerable significance at Hallgate (notably pipkins) were conspicuous by their absence, as were cisterns and cauldrons.

In tables 15 to 17 the vessel forms are broken down by fabric type. Jugs and pitchers dominated the assemblage, but there was a further distinction by fabric type. Whereas jugs and pitchers are commonest in the finer, sandy textured fabrics (A, A1, D, E, F and types), only four were recognised in the coarser, red gritted, C type fabrics. Everted rim jars and pancheons were the commonest type in these fabrics, and, significantly, were rarer in other fabrics. The same picture emerged from the pits (tables 16 and 17), although here numbers of recognisable types were so low as to make definite conclusions hazardous.

In a number of respects the evidence from Hallgate 95 supports that from Hallgate. Buckland *et al* (1979) noted that there appeared to be a tradition of flat bases (as opposed to sagging bases) and a general absence of thumbing on the base / body angle. This was also true of the Hallgate 95 assemblage; no thumbings were noted and the bases were, in general, entirely flat. This may represent part of the local tradition of manufacture, reflecting a transmission of knowledge within the workshop. As at Hallgate, strap handles far outnumbered rod or other types (table 18, figures 46 to 54). Spouts were invariably pulled or pinched (table 19, figures 55 to 60), with more elaborate types absent. Face jugs, knight jugs, curfews, caldrons and cisterns were absent. In this regard the Hallgate 95 assemblage is somewhat simpler than the later Hallgate assemblage.

Handles

The types and occurrence of handles are listed in table 18. Of the 95 present all but three were broad strap handles, the remainder being rod handles, one twisted (figure *). Seven examples were distinguished by the presence of small 'shoulders' or 'ears', recorded as 'strap(e)' added at the junction of the handle and the neck of the vessel, presumably to strengthen the join (figures 55, 61, and 62). One handle, strap(p), was perforated vertically at the point where it joined the neck, possibly to attach a loose bung or a cover of some perishable material (figure 63). The handles were smoothed onto the necks of the jugs and pitchers. There was no evidence for the plugs of clay found in the later Humberware vessels (Hayfield 1980).

There did not appear to be any distinction between the handle types in relation to the fabric. Five strap handles (three in fabric A, one in D and one in E) were found in pit 1054 and two (in fabrics A and E) in pit 1064.

Spouts

The types and numbers of spouts are listed in table 19. The distinction between pinched and pulled spouts is a minor one. Both types were made with a single finger pulling the lip of the vessel out to form a simple spout. The pinched types show a slightly greater degree of lateral pressure, and consequently tend to be slightly more clearly defined. Such a difference presumably relates to minor variations in practice between individual potters. The complete absence of tubular spouts, relatively common in the Hallgate assemblage, is an indication of the restricted range of vessel types compared to the products of the later workshop. No spouts were found in either of the pits.

Glaze

The bulk of the pottery was splash glazed, (a point of critical importance to the dating of the assemblage as has been discussed above) with the distinctive pitted glaze

covering the upper sections of the vessel bodies and the underside of bases. The representation of the different types of glazes are shown in tables 20 to 22). Suspension glazes were virtually restricted to the later types, Hallgate A, Humberware and the ambiguous Fine Thrown Oxidised ware.

The colour range of the splashed glaze was wide and apparently somewhat haphazard, varying considerably on single pots. The intention appears to have been to create a green, mottled effect contrasting with the dull red or buff surface of the vessel. In practice colours varied from clear through greenish browns to deep green, all, particularly the clear glaze, being affected by the colour of the underlying fabric. The method of applying the glaze appears to have affected the final outcome, with individual blobs of glaze showing a 'chromatographic' effect, with the colour bleeding from a variable green in the centre to amber at the outer edge. A similar effect has been described in connection with Nottingham Splash Glazed pottery from Flaxengate in Lincoln (Adams Gilmour 1988:145). Misfiring, probably underfiring, appeared to have affected a considerable number of the pots. In these cases the glaze was 'patinated' with a whitish surface. Others were overfired with a crazed or slightly blistered surface, although in few of these cases did the vessels appear to be true wasters.

Another example of apparent misfiring appeared to be the presence of blobs of lead on the surface of the pots, sometimes in the centre of the small craters produced by the vitrification of the glaze. In their discussion of the 13th to 14th century London-type wares Pearce, Jenner and Vince have described an identical phenomenon and have related it to the method of manufacture;

> Glaze was applied by dusting, rather than any other method. Small pits or pockmarks may be seen at the centre of splashes of glaze where the lead has reacted with the body of the pot. Globules of metal remain on the surface of poorly fired examples, although the presence of this metallic lead does not prove that the glaze itself was powdered metal, since the same effect would be obtained if a lead compound was fired in a reducing atmosphere (Pearce, Jenner and Vince 1985:4-5)

A similar effect has been noted on the Sparsely Glazed ware from Flaxengate in Lincoln (Adams Gilmour 1988:159) and on jugs from Beeston Castle, Cheshire (Courtney 1993).

Barton has recently questioned the precise method by which the glaze was applied to the pots (1990:14), and has noted the considerable short term health hazards involved in the use of dry, powdered, lead rich compounds. He has questioned the existence of the practice on these grounds. Coleman-Smith and Pearson (1988:393-5) have cited examples of the recognition of the poisonous effects of powdered lead compounds, but, prior to 19th and 20th century safety legislation, these do not seem to have affected the practice of using such glazes. There would seem to be no reason to believe that the incidence of lead poisoning affected the use of powdered glaze. Coleman-Smith and Pearson cite a comment by Plot in his *Natural History of Staffordshire* which seems to imply that the practice was still in use as late as the 17th century

> After the vessels are painted they lead them with that sort of lead ore they call Smithum, which is the smallest ore of all, beaten into dust, finely sifted and strewed upon them, which gives them the gloss. (Plot 1686, cited by Coleman-Smith and Pearson 1988:395).

Courtney has recently cited experimental evidence relating to the method of manufacture which may indicate ways in which the potters sought to avoid lead poisoning

> Experimental work by Anne Woods (pers. comm.) of Leicester University has produced all these features (splashing, pitting and lead globules) using powdered galena applied in a

flour and water mixture to provide adhesion. This seems more practical than the direct application of dry powdered galena to the pot, which is often speculated to have been the method used. The Galena (PbS) is oxidised to PbO during an initial stage of firing , then reduced to the metallic lead which jumps around the kiln producing pitting. (Courtney 1993:181-188).

During the examination of the assemblage there were indications that glaze was commoner on the finer A1 and related fabrics than on the coarser C1 types. This is born out by the figures summarised in table 20. Whereas 89.21% of the sherds in fabric A1 (and related types) were glazed, only 29.82% of type C1 and C1 type were glazed (these and the following percentages are based on sherd numbers).

This figure is further reduced when the incidence of accidental patches of glaze is considered. Accidental glazing, judged to have occurred when a sherd or vessel bears only small, discrete, patches of glaze on an otherwise unglazed surface, has been noted on a number of sites, including Hedon (Hayfield and Slater 1984:26), Firsby (Hayfield and Buckland 1989:14) and in the assemblage from the Market Place kiln in Doncaster (Hayfield 1984:43).

Of the 224 Hallgate type sherds (omitting a single sherd of Gritty ware) which show evidence of accidental glazing 128 are in fabrics C1 and C1 type (57.14%) with a further 33 (14.73%) in C2, C3 and related fabrics. A1, D, E and their related types constitute only 9.37%, 7.14%, and 11.60% of the total. Similar proportions were found in the pits (tables 21 and 22) although here neither A1 or A1 type bore accidental splashes.

The proportion of deliberately glazed fabrics is further reduced when glazing on the underside of bases is considered. This appears to have resulted from the practice of firing the vessels upside down, allowing glaze from the upper surfaces of the vessels to run over the bases of those on the lower tier. Vessels which were otherwise unglazed thus received an uneven, patchy coating of glaze on their bases. Stacking scars were common and, as noted above, four vessels were stuck so firmly that at least one, and probably both, of the lower vessels were broken during the unloading of the kiln.

The final column in table 20 shows the numbers and percentage of the fabric groups which were deliberately glazed. For all fabrics except C type, C1 and C2 the percentage of deliberately glazed sherds is over 60%. That it is not higher is probably a result of the fact that the glaze was generally applied to the upper surfaces of the vessels, with the lower third unglazed. Deliberate glaze on fabrics C1 and C2 is, in contrast, much rarer, only 7.76% of C1 and C1 type sherds being deliberately glazed. Quantities of type C2 are too small for the significance of the complete absence of glaze to be assessed. In comparison to fabric A1 then, it seems as if C1 and related fabrics were less likely to be glazed, but were in contact with glazed vessels, probably in the kiln.

Tables 21 and 22 show the same information for the material from pits 1054 and 1064. While both groups are small in size, the figures offer general support to the conclusions drawn from the kiln group.

Firing

As noted in the preceding sections, the pots appear to have been fired upside down in batches of mixed fabrics. The atmosphere seems to have varied somewhat, with reduced sherds particularly common in fabric A1 (A1 R). Whether this was deliberate or whether these vessels represent the results of abnormal firing circumstances is unclear.

Decoration

Three hundred and fifty seven sherds of pottery from the kiln were decorated, 12.7% of the group. Three hundred and sixteen of these (88.5% of the decorated sherds) bore combed or stabbed motifs; continuous or broken wavy lines, short, interrupted combed lines or stabbed comb impressions. Of the remainder, fifteen (4.2%) were thumb impressions on the rims or outer edges of the handles and twenty six (7.2%), various others, predominantly grooves and ridges created during the turning and finishing of the vessels. There were none of the elaborate face jugs or knight jugs of the types found in the Hallgate assemblage and only one small and ambiguous example of applied decoration (not included in the tables).

Table 23 summarises the correlation between fabric type and decorative motif. Table 24 correlates decorative motif with vessel form.

Decoration and fabric type

The most notable aspect of table 24 is the very low percentage of decorated sherds in fabric C1 and related types. Whereas A1, D, E and F vary between 13% and 36%, only 2.5% of the C1 sherds were decorated. Added to the relatively low incidence of glazing, this suggests that vessels in the C1 fabrics were relatively plain and unelaborate. It is also notable that none of the later A type sherds were decorated, although 138 sherds (0.8% of the total assemblage and 1.48% of the type A sherds) from the Hallgate assemblage were decorated.

Four sherds from pit 1064 were decorated; three, in fabric D, with combed wavy lines and a handle, in fabric E, with thumb impressions. Pit 1054 included only two decorated sherds, both with combed wavy lines, one in fabric E and one of Hallgate type.

Decoration and vessel type

Numbers of recognisable vessel types which were also decorated were low, only 2.86% of the total assemblage. In spite of this table 24 contains some features of interest. Jugs and pitchers were the most commonly decorated type of vessel while other types were less commonly decorated. Thumb decorated rims, absent from the jug/pitcher category, form half the decorative motifs on jars. Only one jar was decorated with combed lines, whereas combed lines of various kinds were the commonest decorative motif applied to jugs and pitchers. A similar distinction applied to bowls and pancheons which also had thumbed rims but no combed or incised lines.

Of the decorated sherds from the pits only two were from recognisable vessel types, both jugs or pitchers and both in fabric E. Both handles bore combed wavy decoration.

Discussion and interpretation

A note on vessel types

In the discussion which follows considerable attention will be paid to the different vessel types, most of which have traditionally been named according to presumed function. In the case of jugs, pitchers, pipkins, cisterns and a number of other types, these names are relatively uncontroversial. In other cases, including cooking pots, cauldrons, dripping pans and drinking jugs, the names are more ambiguous. These names are used to denote different classes of vessel based upon their morphological characteristics; whether cooking pots were all used for cooking or whether some were used for storage is, in many cases, a moot point. The increase in the recording of soot and other residues is of value in refining these categories, but has, hitherto, been far from universal. The following discussion is a preliminary attempt to indicate some of the attributes of ceramic vessels which may have played a role in their original classification. The terms used should be seen as shorthand for longer descriptive terms such as 'multi-functional domestic vessel' (cf. Moorhouse 1983).

Distinctions within the assemblage

From the tables and descriptions given above a series of apparently regular distinctions can be seen within the assemblage from the kiln;

Sandy fabrics (A, D, E, F)	Gritty fabrics (C)
Commonly glazed	Less commonly glazed
Commonly decorated	Rarely decorated
Comb decorated	Rare thumb impressions
Jugs/pitchers	Jars, bowls, pancheons

Amongst the questions which arise from this analysis the most interesting concern the extent to which these regularities reflect aspects of the meaning bearing nature of the material. Given that material culture is meaningfully constituted, one of the archaeologist's tasks is to present interpretations of it's characteristics which explain the patterns and regularities which he/she has observed. In the following discussion I shall present an interpretation which attempts to relates the characteristics of the pottery to aspects of the prevailing later medieval *habitus* (Bourdieu 1992, Cumberpatch, in press). A fuller discussion of the issues can be found elsewhere (Cumberpatch, in prep. 2).

It might be argued that the assemblage from Hallgate 95 is untypical of most archaeological contexts, consisting as it does of an unknown fraction of the waste from a pottery workshop. Fortunately a considerable amount of data is available from other sites in the region and some of this can be used to provide a broader context for the Hallgate assemblage.

Hallgate 95 and other kiln assemblages

Any discussion of the Hallgate 95 assemblage must begin with a comparison with that excavated in Hallgate in 1965. In their interpretation of this assemblage, Buckland *et al* (1979) have suggested that the three fabrics identified amongst the material from the rescue excavations represented a chronological progression from the early C type wares (and related Cattle Market types) to the latest, A type, with the industry spanning the late 12th to late 13th or early 14th centuries. As noted above there are clear similarities between some of the fabrics described by Buckland *et al* and those from Hallgate 95, (fabrics DHG95 A1, C1, C2 and C3 being related to Hallgate fabrics A and C respectively), although any counterpart to Hallgate B is lacking. The evidence from the Hallgate 95 assemblage suggests that the situation is somewhat more complex than suggested by Buckland *et al*, with potters using different fabrics simultaneously, and vessels in the different fabric types fired together on at least some occasions. The distinctions in vessel forms, which correlate with the differences in fabric type, suggest that the potters were aware of the differences and were consciously striving to produce vessels which were clearly distinguishable, not only in terms of shape, but also of colour and texture, a practice which I have explored in greater detail elsewhere (Cumberpatch, in prep. 2). One possible explanation for the apparent change in practice between the phases represented by Hallgate 95 and Hallgate is that, whereas production of sandy wares occurred alongside that of gritty wares during the late 11th and earlier 12th centuries, the gritty component of the urban potters repertoire was dropped during the later 12th century, with production in the town of Doncaster thereafter concentrating on sandy wares. The extent to which the apparently simultaneous adoption of the fast wheel is co-incidental is unclear.

In view of the identification of splash glazed gritty wares in white Coal Measures fabrics in the assemblage from Church Walk (pers. obs.) it might be suggested that the locus of gritty ware production moved out from Doncaster to the Lower Don valley sometime during the 12th century. Whether this involved a physical relocation by some of the potters

from Doncaster is unclear. Detailed studies of the manufacturing techniques are required to resolve this question. It may be that the superior physical attributes (notably durability and hardness) of gritty wares made from Coal Measures clay played some part in their adoption over the softer and more friable Hallgate C and Market Place type fabrics, although ethnographic observation suggests that such considerations are rarely paramount as determinants of pottery manufacture.

Tables 28 and 29 summarise the proportions of different types of vessel identified in the Hallgate assemblage. Fabrics A, B and C were only found together in Context 1 at Hallgate, with small quantities of Fabric C being found associated with Hallgate B in Context 2. In both cases fabric C represents such a small percentage of the total that it is difficult to substantiate any comparisons made with Hallgate 95. It is notable however that within the Hallgate A groups a similar pattern of vessel types can be seen to that found at Hallgate 95. Jugs and pipkins predominate over cooking pots, cauldrons and pancheons in all cases where the forms are found together.

Similarly the incidence of decorative motifs at Hallgate reflects that at Hallgate 95. Jugs from the former site were commonly decorated with a variety of motifs (Buckland *et al* 1979:15), while sherds in fabric C were far less commonly decorated and this decoration was largely limited to impressions on bowl rims.

In 1977 a kiln was discovered on the western side of the Market Place in the centre of Doncaster (Hayfield 1984). Although only thirty vessels were recovered from the rescue excavations, they offer some potential for comparison with the material from Hallgate 95. Relevant details are summarised in Table 30.

Although the fabric closely resembled Hallgate C, the range of vessel forms shows a greater emphasis on jugs and pitchers than was found at either Hallgate or Hallgate 95. The pattern of glazing and decoration however reflects that found at Hallgate 95,

> Only the pitchers and jugs appear to have been intentionally splash glazed ... although several of the cooking pots had accidental drips of glaze (Hayfield 1984:43)

The extent to which such a small group of material can be said to support or contradict the conclusions drawn from the Hallgate and Hallgate 95 assemblages (where vessels were found, sporadically, in unexpected fabrics), however, must remain in doubt.

Pottery production within the town of Doncaster appears to have ended during the early 14th century. Even before this however the supply of pottery to the town was becoming increasingly dominated by Humberware fabrics (manufactured at Cowick and Holme-on-Spalding Moor) and gritty wares from the Lower Don Valley. Potteries producing the latter types are known to have existed at Firsby near Conisborough and at Rawmarsh, although in neither case have controlled excavations taken place on the sites. Hayfield and Buckland have noted that documentary references to the Firsby potteries can be traced back to the early 14th century (1989:9), and earlier documentary references have recently been traced (Broadbent, pers. comm.). As noted above, there are suggestions from the unpublished material excavated in Church Walk, Doncaster, that this earlier phase is represented by splash glazed sherds in a white gritty fabric closely resembling the Firsby / Rawmarsh type defined by Hayfield and Buckland. Table 31 summarises the material recovered from areas A and B (13th / 14th and 14th / early 15th centuries respectively) at Firsby (Hayfield and Buckland 1989).

Once again there are inherent problems with the data, in this case the fact that it is based upon surface collection from a single seasons field walking (1984). In each case however it is notable that cooking pots and pancheons outnumber jugs and that pipkins, closely associated with jugs in the Hallgate assemblage, are absent.

Although he does not present detailed statistics, Manby, in his description of the material from the potteries at Upper Heaton near Huddersfield makes a number of comments which are of considerable interest when compared to the assemblages from the Doncaster kilns (Manby 1964). The Upper Heaton site dates to the early 14th century, but forms part of the long lived regional gritty ware tradition. In his discussion of the pottery assemblage Manby has noted that

> Some 90 per cent of the pottery from Upper Heaton is in a hard, compact fabric, liberally mixed with a moderately coarse grit which protrudes through the surface to give a distinctive pimply appearance ...
>
> The second fabric is represented by only some 2 per cent of the pottery, all jugs except for a single cooking pot. This is similar to the first common fabric but lacks the coarse grit content, fine sand being used instead. (Manby 1964:80).

Jugs were also found in the coarse fabric, but totalled only 110 examples (including those in the fine fabric), compared to some 2600 cooking pots, 200 pancheons and less than 100 other vessels. A further point of comparison with Hallgate 95 is the field of decoration. It is not clear precisely how many of the jugs were decorated, but, from Manby's description it is clear that decoration (combed wavy lines, impressed comb marks, applied strips, bosses and medallions) was not uncommon. In contrast decoration on cooking pots was found on 'less than ten vessels' (Manby 1964:90) and was equally rare on pancheons.

In his discussion of the affinities of the Upper Heaton pottery, Manby quotes figures for the assemblage at Staxton, excavated (but never fully published) by Brewster (1958). Here

> No jugs or glazed ware were produced, probably due to the strong competition from the potteries at Scarborough ... About 15 per cent of the Staxton ware vessels are pancheons ..., 25 percent large cooking pots or storage jars..., 40 per cent shallow broad-based cooking pots ..., 15 percent medium cooking pots ..., and 5 percent small cooking pots (Manby 1964:105).

Hurst has contrasted this 'rural coarse-ware industry' with the 'urban glazed-ware industry' of Scarborough and Beverley (1988:116) and has suggested that there is a pattern of 'coarse wares in the countryside and glazed wares mainly in towns'. In the light of the evidence from Doncaster discussed here and of the recently published refinement of the Beverley ware industry (Didsbury and Watkins 1992), this suggestion would seem to be in need of revision. As this review has tried to emphasise, the distinction is between vessel forms (and functions) and fabrics, with coarser, gritty fabrics being preferentially associated with cooking pots and pancheons. This appears to cross-cut any distinction between rural and urban industries. The suggestion immediately raises the question of whether this apparent distinction can be seen in assemblages from other types of site.

Hallgate 95 and medieval urban pottery assemblages

In comparing the Hallgate 95 and Hallgate assemblages with those from urban excavations we have to look beyond Doncaster, where, until recently, most excavation was of a small scale, rescue nature and where the large pottery assemblages from recently excavated sites (notably Low Fishergate and Church Walk) remain unpublished.

The intention in this section is to examine the ceramic assemblages from published urban, domestic, sites with a view to looking for structure within the statistics relating to fabric and vessel type. In doing so it is necessary to adopt a 'broad brush' approach to each site and to summarise data from a number of contexts, features and phases so as to draw out the salient features of the assemblages as a whole, thus obliterating smaller scale

taphonomic and other variations within individual groups. Full details of the individual contexts can be found in the publications from which the examples are taken.

Excavations in High Street and Blackfriargate in Hull (Armstrong and Ayers 1987) yeilded three large and important ceramic assemblages. The three sites are known by the names of their earliest recorded tenants; Hotham/Celererman, Ousefleet and Wytelard. Summary details of the three assemblages are presented in tables 32, 33 and 34.

In each case there is a clear division between Sandy wares and Gritty wares in terms of vessel form (and presumably function), the Sandy wares being dominated by jugs and pipkins with smaller numbers of drinking jugs and bowls. In contrast the commonest types of Gritty wares are cooking pots and pancheons.

Table 35 summarises the results from Middle Lane, Hedon (Hayfield and Slater 1984). Here again a similar pattern can be seen. The fact that pancheons are most common in the local Hedon Fine wares (FH 1 - 5) and bowls are commonly found in the local coarse fabric (CH 1 - 4) is an artefact of the terminology, Hayfield having defined pancheons (somewhat idiosyncratically) as glazed vessels.

Table 36 summarises the material constituting pottery groups A to L from Eastgate, Beverley (Didsbury and Watkins 1992). A broadly similar pattern can be seen here, the presence of Torksey wares indicating the presence of late Saxon material in the earlier groups. It is particularly interesting to note the high numbers of both jugs and cooking pots in the Beverley 1A fabric. In their discussion of the characterisation of the various Beverley sub-types, Didsbury and Watkins have noted that

> Fabric 1A, which is predominantly associated with Beverley type 1, is defined as containing abundant fine sand tempering; large quartz grains are frequently present, particularly where the vessel is of cooking pot form (Didsbury and Watkins 1992:108)

In an earlier consideration of Beverley 1 ware, Watkins has noted that

> Cooking pots ... were manufactured in a much more heavily tempered fabric containing larger quartz particles and frequent flecks of chalk (Watkins 1991:80).

These examples are not intended to form an exhaustive consideration of the situation, but rather to indicate the extent of the structuring of medieval pottery assemblages along the lines indicated by the analysis of the Hallgate 95 material, and to show that factors other than chronology affected the composition of assemblages. Further examples, and some of the wider implications, have been considered in greater detail elsewhere (Cumberpatch in prep. 2).

It should be noted that, while the assemblages from the Humber basin seem to show regularity in fabric distributions, a group from West Yorkshire shows a rather different pattern. Table 37 gives details of the material from Kirkstall Abbey (Moorhouse and Slowikowski 1987). In the absence of significant groups of comparative material (the Sandal Castle report (Moorhouse 1983) is difficult to use in this context), elucidation of the situation is difficult; does it represent a widespread phenomenon or is it simply an aspect of monastic assemblages, an overt attempt to signal the difference between the monastic and secular community? One indication that the situation is more complex comes from the assemblages recovered from Tenements A and B at Tanners Row, Pontefract (table 38). Here again jugs appear in both Gritty and Sandy wares, although cooking pots are present in only Gritty and Shell Tempered fabrics (Cumberpatch, unpublished 1). The small size of this group means that it must be used with caution until such time as the assemblages from Pontefract Castle and sites in the town are published in full.

Glaze

The distinctions between sandy and gritty wares noted at Hallgate 95 were not restricted to their textures; the data presented above suggested that the different vessel types were further distinguished by the presence and absence of glaze. Are the regularities in the relationship between fabric and vessel form also reflected in the presence and absence of glaze?

Variations in the use of glaze are rarely quantified, and in what follows a number of impressionistic statements have been used to support the case being made.

Discussing the glaze on vessels from Upper Heaton, Manby has commented that

> Glaze is found on all vessels produced at Upper Heaton, except for small jars; on the cooking pots and pancheons the glaze is confined to spots and trickles or a transparent sheen, all indicating that the glaze was not intentional but acquired from other vessels during firing. The jugs and minor items were deliberately glazed on the exterior and a dish on the interior (Manby 1964:80).

Discussing Beverley 1 ware Didsbury and Watkins have noted that

> Cooking pots are frequently found with small spots and splashes of glaze on their outer surface (1992:111).

a comment that recalls many of the wares discussed above, including the Hallgate C types.

Table 39 summarises the information given by various authors concerning the presence and colour of glaze on the ceramic types considered in this report. Bibliographic references are given in appendix 1.

A number of comments can be made on the details in table 39. Firstly those types in the West Yorkshire subsection must be considered in the light of the comments made above concerning the assemblages from Kirkstall Abbey and Tanners Row, Pontefract. West Yorkshire appears (at present) to represent a contrast with the Humber basin in the terms both of the use of gritty wares in the manufacture of jugs and pipkins and, as seen here, in the practice of glazing such vessels. Further research is needed before the significance of this distinction becomes clear (Cumberpatch in prep. 2).

Certain types, including Hallgate B ware, occupy an ambiguous position, having fabrics which appear to lie at the boundary between sandy and gritty categories and it is possible that closer study of the type is needed with attention being paid to distinctions between jug/pitcher and jar/cooking pot forms, with a view to establishing whether this fabric, like the Beverley A types, varies according to vessel type.

Broadly however there is a regular association between the sandy wares and the use of glaze. Given that glaze was primarily a decorative device (McCarthy and Brooks 1988:35) this would seem to be a second way in which different vessel types are marked and classified.

In addition to the selective use of glaze, there appears to have been a preference for certain glaze colours, green being dominant and contrasting with the predominantly red or orange unglazed body surfaces. In contrast the unglazed vessels are buff or grey, and would probably have rapidly become discoloured during use (Cumberpatch in prep. 2: Table 12).

It appears therefore that the distinctions seen in the Hallgate 95 assemblage are an example of a wider phenomenon, one which distinguishes different classes of ceramic vessel through the texture and colour of the body. This also extends to the use of decorative motifs.

Decoration

As with glaze, decorative motifs are rarely quantified. This is partly due to the difficulty of determining which aspects of decoration to quantify and appropriate ways to deal with fragmentary motifs. More particularly however there appears to have been some reluctance amongst medieval ceramicists to engage with the problem of the significance of decorated pottery (cf. McCarthy and Brooks 1988:127, Orton Tyers and Vince 1993:227-8).

In table 40 the contrasts between gritty wares and sandy wares are set out qualitatively. Decoration appears to be more common on the latter than on the former, although the example of the Northern Gritty and Orange Gritty wares suggest that the association is primarily between vessel form and decoration rather than between fabric and decoration. Taken together with the evidence of links between fabric and form, outlined above, this suggests that the different attributes are linked through vessel function and the perception of the correct attributes for that function.

Function and symbol in medieval ceramic assemblages

In this report I have tried to demonstrate that medieval ceramic assemblages possess attributes which can be interpreted from perspectives other than those which pre-define pottery as a material lacking in symbolic meaning and suitable only for objectivist, etic, analysis. Once it is accepted that artefactual assemblages are the products of knowledgeable actors working within non-verbal frameworks of discursive action then it becomes possible to analyse medieval pottery from perspectives other than those derived from a modernist ideology of functionality.

I have tried to show in this report that the pottery manufactured at Hallgate possessed physical attributes which were regularly, and most probably meaningfully, structured. I have discussed some of the wider associations (notably with food and drink) in greater detail elsewhere and have also tried to link aspects of colour symbolism with the standardised glaze and body colours described above (Cumberpatch in prep. 2).

It seems clear that, while medieval ceramic studies have achieved a high degree of sophistication in the last 40 years, the emphasis on objectivist and empirical study has effectively precluded a consideration of the symbolic attributes of pottery, as well as of other classes of material culture. This stands in direct contrast to the innovative work based upon colonial period assemblages in the eastern USA (eg. Yentsch 1991a, 1991b).

In some respects this is true of other aspects of medieval society. While considerable attention has been paid to religious communities and individuals (notably women), discussions of medieval rural and urban society has been dominated by a concentration on the physical fabric of towns and villages at the expense of the nature of experience-as-lived within those locales. That complementary perspectives exist has been demonstrated by Johnson (1993), but such approaches remain isolated. The built urban environment in northern England appears to have taken a rather different form to that found in the areas studied by Johnson and detailed studies of buildings are required if sophisticated analyses of material culture are to be set into a wider context.

Appendix 1

Tradition / type	Bibliography
Gritty wares	
Gritty ware	Brooks 1987, Mainman 1990, Cumberpatch unpublished 1
York type G ware	Holdsworth 1978, Watkins 1991
Pimply ware	Moorhouse 1983, Moorhouse and Slowikowski 1987
Hillam ware	Moorhouse and Slowikowski 1987, Cumberpatch unpublished 1
Northern Gritty ware	Moorhouse 1983, Moorhouse and Slowikowski 1987
Orange Gritty ware	Moorhouse and Slowikowski 1987
Other Gritty wares (1)	
3c	Moorhouse 1983
8c	Moorhouse 1983
9c	Moorhouse 1983
24c	Moorhouse 1983
26c	Moorhouse 1983
31c	Moorhouse 1983
Other Gritty wares (2)	Cumberpatch unpublished 1
Splash Glazed Gritty wares	Cumberpatch unpublished 1
Green Glazed Gritty wares	Cumberpatch unpublished 1
Late Medieval Gritty ware	Moorhouse and Slowikowski 1987
Purple Glazed Gritty ware	Cumberpatch unpublished 1
Coarse Sandy ware	Watkins 1987
Staxton-Potter Brompton ware	Watkins 1987, Didsbury and Watkins 1992
Hallgate type C ware	Buckland *et al.* 1979, Hayfield 1984
Hedon Coarse ware CH1	Hayfield and Slater 1984
Hedon Coarse ware CH2	Hayfield and Slater 1984
Hedon Coarse ware CH3	Hayfield and Slater 1984
Hedon Coarse ware CH4	Hayfield and Slater 1984
Beverley 1 ware Fabric A	Didsbury and Watkins 1992
Humberware 2	Watkins 1987
Coal Measures White ware	Hayfield and Buckland 1989
Shell Tempered ware	Adams Gilmour 1988,
Sandy wares	
Hedon Fine ware FH 1	Hayfield and Slater 1984
Hedon Fine ware FH 2	Hayfield and Slater 1984
Hedon Fine ware FH 3	Hayfield and Slater 1984
Hedon Fine ware FH 4	Hayfield and Slater 1984
Hedon Fine ware FH 5	Hayfield and Slater 1984
Nottingham Sandy ware	Woodland 1993
Nottingham Splash Glazed ware	Woodland 1993
Lincoln Medieval Sandy ware	Adams Gilmour 1988
Toynton All Saints ware	Watkins 1987
Brandsby ware	Brooks 1987, Watkins 1987
Beverley 1 ware fabric A	Didsbury and Watkins 1992
Beverley 2 ware fabrics B and C	Watkins 1987, Didsbury and Watkins 1992
Orangeware (= Beverley 2 ware)	Watkins 1987
Hallgate A ware	Buckland *et al* 1979
Hallgate B ware	Buckland *et al* 1979
Humberware 1	Watkins 1987, Hayfield and Grieg 1990, Mayes and Hayfield 1980
Humberware 3	Watkins 1987, Hayfield and Grieg 1990, Mayes and Hayfield 1980
York White ware	Watkins 1987 (=York Glazed ware; Mainman 1993)

Bibliographic references to ceramic types discussed in the report

Bibliography

Adams Gilmour, L 1988 **Early Medieval Pottery from Flaxengate, Lincoln**. Council for British Archaeology. London

Armstrong, P. and Ayers, B. 1987 **Excavations in High Street and Blackfriargate**, Hull Old Town Report Series No. 5. East Riding Archaeologist 8, 208-216.

Barton, K.J. 1990 *Some modern attitudes to medieval pottery studies: an argument.* **Medieval Ceramics** 14, 58-59.

Blinkhorn, P.W. forthcoming *The pottery.* In: I. Sodin. *Excavations in St. John's Square, Daventry 1994.* **Northamptonshire Archaeology**.

Blinkhorn, P.W. in prep. *The post-Roman pottery.* In: A. Chapman. **West Cotton: A study in settlement dynamics. Exavations at West Cotton, Raunds, Northamptonshire.** English Heritage Monograph

Bourdieu, P. 1992 **The Logic of Practice**. Polity Press, Oxford.

Brewster, T. 1958 *Staxton ware - an interim report.* **Yorkshire Archaeological Journal** 39, 445-446

Brooks, C.M. 1987 **Medieval and Later Pottery from Aldwark and Other Sites**. The Archaeology of York: The Pottery 16/3. C.B.A. London

Buckland, P.C., Dolby, M.J., Hayfield, C, and Magilton, J.R., 1979 **The Medieval Pottery Industry at Hallgate, Doncaster**. Doncaster Museums and Arts Service, Doncaster

Buckland, P.C., Magilton, J.R. and Hayfield, C. 1988 **The Archaeology of Doncaster 2; The Medieval and Later Town**. B.A.R. British Series 202.

Coleman-Smith, R. and Pearson, T. 1988 **Excavations in the Donyatt potteries**. Phillimore.

Courtney, P. 1993 *The medieval pottery.* In: P. Ellis (ed.) **Beeston Castle, Cheshire**. H.B.M.C England.

Cumberpatch, C.G. in prep. *Towards a phenomenological approach to the study of medieval pottery.* In: C.G. Cumberpatch and P.W. Blinkhorn (Eds.) **Artefacts: The material manifestation of social action**. Oxbow Monograph

Cumberpatch, C.G. Unpublished 1 **The Medieval pottery from six sites in Pontefract, West Yorkshire.** West Yorkshire Archaeology Service.

Cumberpatch, C.G.. Unpublished 2 **Medieval and post-medieval pottery from the Market Place, Darlington**. Archive report. Archaeological Services, University of Durham.

Cumberpatch, C.G. in press *The Pottery.* In: J.A. Dunkley and C.G. Cumberpatch (Eds.) **Excavations at 16 - 20 Church Street, Bawtry**. South Yorkshire Archaeology Field and Research Unit. County Archaeology Monograph No. 3. B.A.R. British Series.

Didsbury, P. and Watkins, J.G. 1992 *The Pottery.* In: D.H. Evans and D.G. Tomlinson **Excavations at 33 - 35 Eastgate, Beverley**. Sheffield Excavation Reports 3, 81-121.

Fletcher, W. and Heyworth M. P. 1987 *The quantification of vessel fragments.* In: C. and V. Gaffney (Eds.) **Pragmatic Archaeology: Theory in Crisis?.** BAR 167.

Hayfield, C. 1980 *Techniques of Pottery Manufacture in East Yorkshire and North Lincolnshire.* **Medieval Ceramics** 4, 29-43.

Hayfield, C. 1984 *An Early Medieval Splash Glazed Pottery Kiln at Market Place, Doncaster.* **Yorkshire Archaeological Journal** 56, 41-43.

Hayfield, C. 1985 **Humberside Medieval Pottery** B.A.R. British Series 140. Oxford.

Hayfield, C, and Buckland, P.C. 1989 *Late Medieval Pottery Wasters from Firsby, South Yorkshire.* **Transactions of the Hunter Archaeological Society** 15 8-24.

Hayfield, C. and Grieg, J. 1990 *Excavation and Salvage Work on a Moated Site at Cowick, South Humberside 1976.* **Yorkshire Archaeological Journal** 62. 111-115.

Hayfield, C and Slater, T. 1984 **The Medieval town of Hedon.** Humberside Leisure Services.

Holdsworth, J. 1978 **Selected Pottery Groups AD 650-1780.** The Archaeology of York: The pottery Vol. 16/1. C.B.A. London

Hurst, J. G. 1988 *Medieval rural settlement in eastern Yorkshire.* In: T.G. Manby (ed.) **Archaeology in Eastern Yorkshire.** Department of Archaeology and Prehistory, Sheffield University.

Johnson, M. 1993 **Housing Culture. Traditional architecture in an English Landscape.** UCL Press.

Kilmurry, K. 1980 **The pottery industry of Stamford, Lincolnshire.** B.A.R. British Series 84

Mainman, A. 1990 **Anglo-Scandinavian pottery from 16-22 Coppergate.** The Archaeology of York: The Pottery 16/5. C.B.A. / Y.A.T.

Mainman, A. 1993 **Pottery from 46-54 Fishergate.** The Archaeology of York: The Pottery 16/6. C.B.A. / Y.A.T.

Manby, T. 1964 *Medieval pottery kilns at Upper Heaton, West Yorkshire.* **Archaeological Journal** 121, 70-110.

Mayes, P. and Hayfield, C. 1980 *A late medieval kiln at Holme-upon-Spalding Moor, North Humberside.* **Hull Old Town Report Series** No. 4. E.R.A.S. Vol. 6.

McCarthy, M. and Brooks, C. 1988 **Medieval Pottery in Britain AD 900 - 1600.** Leicester University Press, Leicester.

Moorhouse, S. 1983 *The Pottery* In: P. Mayes and L. Butler (Eds.) **Sandal Castle Excavations 1964-1973.** Wakefield Historical Publications, Wakefield. 83-198.

Moorhouse, S. and Slowikowski, A.M. 1987 *The Pottery* In: S. Moorhouse and S. Wrathmell (Eds.) **Kirkstall Abbey volume 1.** West Yorkshire Archaeology Service, Wakefield. 59-116.

Orton, C. 1989 *An introduction to the quantification of assemblages of pottery.* **Journal of Roman Pottery Studies** 2:94-97

Orton, C., Tyers, P. and Vince, A. 1993 **Pottery in Archaeology.** Cambridge University Press.

Pearce, J., Jenner, A. and Vince, A. 1985 **London-type ware. A dated series of London medieval pottery part 2.** London and Middlesex Archaeological Society. Special Paper No. 6.

Pearce, J. and Vince, A. 1988 **Surrey Whitewares. A dated series of London medieval pottery part 4**. London and Middlesex Archaeological Society.

Watkins, J.G. 1987 *The Pottery* In: P. Armstrong and B. Ayers (Eds.) **Excavations in High Street and Blackfriargate,** Hull Old Town Report Series No. 5. East Riding Archaeologist 8, 53-181.

Watkins, J.G. 1991 *The Pottery* In: P. Armstrong, D. Tomlinson and D.H. Evans (Eds.) **Excavations at Lurk Lane, Beverley 1979-82**. Sheffield Excavation Report 1, Department of Archaeology and Prehistory, University of Sheffield. 61-103.

Woodland, R. 1993 *Ceramics*. In: A.G. Kinsley, *Excavations on the Saxo-Norman town defences at Slaughter House Lane, Newark-on-Trent, Nottinghamshire*. **Transactions of the Thoroton Society** 97:33-47.

Yentsch, A. 1991a *Chesapeake artefacts and their cultural context: pottery and the food domain*. **Post-Medieval Archaeology** 25. 25-72.

Yentsch, A. 1991b *The symbolic divisions of pottery: Sex related attributes of English and Anglo-American Household Pots*. In: R.H. McGuire and R. Paynter (Eds.) **The Archaeology of Inequality**. Blackwell, Oxford. 192-231.

Fabric	A	A type	A/A1 type	A1	A1 R	A1 type	B type	C type	C1	C1 type	C2	C3	C3 type	D	D type	E	E R	E type	F	F type	FTO	Gritty	Ha type	HW type	MSandy	RDSandy	Shell	SYG B	WGw	U/ID	**Total**
Total sherd numbers	48	11	2	578	44	58	5	34	863	39	3	167	5	140	1	553	1	51	12	2	53	12	26	3	10	1	15	1	36	18	**2792**
Total sherd weight	635	90	55	15555	2050	1525	25	75	12150	265	160	1425	70	4485	55	11365	25	960	270	365	595	240	60	15	95	15	100	5	325	115	**53170**
E.N.V.	45	10	2	552	42	56	5	34	847	39	3	165	1	116	1	477	1	40	11	1	51	12	26	3	10	1	15	1	33	18	**2618**

Table 1. Total numbers, weight and ENV of sherds by fabric type from the kiln (all phases). Full details of phases and individual contexts are given in tables 5, 6 and 7.

Ha type	Hallgate type
Gritty	Gritty ware
HW type	Humberware type
MSandy	Medieval Sandy ware
RDSandy	Reduced Sandy ware
Shell	Shell Tempered ware
SYG B	South Yorkshire Gritty ware
WGw	White Gritty ware
U/ID	Unidentified wares

Context	Data	A	A type	A1	A1 R	C1	D	E	E type	Hallgate type	Stamford	U/ID	**Total**
1055-1	Sum of Sherd No.	11	0	8	1	19	1	16	0	0	1	0	**57**
	Sum of Sherd Wt	365	0	210	5	220	40	265	0	0	5	0	**1110**
	Sum of ENV	11	0	8	1	18	1	15	0	0	1	0	**55**
1055-2	Sum of Sherd No.	0	2	3	0	10	1	1	3	1	1	1	**23**
	Sum of Sherd Wt	0	35	20	0	135	15	10	30	15	5	5	**270**
	Sum of ENV	0	2	3	0	9	1	1	3	1	1	1	**22**
Total Sum of Sherd No.		**11**	**2**	**11**	**1**	**29**	**2**	**17**	**3**	**1**	**2**	**1**	**80**
Total Sum of Sherd Wt		**365**	**35**	**230**	**5**	**355**	**55**	**275**	**30**	**15**	**10**	**5**	**1380**
Total Sum of ENV		**11**	**2**	**11**	**1**	**27**	**2**	**16**	**3**	**1**	**2**	**1**	**77**

Table 2. Numbers, weights and ENV of sherds from pit 1054

Context	Data	A	A type	A1	A1 R	A1 type	B	C type	C1	D	E	Hall. type	Humberware	MSandy	Stamford	U/ID	**Total**
1038-1	Sum of Sherd No.	0	0	5	1	1	2	1	16	9	2	2	0	5	1	2	**47**
	Sum of Sherd Wt	0	0	165	5	10	15	20	155	195	80	10	0	10	5	5	**675**
	Sum of ENV	0	0	4	1	1	2	1	14	7	2	2	0	5	1	2	**42**
1065-1	Sum of Sherd No.	0	3	0	0	0	1	0	0	0	0	0	0	1	0	0	**5**
	Sum of Sherd Wt	0	70	0	0	0	30	0	0	0	0	0	0	15	0	0	**115**
	Sum of ENV	0	3	0	0	0	1	0	0	0	0	0	0	1	0	0	**5**
1065-2	Sum of Sherd No.	1	2	3	0	0	1	0	4	0	4	0	3	3	0	0	**21**
	Sum of Sherd Wt	10	40	65	0	0	10	0	30	0	65	0	30	20	0	0	**270**
	Sum of ENV	1	2	3	0	0	1	0	4	0	4	0	3	3	0	0	**21**
Total Sum of Sherd No.		**1**	**5**	**8**	**1**	**1**	**4**	**1**	**20**	**9**	**6**	**2**	**3**	**9**	**1**	**2**	**73**
Total Sum of Sherd Wt		**10**	**110**	**230**	**5**	**10**	**55**	**20**	**185**	**195**	**145**	**10**	**30**	**45**	**5**	**5**	**1060**
Total Sum of ENV		**1**	**5**	7	**1**	**1**	**4**	**1**	**18**	7	**6**	**2**	**3**	**9**	**1**	**2**	**68**

Table 3 Numbers, weights and ENV of sherds from pit 1064

D	D type	E	E R	E type	F	F type	FTO	Gritty	Ha type	HW type	MSandy	RDSandy	Shell	SYG	B W/Gw	U/ID	Total
5.01	0.04	19.81	0.04	1.83	0.43	0.07	1.90	0.43	0.93	0.11	0.36	0.04	0.54	0.04	1.29	0.64	100.00
8.44	0.10	21.37	0.05	1.81	0.51	0.69	1.12	0.45	0.11	0.03	0.18	0.03	0.19	0.01	0.61	0.22	100.00
4.43	0.04	18.22	0.04	1.53	0.42	0.04	1.95	0.46	0.99	0.11	0.38	0.04	0.57	0.04	1.26	0.69	100.00

Context	Data	A	A/A1type	A1	A1 R	A1 type	C type	C1	C1 type	D	D type	E	F	MSandy	WGw	U/ID	Total
1112-1	Sum of Sherd No.	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3
	Sum of Sherd Wt.	0	0	0	0	0	0	0	0	0	0	0	0	10	0	0	10
	Sum of ENV	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3
1112-2	Sum of Sherd No.	0	0	12	0	2	0	8	0	11	0	9	0	1	0	0	43
	Sum of Sherd Wt.	0	0	810	0	65	0	205	0	475	0	410	0	20	0	0	1985
	Sum of ENV	0	0	10	0	2	0	8	0	11	0	4	0	1	0	0	36
1112-3	Sum of Sherd No.	0	0	0	1	0	0	0	0	3	0	1	0	0	0	0	5
	Sum of Sherd Wt.	0	0	0	5	0	0	0	0	145	0	65	0	0	0	0	215
	Sum of ENV	0	0	0	1	0	0	0	0	2	0	1	0	0	0	0	4
1112-4	Sum of Sherd No.	0	0	11	6	0	0	4	0	22	0	12	0	0	1	0	56
	Sum of Sherd Wt.	0	0	330	100	0	0	40	0	645	0	170	0	0	30	0	1315
	Sum of ENV	0	0	6	5	0	0	4	0	13	0	11	0	0	1	0	40
1122-2	Sum of Sherd No.	4	2	50	0	21	0	68	2	17	1	12	0	0	0	5	182
	Sum of Sherd Wt.	90	55	1535	0	535	0	1685	75	445	55	425	0	0	0	60	4960
	Sum of ENV	4	2	49	0	21	0	65	2	15	1	9	0	0	0	5	173
310-1	Sum of Sherd No.	0	0	15	0	1	4	18	0	0	0	4	8	0	0	0	50
	Sum of Sherd Wt.	0	0	165	0	15	10	160	0	0	0	60	75	0	0	0	485
	Sum of ENV	0	0	15	0	1	4	17	0	0	0	4	8	0	0	0	49
Total Sum of Sherd No.		**4**	**2**	**88**	**7**	**24**	**4**	**98**	**2**	**53**	**1**	**38**	**8**	**4**	**1**	**5**	**339**
Total Sum of Sherd Wt.		**90**	**55**	**2840**	**105**	**615**	**10**	**2090**	**75**	**1710**	**55**	**1130**	**75**	**30**	**30**	**60**	**8970**
Total Sum of ENV		**4**	**2**	**80**	**6**	**24**	**4**	**94**	**2**	**41**	**1**	**29**	**8**	**4**	**1**	**5**	**305**

Table 6. Kiln: Phase 1 contexts.

Context	Data	A	A type	A1	A1 R	A1 type	B type	C type	C1	C1 type	C3	C3 type	D	E	E type	F	F type	FTO	Gritty	Hall type	HW type	MSandy	RDSandy	U/ID	WGw	Total
1111-1	Sum of Sherd No.	0	1	3	4	0	0	0	11	0	0	0	1	11	0	0	0	0	0	0	0	0	0	0	0	31
	Sum of Sherd Wt.	0	5	85	155	0	0	0	405	0	0	0	15	590	0	0	0	0	0	0	0	0	0	0	0	1255
	Sum of ENV	0	1	2	4	0	0	0	11	0	0	0	1	9	0	0	0	0	0	0	0	0	0	0	0	28
1111-2	Sum of Sherd No.	7	0	39	1	2	0	0	60	1	0	0	2	44	1	2	0	0	2	6	0	0	0	0	2	169
	Sum of Sherd Wt.	85	0	1060	75	25	0	0	500	20	0	0	40	700	15	125	0	0	15	10	0	0	0	0	15	2685
	Sum of ENV	4	0	37	1	1	0	0	58	1	0	0	2	38	1	2	0	0	2	6	0	0	0	0	2	155
1111-3	Sum of Sherd No.	0	0	0	0	0	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
	Sum of Sherd Wt.	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
	Sum of ENV	0	0	0	0	0	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
1117-1	Sum of Sherd No.	0	0	9	4	3	0	0	2	0	1	5	8	11	9	2	2	0	4	1	0	0	0	0	0	61
	Sum of Sherd Wt.	0	0	375	230	180	0	0	55	0	10	70	160	405	380	70	365	0	35	5	0	0	0	0	0	2340
	Sum of ENV	0	0	6	4	3	0	0	2	0	1	1	6	11	2	1	1	0	4	1	0	0	0	0	0	43
1117-2	Sum of Sherd No.	5	0	27	3	2	0	0	42	0	0	0	11	21	6	0	0	3	0	3	0	0	0	0	0	123
	Sum of Sherd Wt.	50	0	545	80	75	0	0	555	0	0	0	445	350	185	0	0	15	0	20	0	0	0	0	0	2320
	Sum of ENV	5	0	27	3	2	0	0	42	0	0	0	7	20	5	0	0	3	0	3	0	0	0	0	0	117
1117-3	Sum of Sherd No.	0	0	33	0	0	0	0	58	17	0	0	7	30	13	0	0	12	0	12	0	0	0	0	2	184
	Sum of Sherd Wt.	0	0	670	0	0	0	0	630	70	0	0	150	670	105	0	0	105	0	10	0	0	0	0	10	2420
	Sum of ENV	0	0	32	0	0	0	0	58	17	0	0	7	29	13	0	0	12	0	12	0	0	0	0	2	182
1117-4	Sum of Sherd No.	2	0	26	5	2	0	0	36	2	0	0	5	29	4	0	0	0	0	3	0	2	0	0	2	118
	Sum of Sherd Wt.	90	0	690	580	10	0	0	1010	5	0	0	85	725	80	0	0	0	0	5	0	20	0	0	5	3305
	Sum of ENV	2	0	26	4	2	0	0	36	2	0	0	5	26	2	0	0	0	0	3	0	2	0	0	2	112
1117-5	Sum of Sherd No.	0	0	0	0	2	0	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25
	Sum of Sherd Wt.	0	0	0	0	10	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20
	Sum of ENV	0	0	0	0	2	0	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25
307-1	Sum of Sherd No.	0	0	33	1	0	0	0	87	1	2	0	6	51	0	0	0	8	0	0	0	0	1	8	6	204
	Sum of Sherd Wt.	0	0	755	45	0	0	0	605	40	65	0	205	725	0	0	0	40	0	0	0	0	15	5	50	2550
	Sum of ENV	0	0	33	1	0	0	0	87	1	2	0	6	51	0	0	0	8	0	0	0	0	1	8	6	204
307-10	Sum of Sherd No.	7	0	0	2	0	5	4	0	0	0	0	0	0	0	0	0	0	0	0	3	4	0	0	2	27
	Sum of Sherd Wt.	100	0	0	15	0	25	20	0	0	0	0	0	0	0	0	0	0	0	0	15	45	0	0	30	250
	Sum of ENV	7	0	0	2	0	5	4	0	0	0	0	0	0	0	0	0	0	0	0	3	4	0	0	2	27
307-2	Sum of Sherd No.	0	0	29	1	0	0	0	44	0	0	0	3	40	0	0	0	11	3	0	0	0	0	0	0	131
	Sum of Sherd Wt.	0	0	840	10	0	0	0	585	0	0	0	80	585	0	0	0	90	30	0	0	0	0	0	0	2220
	Sum of ENV	0	0	27	1	0	0	0	43	0	0	0	3	40	0	0	0	10	3	0	0	0	0	0	0	127
309-1	Sum of Sherd No.	0	0	27	8	2	0	0	17	0	22	0	15	18	4	0	0	2	0	1	0	0	0	0	1	117
	Sum of Sherd Wt.	0	0	990	415	175	0	0	245	0	325	0	575	665	65	0	0	85	0	10	0	0	0	0	5	3555
	Sum of ENV	0	0	27	8	2	0	0	14	0	21	0	13	16	4	0	0	1	0	1	0	0	0	0	1	108
Total Sum of Sherd No.		21	1	226	29	13	5	27	357	33	25	5	58	255	37	4	2	36	9	26	3	6	1	8	15	1202
Total Sum of Sherd Wt.		325	5	6010	1605	475	25	30	4590	145	400	70	1755	5415	830	195	365	335	80	60	15	65	15	5	115	22930
Total Sum of ENV		18	1	217	28	12	5	27	351	33	24	1	50	240	27	3	1	34	9	26	3	6	1	8	15	1140

Table 7. Numbers, weights and ENV from the kiln (phase 2)

Context	Type	No. sherds	Date range
100-3	NLST	2	E13th - L15th
190-2	NLST	2	E13th - L15th
206-2	LEMS	1	Mid 12th-E13th
301-4	NLST	1	E13th - L15th
305-5	NLST	5	E13th - L15th
307-1	NLST	1	E13th - L15th
1001-1	NLST	1	E13th - L15th
1001-1	NLST	1	E13th - L15th
1001-5	NLST	1	E13th - L15th
1003-1	MEDX	1	E/M13th - L15th
1003-1	NLST	1	E13th - L15th
1003-14	NLST	1	E13th - L15th
1003-2	LFS	1	L10th-M12th
1003-2	LFS	1	L10th-M12th
1003-2	NLST	1	E13th - L15th
1003-2	NLST	1	E13th - L15th
1003-2	NLST	1	E13th - L15th
1003-2	LFS	1	L10th-M12th
1003-29	LFS	2	L10th-M12th
1003-3	LFS	1	L10th-M12th
1003-36	LFS	1	L10th-M12th
1003-38	NLST	2	E13th - L15th
1003-38	NLST	1	E13th - L15th
1003-9	NLST	1	E13th - L15th
1016-2	NLST	1	E13th - L15th
1028-3	NLST	1	E13th - L15th
1038-1	LFS	2	L10th-M12th
1038-1	MEDLOC	1	E13th
1048-1	LEMS	1	M12th-E13th
1048-1	LEMS	1	M12th-E13th
1048-1	LFS	1	L10th-M12th
1048-1	NLST	1	E13th-L15th
1053-10	NLST	1	E13th-L15th
1053-2	NLST	2	E13th-L15th
1057-1	EMLOC	1	E/M 12th - E/M13th
1057-1	LEMS	1	M12th-E13th
1057-1	LEMS	1	M12th-E13th
1057-1	LFS	1	L10th-M12th
1057-2	LEMS	1	M12th-E13th
1057-3	NLST	1	E13th-L15th
1057-4	LEMS	1	M12th-E13th
1088-2	LEMS	1	M12th-E13th
1094-2	LFS	1	L10th-M12th
1099-5	MISC	1	U/ID
1099-5	MISC	1	U/ID
1105-1	LFS	1	L10th-M12th

NLST	North Lincolnshire Shell Tempered ware	MEDLOC	Medieval Local fabric A
LFS	Lincoln Fine-Shelled ware	MEDX	Medieval non-local fabric
LEMS	Early Medieval Shelly ware	MISC	Undated fabric

Table 8. Shell Tempered ware (all contexts).

Context no.	1105				1111			1112				1117					1122	305				307			309	310	
Bag no.	1	2	3	4	1	2	3	1	2	3	4	1	2	3	4	5	2	1	3	5	6	1	10	2	1	1	Total
Fabric																											
A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A type	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A/A1type	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A1	6	0	0	0	0	1	0	0	2	0	0	0	0	1	4	0	5	4	0	7	3	2	0	1	12	0	48
A1 R	0	0	0	0	1	1	0	0	0	1	2	3	3	0	4	0	0	0	0	0	3	0	0	0	0	0	18
A1 type	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18	0	0	0	0	0	0	0	0	0	18
B type	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C type	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	4	5
C1	0	0	0	1	1	3	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	3	0	2	13
C1 type	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	2
C2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C3 type	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D	1	0	0	0	0	0	0	0	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1	0	5
D type	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
E	0	0	0	0	2	0	0	0	0	0	0	0	0	0	1	0	0	1	0	1	0	0	0	0	0	0	5
E R	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
E type	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
F	0	0	0	0	0	1	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
F type	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hall. type	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	**7**	**0**	**0**	**1**	**4**	**7**	**0**	**0**	**3**	**1**	**2**	**6**	**4**	**2**	**9**	**0**	**24**	**7**	**1**	**9**	**6**	**3**	**0**	**4**	**13**	**6**	**119**

Table 9. Wasters from the kiln assemblage.

Fabric	Context		
	1055-1	1055-2	**Total**
A	2	0	**2**
A type	0	0	**0**
A1	1	0	**1**
A1 R	0	0	**0**
C1	0	0	**0**
D	0	0	**0**
E	0	0	**0**
E type	0	0	**0**
Hallgate type	0	0	**0**
Stamford	0	0	**0**
U/ID	0	0	**0**
Total	**3**	**0**	**3**

Table 10. Wasters from pit 1054

Fabric type	Context			
	1038-1	1065-1	1065-2	**Total**
A	0	0	0	**0**
A type	0	0	0	**0**
A1	0	0	0	**0**
A1 R	1	0	0	**1**
A1 type	1	0	0	**1**
B	0	0	0	**0**
C type	0	0	0	**0**
C1	0	0	0	**0**
D	0	0	0	**0**
E	0	0	0	**0**
Hallgate type	1	0	0	**1**
Humberware	0	0	0	**0**
Med. Sandy	0	0	0	**0**
Stamford	0	0	0	**0**
U/ID	0	0	0	**0**
Total	**3**	**0**	**0**	**3**

Table 11. Wasters from pit 1064

Fabric	Data	Handmade	Hand/Turned	Thrown	Thrown(?)	Turned	U/ID	Total
A	Sum of Sherd No.	19	0	28	0	1	0	48
	Sum of Sherd Wt.	180	0	380	0	75	0	635
	Sum of ENV	19	0	25	0	1	0	45
A type	Sum of Sherd No.	2	0	9	0	0	0	11
	Sum of Sherd Wt.	25	0	65	0	0	0	90
	Sum of ENV	2	0	8	0	0	0	10
A/A1type	Sum of Sherd No.	2	0	0	0	0	0	2
	Sum of Sherd Wt.	55	0	0	0	0	0	55
	Sum of ENV	2	0	0	0	0	0	2
A1	Sum of Sherd No.	447	126	0	0	4	1	578
	Sum of Sherd Wt.	11655	3760	0	0	125	15	15555
	Sum of ENV	429	118	0	0	4	1	552
A1 R	Sum of Sherd No.	33	2	0	0	5	4	44
	Sum of Sherd Wt.	1865	60	0	0	55	70	2050
	Sum of ENV	32	2	0	0	4	4	42
A1 type	Sum of Sherd No.	54	0	2	0	2	0	58
	Sum of Sherd Wt.	1495	0	10	0	20	0	1525
	Sum of ENV	52	0	2	0	2	0	56
B type	Sum of Sherd No.	0	0	0	0	5	0	5
	Sum of Sherd Wt.	0	0	0	0	25	0	25
	Sum of ENV	0	0	0	0	5	0	5
C type	Sum of Sherd No.	11	0	0	0	0	23	34
	Sum of Sherd Wt.	65	0	0	0	0	10	75
	Sum of ENV	11	0	0	0	0	23	34
C1	Sum of Sherd No.	742	105	1	0	15	0	863
	Sum of Sherd Wt.	9325	2480	75	0	270	0	12150
	Sum of ENV	734	98	1	0	14	0	847
C1 type	Sum of Sherd No.	39	0	0	0	0	0	39
	Sum of Sherd Wt.	265	0	0	0	0	0	265
	Sum of ENV	39	0	0	0	0	0	39
C2	Sum of Sherd No.	2	0	0	0	1	0	3
	Sum of Sherd Wt.	25	0	0	0	135	0	160
	Sum of ENV	2	0	0	0	1	0	3
C3	Sum of Sherd No.	162	5	0	0	0	0	167
	Sum of Sherd Wt.	1290	135	0	0	0	0	1425
	Sum of ENV	161	4	0	0	0	0	165
C3 type	Sum of Sherd No.	5	0	0	0	0	0	5
	Sum of Sherd Wt.	70	0	0	0	0	0	70
	Sum of ENV	1	0	0	0	0	0	1
D	Sum of Sherd No.	121	17	0	0	2	0	140
	Sum of Sherd Wt.	3745	680	0	0	60	0	4485
	Sum of ENV	103	12	0	0	1	0	116
D type	Sum of Sherd No.	1	0	0	0	0	0	1
	Sum of Sherd Wt.	55	0	0	0	0	0	55
	Sum of ENV	1	0	0	0	0	0	1
E	Sum of Sherd No.	518	25	1	0	9	0	553
	Sum of Sherd Wt.	9840	1360	5	0	160	0	11365
	Sum of ENV	449	23	1	0	4	0	477
E'R	Sum of Sherd No.	1	0	0	0	0	0	1
	Sum of Sherd Wt.	25	0	0	0	0	0	25
	Sum of ENV	1	0	0	0	0	0	1
E type	Sum of Sherd No.	44	7	0	0	0	0	51
	Sum of Sherd Wt.	710	250	0	0	0	0	960
	Sum of ENV	39	1	0	0	0	0	40
F	Sum of Sherd No.	10	0	0	0	2	0	12
	Sum of Sherd Wt.	250	0	0	0	20	0	270
	Sum of ENV	9	0	0	0	2	0	11
F type	Sum of Sherd No.	2	0	0	0	0	0	2
	Sum of Sherd Wt.	365	0	0	0	0	0	365
	Sum of ENV	1	0	0	0	0	0	1
Fine Thrown Ox.	Sum of Sherd No.	12	0	38	2	0	1	53
	Sum of Sherd Wt.	105	0	400	85	0	5	595
	Sum of ENV	12	0	36	2	0	1	51
Gritty ware	Sum of Sherd No.	2	0	7	0	0	3	12
	Sum of Sherd Wt.	120	0	100	0	0	20	240
	Sum of ENV	2	0	7	0	0	3	12
Hallgate type	Sum of Sherd No.	20	0	6	0	0	0	26
	Sum of Sherd Wt.	50	0	10	0	0	0	60
	Sum of ENV	20	0	6	0	0	0	26
Humberware type	Sum of Sherd No.	0	0	3	0	0	0	3
	Sum of Sherd Wt.	0	0	15	0	0	0	15
	Sum of ENV	0	0	3	0	0	0	3
Medieval Sandy	Sum of Sherd No.	5	0	5	0	0	0	10
	Sum of Sherd Wt.	30	0	65	0	0	0	95
	Sum of ENV	5	0	5	0	0	0	10
Reduced Sandy	Sum of Sherd No.	1	0	0	0	0	0	1
	Sum of Sherd Wt.	15	0	0	0	0	0	15
	Sum of ENV	1	0	0	0	0	0	1
Shell Tempered	Sum of Sherd No.	0	0	0	0	0	15	15
	Sum of Sherd Wt.	0	0	0	0	0	100	100
	Sum of ENV	0	0	0	0	0	15	15
South Yorks Grit B	Sum of Sherd No.	0	0	1	0	0	0	1
	Sum of Sherd Wt.	0	0	5	0	0	0	5
	Sum of ENV	0	0	1	0	0	0	1
U/ID	Sum of Sherd No.	6	1	3	0	0	8	18
	Sum of Sherd Wt.	65	20	25	0	0	5	115
	Sum of ENV	6	1	3	0	0	8	18
White Gritty ware	Sum of Sherd No.	9	0	27	0	0	0	36
	Sum of Sherd Wt.	70	0	255	0	0	0	325
	Sum of ENV	9	0	24	0	0	0	33
Total Sum of Sherd No.		2270	288	131	2	46	55	2792
Total Sum of Sherd Wt.		41760	8745	1410	85	945	225	53170
Total Sum of ENV		2142	259	122	2	38	55	2618

Table 12. Fabric type and manufacturing technique (kiln, all contexts).

Fabric	Data	Hand	Thrown	Turned	Unidentified	**Total**
A	Sum of Sherd No.	0	1	0	0	**1**
	Sum of Sherd Wt	0	10	0	0	**10**
	Sum of ENV	0	1	0	0	**1**
A type	Sum of Sherd No.	0	4	0	1	**5**
	Sum of Sherd Wt	0	70	0	40	**110**
	Sum of ENV	0	4	0	1	**5**
A1	Sum of Sherd No.	7	0	1	0	**8**
	Sum of Sherd Wt	205	0	25	0	**230**
	Sum of ENV	6	0	1	0	**7**
A1 R	Sum of Sherd No.	1	0	0	0	**1**
	Sum of Sherd Wt	5	0	0	0	**5**
	Sum of ENV	1	0	0	0	**1**
A1 type	Sum of Sherd No.	1	0	0	0	**1**
	Sum of Sherd Wt	10	0	0	0	**10**
	Sum of ENV	1	0	0	0	**1**
B	Sum of Sherd No.	0	4	0	0	**4**
	Sum of Sherd Wt	0	55	0	0	**55**
	Sum of ENV	0	4	0	0	**4**
C type	Sum of Sherd No.	0	0	1	0	**1**
	Sum of Sherd Wt	0	0	20	0	**20**
	Sum of ENV	0	0	1	0	**1**
C1	Sum of Sherd No.	20	0	0	0	**20**
	Sum of Sherd Wt	185	0	0	0	**185**
	Sum of ENV	18	0	0	0	**18**
D	Sum of Sherd No.	9	0	0	0	**9**
	Sum of Sherd Wt	195	0	0	0	**195**
	Sum of ENV	7	0	0	0	**7**
E	Sum of Sherd No.	6	0	0	0	**6**
	Sum of Sherd Wt	145	0	0	0	**145**
	Sum of ENV	6	0	0	0	**6**
Hallgate type	Sum of Sherd No.	0	0	0	2	**2**
	Sum of Sherd Wt	0	0	0	10	**10**
	Sum of ENV	0	0	0	2	**2**
Humberware	Sum of Sherd No.	0	3	0	0	**3**
	Sum of Sherd Wt	0	30	0	0	**30**
	Sum of ENV	0	3	0	0	**3**
Med. Sandy	Sum of Sherd No.	0	4	0	5	**9**
	Sum of Sherd Wt	0	35	0	10	**45**
	Sum of ENV	0	4	0	5	**9**
Stamford	Sum of Sherd No.	0	1	0	0	**1**
	Sum of Sherd Wt	0	5	0	0	**5**
	Sum of ENV	0	1	0	0	**1**
U/ID	Sum of Sherd No.	0	0	0	2	**2**
	Sum of Sherd Wt	0	0	0	5	**5**
	Sum of ENV	0	0	0	2	**2**
Total Sum of Sherd No.		**44**	**17**	**2**	**10**	**73**
Total Sum of Sherd Wt		**745**	**205**	**45**	**65**	**1060**
Total Sum of ENV		**39**	**17**	**2**	**10**	**68**

Table 14. Fabric type and manufacturing technique (Pit 1064)

Table 15 Key

Hall. type	Hallgate type
HW type	Humberware type
MSandy	Medieval Sandy ware
RDSandy	Reduced Sandy ware
Shell	Shell Tempered ware
SYG B	South Yorkshire Gritty ware group B (CMW)
U/ID	Unidentified
WGw	White Gritty ware
ERJ	Everted Rim jar
Pcn/Bowl	Pancheon / Bowl
ERB	Everted Rim bowl
ERVs	Everted Rim vessel
C Pot	Cooking Pot

Fabric	Data	Jar	ERJ	Jar/Jug	Jug	Jug(?)	Jug/pitcher	Bowl	Pcn/bowl	Pancheon	ERB	ERVs	C Pot	U/ID	Total
A	Sum of Sherd No.	0	0	1	1	0	1	0	0	0	0	0	0	45	48
	Sum of Sherd Wt.	0	0	75	15	0	20	0	0	0	0	0	0	525	635
	Sum of ENV	0	0	1	1	0	1	0	0	0	0	0	0	42	45
A type	Sum of Sherd No.	0	0	0	0	0	0	0	0	0	0	0	0	11	11
	Sum of Sherd Wt.	0	0	0	0	0	0	0	0	0	0	0	0	90	90
	Sum of ENV	0	0	0	0	0	0	0	0	0	0	0	0	10	10
A/A1type	Sum of Sherd No.	0	0	0	0	0	0	0	0	0	0	0	0	2	2
	Sum of Sherd Wt.	0	0	0	0	0	0	0	0	0	0	0	0	55	55
	Sum of ENV	0	0	0	0	0	0	0	0	0	0	0	0	2	2
A1	Sum of Sherd No.	2	2	0	64	2	17	0	0	0	0	0	0	491	578
	Sum of Sherd Wt.	50	110	0	3110	100	1200	0	0	0	0	0	0	10985	15555
	Sum of ENV	1	1	0	58	1	16	0	0	0	0	0	0	475	552
A1 R	Sum of Sherd No.	0	0	0	9	0	1	0	0	0	0	0	0	34	44
	Sum of Sherd Wt.	0	0	0	650	0	50	0	0	0	0	0	0	1350	2050
	Sum of ENV	0	0	0	9	0	1	0	0	0	0	0	0	32	42
A1 type	Sum of Sherd No.	0	2	0	7	0	1	0	0	0	0	0	0	48	58
	Sum of Sherd Wt.	0	10	0	265	0	25	0	0	0	0	0	0	1225	1525
	Sum of ENV	0	2	0	7	0	1	0	0	0	0	0	0	46	56
B type	Sum of Sherd No.	0	0	0	0	0	0	0	0	0	0	0	0	5	5
	Sum of Sherd Wt.	0	0	0	0	0	0	0	0	0	0	0	0	25	25
	Sum of ENV	0	0	0	0	0	0	0	0	0	0	0	0	5	5
C type	Sum of Sherd No.	0	0	0	0	0	0	0	0	0	0	0	0	34	34
	Sum of Sherd Wt.	0	0	0	0	0	0	0	0	0	0	0	0	75	75
	Sum of ENV	0	0	0	0	0	0	0	0	0	0	0	0	34	34
	Sum of Sherd Wt.	0	0	0	0	0	0	0	0	0	0	0	0	75	75
	Sum of ENV	0	0	0	0	0	0	0	0	0	0	0	0	34	34
C1	Sum of Sherd No.	11	58	0	0	0	1	2	2	5	1	1	0	782	863
	Sum of Sherd Wt.	380	1410	0	0	0	5	35	320	285	15	15	0	9685	12150
	Sum of ENV	10	54	0	0	0	1	1	2	5	1	1	0	772	847
C1 type	Sum of Sherd No.	0	0	0	1	0	1	0	0	0	0	0	0	37	39
	Sum of Sherd Wt.	0	0	0	15	0	60	0	0	0	0	0	0	190	265
	Sum of ENV	0	0	0	1	0	1	0	0	0	0	0	0	37	39
C2	Sum of Sherd No.	0	1	0	0	0	0	0	0	0	0	0	0	2	3
	Sum of Sherd Wt.	0	135	0	0	0	0	0	0	0	0	0	0	25	160
	Sum of ENV	0	1	0	0	0	0	0	0	0	0	0	0	2	3
C3	Sum of Sherd No.	0	0	0	4	0	2	0	0	1	0	0	0	160	167
	Sum of Sherd Wt.	0	0	0	200	0	65	0	0	10	0	0	0	1150	1425
	Sum of ENV	0	0	0	3	0	2	0	0	1	0	0	0	159	165
C3 type	Sum of Sherd No.	0	0	0	0	0	0	0	0	0	0	0	0	5	5
	Sum of Sherd Wt.	0	0	0	0	0	0	0	0	0	0	0	0	70	70
	Sum of ENV	0	0	0	0	0	0	0	0	0	0	0	0	1	1
D	Sum of Sherd No.	0	0	0	13	0	6	0	0	0	0	0	0	121	140
	Sum of Sherd Wt.	0	0	0	830	0	205	0	0	0	0	0	0	3450	4485
	Sum of ENV	0	0	0	10	0	4	0	0	0	0	0	0	102	116
D type	Sum of Sherd No.	0	0	0	0	0	1	0	0	0	0	0	0	0	1
	Sum of Sherd Wt.	0	0	0	0	0	55	0	0	0	0	0	0	0	55
	Sum of ENV	0	0	0	0	0	1	0	0	0	0	0	0	0	1
E	Sum of Sherd No.	0	8	0	39	0	22	0	0	8	0	0	0	476	553
	Sum of Sherd Wt.	0	95	0	2430	0	1505	0	0	155	0	0	0	7180	11365
	Sum of ENV	0	4	0	35	0	17	0	0	6	0	0	0	415	477
E R	Sum of Sherd No.	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	Sum of Sherd Wt.	0	0	0	0	0	0	0	0	0	0	0	0	25	25
	Sum of ENV	0	0	0	0	0	0	0	0	0	0	0	0	1	1
E type	Sum of Sherd No.	0	0	0	2	0	0	0	0	1	0	0	0	48	51
	Sum of Sherd Wt.	0	0	0	130	0	0	0	0	10	0	0	0	820	960
	Sum of ENV	0	0	0	1	0	0	0	0	1	0	0	0	38	40
F	Sum of Sherd No.	0	0	0	4	0	2	0	0	0	0	0	0	6	12
	Sum of Sherd Wt.	0	0	0	195	0	20	0	0	0	0	0	0	55	270
	Sum of ENV	0	0	0	3	0	2	0	0	0	0	0	0	6	11
F type	Sum of Sherd No.	0	0	0	2	0	0	0	0	0	0	0	0	0	2
	Sum of Sherd Wt.	0	0	0	365	0	0	0	0	0	0	0	0	0	365
	Sum of ENV	0	0	0	1	0	0	0	0	0	0	0	0	0	1
FTO	Sum of Sherd No.	0	0	0	0	0	0	0	0	0	0	0	0	53	53
	Sum of Sherd Wt.	0	0	0	0	0	0	0	0	0	0	0	0	595	595
	Sum of ENV	0	0	0	0	0	0	0	0	0	0	0	0	51	51
Gritty ware	Sum of Sherd No.	0	0	0	0	0	0	0	0	0	0	0	1	11	12
	Sum of Sherd Wt.	0	0	0	0	0	0	0	0	0	0	0	40	200	240
	Sum of ENV	0	0	0	0	0	0	0	0	0	0	0	1	11	12
Hall. type	Sum of Sherd No.	0	0	0	1	0	0	0	0	0	0	0	0	25	26
	Sum of Sherd Wt.	0	0	0	10	0	0	0	0	0	0	0	0	50	60
	Sum of ENV	0	0	0	1	0	0	0	0	0	0	0	0	25	26
HW type	Sum of Sherd No.	0	0	0	0	0	0	0	0	0	0	0	0	3	3
	Sum of Sherd Wt.	0	0	0	0	0	0	0	0	0	0	0	0	15	15
	Sum of ENV	0	0	0	0	0	0	0	0	0	0	0	0	3	3
MSandy	Sum of Sherd No.	0	0	0	0	0	0	0	0	0	0	0	0	10	10
	Sum of Sherd Wt.	0	0	0	0	0	0	0	0	0	0	0	0	95	95
	Sum of ENV	0	0	0	0	0	0	0	0	0	0	0	0	10	10
RDSandy	Sum of Sherd No.	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	Sum of Sherd Wt.	0	0	0	0	0	0	0	0	0	0	0	0	15	15
	Sum of ENV	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Shell	Sum of Sherd No.	0	0	0	0	0	0	0	0	0	0	0	0	15	15
	Sum of Sherd Wt.	0	0	0	0	0	0	0	0	0	0	0	0	100	100
	Sum of ENV	0	0	0	0	0	0	0	0	0	0	0	0	15	15
SYG B	Sum of Sherd No.	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	Sum of Sherd Wt.	0	0	0	0	0	0	0	0	0	0	0	0	5	5
	Sum of ENV	0	0	0	0	0	0	0	0	0	0	0	0	1	1
U/ID	Sum of Sherd No.	0	0	0	1	0	0	0	0	0	0	0	0	17	18
	Sum of Sherd Wt.	0	0	0	20	0	0	0	0	0	0	0	0	95	115
	Sum of ENV	0	0	0	1	0	0	0	0	0	0	0	0	17	18
WGw	Sum of Sherd No.	0	0	0	0	0	0	0	0	0	0	0	1	35	36
	Sum of Sherd Wt.	0	0	0	0	0	0	0	0	0	0	0	25	300	325
	Sum of ENV	0	0	0	0	0	0	0	0	0	0	0	1	32	33
Total Sum of Sherd No.		13	71	1	148	2	55	2	2	15	1	1	2	2479	2792
Total Sum of Sherd Wt.		430	1760	75	8235	100	3210	35	320	460	15	15	65	38450	53170
Total Sum of ENV		11	62	1	131	1	47	1	2	13	1	1	2	2345	2618

Table 15. Fabric type and vessel form (kiln, all contexts).

Fabric	Data	Everted rim jar	Int. rim bowl	Jar/cooking pot	Jug	Jug/pitcher	U/ID	**Total**
A	Sum of Sherd No.	0	0	0	2	0	9	**11**
	Sum of Sherd Wt	0	0	0	130	0	235	**365**
	Sum of ENV	0	0	0	2	0	9	**11**
A type	Sum of Sherd No.	1	0	0	1	0	0	**2**
	Sum of Sherd Wt	15	0	0	20	0	0	**35**
	Sum of ENV	1	0	0	1	0	0	**2**
A1	Sum of Sherd No.	0	0	0	2	0	9	**11**
	Sum of Sherd Wt	0	0	0	65	0	165	**230**
	Sum of ENV	0	0	0	2	0	9	**11**
A1 R	Sum of Sherd No.	0	0	0	0	0	1	**1**
	Sum of Sherd Wt	0	0	0	0	0	5	**5**
	Sum of ENV	0	0	0	0	0	1	**1**
C1	Sum of Sherd No.	0	0	1	0	0	28	**29**
	Sum of Sherd Wt	0	0	50	0	0	305	**355**
	Sum of ENV	0	0	1	0	0	26	**27**
D	Sum of Sherd No.	0	0	0	1	0	1	**2**
	Sum of Sherd Wt	0	0	0	15	0	40	**55**
	Sum of ENV	0	0	0	1	0	1	**2**
E	Sum of Sherd No.	1	0	0	0	1	15	**17**
	Sum of Sherd Wt	10	0	0	0	40	225	**275**
	Sum of ENV	1	0	0	0	1	14	**16**
E type	Sum of Sherd No.	0	0	0	0	0	3	**3**
	Sum of Sherd Wt	0	0	0	0	0	30	**30**
	Sum of ENV	0	0	0	0	0	3	**3**
Hall. type	Sum of Sherd No.	0	1	0	0	0	0	**1**
	Sum of Sherd Wt	0	15	0	0	0	0	**15**
	Sum of ENV	0	1	0	0	0	0	**1**
Stamford	Sum of Sherd No.	0	0	0	0	0	2	**2**
	Sum of Sherd Wt	0	0	0	0	0	10	**10**
	Sum of ENV	0	0	0	0	0	2	**2**
U/ID	Sum of Sherd No.	0	0	0	0	0	1	**1**
	Sum of Sherd Wt	0	0	0	0	0	5	**5**
	Sum of ENV	0	0	0	0	0	1	**1**
Total Sum of Sherd No.		**2**	**1**	**1**	**6**	**1**	**69**	**80**
Total Sum of Sherd Wt		**25**	**15**	**50**	**230**	**40**	**1020**	**1380**
Total Sum of ENV		**2**	**1**	**1**	**6**	**1**	**66**	**77**

Table 16. Fabric type and vessel form (Pit 1054)

Fabric	Data	C/Pot	Jar	Jug/pitcher	Unidentified	**Total**
A	Sum of Sherd No.	0	1	0	0	**1**
	Sum of Sherd Wt	0	10	0	0	**10**
	Sum of ENV	0	1	0	0	**1**
A type	Sum of Sherd No.	0	0	1	4	**5**
	Sum of Sherd Wt	0	0	40	70	**110**
	Sum of ENV	0	0	1	4	**5**
A1	Sum of Sherd No.	0	0	1	7	**8**
	Sum of Sherd Wt	0	0	15	215	**230**
	Sum of ENV	0	0	1	6	**7**
A1 R	Sum of Sherd No.	0	0	0	1	**1**
	Sum of Sherd Wt	0	0	0	5	**5**
	Sum of ENV	0	0	0	1	**1**
A1 type	Sum of Sherd No.	0	0	0	1	**1**
	Sum of Sherd Wt	0	0	0	10	**10**
	Sum of ENV	0	0	0	1	**1**
B	Sum of Sherd No.	1	0	0	3	**4**
	Sum of Sherd Wt	30	0	0	25	**55**
	Sum of ENV	1	0	0	3	**4**
C type	Sum of Sherd No.	0	0	0	1	**1**
	Sum of Sherd Wt	0	0	0	20	**20**
	Sum of ENV	0	0	0	1	**1**
C1	Sum of Sherd No.	0	0	0	20	**20**
	Sum of Sherd Wt	0	0	0	185	**185**
	Sum of ENV	0	0	0	18	**18**
D	Sum of Sherd No.	0	0	0	9	**9**
	Sum of Sherd Wt	0	0	0	195	**195**
	Sum of ENV	0	0	0	7	**7**
E	Sum of Sherd No.	0	1	1	4	**6**
	Sum of Sherd Wt	0	20	60	65	**145**
	Sum of ENV	0	1	1	4	**6**
Hallgate type	Sum of Sherd No.	0	0	0	2	**2**
	Sum of Sherd Wt	0	0	0	10	**10**
	Sum of ENV	0	0	0	2	**2**
Humberware	Sum of Sherd No.	0	0	0	3	**3**
	Sum of Sherd Wt	0	0	0	30	**30**
	Sum of ENV	0	0	0	3	**3**
Med. Sandy	Sum of Sherd No.	0	0	0	9	**9**
	Sum of Sherd Wt	0	0	0	45	**45**
	Sum of ENV	0	0	0	9	**9**
Stamford	Sum of Sherd No.	0	0	0	1	**1**
	Sum of Sherd Wt	0	0	0	5	**5**
	Sum of ENV	0	0	0	1	**1**
U/ID	Sum of Sherd No.	0	0	0	2	**2**
	Sum of Sherd Wt	0	0	0	5	**5**
	Sum of ENV	0	0	0	2	**2**
Total Sum of Sherd No.		**1**	**2**	**3**	**67**	**73**
Total Sum of Sherd Wt		**30**	**30**	**115**	**885**	**1060**
Total Sum of ENV		**1**	**2**	**3**	**62**	**68**

Table 17. Fabric type and vessel form (Pit 1064)

Fabric	Flat rod	Twisted Rod	Rod	Stump	Strap	Strap (e)	Strap (p)	U/ID.	**Total**
A	0	0	0	0	0	0	0	0	**0**
A type	0	0	0	0	0	0	0	0	**0**
A/A1type	0	0	0	0	0	0	0	0	**0**
A1	0	0	0	2	34	1	1	0	**38**
A1 R	0	0	0	1	4	0	0	0	**5**
A1 type	0	0	1	0	2	1	0	0	**4**
B type	0	0	0	0	0	0	0	0	**0**
C type	0	0	0	0	0	0	0	0	**0**
C1	0	0	0	0	1	0	0	0	**1**
C1 type	0	0	0	0	1	0	0	0	**1**
C2	0	0	0	0	0	0	0	0	**0**
C3	0	0	0	0	2	1	0	0	**3**
C3 type	0	0	0	0	0	0	0	0	**0**
D	0	0	0	1	8	0	0	0	**9**
D type	0	0	0	0	1	0	0	0	**1**
E	1	1	0	0	25	2	0	1	**30**
E R	0	0	0	0	0	0	0	0	**0**
E type	0	0	0	0	0	1	0	0	**1**
F	0	0	0	0	1	0	0	0	**1**
F type	0	0	0	0	0	1	0	0	**1**
Hallgate type	0	0	0	0	0	0	0	0	**0**
U/ID	0	0	0	0	0	0	0	0	**0**
Total	**1**	**1**	**1**	**4**	**79**	**7**	**1**	**1**	**95**

Table 18. Vessel handles from the kiln

Fabric	Spout		
	Pinched	Pulled	Total
A	0	0	0
A type	0	0	0
A/A1type	0	0	0
A1	2	3	5
A1 R	1	1	2
A1 type	1	0	1
B type	0	0	0
C type	0	0	0
C1	0	0	0
C1 type	0	0	0
C2	0	0	0
C3	0	0	0
C3 type	0	0	0
D	1	2	3
D type	0	0	0
E	3	2	5
E R	0	0	0
E type	0	0	0
F	0	1	1
F type	1	0	1
Hallgate type	0	0	0
U/ID	0	0	0
Total	9	9	18

Table 19. Type and occurrence of spouts (kiln)

Fabric	Glazed	Unglazed	Total	Accidentally glazed	Underside of base glazed	Deliberately glazed
A and A type	39	20	59	0	0	39
A1+ A1 types	612	74	686	21	47	544
C1+ C1 type	269	633	902	128	71	70
C type	6	32	38	0	0	6
C2	1	2	3	1	0	0
C3 + C3 type	143	29	172	32	0	111
D + D type	138	3	141	16	15	107
E + E types	435	171	606	26	34	375
F + F type	14	0	14	0	0	14
Total	**1657**	**964**	**2621**	**224**	**167**	**1266**
A and A type	66.10%	33.89%	99.99%	0	0	66.10%
A1+ A1 types	89.21%	10.78%	99.99%	21	47	79.30%
C1+ C1 type	29.82%	70.17%	99.99%	128	71	7.76%
C type	15.78%	84.21%	99.99%	0	0	15.78%
C2	33.33%	66.66%	99.99%	1	0	0
C3 + C3 type	83.13%	16.86%	99.99%	32	0	64.53%
D + D type	97.87%	2.12%	99.99%	16	15	75.88%
E + E types	71.78%	28.21%	99.99%	26	34	61.88%
F + F type	100%	0	100%	0	0	100%
Total	**63.22%**	**36.77%**	**99.99%**	**224**	**167**	**48.30%**

Table 20. Summary of occurrence of glaze on sherds from the kiln.

Fabric	Glazed	Unglazed	**Total**	Accidentally glazed	Underside of base glazed	**Deliberately glazed**
A and A type	12	1	**13**	0	1	**12**
A1+ A1 types	8	5	**13**	0	2	**11**
C1+ C1 type	19	10	**29**	4	3	**12**
D + D type	2	0	**2**	1	0	**1**
E + E types	15	5	**20**	4	2	**14**
Hallgate type	1	0	**1**	0	0	**1**
Total	**57**	**21**	**78**	**9**	**8**	**61**
A and A type	92.30%	7.69%	**99.99%**	0	7.69%	**92.30%**
A1+ A1 types	61.53%	38.46%	**99.99%**	0	15.38%	**84.61%**
C1+ C1 type	65.51%	34.48%	**99.99%**	13.79%	10.34%	**41.31%**
D + D type	100%	0%	**100%**	50%	0	**50.00%**
E + E types	75%	25%	**100%**	20%	10%	**70.00%**
Hallgate type	100%	0%	**100%**	0	0	**100%**
Total	**73.07%**	**26.92%**	**99.99%**	**11.53%**	**10.25%**	**78.20%**

Table 21. Summary of occurrence of glaze on sherds from pit 1054

Fabric	Glazed	Unglazed	**Total**	Accidentally glazed	Underside of base glazed	**Deliberately glazed**
A and A type	3	3	**6**	0	0	**3**
A1 and A1 type	8	2	**10**	1	2	**7**
C1	8	12	**20**	8	5	**0**
C type	0	1	**1**	0	0	**0**
D	9	0	**9**	0	2	**7**
E	5	1	**6**	0	0	**5**
Hallgate type	1	1	**2**	0	0	**1**
Total	**34**	**20**	**54**	**9**	**9**	**23**
A and A type	50%	50%	100%	0	0	50%
A1 and A1 type	80%	20%	100%	10%	20%	70%
C1	40%	60%	100%	40%	25%	35%
C type	0	100%	100%	0	0	0
D	100%	0	100%	0	22.22%	77.77%
E	83.33%	16.66%	99.99%	0	0	83.33%
Hallgate type	50%	50%	**100%**	0	0	**50%**
Total	62.96%	37.03%	**99.99%**	16.66%	16.66%	**42.59%**

Table 22. Summary of occurrence of glaze on sherds from pit 1064.

	A	A type	A/A1 type	A1	A1 R	A1 type	C type	C1	C1 type	C2	C3	C3 type	D	D type	E	E R	E type	F	F type	Hall. type	Total
Undecorated	*48*	*11*	*2*	*493*	*40*	*57*	*34*	*832*	*38*	*3*	*147*	*0*	*99*	*1*	*405*	*1*	*35*	*7*	*2*	*26*	***2281***
Combed wavy lines (Body)	0	0	0	49	4	1	0	17	1	0	19	0	39	0	97	0	13	4	0	0	**244**
Horizontal lines (Body)	0	0	0	18	0	0	0	1	0	0	0	0	0	0	13	0	0	1	0	0	**33**
Thumb decorated handle	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	**4**
Vertical combed wavy lines	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	3	0	0	0	**5**
Thumb decorated rim	0	0	0	0	0	0	0	9	0	0	0	0	0	0	2	0	0	0	0	0	**11**
Other	0	0	0	11	0	0	0	4	0	0	1	0	0	0	10	0	0	0	0	0	**26**
Incised wavy lines (Handle)	0	0	0	1	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	**3**
Stabbed comb decoration (Body)	0	0	0	1	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	**4**
Short combed lines (Body)	0	0	0	3	0	0	0	0	0	0	0	5	1	0	18	0	0	0	0	0	**27**
Total decorated	***0***	***0***	***0***	***85***	***4***	***1***	***0***	***31***	***1***	***0***	***20***	***5***	***41***	***0***	***148***	***0***	***16***	***5***	***0***	***0***	***357***
Total	**48**	**11**	**2**	**578**	**44**	**58**	**34**	**863**	**39**	**3**	**167**	**5**	**140**	**1**	**553**	**1**	**51**	**12**	**2**	**26**	**2638**

Table 23. Decorative motifs and selected fabric types.

	Bowl	C Pot	ERB	ERJ	ERV	Jar	Jar/jug	Jug	Jug(?)	Jug/pitcher	Panc.	Pcn/bowl	U/ID	Total
Undecorated	2	2	1	61	1	9	1	104	2	42	7	1	2202	2435
Combed wavy lines (body)	0	0	0	0	0	0	0	22	0	3	0	0	219	244
Horizontal lines (body)	0	0	0	1	0	0	0	6	0	3	0	0	23	33
Short combed lines (body)	0	0	0	0	0	0	0	4	0	2	0	0	21	27
Thumb decorated handles	0	0	0	0	0	0	0	4	0	0	0	0	0	4
Vertical wavy lines	0	0	0	0	0	0	0	0	0	2	0	0	3	5
Thumb decorated rims	0	0	0	6	0	1	0	0	0	0	3	1	0	11
Other	0	0	0	3	0	3	0	7	0	1	5	0	7	26
Interrupted wavy lines (handle)	0	0	0	0	0	0	0	1	0	2	0	0	0	3
Stabbed combed decoration (body)	0	0	0	0	0	0	0	0	0	0	0	0	4	4
Total decorated	*0*	*0*	*0*	*10*	*0*	*4*	*0*	*44*	*0*	*13*	*8*	*1*	*277*	*357*
Total	**2**	**2**	**1**	**71**	**1**	**13**	**1**	**148**	**2**	**55**	**15**	**2**	**2479**	**2792**

Table 24. Decorative motifs and vessel type

Key to Table 24

C Pot	Cooking pot
ERB	Everted Rim Bowl
ERJ	Everted Rim Jar
ERV	Everted Rim vessel
Panc.	Pancheon
Pcn/bowl	Pancheon / bowl
U/ID	Unidentified

Fabric	Data	Splash	Splash (?)	Susp.	Unglazed	U/ID	Total
A	Sum of Sherd No.	19	0	11	8	10	48
	Sum of Sherd Wt.	245	0	100	125	165	635
	Sum of ENV	19	0	11	8	7	45
A type	Sum of Sherd No.	0	0	0	2	9	11
	Sum of Sherd Wt.	0	0	0	25	65	90
	Sum of ENV	0	0	0	2	8	10
A/A1type	Sum of Sherd No.	2	0	0	0	0	2
	Sum of Sherd Wt.	55	0	0	0	0	55
	Sum of ENV	2	0	0	0	0	2
A1	Sum of Sherd No.	551	0	1	23	4	579
	Sum of Sherd Wt.	14590	0	30	895	55	15570
	Sum of ENV	528	0	1	20	4	553
A1 R	Sum of Sherd No.	40	0	0	1	1	42
	Sum of Sherd Wt.	1985	0	0	10	40	2035
	Sum of ENV	38	0	0	1	1	40
A1 type	Sum of Sherd No.	50	0	0	8	1	59
	Sum of Sherd Wt.	1470	0	0	45	25	1540
	Sum of ENV	48	0	0	8	1	57
B type	Sum of Sherd No.	5	0	0	0	0	5
	Sum of Sherd Wt.	25	0	0	0	0	25
	Sum of ENV	5	0	0	0	0	5
C type	Sum of Sherd No.	9	0	0	28	0	37
	Sum of Sherd Wt.	45	0	0	30	0	75
	Sum of ENV	9	0	0	28	0	37
C1	Sum of Sherd No.	514	1	0	348	0	863
	Sum of Sherd Wt.	7185	5	0	4960	0	12150
	Sum of ENV	506	1	0	340	0	847
C1 type	Sum of Sherd No.	9	0	0	30	0	39
	Sum of Sherd Wt.	180	0	0	85	0	265
	Sum of ENV	9	0	0	30	0	39
C2	Sum of Sherd No.	1	0	0	2	0	3
	Sum of Sherd Wt.	15	0	0	145	0	160
	Sum of ENV	1	0	0	2	0	3
C3	Sum of Sherd No.	141	0	0	26	0	167
	Sum of Sherd Wt.	1160	0	0	265	0	1425
	Sum of ENV	140	0	0	25	0	165
C3 type	Sum of Sherd No.	5	0	0	0	0	5
	Sum of Sherd Wt.	70	0	0	0	0	70
	Sum of ENV	1	0	0	0	0	1
D	Sum of Sherd No.	138	0	0	1	1	140
	Sum of Sherd Wt.	4400	0	0	30	55	4485
	Sum of ENV	114	0	0	1	1	116
D type	Sum of Sherd No.	0	0	0	0	1	1
	Sum of Sherd Wt.	0	0	0	0	55	55
	Sum of ENV	0	0	0	0	1	1
E	Sum of Sherd No.	494	0	0	60	0	554
	Sum of Sherd Wt.	10440	0	0	935	0	11375
	Sum of ENV	423	0	0	55	0	478
E R	Sum of Sherd No.	1	0	0	0	0	1
	Sum of Sherd Wt.	25	0	0	0	0	25
	Sum of ENV	1	0	0	0	0	1
E type	Sum of Sherd No.	47	0	0	4	0	51
	Sum of Sherd Wt.	915	0	0	45	0	960
	Sum of ENV	36	0	0	4	0	40
F	Sum of Sherd No.	12	0	0	0	0	12
	Sum of Sherd Wt.	270	0	0	0	0	270
	Sum of ENV	11	0	0	0	0	11
F type	Sum of Sherd No.	2	0	0	0	0	2
	Sum of Sherd Wt.	365	0	0	0	0	365
	Sum of ENV	1	0	0	0	0	1
Fine thrown Ox.	Sum of Sherd No.	12	10	12	6	13	53
	Sum of Sherd Wt.	70	135	105	185	100	595
	Sum of ENV	12	10	12	5	12	51
Gritty ware	Sum of Sherd No.	4	0	0	8	0	12
	Sum of Sherd Wt.	125	0	0	115	0	240
	Sum of ENV	4	0	0	8	0	12
Hallgate type	Sum of Sherd No.	5	0	0	15	6	26
	Sum of Sherd Wt.	25	0	0	25	10	60
	Sum of ENV	5	0	0	15	6	26
Humberware type	Sum of Sherd No.	0	0	0	1	0	1
	Sum of Sherd Wt.	0	0	0	5	0	5
	Sum of ENV	0	0	0	1	0	1
Medieval Sandy ware	Sum of Sherd No.	3	0	0	2	1	6
	Sum of Sherd Wt.	10	0	0	20	20	50
	Sum of ENV	3	0	0	2	1	6
Reduced Sandy ware	Sum of Sherd No.	0	0	0	1	0	1
	Sum of Sherd Wt.	0	0	0	15	0	15
	Sum of ENV	0	0	0	1	0	1
Shell Tempered ware	Sum of Sherd No.	0	0	0	15	0	15
	Sum of Sherd Wt.	0	0	0	100	0	100
	Sum of ENV	0	0	0	15	0	15

Table 25. Fabric type and glaze technique (kiln, all contexts).

Fabric	Data	Splash	Unglazed	Unidentified	**Total**
A	Sum of Sherd No.	10	0	1	**11**
	Sum of Sherd Wt	305	0	60	**365**
	Sum of ENV	10	0	1	**11**
A type	Sum of Sherd No.	1	1	0	**2**
	Sum of Sherd Wt	20	15	0	**35**
	Sum of ENV	1	1	0	**2**
A1	Sum of Sherd No.	8	3	0	**11**
	Sum of Sherd Wt	210	20	0	**230**
	Sum of ENV	8	3	0	**11**
A1 R	Sum of Sherd No.	0	1	0	**1**
	Sum of Sherd Wt	0	5	0	**5**
	Sum of ENV	0	1	0	**1**
C1	Sum of Sherd No.	27	2	0	**29**
	Sum of Sherd Wt	300	55	0	**355**
	Sum of ENV	25	2	0	**27**
D	Sum of Sherd No.	2	0	0	**2**
	Sum of Sherd Wt	55	0	0	**55**
	Sum of ENV	2	0	0	**2**
E	Sum of Sherd No.	12	5	0	**17**
	Sum of Sherd Wt	205	70	0	**275**
	Sum of ENV	12	4	0	**16**
E type	Sum of Sherd No.	3	0	0	**3**
	Sum of Sherd Wt	30	0	0	**30**
	Sum of ENV	3	0	0	**3**
Hallgate type	Sum of Sherd No.	1	0	0	**1**
	Sum of Sherd Wt	15	0	0	**15**
	Sum of ENV	1	0	0	**1**
Stamford	Sum of Sherd No.	0	0	2	**2**
	Sum of Sherd Wt	0	0	10	**10**
	Sum of ENV	0	0	2	**2**
U/ID	Sum of Sherd No.	0	1	0	**1**
	Sum of Sherd Wt	0	5	0	**5**
	Sum of ENV	0	1	0	**1**
Total Sum of Sherd No.		**64**	**13**	**3**	**80**
Total Sum of Sherd Wt		**1140**	**170**	**70**	**1380**
Total Sum of ENV		**62**	**12**	**3**	**77**

Table 26. Fabric type and glaze technique (Pit 1054)

Fabric	Data	Unglazed	Splash	Suspension	**Total**
A	Sum of Sherd No.	1	0	0	**1**
	Sum of Sherd Wt	10	0	0	**10**
	Sum of ENV	1	0	0	**1**
A type	Sum of Sherd No.	2	0	3	**5**
	Sum of Sherd Wt	30	0	80	**110**
	Sum of ENV	2	0	3	**5**
A1	Sum of Sherd No.	2	6	0	**8**
	Sum of Sherd Wt	55	175	0	**230**
	Sum of ENV	2	5	0	**7**
A1 R	Sum of Sherd No.	0	1	0	**1**
	Sum of Sherd Wt	0	5	0	**5**
	Sum of ENV	0	1	0	**1**
A1 type	Sum of Sherd No.	0	1	0	**1**
	Sum of Sherd Wt	0	10	0	**10**
	Sum of ENV	0	1	0	**1**
B	Sum of Sherd No.	4	0	0	**4**
	Sum of Sherd Wt	55	0	0	**55**
	Sum of ENV	4	0	0	**4**
C type	Sum of Sherd No.	1	0	0	**1**
	Sum of Sherd Wt	20	0	0	**20**
	Sum of ENV	1	0	0	**1**
C1	Sum of Sherd No.	12	8	0	**20**
	Sum of Sherd Wt	55	130	0	**185**
	Sum of ENV	12	6	0	**18**
D	Sum of Sherd No.	0	9	0	**9**
	Sum of Sherd Wt	0	195	0	**195**
	Sum of ENV	0	7	0	**7**
E	Sum of Sherd No.	3	3	0	**6**
	Sum of Sherd Wt	60	85	0	**145**
	Sum of ENV	3	3	0	**6**
Hallgate type	Sum of Sherd No.	0	2	0	**2**
	Sum of Sherd Wt	0	10	0	**10**
	Sum of ENV	0	2	0	**2**
Humberware	Sum of Sherd No.	0	0	3	**3**
	Sum of Sherd Wt	0	0	30	**30**
	Sum of ENV	0	0	3	**3**
Med. Sandy	Sum of Sherd No.	5	0	4	**9**
	Sum of Sherd Wt	10	0	35	**45**
	Sum of ENV	5	0	4	**9**
Stamford	Sum of Sherd No.	0	0	1	**1**
	Sum of Sherd Wt	0	0	5	**5**
	Sum of ENV	0	0	1	**1**
U/ID	Sum of Sherd No.	2	0	0	**2**
	Sum of Sherd Wt	5	0	0	**5**
	Sum of ENV	2	0	0	**2**
Total Sum of Sherd No.		**32**	**30**	**11**	**73**
Total Sum of Sherd Wt		**300**	**610**	**150**	**1060**
Total Sum of ENV		**32**	**25**	**11**	**68**

Table 27. Fabric type and glaze technique (Pit 1064)

Context 1												
	Bases	C/Pot	Cauldron	Cistern	Curfew	Jug	Face Jug	Pipkin	Pancheon	Lamp	Urinal	**Total**
A	3806	59	16	1	1	3300	16	1862	65	1	1	**9128**
B	232	68	0	0	0	163	0	49	52	0	0	**564**
C	2	9	0	0	0	1	0	0	0	0	0	**12**
												9704
Context 2												
A	0	0	0	0	0	0	0	0	0	0	0	**0**
B	1908	459	2	0	1	1530	0	74	140	0	0	**4114**
C	0	15	0	0	0	1	0	0	8	0	0	**24**
												4138
Context 3												
A	59	5	0	0	0	84	0	10	11	0	0	**169**
B	155	32	1	0	0	76	0	15	19	0	0	**298**
C	0	0	0	0	0	0	0	0	0	0	0	**0**
												467
Context 4												
A	0	0	0	0	0	1	0	0	0	0	0	**1**
B	611	95	1	1	0	551	0	61	41	0	0	**1361**
C	0	0	0	0	0	0	0	0	0	0	0	**0**
												1362
Total	**6773**	**742**	**20**	**2**	**2**	**5544**	**179**	**2071**	**336**	**1**	**1**	**15671**

Table 28. Hallgate: Vessel type subdivided by fabric type (numbers of sherds). (Source Buckland *et al* 1979)

Context 1												
	Bases	C/Pot	Cauldron	Cistern	Curfew	Jug	Face Jug	Pipkin	Pancheon	Lamp	Urinal	**Total**
A	39.22	0.60	0.16	0.01	0.01	34.0	0.16	19.18	0.66	0.01	0.01	**94.06**
B	2.39	0.70	0	0	0	1.67	0	0.50	0.53	0	0	**5.81**
C	0.02	0.09	0	0	0	0.16	0	0	0	0	0	**0.12**
Total	41.63	1.39	1.16	0.01	0.01	35.83	0.16	19.68	1.19	0.01	0.01	**99.99**
Context 2												
A	0	0	0	0	0	0	0	0	0	0	0	**0**
B	46.10	11.09	0.04	0	0.02	36.97	0	1.78	3.38	0	0	**99.42**
C	0	0.36	0	0	0	0.02	0	0	0.19	0	0	**0.57**
Total	46.10	11.45	0.04	0	0.02	36.99	0	1.78	3.57	0	0	**99.99**
Context 3												
A	12.6	1.07	0	0	0	17.98	0	2.14	2.35	0	0	**36.18**
B	33.19	6.85	0.21	0	0	16.27	0	3.21	4.06	0	0	**63.81**
C	0	0	0	0	0	0	0	0	0	0	0	**0**
Total	45.79	7.92	0.21	0	0	34.25	0	5.35	6.41	0	0	**99.99**
Context 4												
A	0	0	0	0	0	0.07	0	0	0	0	0	**0.07**
B	44.89	6.97	0.07	0.07	0	40.45	0	4.47	3.01	0	0	**99.92**
C	0	0	0	0	0	0	0	0	0	0	0	**0**
Total	44.89	6.97	0.07	0.07	0	40.52	0	4.47	3.01	0	0	**99.99**

Table 29. Hallgate: Percentages of vessel types by fabric type. (Source Buckland *et al* 1979)

	Pitcher	Jug	Cooking Pot	U/ID
Vessel Number	2	11	6	11
Splash glazed	2	11	2	5
Decorated	1	3	0	0

Table 30. Pottery from Doncaster Market Place. (Source: Hayfield 1984)

	Cooking Pot	Jug	Cistern	Pancheon	Drinking Mug	Lid	Dish	Total
Area A								
Sherd numbers	20	8	0	8	0	0	1	37
Percentage	54.05	21.62	0	21.62	0	0	2.7	99.99
Area B								
Sherd numbers	9	3	1	18	3	3	0	37
Percentage	24.32	8.11	2.7	48.64	8.11	8.11	0	99.99

Table 31. Pottery from Firsby. (Source Buckland and Hayfield 1989:Table 1).

Phases 1 - 7 (Mid 13th to 15th centuries)																		
	Sandy												Gritty				Other	
	Orange 1	Orange 2	Humber 1	Humber 3	NYorks 1	NYorks 2	Scarb 1	Scarb 2	Scarb 3	Tynt 1	Tynt 2	YorkW	CSW	StaxPB	Humber 2	SYG	Other	Humber 5
Jug	190	6	270	4	43	26	17	6	6	14	8	9				2	3	
D/Jug			24															
Pipkin	11						1											
Jar			1															
Pancheon	2												14	1	9			
Cook Pot			5										111	6				
D/Pan													1		1			
Cup	1						2											1
Bowl	2																	1
S/Bowl	1		7															
Curfew													3					
Cistern			2		1											1		
Other	3		4		1								4		3			6

Table 32. Pottery from the Wytelard property, Hull. Phases 1 to 7 inclusive (Source Watkins 1987)

Site O Phases 1 - 3e (late 13th century to mid 14th century)															
	Sandy											Gritty			
	Orange 1	Orange 2	Humber 1	NYorks 1	NYorks 2	Scarb 1	Scarb 2	Scarb 3	Tynt 1	Tynt 2	YorkW	CSW	StaxPB	SYG	Shell
Jug	200	2	44	49	13	4	4	3	13	43	4			1	
D/Jug															
Pipkin	16						2								
Jar	3		1												
Pancheon	1											6			
Cooking Pot												46	2		1
D/Pan	23														
Cup															
Bowl	4											1			
S/Bowl															
Curfew															
Cistern	1														
Other	6			2		2	4	1				17		1	

Table 33. Pottery from the Ousefleet property, Hull. Phases 1 to 3e inclusive. (Source Watkins 1987)

Site H / C Phases 1 to 3Wb															
Late 13th century to mid / late 14th century															
	Sandy											Gritty			Other
	Orange 1	Orange 2	Humber 1	Humber 3	NYorks 1	NYorks 2	Scarb 1	Scarb 2	Tynt 1	Tynt 2	YorkW	CSW	StaxPB	Humber 2	Other
Jug	226	11	143	3	26	10	13	3	15	27	1			2	1
D/Jug			1												
Pipkin	11														
Jar	1														
Pancheon	1											3		2	
Cooking Pot												38	2		
D/Pan	2													2	
Cup	1														
Bowl	3														
S/Bowl	10											1			
Curfew	1											2			
M/Jar															
M/Jug	1														
Cistern															
Other	18		2		1							18		3	

Table 34. Pottery from the Hotham / Celererman property, Hull. Phases 1 to 3Wb inclusive (Source Watkins 1987).

Key (Tables 32 - 34)

Orange 1	Orangeware 1	NYorks 2	Reduced North Yorkshire ware	Tynt 2	Toynton-Calcareous	SYG	South Yorkshire Gritty ware
Orange 2	Orangeware 2	Scarb 1	Scarborough ware 1	YorkW	York White ware	Shell	Shell Tempered ware
Humber 1	Humberware 1	Scarb 2	Scarborough ware 2	CSW	Coarse sandy ware	Humber 2	Humberware 2
NYorks1	Brandsby ware	Tynt 1	Toynton All Saints ware	StaxPB	Staxton Potter-Brompton	Humber 3	Humberware 3

D/Jug	Drinking jug
D/Pan	Dripping pan
S/Bowl	Small bowl
M/Jar	Miniature jar
M/Jug	Miniature jug

Middle Lane, Hedon.											
All contexts (mid 12th century to 14th century)											
	Sandy								Gritty		
	FH1-5	Stam	DStam	Scarb(WS)	Bev?(WB)	Orange (OB, OH)	HaB (WD)	Humber	CH1 - 4	Shell	Other
Cook Pot	3			1		1			3141	5	9
U/G Bowl	1								121		
Curfew									7		
U/G Other									13		
Jug	3218	3	14	17	12	522	35	422	5	3	47
Pipkin	117					15	1				1
B/Dish	14					1		1			
Panch	21							4			
D/Mug	1							2			
Gl. Other	15			1		3		2			1

Table 35. Pottery from all phases at Middle Lane, Hedon. (Source: Hayfield and Slater 1984.)

Key

FH 1 - 5	Hedon Fine wares 1 to 5	U/G Bowl	Unglazed bowl
Stam	Stamford ware	U/G Other	Unglazed other vessel
DStam	Developed Stamford ware	B/Dish	Basting dish
Scarb (WS)	Scarborough ware	D/Mug	Drinking mug
Bev ? (WB)	Beverley ware (?)	Gl. Other	Glazed other vessel
Orange (OB, OH)	Orangeware		
HaB (WD)	Hallgate type B		
Humber	Humberware		
CH 1 - 4	Hedon Coarseware 1 to 4		
Shell	Shell Tempered ware		

Eastgate Beverley. Pottery groups A to L (11th to mid 14th centuries)																											
Type	Tork	Stam	Bev1A	Bev1B	Bev1C	Bev1X	Bev2A	Bev2B	Bev2C	Hum1	Hum3	U/Spl	YkWh	NYk1	NYk2	Scarb1	Scarb2	PBuff	YorkG	Pimply	RChalky	CSW	StaxPB	U/G	Pchalk	Oth	Shell
Jug			86		2	7	1	104	14	11	5	6	26	4	1	2	3	7							13	
D/Jug										2																	
Pipkin							1	10	1																		
Dish								2														•					
Jar									1																		
Panch																										3	
C/Pot	24	3	35	1		2		12				2							4	14	71	9	54	22	5	24	2
D/Pan							3	2																			
Cup																											
Bowl	1																				3						
S/Bowl																											
Curfew								1																			
M/Jar									1																		
M/Jug							1																				
Cistern																											
Other	9	5	37			2	1	21	8	1		18	3					2	4	16	19		7	36		65	9
Lid								1	1																		

Table 36. Summary of pottery groups A to L from Eastgate, Beverley (Source Watkins and Didsbury 1992)

Key

Tork	Torksey	YkWh	York White ware	Pchalk	Pitted Chalky ware
Stam	Stamford	NYk1	Brandsby ware	Oth	Other
Bev1A	Beverley 1A	NYk2	Reduced North Yorkshire ware	Shell	Shell Tempered ware
Bev1B	Beverely 1B	Scarb1	Scarborough phase I ware		
Bev1C	Beverley 1C	Scarb2	Scarborough phase II ware		
Bev1X	Beverley 1X	PBuff	Pinky Buff ware		
Bev2A	Beverley 2A	YorkG	York Glazed ware		
Bev2B	Beverley 2B	Pimply	Pimply ware		
Bev2C	Beverley 2C	RChalky	Reduced Chalky ware		
Hum1	Humber ware 1	CSW	Coarse Sandy ware		
Hum3	Humberware 3	StaxPB	Staxton Potter Brompton ware		
U/Spl	Unclassified splash glazed	U/G	Unglazed ware		

	Kirkstall Abbey (Moorhouse and Slowikowski 1987)																				
	Sandy												Gritty								
	DStam	TriPit	U/IDNL	FSand	PFine	OxHumb	RdcHumb	SkOSw	YorkWh	TudGr	WhSHumb	Baildon	Pimply	YorkTp	Hillam	SWMC	NorGrit	OrnGrit	StepJg	RawM	LMedGr
Jar						1							36	1	1	4	18	5			1
Jug	1		18	6	1	14		17	20	1		1	11		1		150	20	1	2	
Bowl									1				2				23	14			
TriPitch		3																			
Curfew																	1				
D/Pan																	3				
Strainer																	1				
Lid									1								2				
Cistern																				8	
Cups									1		1										
Other																	1				
U/ID							2		8				57				149	25		15	

Table 37. Pottery from Kirkstall Abbey, West Yorkshire (Source Moorhouse and Slowikowski 1987).

Key

DStam	Developed Stamford ware	NorGrit	Northern Gritty.ware
TriPit	Tripod Pitchers	OrnGrit	Orange Gritty ware
U/IDNL	Unidentified non-local	StepJg	Stepped Jug ware
FSand	Fine Sandy ware	RawM	Rawmarsh type
PFine	Pink Fine ware	LMedGr	Late Medieval Gritty ware
OxHumb	Oxidised Humberware		
RdcHumb	Reduced Humberware	TriPitch	Tripod Pitcher
SkOSw	Skipton-on-Swale	D/Pan	Dripping Pan
YorkWh	York White ware		
TudGr	Tudor Green		
WhSHumb	White Slipped Humberware		
Baildon	Baildon ware		
Pimply	Pimply ware		
York Type	York type ware		
Hillam	Hillam ware		
SWMC	Southwest Midlands Coarseware		

Tradition / type	**Glaze**	**Colours**
Gritty wares		
West Yorkshire types		
Northern Gritty ware	Rare (noted on jugs only)	Green or brown
Orange Gritty ware	Jugs only glazed	Green or brown on upper surface
Other Gritty wares (1)	3c - unglazed	
	8c - unglazed	
	9c - unglazed	
	24c - some glazed	Purple, occasionally light brown
	26c - usually unglazed,	Purple (when glazed)
	31c- some glazed	Green
Other Gritty wares (2)	Mainly unglazed	
Splash Glazed Gritty wares	Glazed	Green, more rarely yellow brown
Green Glazed Gritty wares	Glazed	Green
Late Medieval Gritty ware	Glazed	Purple (rdc) or brownish-green (ox)
West Yorkshire types found in Humber basin		
Pimply ware	Unglazed	
Hillam ware	Unglazed	
East Yorkshire and Humber basin types		
Gritty ware	Rarely glazed	Shades of green
York type G ware	Unglazed (some splash glaze)	
Coarse Sandy ware	Very rare	Accidental spalshes
Staxton-Potter Brompton ware	Very rare	Accidental splashes
Hallgate type C ware	Rare and accidental	Yellow-green or pale green
Hedon Coarse ware CH1	Unglazed	
Hedon Coarse ware CH2	Unglazed	
Hedon Coarse ware CH3	Unglazed	
Hedon Coarse ware CH4	1 vessel, unglazed	
Beverley 1 ware Fabric A (C/Pots)	Spots and splashes	Accidental splashes
Humberware 2	Internal, partial	Olive green
Coal Measures White ware (SYG)	Glazed	Yellow-green or green
Hallgate B ware	Glazed	Olive green
Shell Tempered ware	Unglazed or incidentally glazed	
Sandy wares		
Hedon Fine ware FH 1	Splash glazed	Olive-green, occasionally orange/yellow
Hedon Fine ware FH 2	Glazed	Olive-green, occasionally orange-brown
Hedon Fine ware FH 3	Glazed	Olive-green
Hedon Fine ware FH 4	Splash glazed	As FH1
Hedon Fine ware FH 5	Glazed	As FH2
Nottingham Sandy ware	Glazed	Green
Nottingham Splash Glazed ware	Splash glazed	When present, mottled orange and green
Lincoln Medieval Sandy ware	Glazed	Deep green
Toynton All Saints ware	Glazed	Olive-green
Brandsby ware	Glazed	Apple or dark green,
Beverley 1 ware fabric A (Jugs)	Glazed	Green
Beverely 2 ware fabrics B and C	Glazed	Green, some jugs with iron-rich strips
Orangeware (= Beverley 2 ware)	Glazed	Green, olive green
Hallgate A ware	Glazed	Green, varying shades
Humberware 1	Glazed	Green
Humberware 3	Glazed	Deep (copper) green
York White ware (=York Glazed)	Glazed	Rich copper green

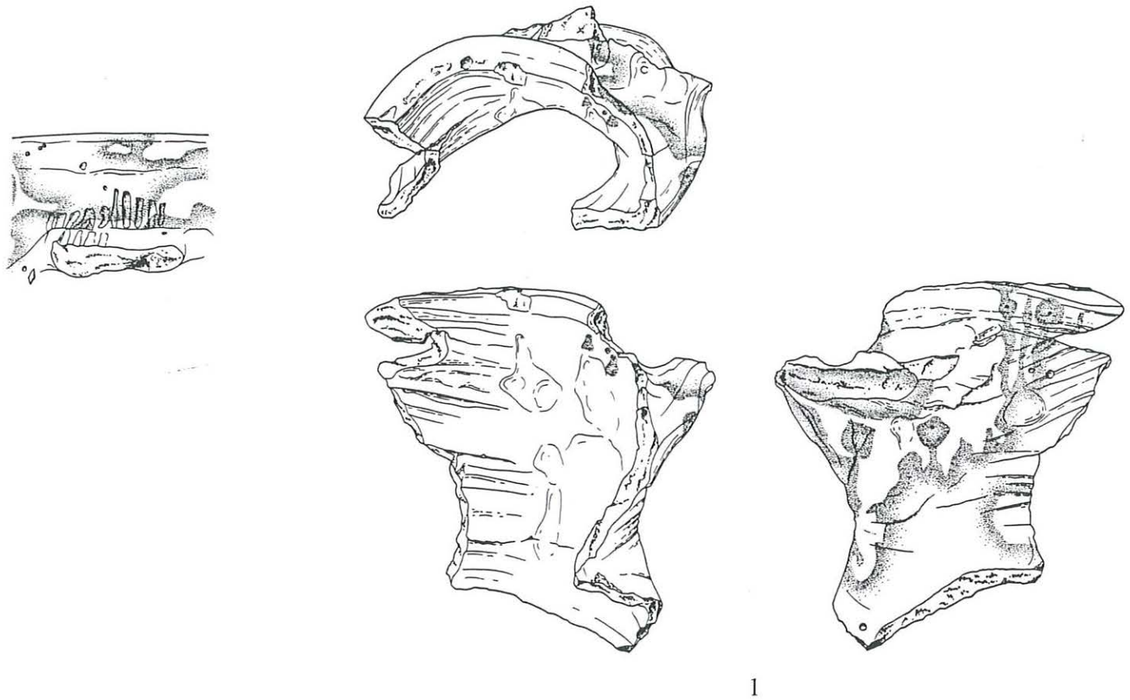
Table 39. Presence and colour of glaze on medieval pottery

Tradition / type	Decoration
Gritty wares	
Gritty ware	Undecorated
York type G ware	Undecorated
Pimply ware	Rare, vertical thumbed strips
Hillam ware	Undecorated
Northern Gritty ware	Absent on jars, rare on bowls, commoner on jugs - applied strips, combed lines
Orange Gritty ware	Jugs only. Applied and impressed white clay, horizontal incised lines
Other Gritty wares (1)	
3C	Undecorated
8C	Undecorated
9C	Undecorated
24C	Undecorated
26C	Horizontal grooves
31C	Rare, horizontal or wavy lines on jugs, one with rosette stamp
Other Gritty wares (2)	
Splash Glazed Gritty wares	Rare
Green Glazed Gritty wares	Rare
Late Medieval Gritty ware	Undecorated
Purple Glazed Gritty ware	Rare
Coarse Sandy ware	Very rare applied strips and impressed rims
Staxton-Potter Brompton ware	Rare wavy incised lines
Hallgate type C wares	Rare - thumb impressed rims, incised wavy lines. See table 23
Hedon Coarse ware CH1	Rare - occasional thumbing on rim edge
Hedon Coarse ware CH2	Rare - occasional thumbing on rim edge
Hedon Coarse ware CH3	Rare - occasional thumbing on rim edge, applied strips on large cooking pots
Hedon Coarse ware CH4	Rare
Beverley 1 ware Fabric A	Cooking pots undecorated, jugs/pitchers - combed lines
Humberware 2	Undecorated
Coal Measures White ware	Rare
Shell Tempered ware	Undecorated
Sandy wares	
Hedon Fine ware FH 1	Undecorated
Hedon Fine ware FH 2	Common from 13th century, applied and incised motifs
Hedon Fine ware FH 3	Applied and incised motifs
Hedon Fine ware FH 4	Undecorated
Hedon Fine ware FH 5	Undecorated
Nottingham Sandy ware	Rare
Nottingham Splash Glazed ware	Incised and combed on bodies and thumb impressed handles
Lincoln Medieval Sandy ware	Unknown
Toynton All Saints ware	Applied strips with ferrous pigment, stamped (Toynton 2)
Brandsby ware	Combed wavy lines, rilling, rouletting, applied scales
Beverley 1 ware fabric A	Combed lines (jugs/pitchers only)
Beverley 2 ware fabric B	Highly decorated; applied scales, applied iron rich strips, face jugs
Beverley 2 ware fabric C	Highly decorated; applied strips, applied pellets, moulded motifs
Hallgate A ware	Knight and face jugs, applied strips, combed lines, impressed comb marks
Hallgate A1	See table 23
Hallgate D	See table 23
Hallgate E	See table 23
Hallgate F	See table 23
Doncaster Hallgate B	Varied - combed, applied, rouletted
Humberware 1	Applied strips and pads, rilling, shoulder rouletting. Stamps are rare
Humberware 3	Unknown
York White ware	Iron pellets, combed lines, seal jugs, rare anthropomorphic jugs, aquamaniles

Table 40. Medieval pottery: Decorative treatments and motifs (Sources: See appendix 1)

Pottery Illustrations

(half actual size)



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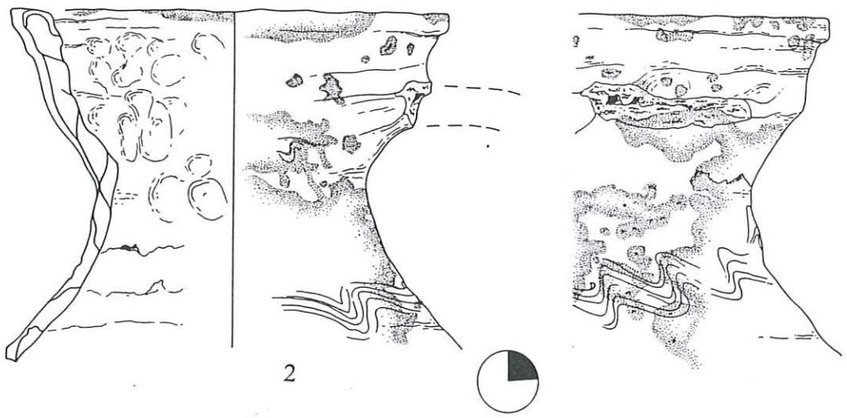

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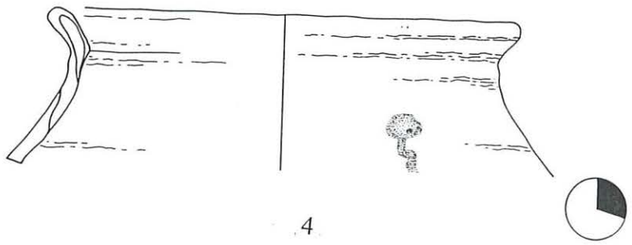

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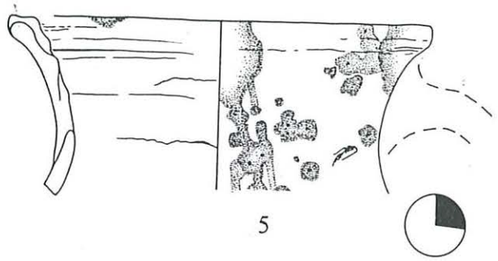

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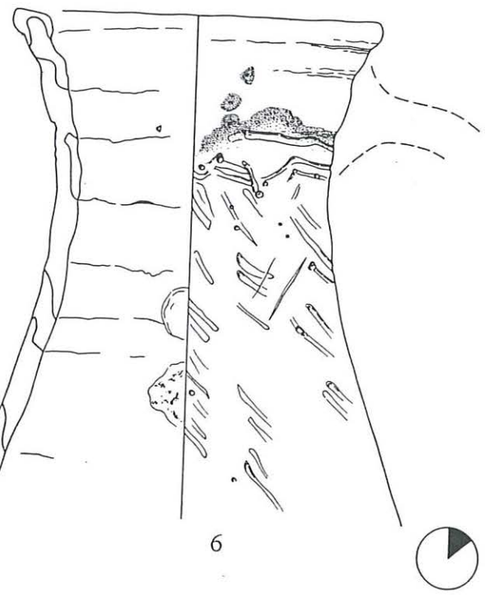

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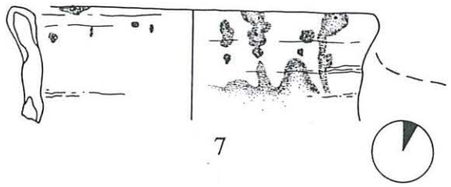

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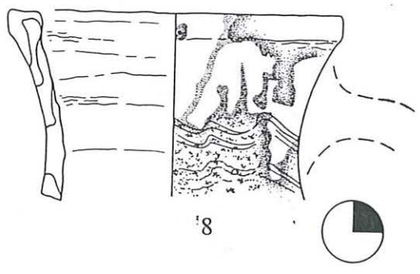

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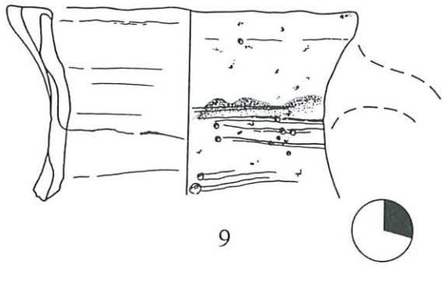

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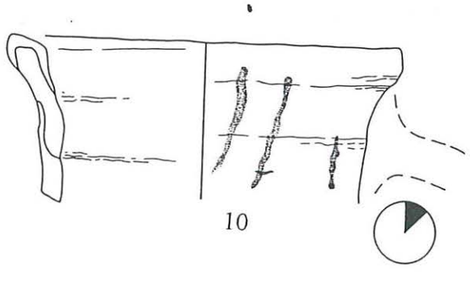

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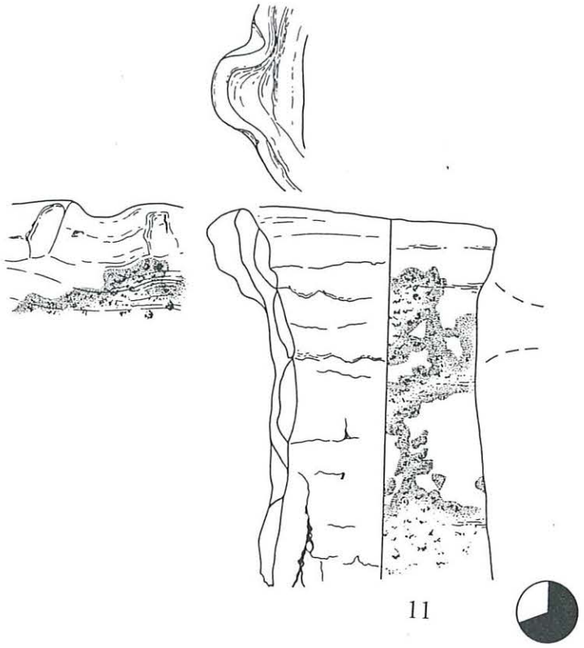

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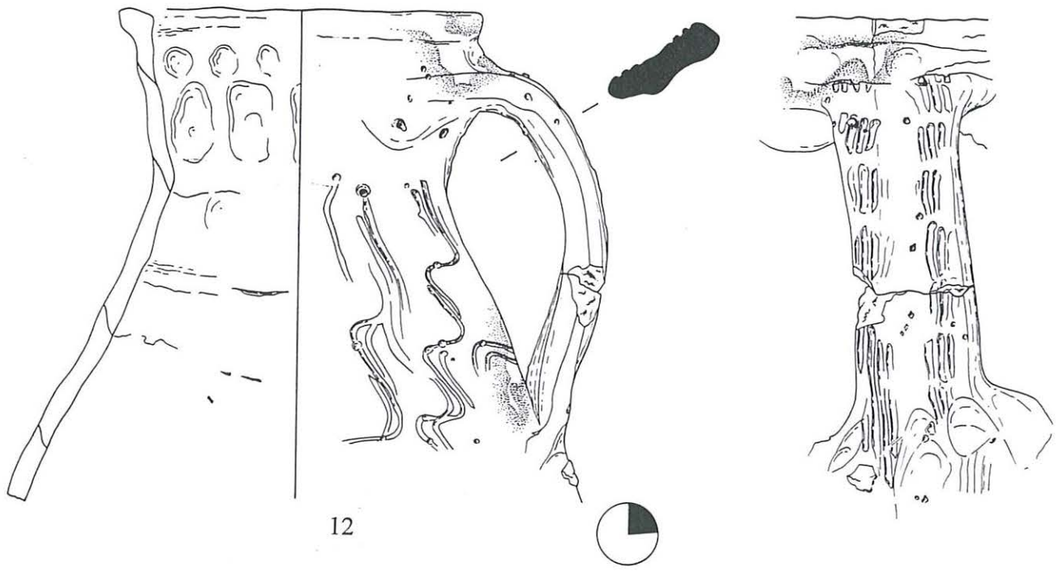

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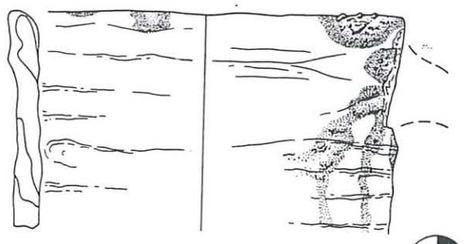

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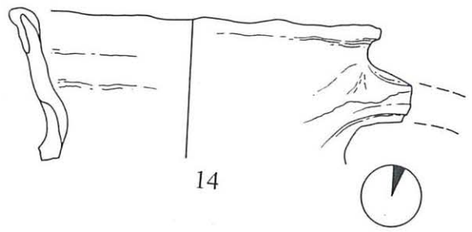

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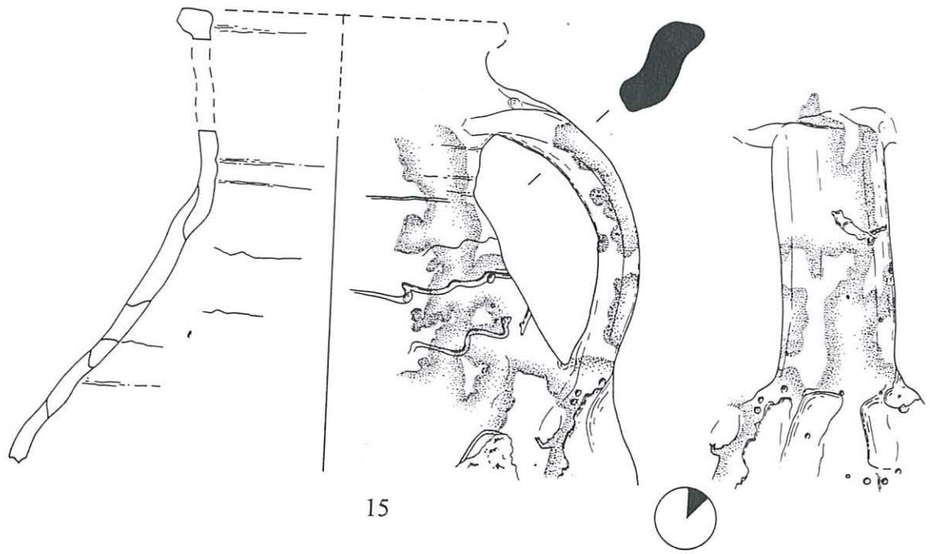

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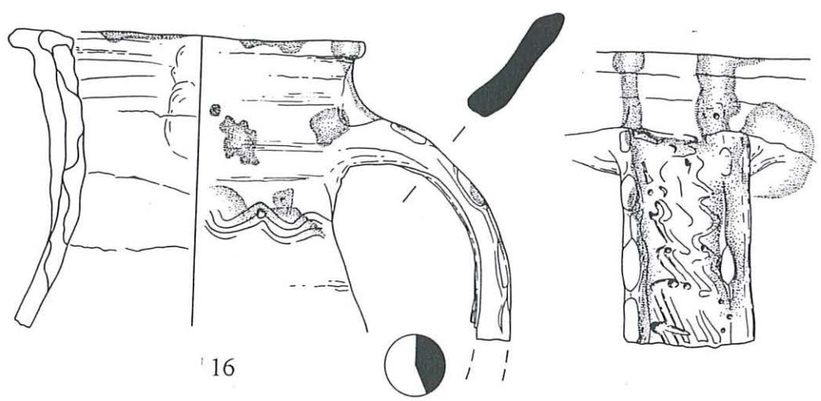

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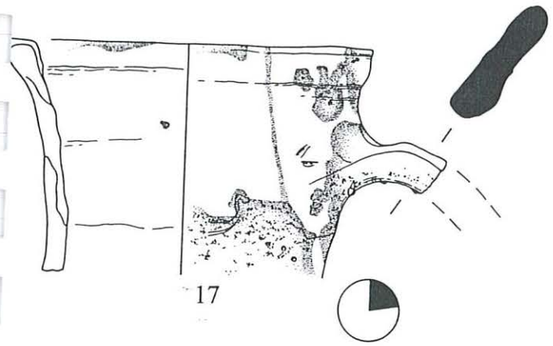

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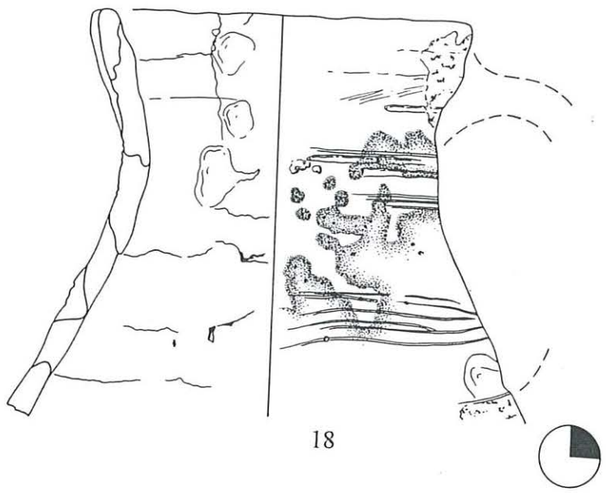

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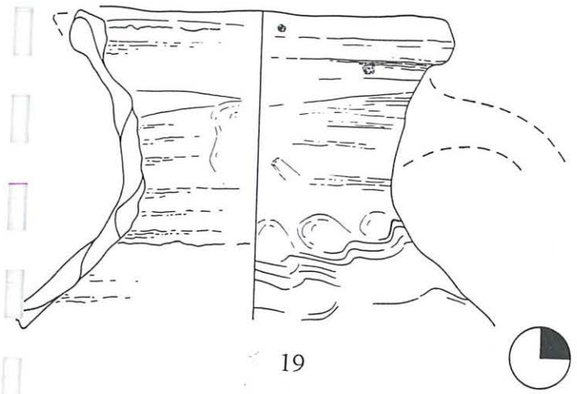

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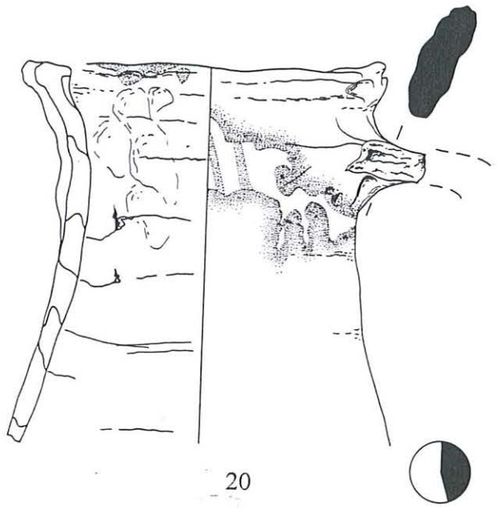

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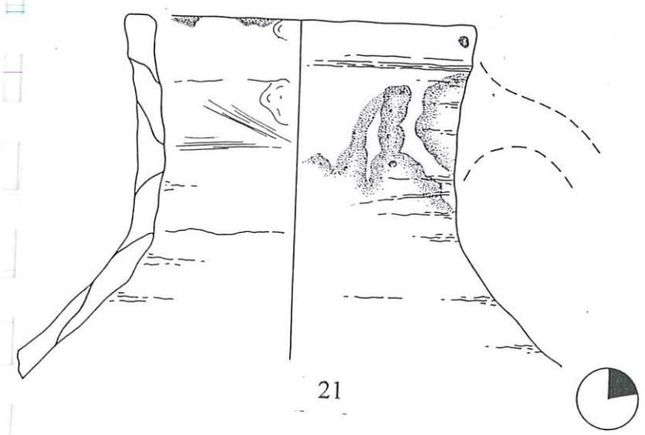

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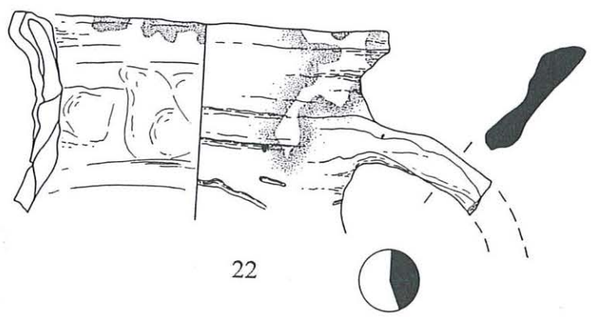

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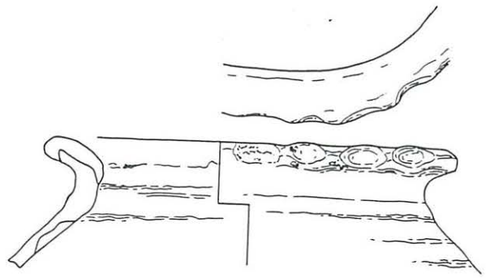

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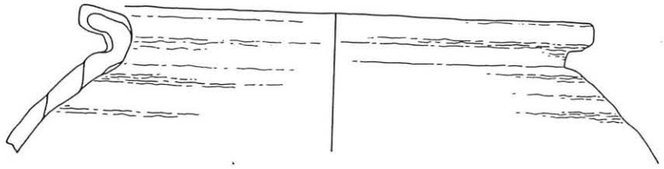

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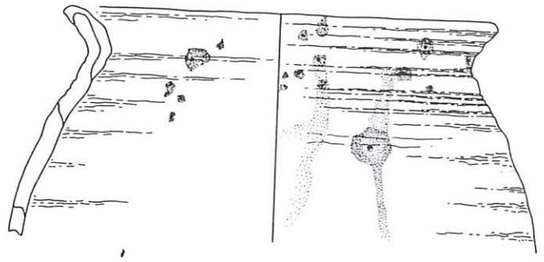

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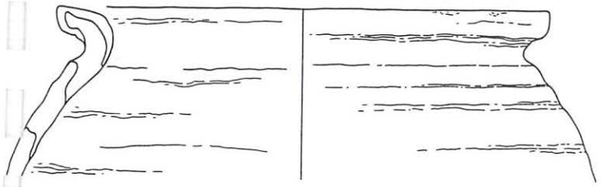

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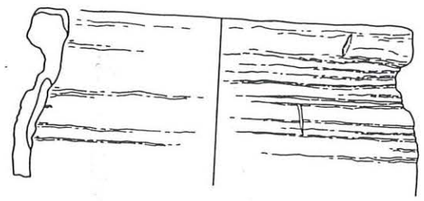

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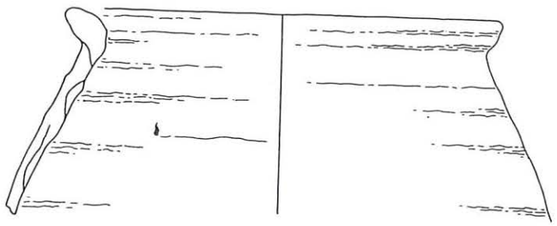

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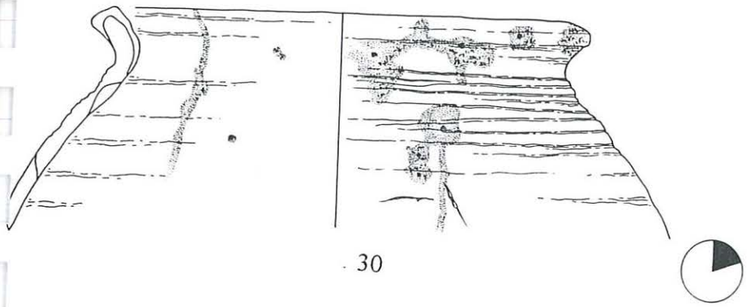

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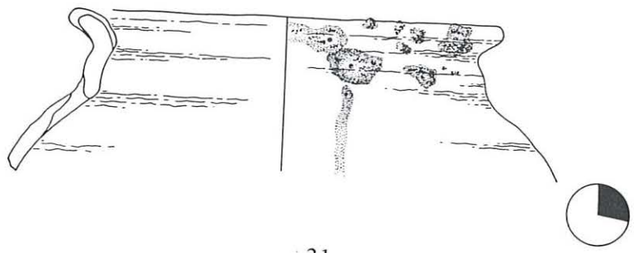

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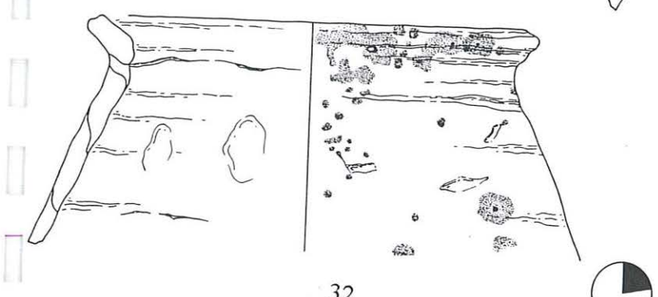

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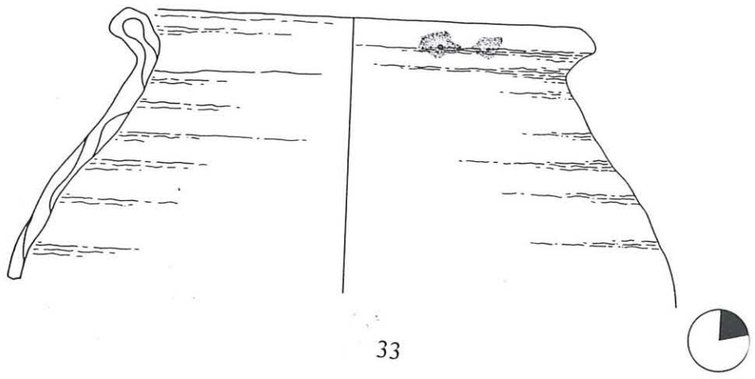

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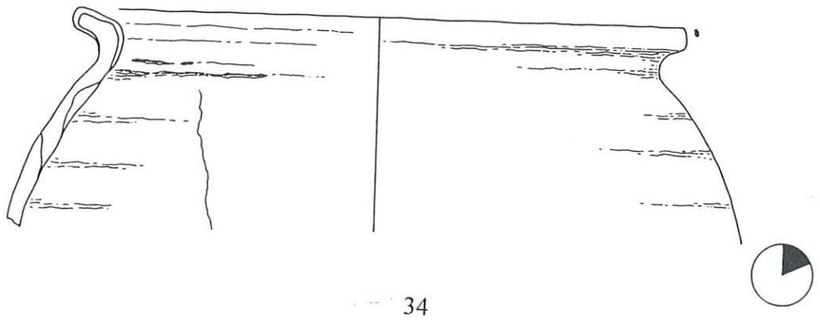

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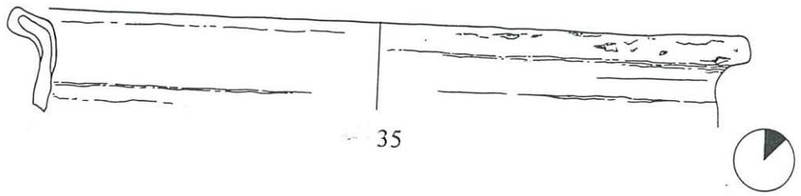

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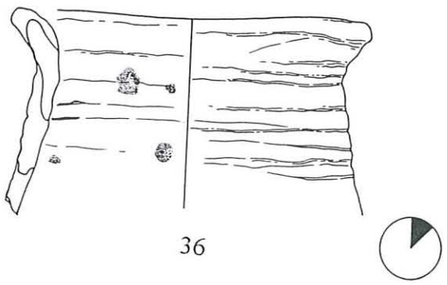

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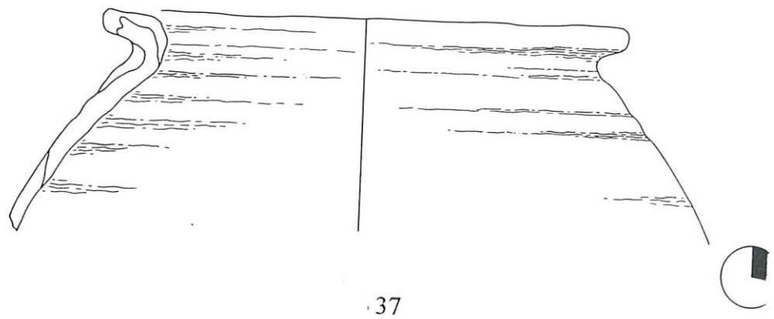

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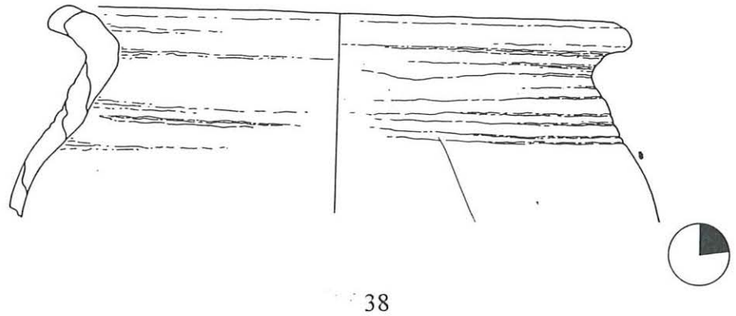

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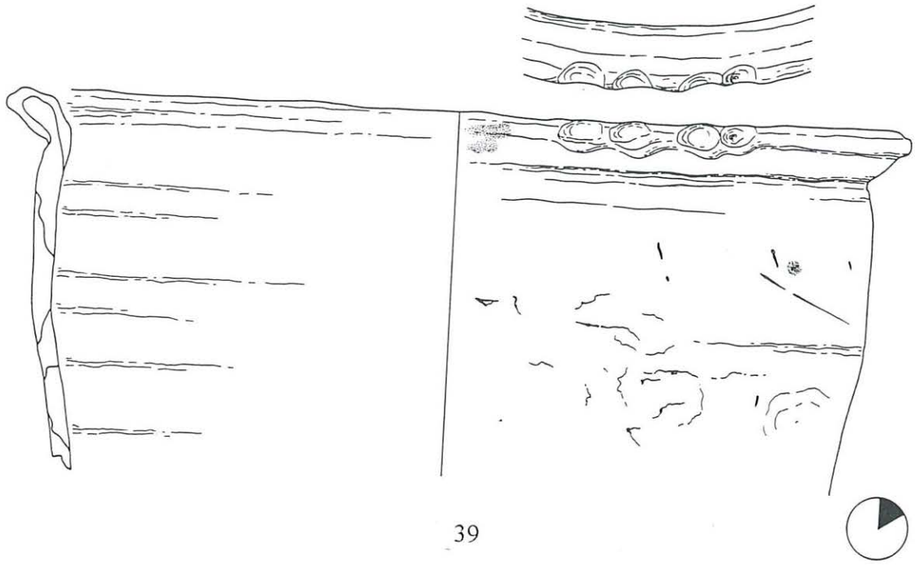

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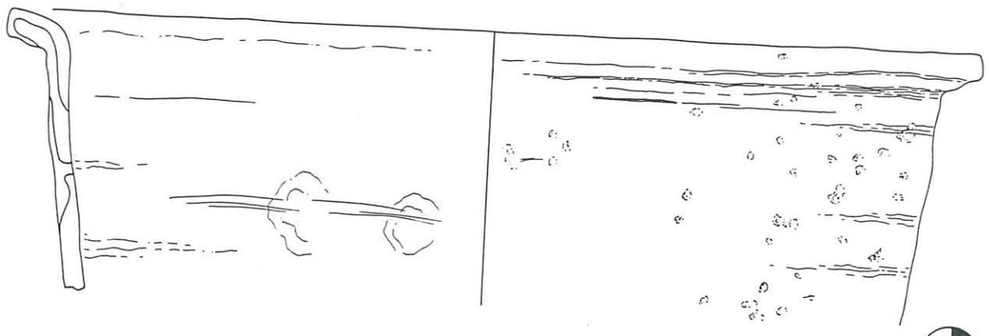

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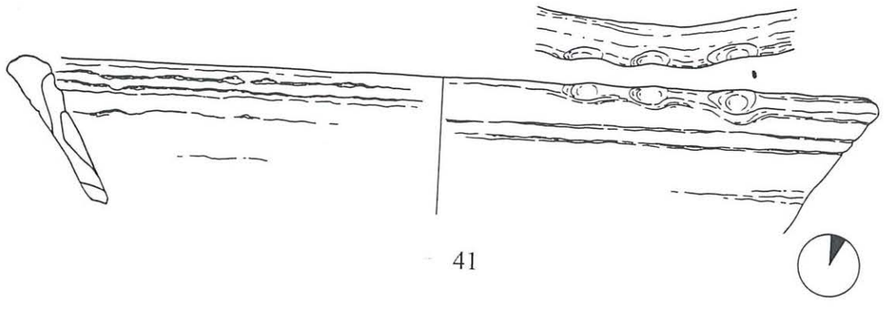

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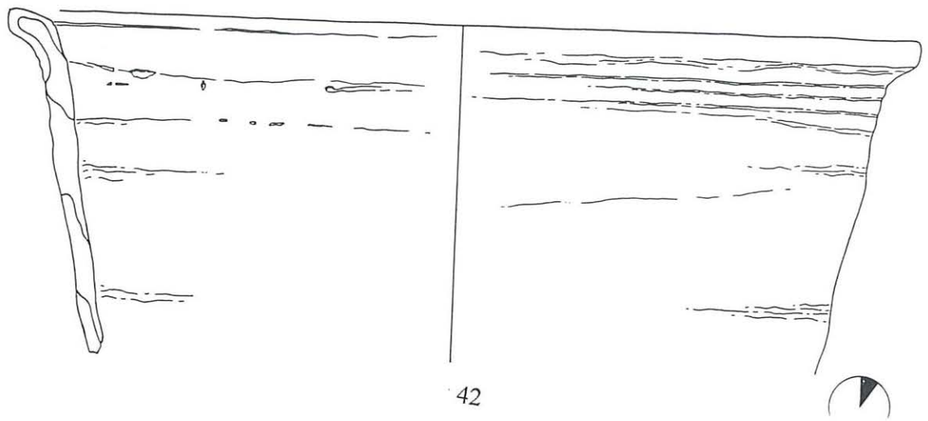

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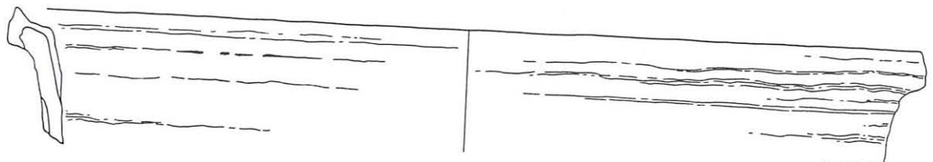

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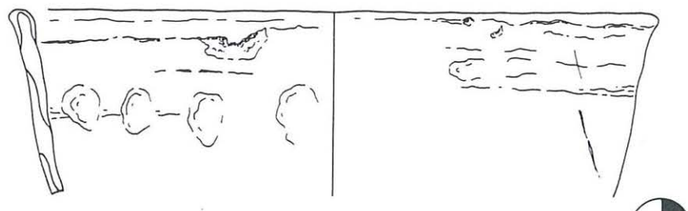

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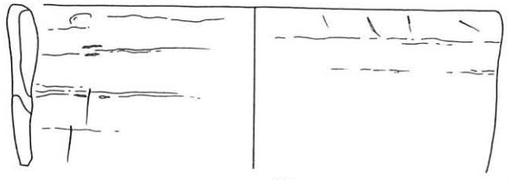

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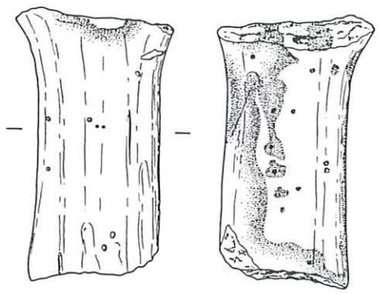

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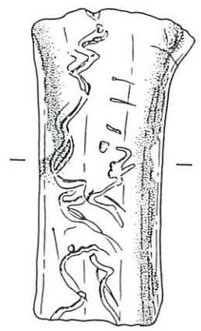

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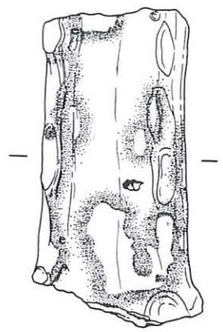

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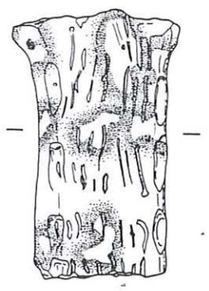

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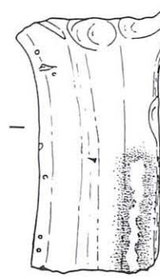

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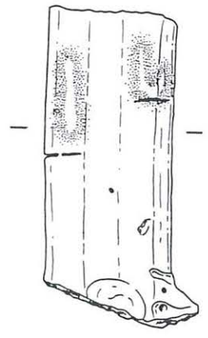

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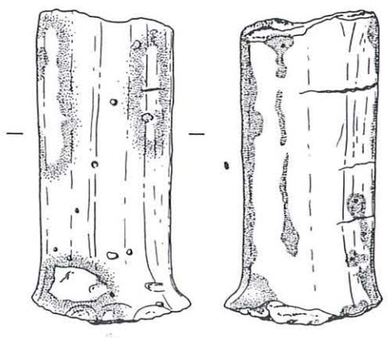

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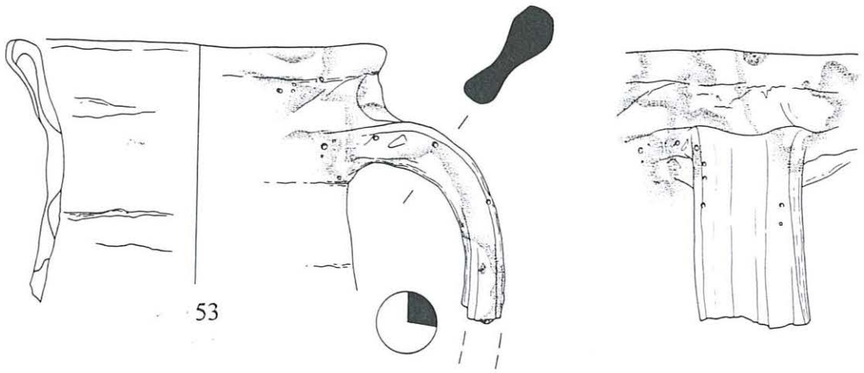

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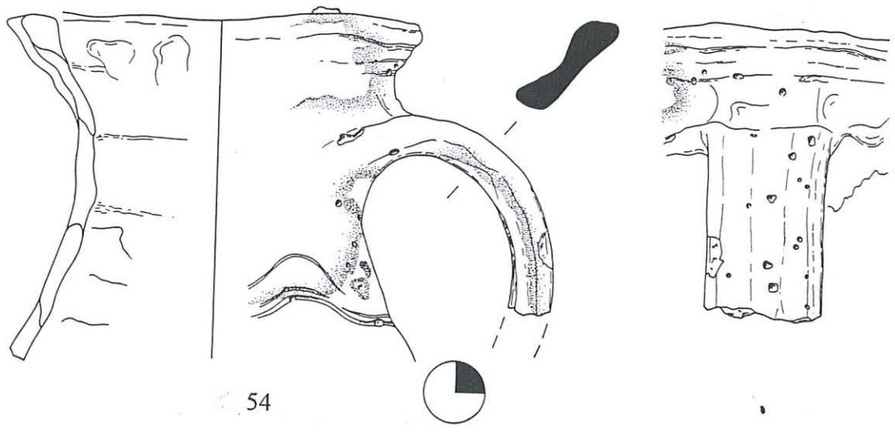

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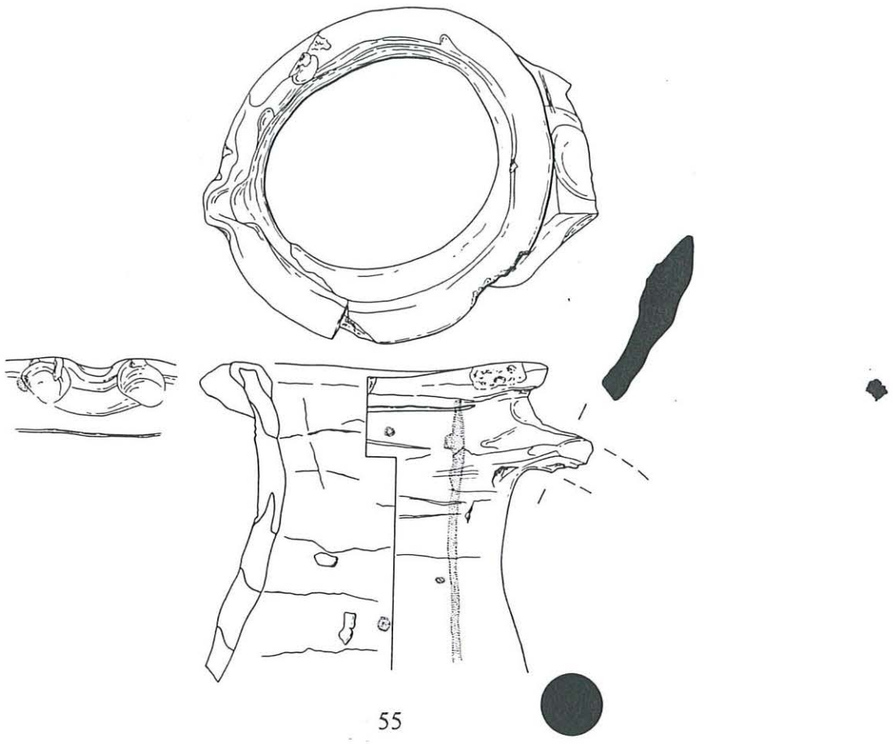

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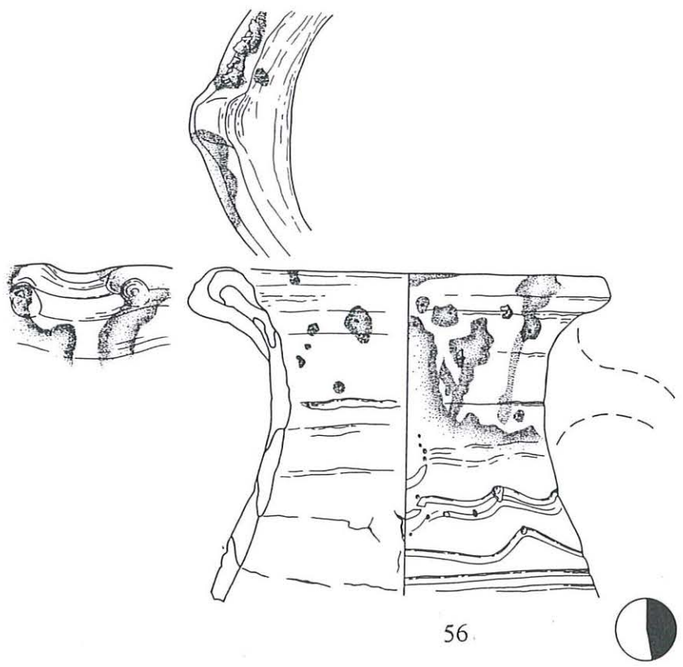

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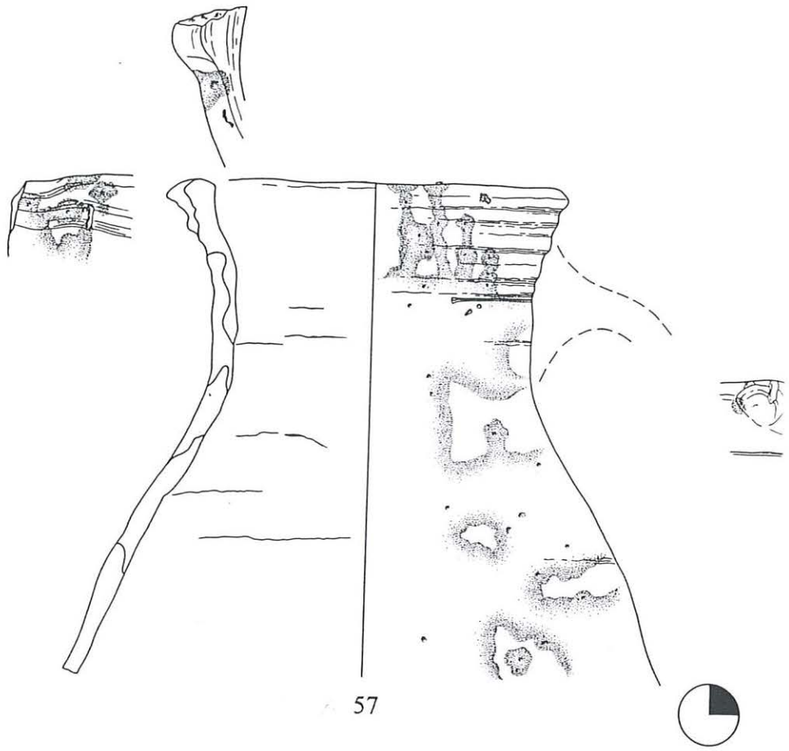

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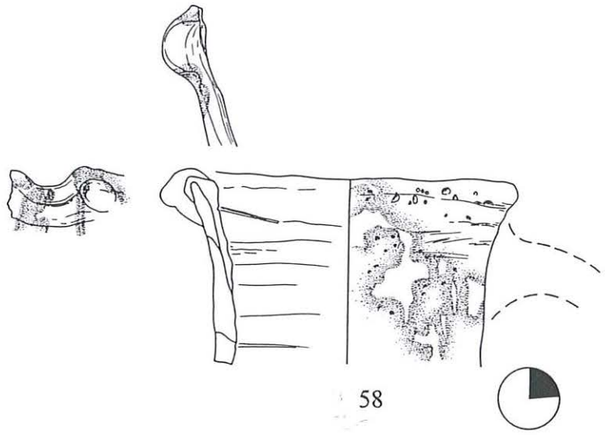

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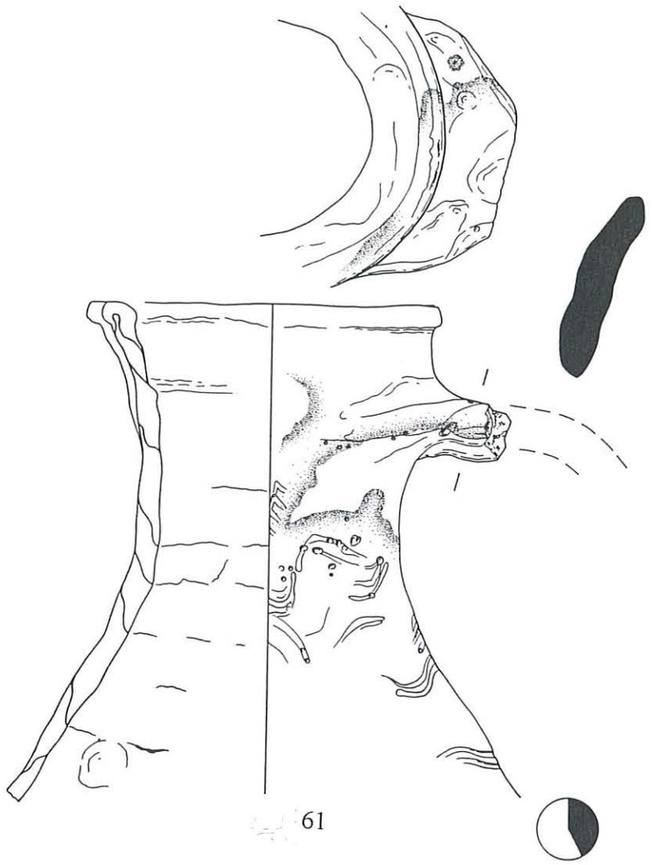

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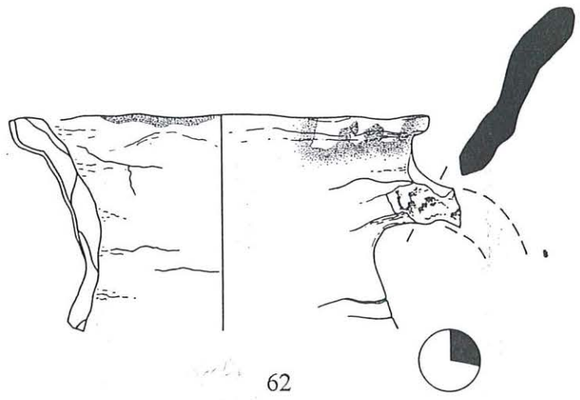

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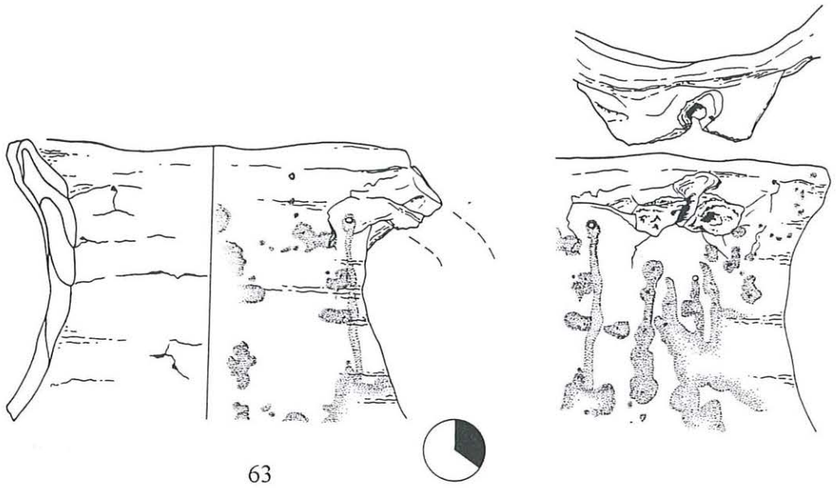

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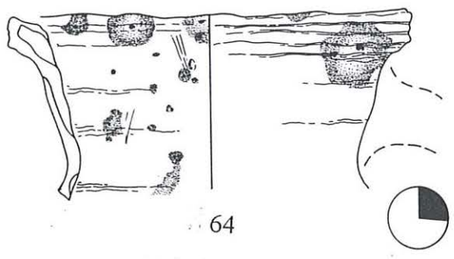

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