

THE SOUTHERN LANES, CARLISLE,

Publication of Existing Unpublished Fascicules: Fascicule 3



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FASCICULE 3

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SUMMARY

During the late 1970s and early 1980s, Carlisle Archaeological Unit (CAU) carried out a programme of archaeological excavation prior to the redevelopment of the Lanes, a densely built-up area situated within the north-east angle of Carlisle's medieval city defences (NY 4015 5606). The work confirmed that deeply stratified archaeological deposits relating to the Roman town and the medieval and post-medieval city survived over large parts of the site. For post-excavation purposes, the project was divided into two areas: the north and south Lanes.

Following a period of several years in which the project remained largely static, English Heritage provided funding in the mid-1990s for CAU to undertake a programme of analysis leading to publication. For the south Lanes, it was envisaged that three fascicules, presenting the detailed data for the stratigraphic sequence and environmental remains (Fascicule 1), the artefacts (Fascicule 2), and the pottery (Fascicule 3), would accompany a synthetic monograph. A similar publication strategy was also planned for the northern Lanes.

The south Lanes monograph was published in 2000, by which time CAU had become Carlisle Archaeology Limited (CAL), but the accompanying fascicules were never published, nor were the monograph and fascicules for the north Lanes, and CAL ceased trading in 2001. However, manuscript copies of all three of the south Lanes fascicules were available in the former CAL archive in Carlisle.

In 2009, English Heritage commissioned Oxford Archaeology North (OA North) to make the south Lanes fascicules available on-line through the Archaeology Data Service (ADS). The work was restricted to minor copy-editing and the creation of PDF versions of the existing documents; no new work was undertaken. However, during the course of this work, any obvious mistakes or omissions were noted, and errata lists were compiled. It was found that the published monograph held a fascicule Contents List, and also contained numerous cross-references to the fascicules, many of which were not consistent with the chapter numbering and pagination in the existing manuscript versions of these documents. Consequently, it proved necessary to compile a concordance between the monograph and the fascicules.

All three fascicules were placed on the ADS as separate documents; appended to each was a short report, prepared by OA North, detailing the background to the project and the methodologies employed to produce digital versions of the fascicules from the existing manuscript copies. Each report also contained, as appropriate, an errata list and a monograph concordance.

1. INTRODUCTION

1.1 BACKGROUND

- 1.1.1 From 1978 to 1982, Carlisle Archaeological Unit (CAU) carried out a programme of archaeological excavation and standing building recording, funded in part by the then Department of the Environment, prior to the redevelopment of the Lanes, a densely built-up area of approximately 2.8ha (6.9 acres) situated within the north-east angle of Carlisle's medieval city defences (NY 4015 5606). In total, some 26 excavation trenches were opened over the site as a whole, and a further 20 areas were subjected to watching brief. The work confirmed that deeply stratified archaeological deposits relating to the Roman town and the medieval and post-medieval city survived over large parts of the site. For post-excavation purposes, the project was divided into two areas: the north and south Lanes.
- 1.1.2 Following completion of the fieldwork and basic post-excavation processing, the project remained static for several years. During the 1990s, however, English Heritage provided funding for CAU to undertake a programme of analysis leading to publication. For the south Lanes, it was envisaged that three fascicules, presenting the detailed data for the stratigraphic sequence and environmental remains (Fascicule 1), the artefacts (Fascicule 2), and the pottery (Fascicule 3), would accompany a synthetic monograph. A similar publication strategy was also planned for the northern Lanes.
- 1.1.3 The south Lanes monograph was published in 2000 (McCarthy 2000a), by which time CAU had transferred from Carlisle City Council to the University of Bradford, to become Carlisle Archaeology Limited (CAL). The accompanying fascicules (the contents of which are tabulated in the monograph) were never published, nor were the monograph and fascicules for the north Lanes, and CAL ceased trading in August 2001. However, manuscript copies of all three of the south Lanes fascicules (Fascicule 1: McCarthy 2000b; Fascicule 2: Padley 2000; Fascicule 3 (two versions, Section 1.3.2): Hird and Brooks 1993; 2000) were found to exist in the archive of CAU/CAL, which is curated by Tullie House Museum and Art Gallery.

1.2 SCOPE OF THE PROJECT

- 1.2.1 In 2009, as part of a wider initiative to disseminate the results of the Lanes project, English Heritage commissioned Oxford Archaeology North (OA North) to make the mock-ups of the south Lanes fascicules available on-line through the Archaeology Data Service (ADS). The work was restricted to minor copy-editing and the creation of PDF versions of the existing documents; no new work was undertaken.
- 1.2.2 It is important to note that the specialist reports within each fascicule, most of which were prepared during the mid-1990s or before (the glass report, for

example, which appears in Fascicule 2, was written in 1992), have not been revised or updated, but are presented as being 'of their time'. Work on the north Lanes is subject to a different proposal.

1.3 METHODOLOGY

- 1.3.1 *Contacting authors*: in the first instance, all specialists who had contributed reports for inclusion in the south Lanes fascicules were contacted, in order to make them aware of the project and to discuss any relevant issues. In total, 18 specialists were contacted, and replies were received from eight (see *Acknowledgements*), most of whom provided valuable help and information.
- 1.3.2 *Digitisation of manuscripts*: for Fascicules 1 and 2, clean, typeset manuscript mock-ups (McCarthy 2000b; Padley 2000) were available in the former CAU/CAL archive; these were simply scanned to create PDF files of the documents. In the case of Fascicule 3, which was available in two parts an early, heavily annotated copy (Hird and Brooks 1993) and an incomplete photocopy of a later version (Hird and Brooks 2000), the latter obtained from the papers of the late Vivien Swan (see *Acknowledgements*), the entire text was retyped to create the digital document. The accompanying figures and tables were then scanned, except where the tables were illegible, in which case they were retyped. The whole fascicule was then typeset.
- 1.3.3 *Errata*: during the course of this work, any obvious mistakes or omissions, such as missing/incorrect page numbers or incomplete bibliographic references, were noted. In the case of Fascicules 1 and 2, it was not possible to correct the documents themselves, since the digital versions comprised PDFs scanned from the original manuscripts (*Section 1.3.2*). For this reason, all mistakes and corrections are presented in errata lists in the reports that accompany those documents. However, since Fascicule 3 was retyped from scratch (*Section 1.3.2*), any mistakes or omissions present in the extant manuscripts were corrected during retyping, obviating the need for an accompanying errata sheet.
- 1.3.4 *Concordance between fascicules*: as part of this process, all cross-references between the different fascicules were checked. Any that proved to be incorrect were added, with amendments, to the relevant errata list.
- 1.3.5 *Concordance with monograph*: the published south Lanes monograph (McCarthy 2000a) contains a Contents List for all three fascicules, although these documents had not been published at the time. In this, each fascicule is paginated separately, and contains its own list of Chapters, Illustrations and Tables. Thus, Fascicule 1 comprises Chapters 1 through 13 and runs from page 1 to page 166; Fascicule 2 comprises Chapters 1 though 13 and runs from page 1 to page 165; and Fascicule 3 comprises Chapters 1 through 6 and runs from page 1 to page 110. All cross-references to the fascicules that appear in the monograph text also follow this system.
- 1.3.6 However, the extant manuscripts of the fascicules did not follow this system. Instead, pagination, chapter numbering, and numbering of illustrations and

tables were continuous across all three volumes. The reason for this is not clear, but it seems likely that the Contents List published in the monograph reflects an intended change that was never realised (at least in the available versions of the fascicules) before CAL ceased trading in 2001. Thus, whilst the numbering of Fascicule 1 is largely consistent with that given in the published Contents List (with the exception of Chapter 13, The Human Bone, which is given in the monograph Contents List but does not actually exist), the pagination, chapter numbering and numbering of Illustrations and Tables for Fascicules 2 and 3 were wholly incompatible with those published in the monograph.

- 1.3.7 In the case of Fascicule 3 this problem could be largely resolved, since retyping of the document from scratch (see above) allowed for the adoption of the system of pagination and numbering given in the monograph, though a few discrepancies remain. For Fascicule 2, however, which was simply scanned and converted to a PDF file from manuscript version (*Section 1.3.2*), this was not possible, and the original pagination and numbering had to be retained. Consequently, a concordance was required between the pagination and numbering published in the monograph and that which appears in the digital fascicules hosted on the ADS. The concordance for Fascicule 3 is presented in *Section 3*, below.
- 1.3.8 For Fascicule 3, it was found that neither of the extant manuscript copies (Hird and Brooks 1993; 2000) contained an Introduction chapter, though this was included in the Contents List for Fascicule 3 that appears in the published monograph (Fascicule 3, Chapter 1; McCarthy 2000a, x). Consequently, during the retyping of this document, the introductory chapter for Fascicule 2 was copied and, with minor changes of wording to render it 'fit for purpose', was inserted into Fascicule 3 to serve as Chapter 1.

2. FASCICULE 3 ERRATA

2.1 Introduction

2.1.1 The manuscript copy of the south Lanes Fascicule 3 (Hird and Brooks 2000) existed only as two heavily annotated and/or incomplete documents. For this reason, the whole fascicule was retyped from scratch to create a digital document that could be hosted on the ADS (*Section 1.3.2*). Consequently, it was possible to correct mistakes, omissions or out-of-date bibliographic references that were noted during the course of the work, unlike the situation with Fascicules 1 and 2, which were scanned directly from the manuscripts. For this reason, no errata list was needed for Fascicule 3.

3. CONCORDANCE OF CROSS-REFERENCES FROM THE SOUTH LANES MONOGRAPH TO FASCICULE 3

3.1 Introduction

3.1.1 The published south Lanes monograph (McCarthy 2000a) includes a Contents List for the three accompanying specialist fascicules (*op cit*, x), although these documents were not published at the time. For each fascicule, a list of chapters is provided, which includes the chapter title, the author(s), and page numbers. Additionally, the monograph text also contains numerous cross-references to the fascicules; these were checked against the manuscript copies of the fascicules present in the former CAU/CAL archive, and any divergences were noted.

3.2 Cross-References from the Monograph to Fascicule 3

3.2.1 *Chapter concordance*: since Fascicule 3 was retyped, it was possible to renumber the chapters to make both the chapter numbering and the pagination consistent with those presented in the monograph Contents List (McCarthy 2000a, x). Consequently, no chapter concordance between the monograph and Fascicule 3 is required, though for completeness sake a listing is provided in Table 1.

Monograph Contents List	Page nos	Actual contents of Fascicule 3	Page nos
(McCarthy 2000a)			
Chapter 1: Introduction	1	Chapter 1: Introduction	1
Chapter 2: Introduction and List of	11	Chapter 2: Introduction and List of	11
Roman Fabrics		Roman Fabrics	
Chapter 3: Summary of the Roman	19	Chapter 3: Summary of the Roman	19
Pottery by Site		Pottery by Site	
Chapter 4: The Samian Ware	59	Chapter 4: The Samian Ware	59
Chapter 5: The Stamped Mortaria	81	Chapter 5: The Stamped Mortaria	81
Chapter 6: The Medieval Pottery	85	Chapter 6: The Medieval Pottery	85

Table 1: Chapter concordance between south Lanes monograph (McCarthy 2000a) and Fascicule 2

3.2.2 *Concordance of page cross-references*: there are 49 cross-references to Fascicule 3 in the published monograph (McCarthy 2000a), on pages 62, 123, 124, 125, 127(3), 128(5), 129(5), 130(2), 131, 132(4), 133, 134(4), 135(5), 136, 137(2), 138(9), 139(2), and 142. All are correct, with the exception of four, which are listed below.

Page 62 (column 2, line 33): for 'Fascicule 3, tables 8, 12' read 'Fascicule 3, tables 7 and 9'.

Page 123 (column 2, line 34): for 'Fascicule 3, p 103' read 'Fascicule 3, p 102'.

Page 129 (column 1, line 15): for 'Fascicule 3, p 70, No 68' read 'Fascicule 3, p 78, No 68'.

Page 138 (column 1, line 16): for 'Fascicule 3, p 68, No 67' read 'Fascicule 3, p 69, No 67'.

BIBLIOGRAPHY

Hird, M L, and Brooks, C, 1993 Roman and medieval Carlisle, the Lanes Volume 1: excavations at Old Grapes, Crown and Anchor and Lewthwaite's Lanes 1981-2. Fascicule 3: the Roman and medieval pottery, unpubl manuscript (early draft), Tullie House Museum and Art Gallery archive, Carlisle

Hird, M L, and Brooks, C, 2000 Roman and medieval Carlisle, the Lanes Volume 1: excavations at Old Grapes, Crown and Anchor and Lewthwaite's Lanes 1981-2. Fascicule 3: the Roman and medieval pottery, unpubl manuscript (later draft), Tullie House Museum and Art Gallery archive, Carlisle

McCarthy, M R, 2000a Roman and medieval Carlisle: the southern Lanes. Excavations 1981-2, Dept Archaeol Sci, Univ Bradford Res Rep, 1, Carlisle

McCarthy, M R, 2000b Roman and medieval Carlisle, the Lanes Volume 1: excavations at Old Grapes, Crown and Anchor and Lewthwaite's Lanes 1981-2. Fascicule 1: the stratigraphic sequence, absolute dating and the environmental remains, unpubl manuscript, Tullie House Museum and Art Gallery archive, Carlisle

Padley, T G, 2000 Roman and medieval Carlisle, the Lanes Volume 1: excavations at Old Grapes, Crown and Anchor and Lewthwaite's Lanes 1981-2. Fascicule 2: the Roman and medieval finds, unpubl manuscript, Tullie House Museum and Art Gallery archive, Carlisle

ROMAN AND MEDIEVAL CARLISLE: THE SOUTHERN LANES. Excavations 1981-2

Fascicule 3 The Roman and Medieval Pottery

By M L Hird and C M Brooks

With contributions by
B M Dickinson, K F Hartley, M R McCarthy
and R S O Tomlin

Volume Editor C M Brooks

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ABBREVIATIONS

Crown and Anchor Lane
East Tower Street
Globe Lane
King's Arms Lane
Keay's Lane
Law's Lane
Lewthwaite's Lane
Longcake's Lane
Old Bush Lane
Old Grapes Lane
Pack Horse Lane
Peascod's Lane
Sewell's Lane
Union Court

CHAPTER 1 INTRODUCTION

by M R McCarthy

Location and Background

Carlisle lies on the south bank of the River Eden, nine miles south of the present-day border with Scotland (Fig 1). On the north side of the Eden lies the suburb of Stanwix; Hadrian's Wall runs through Stanwix, crossing the Eden close to its confluence with the River Caldew immediately north of the Castle.

The Lanes area as a whole occupies an area over 6 acres (2.43ha) in extent, on the eastern side of the Roman settlement and the medieval walled city. The Lanes derived its name from the large number of narrow lanes or vennels which ran between Scotch Street and Lowther Street. The excavation sites dealt with here were at the southern end of The Lanes in an area bounded by Scotch Street, Lowther Street, Bank Street and former Old Bush Lane (Figs 1-3).

The history of the project, together with its scope and strategies is set out in Fascicule 1, Chapter 1. A limited amount of small-scale work had been undertaken in The Lanes in the 1950s (Hogg 1955) and by Peter Clack and Paul Gosling working for the University of Durham and the Department of the Environment in 1975. Although these investigations provided little substance, the 1975 interventions were useful in confirming the intensity of occupation in medieval and later times, as well as giving an indication of the likely depth of archaeological deposits.

The main programme of excavation commenced in 1978 and lasted for three and a half years, exposing in all approximately 1.3 acres (0.53ha) of the Roman settlement. In addition a substantial area of medieval townscape, including several lanes with their buildings, yards, pits, wells and other features, was investigated at Keay's and Law's Lanes at the northern end of The Lanes (Fig 2).

Two other programmes of work were put in hand; a detailed survey of existing buildings and a systematic programme of documentary research. The combined archaeological, architectural and historical strands add up to one of the largest urban projects ever undertaken in north Britain.

Method of Publication

The size of this project, and the amount of data recovered, necessitate the division of this publication into three volumes. The first deals with the results of work at the southern end of the development area, and covers all periods from the prehistoric to the twentieth century. The other two (Zant and Howard-Davis in prep a and b) cover the Roman and medieval to post—medieval features respectively at the northern end of The Lanes area. The results of the architectural survey will be incorporated into these volumes where appropriate. The documentary research is published separately (Summerson 1993), although salient information from this will be incorporated into The Lanes volumes.

Following the precedent established with the publication of Castle Street, Carlisle, the archaeological detail is published as a series of fascicules with separately produced volumes of synthesis. The rationale behind this approach has been described elsewhere (McCarthy 1991a; McCarthy *et al* 1992). The South Lanes monograph (McCarthy 2000) provides an illustrated summary and overview of the archaeological remains, together with general discussions, contributed by the relevant specialists, of the plant, insect and parasite remains, the animal and bird bone, the finds and the Roman and medieval pottery. The supporting data for the monograph are published as a series of three fascicules, the contents and authors of which are also listed in the monograph. Due to technological restrictions, half-tones only appear in the monograph.

This fascicule covers the Roman and post-Roman pottery. The stratigraphic sequence, dendrochronology, and the environmental and economic remains appear in Fascicule 1, and the organic and inorganic finds can be found in Fascicule 2.

The site archive, including the paper and photographic records, together with the artefacts and environmental data, is held by Tullie House Museum and Art gallery, Carlisle.

Phasing

Each trench was investigated as a self-contained unit with its own numbering sequence of contexts and finds, and the data were examined independently of the other trenches, irrespective of whether they were contiguous or not. Within each trench the sequence was divided into periods, which are identified by number. Some periods were then sub-divided, the divisions being identified by letter. It should be noted that contexts containing finds or pottery may not be separately identified on plans in Fascicule 1.

On completion of the phasing, an attempt was made to correlate the details of contiguous trenches. In some cases the correlation is secure but in others there is an element of doubt. An attempt was also made to correlate sequences between all trenches, and here there is a considerable element of doubt. Where the physical evidence was absent, pottery has been used as a guide to contemporaneity. Table 1 below is a very tentative stab at linking the phasing against a chronological framework.

Dating

The site chronologies have been based very largely on pottery, especially samian ware, as very few coins were discovered in useful positions. Absolute dates for many timbers were obtained (Fasc 1, pp 103-6), but many of the felling dates are too early, being first century BC or early first century AD, and are of no use in dating individual structures, with the

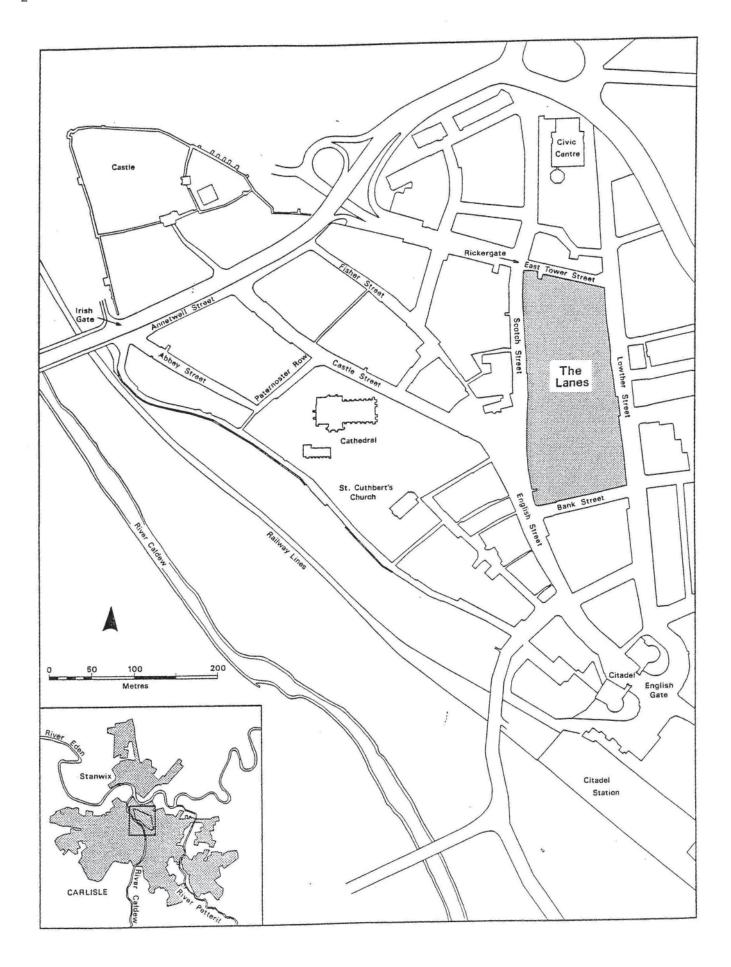


Fig 1 Location plan of The Lanes

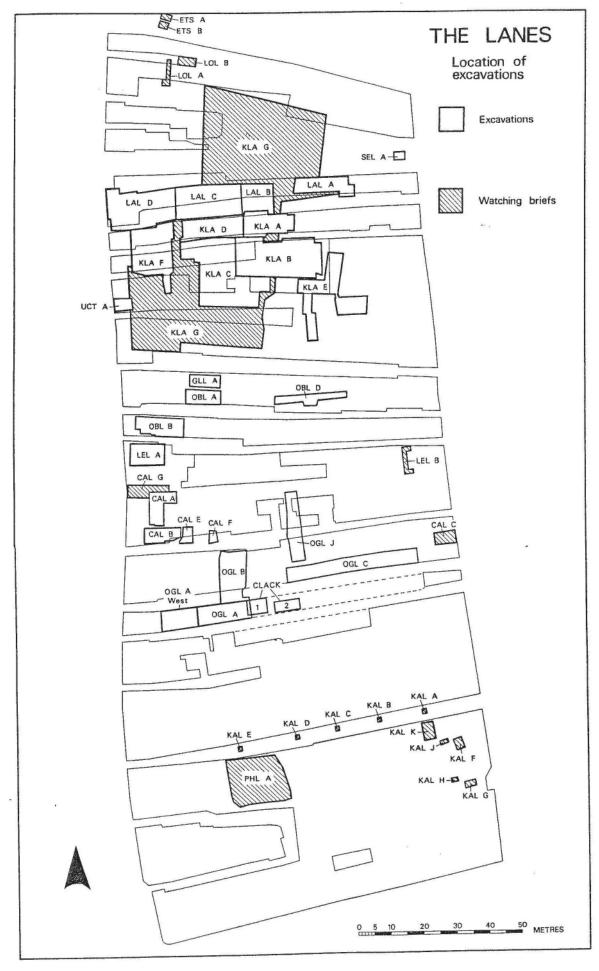


Fig 2 Location of excavations in The Lanes

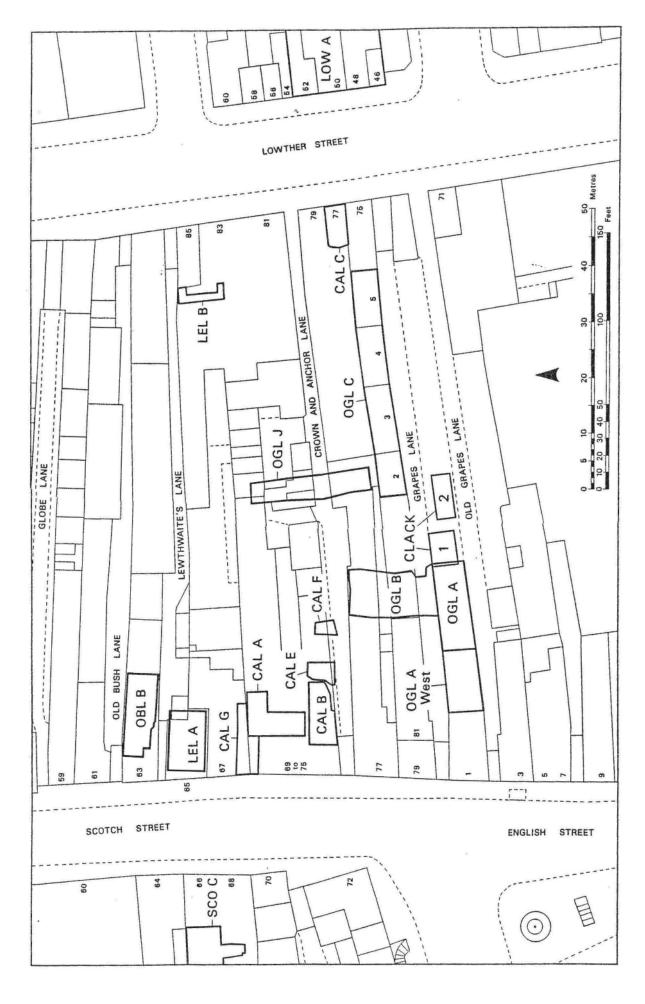


Fig 3 Location of major excavations in the southern Lanes area

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possible exception of OGL A Periods 6 and 13, and OGL B Period 2A. It is very difficult, therefore, to establish the dating with any degree of precision.

The problems of dating are compounded by the difficulty in deciding how to interpret some deposits. Period 4 in OGL B, for example, appeared to be remarkably clean compared with its equivalent in OGL A (Period 6). This could be explained if the assumption is made that period 4 in OGL B was deliberately kept clear of rubbish for a specific purpose. However Periods 5A and 5B in OGL B yielded over 1,000 sherds of pottery, including nearly 300 sherds of samian ware, and over 40,000g of animal bone. In this case it is possible to suggest that the deposits of Periods 5A and 5B derived from Period 4 and were midden

material which was alter spread across the site. The samian spectrum appears to bear this out in that it compares fairly well to OGL A Period 6, which ended about AD 160.

Summary of the Excavations

The earliest features

The old ground surface was recorded at several sites but, unlike excavations on the western side of the city, at Blackfriars Street (McCarthy 1990, 13-14) and Annetwell Street (Caruana in prep), no traces of plough marks were

Table 1 Concordance of sites and periods

Horizon	OGL A		OGL B		CAL B		CAL A		LEL A		OGL C		OGLJ
Natural	0 1A 1B	=	0 1A	=	0	=	0	=	0				
Old ground surface	1C	=	1B	=	1B	=	1	=	1	=	1		
Round house	2												
Late 1st century	3-5	=/=	2A-3		2A-B	=	2A-B	=/=	2A-B				
AD 90s	6	=	4A				2C 2D 2E 3A 3B-C	=/= =/= =/= =/=	3 4 5-6C 7A 7B-C 8		2		
			4B-D		3А-В	=	4	=/=	9				
Late 2 nd century	7A-8C 9A	=/= =/=	4E-5C 5D				5		10				
2 nd – 3 rd century	9B 9C-E 9F-H 10A-D 10E-F	=/= =/= =/= =/= =/=	6A 6B-D 6E 6F 7A-B						11 12		3	=	2
$3^{rd} - 12^{th}$	11-12A	,	8A-B		OGL	A We	est 1-3		13 14 15 16- 19A				
Medieval	13	=	9	=	OGL.	A We	est 4-7	=	19A 19B- 22				
Post – medieval					OGI	LA W	Vest 8	=	23				

Periods linked by = are probably or certainly the same; periods linked by =/= may be the same but there is an element of doubt

found. The nearest possible example was observed at 46-52 Lowther Street 1991 (Fasc 1, p101; Flynn 1995).

The only potential prehistoric feature was part of a roundhouse, which cut the old ground surface in OGLA. The roundhouse cannot be reliably dated, and could theoretically belong almost anywhere from the early Bronze Age to the early Roman period. Apart from a barbed and tanged arrowhead from the same site (Fasc 2, pp 224-5, No G13), the lithic assemblage is undiagnostic. On balance it seems likely that the roundhouse was either late Iron Age or early Roman in date (McCarthy 2000, 17-19).

A small number of Neronian to early Flavian samian ware sherds, together with the occasional example of Lyon ware and Terra Nigra, may indicate Flavian period activity in the vicinity. There is no corroborative artefactual evidence from the sites excavated to indicate occupation that early, and it seems likely that this material is rubbish emanating from somewhere else.

The earliest Roman activities are represented by pits, soil spreads and postholes. Period 2B at OGL B includes a timber with a *terminus post quem* for felling of AD 83 (Fasc 1, p 104). It is thought that the early phases in OGL A and B belong to the late 80s or early 90s. Periods 2 and 5 in LEL A, thought to be contemporary, include a sequence of patchy surfaces associated with gulleys, slots and some postholes.

The late first to the mid second century

In the winter of AD 93-4 a timber and wattle building, Building 674, was erected within a fenced or hedged enclosure in OGL A, Period 6 (Period 4 in OGL B) (Fig 4). The building probably had a life of 50-60 years, extending to around AD 160, on the evidence of associated samian ware. The function of the building, which contained at least two rooms and a possible outshut, cannot be determined with certainty, but the insect and botanical remains suggest that the building might have been, in part at least, a stable or byre. Around the building were metalled open areas which were probably yards, perhaps for stock. The stockyards were bounded by a damp gulley and a hedge to the west, whilst a mixed hedge and fence alongside a road defined the property to the north.

This road ran from the heart of the Roman settlement eastwards towards the crossing of the River Petteril; its alignment was secured through work at CAL B-C and OGL J, and at 46-52 Lowther Street (Flynn 1995). The date at which this road was first laid down could not be established, but because it was bedded directly on the old ground surface, it is assumed to have been at least as early as building 674 in OGLA. Further east, along the south side of this road in OGL C, a complex of slots, posts and surfaces recorded in section, and which are assumed to belong to this period, suggest that the settlement extended at least as far as this.

On the north side of the road successive buildings (Buildings 125 and 97) were erected in CAL A (Period 2; Fig 4), the property being screened from the road by a fence. Its northern boundary is thought to have been in LEL A where, in Period 6, there was an east-west gulley bounded by a stake fence; this also formed the southern limit of another property to the north. The CAL A building (97) probably stood within a plot

containing yards and working areas, seen both in CALA and LELA. The building was similar to that in OGLA-B in terms of width and construction techniques, but unlike the latter, the CALA building was reconstructed on at least two occasions. In OBLB, Building 117 is also tentatively associated with this phase (Fig 4).

Correlating phases between trenches and the search for patterning in the evidence are clearly difficult in the absence of absolute dates, and there are several possible interpretations of the evidence for the building history. These buildings and boundaries could be seen either as piecemeal development along the street frontages, or as a layout of plots and buildings that owed their origin to a deliberate act of planning, the latter being the interpretation preferred by the present writer. It is suggested that a series of enclosed plots were established in the mid 90s AD along both the east-west road leading out of the city and the present Scotch Street frontage leading towards the crossing of the River Eden. After the initial layout had been established, however, piecemeal rather than uniform development may be expected.

The mid second to the fourth century

In the mid second century, from around AD 160, deposits at OGL A-B and LEL A seem to represent combinations of dumping, soil accumulating in situ, cobbled surfaces and other miscellaneous features including fence lines and pits. Precisely what was going on is not clear, except that much activity was taking place. Period 6B in OGLB and Period 10 in LELA, both attributed to the later second century, witnessed the erection of major buildings. Building 663 in LELA (Fig 5) may have been on the frontage of the Roman predecessor of Scotch Street, and Building 362 in OGL B occupied a position on the frontage of the CALB-C road (Fig 6). The function of neither structure is certain as too little of the plans was recovered. Both structures may be domestic, but the LEL A building could be relatively large. Attention is also drawn to a probable building in CAL A Period 5 (Fig 5), and it may have been at this time that the surfaces and ovens represented in the cellar sections at CAL A (Periods 4B and 5) were in use.

Buildings 377 was erected, set back some distance from the known road at the junction of the two trenches, in the late second or early third century, after which the OGL A-B sequence seems to peter out. Although the absence of pottery and finds of third- and fourth-century date seems decisive, the OGL A West Excavation included a small amount of late Roman material associated with buildings and surfaces, how ever (Periods West 1 to West 3). This may imply that some late Roman deposits had been removed in antiquity or by machining.

In LEL A the Roman sequence was not affected by machine excavations or cellarage, and continued through multiple phases. Although traces of buildings were recognised in most periods, it is rarely possible to attempt any functional interpretation because of the size of the excavation.

Within this period it seems likely that a programme of defence building commenced, as shown by work at OGL C and J (Fig 6), although there is little associated pottery and dendrochronology cannot refine the dating of this important

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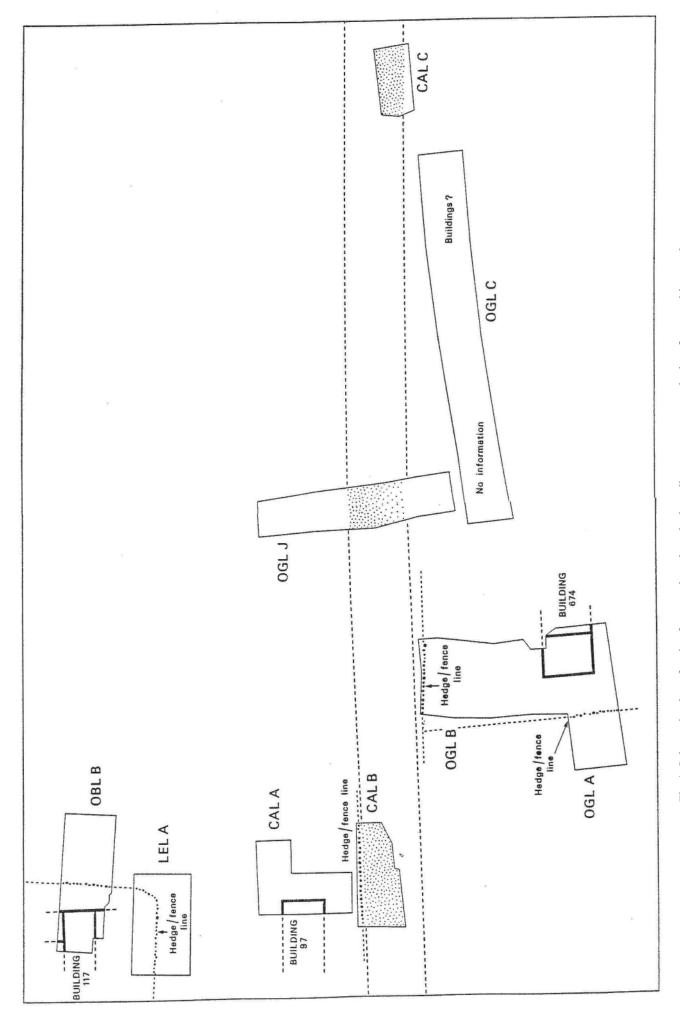


Fig 4 Schematic plan of major features thought to be broadly contemporary: the late first to mid second century (CAL A Period 2E, OGL A Period 6, OGL B Period 4, OGL C Period 2, LEL A Period 4, OBL B Period 2-7)

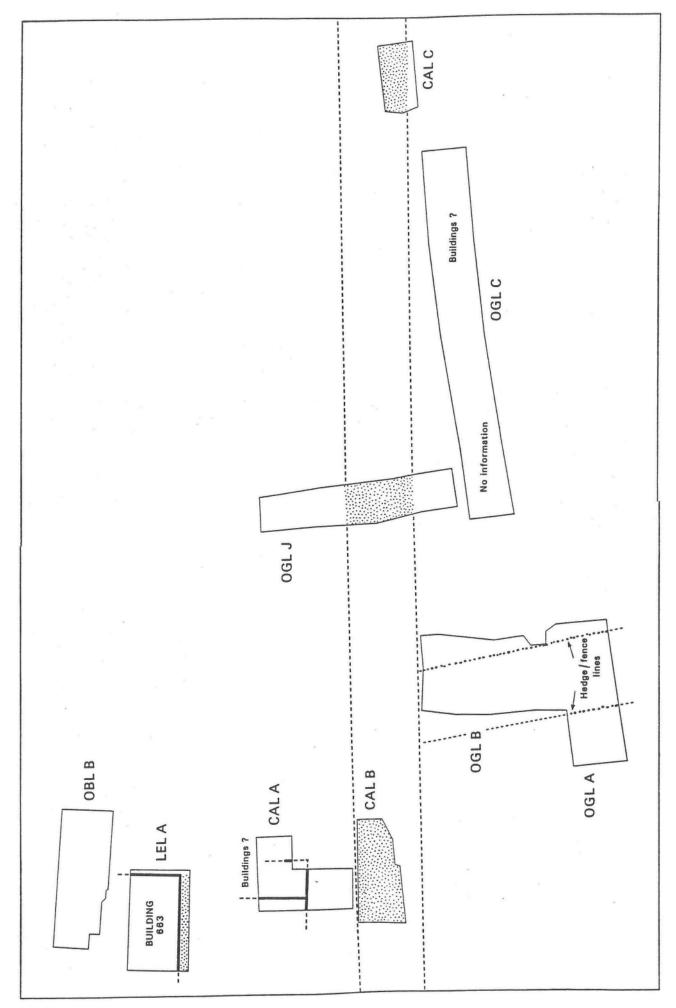


Fig 5 Schematic plan of major features thought to be broadly contemporary: the late second century (CAL A Period 5, OGL A Period 8-9, OGL B Period 5, LEL A Period 10)

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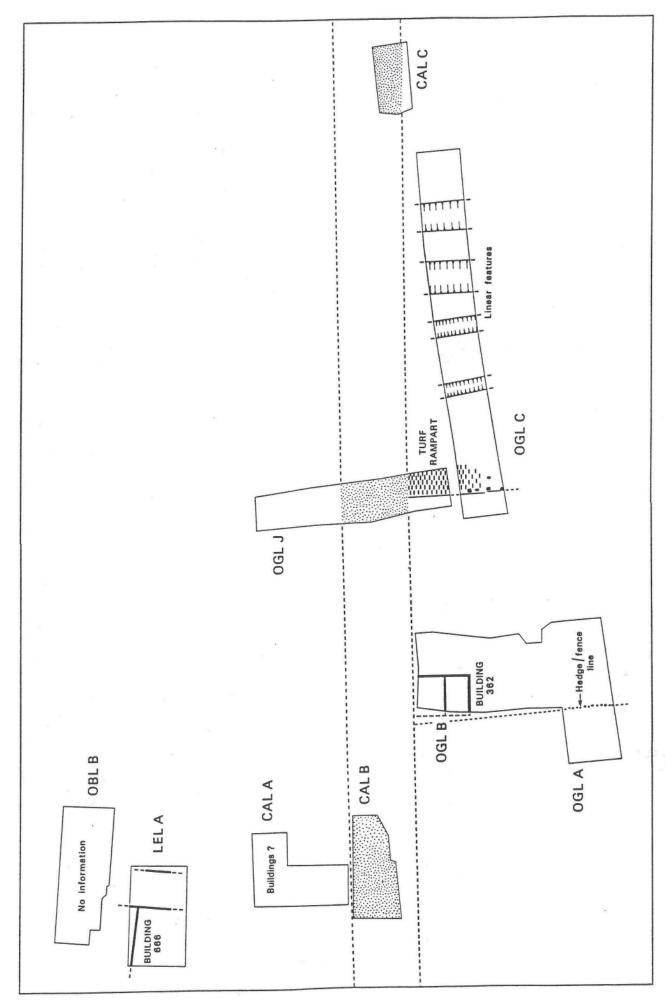


Fig 6 Schematic plan of major features thought to be broadly contemporary: the late second or early third century (OGL A Periods 9D-F, OGL B Periods 6B-E, OGL C Period 3, OGL J Period 2, LEL A Period 12B)

development. It is clear, however, that the turf rampart was not finished. No evidence for it was found on the northern side of the road in OGL J, and none was present either in OBL D further north.

The post-Roman to Anglo-Scandinavian periods

There is no reason to doubt that activity continued into the fourth century in the vicinity of LEL A. What is not clear from any of these Lanes sites is the nature and dating of deposits at the interface between the Roman and post-Roman periods, which at LEL A must occur somewhere between Periods 11 and 20. There were no 'dark earth' deposits, and features ostensibly of twelfthcentury or later date were in direct contact with those associated only with Roman finds. Yet some Anglian or Anglo-Scandinavian period activity would not be surprising. A Trewhiddle-style strap-end mould from CAL A (Fasc 2, p 221, No F15), the late eighth- to early ninth-century dendrochronology dates for CAL A, and a late tenth- to eleventh-century brooch from OGL A West (Fasc 2, p 197, No C12), together with features on the St Alban's church site on the opposite side of the road to LEL A (Keevil in prep), provide some pointers. It may be supposed that the junction of the CAL B-C Roman road and Scotch Street was a focus of settlement within this period. It is possible that a wattle building (668) in LEL A Period 15 belongs here.

The medieval and post-medieval periods

Medieval features were not well preserved. A large timber hall-like building (Building 669), perhaps dating to the later twelfth/thirteenth century, was present at LELA (Period 21). A series of pits in OGL B (Period 9), tentatively regarded as having an industrial function, perhaps for tanning, probably date to the early thirteenth century, as does the infill of a timberlined well (1237, Period 13) at OGL A. The road identified in CAL probably continued in use into the medieval period, when a number of pits containing twelfth-century pottery were dug into the surface (CAL E-F; below pp 90-2).

At none of the sites does the sequence continue unbroken into the post-medieval period. Given the history of the medieval town (Jones 1976; Summerson 1993), it is inconceivable that an area such as this, so close to the heart of the city, should have been unoccupied. Here is a case where the relative lack of archaeological information can be confidently ascribed to the removal of deposits in later times.

This process probably took place in the late seventeenth and early eighteenth centuries when the Scotch Street frontage was gradually rebuilt in brick. An example of this can be seen at LELA, the site of No. 65 Scotch Street.

CHAPTER 2 INTRODUCTION AND LIST OF ROMAN FABRICS

by ML Hird

Introduction and Methodology

About 14,000 sherds of Roman coarse and fine wares (excluding samian ware), amphorae and mortaria, weighing approximately 376kg, were recovered from Crown and Anchor Lane Trenches A and B, Old Grapes Lane Trenches A and B, Lewthwaite's Lane Trenches A and B and Old Bush Lane Trenches B.

The pottery, including the unstratified material, was recorded by context, and a computer database was created using DBASE III+. The pottery was quantified by weight and sherd count, and fabric, form, rim diameters and percentages, decoration, mending, sooting and residues were recorded. This information is available in the site archive.

The fabrics are listed below, with a brief discussion and lists of the illustrated forms. A generally accepted date range is given for each fabric, this being the date range for the occurrence of the fabric in the north of England. Where fabrics have common names, these have been included, together with the Carlisle fabric number. It should be noted here that the fabric numbers are not given in Taylor 1991, 337-42; recent work on the Carlisle fabric series has necessitated re-numbering. Coarse and fine ware fabrics are numbered from 1, amphora fabrics from 200 and morarium fabrics from 300. With a few notable exceptions, for example BB1 (Fabric 1), all the coarse wares are wheel thrown unless otherwise stated.

Discussions of the stratified pottery by site and period are given in Chapter 3; information on the samian ware, taken from Chapter 4 below and the archive report by B Dickinson, is included. Selected pottery is catalogued and illustrated where appropriate. Tables for each site present the data for all fabrics, expressed as percentages of sherd counts to facilitate direct comparison between groups. Tables of average sherd weight for each site are also given for the coarse and fine wares, mortaria and amphorae. A brief discussion of the coarse ware graffiti, by R S O Tomlin, concludes Chapter 3.

The samian ware is discussed in detail in Chapter 4, and the stamped mortaria in Chapter 5.

A general overview of the Roman pottery can be found in the monograph (Hird *et al* 2000, 123-38).

Intrusive and Residual Pottery

Intrusive pottery does not appear to constitute a particular problem for the southern Lanes sites; a very few medieval sherds were found among stratified Roman assemblages and their presence is noted in the appropriate sections in Chapter 3.

Residuality is much more of a problem, particularly when, as here, much of the site chronology is based upon the dating of ceramic assemblages. The problems of residuality in the medieval period are discussed below in Chapter 6 (pp 85-6). Some Roman levels also show high levels

of residuality, indicated by the association of well-dated pottery types with obviously later material, as well as by the occurrence of sherds from the same vessels in different periods. The average sherd sizes, tabulated in Chapter 3 may also give a guide to the degree of residuality, testifying as they do to the amount of soil movement and disturbance.

Residuality causes particular difficulties in identifying the latest Roman deposits and distinguishing them from possible post-Roman levels. At OGL A West, Period West 3, despite the absence of medieval pottery, may well post-date the Roman period, for example. At LELA, Periods 14 to 18 cannot be dated closer than to between the third- to twelfth century AD; the Roman pottery from these phases may be entirely residual.

List of Fabrics

Coarse/fine wares

Black Burnished ware 1 (BB1): Fabric 1

(Williams 1977)

Small amounts of BB1 occur in OGLA Period 5 (a lid, Fig 12, 28), OGLB Period 5A (a cooking pot, Fig 25, 116), and LELA Period 7 (an unusual flanged bowl, Fig 42, 269). The lid and flanged bowl are unusual vessels, and could indicate early strays to the site rather than organized supply, which appears to begin in Period 6 at OGLA, Period 5C at OGLB and Period 8E at LELA. There is no reason to suppose that Carlisle is any different from the rest of the Roman North of England, with its supplies of BB1 beginning in the early Hadrianic period (Williams 1977).

BB1 supplies to The Lanes sites continued through the Roman occupation of the sites (see Chapter 3). The majority of the types present are of second-century date; only OGL A Periods 12 and West 1 to 3 and LEL A Period 18 have types which date to the third or fourth centuries.

A cooking pot from OGL A has graffiti, inscribed after firing (Fig 13, 32 and Fig 50, 1).

Date range: early/mid second-fourth century

Dishes: Fig 8, 9; Fig 15, 64-6; Fig 16, 81; Fig 18, 89;

Fig 27, 143; Fig 29, 158-61; Fig 30, 175-7; Fig 31, 180-2; Fig 33, 196; Fig 35, 210; Fig 37, 223; Fig 33, 196; Fig 35, 210; Fig 37, 223; Fig 38, 227-8; Fig 43, 291-2; Fig 44, 304

Bowls/dishes: Fig 27, 142; Fig 33, 195; Fig 34, 205

Bowls: Fig 13, 33; Fig 15, 61-3; Fig 29, 157; Fig 33,

194; Fig 42, 269; Fig 49, 339

Jars Fig 14, 39; Fig 29, 156

Small jars/beakers: Fig 14, 40-1

Cooking pots: Fig 13, 31-2; Fig 15, 54-60; Fig 16, 80; Fig 18,

 $88; Fig\, 25, 116; Fig\, 26, 129\text{-}30; Fig\, 34, 204;$

Fig 45, 313-4; Fig 49, 338

Jugs: Fig 26, 131; Fig 38, 226 Lids: Fig 11, 27; Fig 12, 28

Black Burnished ware 2 (BB2): Fabric 2

(Williams 1977)

BB2 is only present in small quantities (see Chapter 3) but it is distributed over most of these Lanes sites, occurring in OGL A Periods 8-9, 10, 12 and West 1 and 3, OGL B Periods 6A to 6E and 7, OGL C Period 2 and LEL A Periods 11 and 18.

Except for a cooking pot from OGLA Period West 3 (not illustrated), the stratified vessels are all dishes: Gillam and Mann 22 from OGLA Period 12A, Gillam 312 from OGLB Period 7, and Gillam 317 from OGLA Period West 1 and OGLC Period 2. All except Gillam 312 are the earlier forms of BB2, traditionally dated to the Antonine period (Williams 1977). Gillam 312 is a later form, dated to AD 180-240. See also OGLA Period 10, p 28 below.

Date range: mid second-mid third century

Dishes: Fig 16, 82; Fig 18, 90-91; Fig 29, 162; Fig 31,

183; Fig 35, 211

Rustic ware: Fabric 3

Hard mid-grey fabric with darker grey outer surface and rusticated decoration.

The majority of the rustic ware is in this reduced fabric, with only 11 sherds in Fabric 5 (see below). Rustic ware is traditionally regarded as a pre-Hadrianic ware, which does not appear to be made much after *c* AD 130 (Gillam 1970, types 95-98). At OGL A it is present in Periods 6 to 10, and residually in Periods 12 and West 1. It is present in Periods 2, 4 to 5B, 6 and 7 at OGL B, and Periods 6 to 12 at LEL A. Of the 55 sherds present at LEL A, 38 occur in Periods 6 and 7, dated to the late first/early second century.

Date range: late first/early second century

Jars: Fig 8, 10-2; Fig 25, 117; Fig 41, 245-6; Fig 42,

270

Fabric 4

Oxidized orange ware with white/cream slip. Usually a fairly sandy fabric. Local ware; could well be the product of more than one source. First occurs in OGL A Period 6, OGL B Period 3 and LEL A Period 2C.

Date range: late first-second century

Flagons: Fig 14, 42; Fig 29, 163; Fig 38, 229; Fig 43,

293; Fig 45, 315

Rustic ware: Fabric 5

Fine textured, pinkish-orange fabric, with rusticated decoration. Source unknown. Oxidised rustic ware only occurs in OGL B Period 5 and 6, which produced 11 sherds (perhaps all belonging to one vessel?).

Date range: late first-early second century

Fabric 6

Hard white fabric with no visible inclusions and smooth outer surface. Source unknown.

Date range: uncertain

Flagon: Fig 31, 184

Fabric 7

Hard, fine textured, pinkish-buff fabric with mica-dusted surface. Local ware? An uncommon fabric, occurring in OGL A Period 5 and OGL B Period 6.

Date range: late first-early second century

Fabric 8

Hard, granular-textured white fabric with pinkish slip externally and smooth surfaces. Source unknown.

Date range: uncertain

Beaker?: Fig 13, 34

Terra Nigra: Fabric 9

(Rigby 1973)

Hard, pale pinkish-grey fabric with shiny black outer surface. Terra Nigra is a first-century ware, dated to *c* AD 40-85, which has also been found in Carlisle in the ditch of annexe to the first Flavian fort (Hird 1992, fig 7.1), and at Annetwell Street (Hird in prep a), where types 296 and 297 occur in Period 5 contexts. Only three sherds came from these Lanes sites, from OGL A Period 6, OGLB Period 5B and LEL A Period 6.

Date range: first century

Fabric 10

Fine-textured grey fabric with sandwich core, light grey/dark grey/light grey, and very shiny external surface. Local ware. An uncommon fabric which only occurs in OGL A Period 6.

Date range: first century

Unidentified Grey wares: Fabric 11

The products of several sources, many or all of which are likely to be local.

Date range: first-fourth century

Dishes: Fig 21, 99; Fig 31, 186; Fig 33, 198-201;

Fig 34, 209; Fig 45, 318; Fig 49, 343-4

Bowl/dish: Fig 34, 206

Bowls: Fig 16, 85; Fig 21, 97-8, Fig 24, 110; Fig 29,

167-8; Fig 30, 179; Fig 33, 197; Fig 34, 207-8; Fig 35, 212; Fig 40, 235; Fig 41, 250; Fig 42, 276-7; Fig 43, 298-9; Fig 44, 308; Fig 47,

328; Fig 48, 335

Jars: Fig 7, 1-2; Fig 8, 13-4; Fig 9, 16; Fig 10, 21-

2; Fig 13, 35; Fig 14, 43-5; Fig 15, 67-71; Fig 16, 83-4; Fig 21, 96; Fig 22, 101; Fig 26, 132; Fig 27, 144-6; Fig 28, 151-2; Fig29, 164-6; Fig 30, 178; Fig 31, 185; Fig 40, 232-4; Fig 41, 247-9; Fig 42, 271-5; Fig 43, 294-7; Fig 44, 305-6; Fig 45, 316-7; Fig 48, 334;

Fig 49, 340-1

Jar/beaker: Fig 48, 333

Beaker: Fig 10, 23 Flask: Fig 25, 119

Flagon: Fig 47, 327

Lids: Fig 12, 29; Fig 14, 46; Fig 15, 72-3; Fig 26,

133; Fig 41, 251-3

Tazza: Fig 33, 202

Head pots: Fig 19, 93; Fig 29, 342

Triple vases: Fig 44, 307; Fig 46, 324

Unidentified oxidized wares: Fabric 12

The products of several sources, many or all of which are likely to be local. One vessel has a graffito, inscribed after firing (Fig 50, 4).

Date range: first-fourth century

Dishes: Fig 9, 18; Fig 15, 74; Fig 42, 287; Fig 49,

345-6

Bowl/dish: Fig 8, 15

Bowls: Fig 7, 5-6; Fig 14, 48; Fig 22, 103; Fig 23,

106; Fig 24, 112; Fig 26, 137; Fig 31, 187; Fig 32, 190; Fig 35, 214; Fig 37, 224; Fig 40, 238-41; Fig 41, 255-60; Fig 42, 282-6; Fig 43,

301

Bowl?: Fig 27, 148

Jars: Fig 7, 4; Fig 9, 17; Fig 22, 102; Fig 25, 122;

Fig 26, 134-6; Fig 29, 169; Fig 35, 213; Fig 38, 230; Fig 40, 237; Fig 41, 254; Fig 42,

279-81; Fig 43, 300

Flagons: Fig 7, 3; Fig 13, 36; Fig 14, 47; Fig 23, 105;

Fig 24, 111; Fig 25, 120-1; Fig 32, 189; Fig 36, 219; Fig 40, 236; Fig 42, 278; Fig 47, 329

Flagon/jar: Fig 45, 319

Lids: Fig 7, 19; Fig 12, 30; Fig 13, 37; Fig 14, 49;

Fig 26, 138; Fig 27, 147; Fig 32, 191; Fig 35,

215; Fig 41, 261-2

Fabric 13

Hard oxidized orange fabric which contains a fair amount of white grit (and some larger inclusions), making the surface pimply. Local ware. First occurs in OGL A Period 6, OGL B Period 3 and LEL A Period 6.

Date range: first-second century

Dishes: Fig 14, 50; Fig 25, 125; Fig 35, 216; Fig 43,

302

Bowls: Fig 24, 113-4; Fig 25, 124; Fig 26, 139;

Fig 29, 171

Jars: Fig 23, 107; Fig 25, 123; Fig 28, 153; Fig 29,

170

Lid: Fig 26, 140

Rough-cast ware: Fabric 14

Fine textured pink fabric with rough-cast decoration. Some times has a darker pinkish-brown slip. Local ware? Possibly a local imitation of imported rough-cast beakers, such as Fabric 15. First occurs in OGLA Period 7-8, OGL B Period 5C and LEL A Period 8.

Date range: late first-second century

Beakers: Fig 15, 75-6; Fig 28, 154; Fig 45; 320

Rough-cast ware: Fabric 15

(Anderson 1980)

Fine, hard orange fabric with grey core and purplish grey slip and rough-cast decoration. Anderson's North Gaulish Fabric 1. Earliest occurrences are OGLA Period 6 and LELA Period 8.

Date range: late first-second century

Beakers: Fig 43, 303; Fig 44, 309

Fabric 16

Hard, fine-textured pink fabric with deeper pink, slightly micaceous outer surface. Local ware? An uncommon fabric which only occurs in OGL A Period 8-9.

Date range: uncertain

Severn Valley ware: Fabric 17

(Webster 1976)

Hard orange fabric with purple grey core and mica visible in surfaces. May have burnished lattice or line decoration. Not common on southern Lanes sites; occurs in OGL A Period 7-8, OGL B Period 6 and LEL A Period 18.

Date range: first-fourth century

Fabric 18

Soft, creamy buff fabric, rather sandy in texture. Appears to be used only for small lids which are usually regarded as 'amphora stoppers'. Imported. Not common on southern Lanes sites, only present at LEL A where the earliest occurrence is in Period 10.

Date range: uncertain

'Amphora stoppers'/lids: Fig 45, 321; Fig 48, 336

Fabric 19

Granular-textured buff fabric with occasional red inclusions and smooth pinkish-buff surface. Source unknown. An uncommon fabric only occurring at OGL A and B; first occurrence is in Period 7-8 at OGL A and Period 4 at OGL B. Date range: uncertain

Fabric 20

Granular-textured buff fabric with occasional red inclusions and smooth pinkish-buff surface. Source unknown. An uncommon fabric only occurring at OGL A and B; first occurrence is in Period 7-8 at OGL A Period 8-9.

Date range: uncertain

Nene Valley Colour-coated ware: Fabric 21

(Howe et al 1980)

Fairly hard white or pink fabric with colour-coat of various colours from dark grey to orange-brown. Uncommon in stratified contexts from these Lanes sites. First occurs in OGLA Periods 11 and West 1, OGL B Period 8A and LELA Periods 14 to 17.

Date range: uncertain

Beaker: Fig 49, 347

Huntcliff ware: Fabric 22

Soapy-textured, calcite-gritted grey or black fabric, heavily charged with white calcite grit or having voids left by dissolved grit. Hand-made. Found stratified only in OGL A West, where the earliest occurrence is in Period 1.

Date range: fourth century

Jar: Fig 20, 94

Grev Crambeck ware: Fabric 27

(Corder and Birley 1937; Evans 1989)

Very pale grey fabric with lead-grey surfaces. First occurs in OGL A Period West 2, OGL B Period 8A and LEL A Periods 14 to 17.

Date range: fourth century

Dish: Fig 20, 95
Bowl: Fig 21, 100

Parchment Crambeck ware: Fabric 28

(Corder and Birley; Evans 1989)

Hard, yellowish-white fabric usually with re/brown painted decoration. The only stratified occurrence of this ware is in OGL A Period West 2.

Date range: later fourth century

Rough-cast ware: Fabric 29

Hard, fine-textured, pinkish-buff fabric with dark grey slip and fine rough-cast decoration. Import. First occurs in OGL A Period 5, OGL B Period 5B and LEL A Period 6.

Date range: late first-second century

Beakers: Fig 7, 7-8; Fig 10, 24; Fig 15, 77; Fig 37,

225; Fig 42, 288

Rhineland?: Fabric 30

Very fine white fabric with orange/red slip and barbotine decoration. First occurs in OGL B Period 5A and LEL A Period 7.

Date range: uncertain

Rhineland: Fabric 31

Very fine white fabric with brown or grey slip and rough-cast or barbotine decoration. Occurs first in OGL A Period 6, OGL B Period 4 and LEL A Periods 2 to 5. Probably the commonest of the rough-cast fabrics.

Date range: late first-second century.

Beakers: Fig 9, 20; Fig 14, 51; Fig 24, 115; Fig

29, 172; Fig 40, 242; Fig 41, 263; Fig

42, 289; Fig 44, 310

Fabric 32

Fine, granular-textured, whitish-buff fabric with grey/brown slip and barbotine decoration. Source unknown. An uncommon fabric, occurring first in OGLA Period 6 and LEL A Period 10.

Date range: uncertain

Fabric 33

Granular-textured, whitish-cream fabric with brownish-orange slip and scale-pattern decoration. Regional import? An uncommon fabric, occurring only in OGL A Period 12.

Date range: uncertain

'Rhenish' ware: Fabric 34

(Greene 1978)

Very hard orange-grey/orange fabric with glossy black slip. Trier. The only stratified occurrences of this are in OGL A Periods West 2 and 3, and LEL A Period 18.

Date range: later second-mid third century

'Rhenish' ware: Fabric 35

(Greene 1978)

Very fine textured, hard pink fabric with glossy black slip. Gaulish. The only stratified occurrences are in OGL A Period West 1 and 3, and OGL C Period 2.

Date range: later second-mid third century?

Parisian ware: Fabric 37

(Elsdon 1982)

Fine-textured mid-grey fabric with smooth, shiny black surface; externally stamped decoration. An uncommon ware found only in OGL B Periods 5C and 6.

Date range: second century Bowl: Fig 27, 150 Beaker: Fig 27, 149

Lyon ware: Fabric 38

(Greene 1978)

Fine, granular-textured, cream fabric with beigey-brown metallic slip and sand rough-cast decoration.

Lyon ware is a first century ware, occurring on sites founded up to *c* AD 75 (Young 1980), including Agricolan sites in Scotland (Dore 1981). The ware has been found at Blackfriars Street (Taylor 1990), Castle Street (Taylor 1991) and Annetwell Street (Hird in prep a, types 250-252). Almost all the Lyon ware, a total of 18 sherds, come from LEL A Periods 2 to 5, 6 and 7 (Table 16). There was also one sherd from OGL B Period 5A.

Date range: first century

Beakers: Fig 40, 243; Fig 41, 264

Fabric 39

Granular-textured, pinkish-orange fabric with grey slip and scale pattern decoration in barbotine. Regional import? An uncommon fabric, only occurring in OGL B Period 5C.

Date range: uncertain

Fabric 40

Fine-textured buff fabric with smooth buff-brown surface very smooth internally. Source unknown. An uncommon fabric, occurring only in OGL C Period 3?

Date range: uncertain

Dish: Fig 36, 220

Fabric 41

Hard white fabric with quartz sand inclusions which give surface a pimply effect. Source unknown. An uncommon fabric, only occurring in OGL C Period 3?

Date range: uncertain

Dish: Fig 36, 221

Fabric 42

Hard pinkish-buff fabric with some quartz sand inclusions. Red-painted decoration. Regional import? An uncommon fabric, only occurring in CAL A Period 3B.

Date range: uncertain

Pompeian Red ware: Fabric 43

(Peacock 1977b, Fabric 4)

Hard, pale grey fabric with grey core and thick maroon

red slip on inner surface. Only occurs in CAL A Period 3A.

Date range: first century

Fabric 44

Hard, fine-textured pale grey fabric with very smooth, darker grey, shiny metallic surfaces. Rouletted decoration. Local ware? Only occurs in CAL A Period 5 and LEL A Periods 8 and 9.

Date range: uncertain

Bowl: Fig 10, 25

Dish: Fig 44, 311

Fabric 45

Hard, sandy dark grey fabric with smooth, shiny inner surface and narrow band of paler grey beneath surface. Source unknown. An uncommon fabric, only occurring in LEL A Period 6.

Date range: uncertain

Bowl: Fig 41, 265

Fabric 46

Hard, granular-textured, pinkish-buff fabric with quartz sand inclusions. Mica-dusted surfaces. Regional import? An uncommon fabric, only occurring in LEL A Periods 6 and 10.

Date range: uncertain

Bowl: Fig 41, 266

Fabric 48

Fine-textured, brownish-grey fabric with micaceous grey surface. Local ware? This ware only occurs at LELA, where it first appears in Period 10.

Date range: uncertain

Jar: Fig 47, 330

Amphorae

Gaulish: Fabric 200

(Peacock and Williams 1986, Class 27)

Granular-textured, greyish-cream fabric with occasional red particles, with pinkish-orange wash on outer surface. An uncommon fabric, found only in OGL A Period 6 and OGL B Period 4.

Date range: uncertain

Fabric 201

Hard buff fabric with copious grit giving a pimply feel to surface. The surface also has a soapy feel. Amphora? Source unknown. An uncommon fabric, found only in OGL A Period 6.

Date range: uncertain

South Spanish: Fabric 202

Smooth, fine-textured pink fabric with greyish outer surface. Handles may have grey core. Slightly micaceous. First occurs in OGL A Period 5, OGL B Periods 6A to 6E and LEL A Period 7.

Date range: late first-early second century

Amphora: Fig 45, 322

Fabric 203

Hard, dense orange fabric with paler surfaces. Amphora? Source unknown. First occurs in OGLA Period 5 and OGL B Period 4.

Date range: uncertain

North Africa?: Fabric 204

(Peacock and Williams 1986, Class 11)

Hard, fine textured, micaceous pinkish-orange fabric with paler but very micaceous outer surface. First occurs in OGL A Periods 3 and 4, OGL B Period 6F and LEL A Period 10.

Data range: first-second century

Amphora: Fig 14, 52

Gaulish?: Fabric 205

(Peacock and Williams 1986, Class 27)

Hard, sandy orange fabric with thick cream slip. An uncommon fabric, first occurring in OGL A Period 8-9 and OGL B Periods 6A to 6E.

Date range: late first-mid third century

Fabric 206

Fine-textured, dull buffish-grey fabric with slight micaceous glint. Source unknown. First occurs in OGL A Period 8-9, OGL B Period 5A and LEL A Periods 2 to 5

Date range: uncertain

South Spanish: Fabric 207

(Peacock and Williams 1986, Class 25)

Rough, sandy, flaky buff-pink fabric with creamy outer surface. The commonest amphora fabric present at these Lanes sites. First occurs in OGL A Periods 3 and 4, OGL B Periods 4 and LEL A Period 6. One vessel has a potter's signature (p 57 and Fig 50, 2)

South Spanish: Fabric 208

(Peacock and Williams 1986, Class 25)

Hard, sandy outer fabric with cream slip. First occurs in OGL A Period 7-8, OGL B Periods 6A to 6E and LEL A Period 9. One vessel has a graffito (Fig 50, 3)

Date range: first-third century

Amphora: Fig 14, 53

Fabric 209

Fairly fine-textured, pinkish-orange fabric with red slipped outer surface. Amphora? Source unknown. An uncommon fabric which only occurs in CAL B Period 3A and LEL A Periods 14 to 17.

Date range: uncertain

Gaulish?: Fabric 210

Very hard greyish-white fabric with black particles and yellowish outer surface. An uncommon fabric only present in OGL J Period 2.

Date range: uncertain

'Carrot' amphora: Fabric 211

(Peacock and Williams 1986, Class 12)

Greyish-brown sandy (quartz) fabric. An uncommon fabric which only occurs in LEL A Periods 6,7 and 11 (possibly all one vessel).

Date range: first century

Amphora: Fig 46, 325

Mortaria

Carlisle/ Scalesceugh area: Fabric 301

often very hard, dense dark red-brown to pink brown fabric with some sine, mainly quartz inclusions. Inclusions vary in size and quantity. Usually a cream or buff slip but occasionally a raetian, red-brown slip on flange and bead. Trituration grit consists of white quartz, red-brown and occasionally blackish material. First occurs in OGLA Period 6, OGL B Period 3 and LEL A Period 7.

Date range: late first-second century

Mortaria: Fig 17, 86-7; Fig 18, 92; Fig 28, 155; Fig 29,

173; Fig 31, 188, Fig 32, 192-3; Fig 33, 203; Fig 36, 222; Fig 44, 312; Fig 49, 349

Carlisle/Scalesceugh area: Fabric 302

Hard, textured buff fabric with thin orange-brown core or slightly more orangey below the surface, with thin grey core moderate, mainly quartz inclusions; usually a buff slip or surface. Trituration grit consist of transparent and white quartz, red-brown sandstone and blackish material, possibly iron-rich. A few examples have softer and more granular fabric. Less common than 301. First occurs in OGL A Period 6 and OGL B Period 5B.

Date range: late first-second century

Carlisle/ Old Penrith area: Fabric 303

Fairly fine textured, orange-brown fabric with some fairly evenly distributed, ill-sorted inclusions. Trituration grit consists of quartz, sandstone and blackish and grey material. Both hardness and texture vary in this group and it certainly contains the products of more than one workshop. Surface treatment varies; cream/buff or self-coloured slip. Lesson common than Fabric 301. First occurs in OGL A Period 6.

Doto rongo: loto f

Date range: late first-second century

Mortaria: Fig 13, 38; Fig 35, 218

Carlisle/ Old Penrith area: Fabric 305

Identical to fabric noted in mortaria from recent excavations at Old Penrith. Probably made in Cumbria within about a 15-mile radius of Carlisle. Hard orange-brown fabric with fairly frequent transparent and whitish quartz inclusions and a few blackish inclusions. Trituration grit consists of abundant white quartz with some gold mica and occasional brown and blackish material, possible ironstone or iron slag. The tempering sometimes makes the surface slightly pimply. First occurs in OGL B Period 4 and LELA periods 2 to 5.

Date range: late first-second century

Mortaria: Fig 25, 127; Fig 26, 141; Fig 40, 244

Carlisle/ Scalesceugh area: Fabric 306

Hard, fine textured orange-brown fabric, sometimes with grey core, few inclusions. Similar to Fabric 304 but seems to have only white trituration grit. Less common than fabric 301. First occurs in OGL A Period 6.

Date range: late first-second century

Carlisle/ Old Penrith area: Fabric 312

Coarse, granular orange-brown fabric, sometimes with grey core, and with fairly frequent, ill sorted quartz inclusions Trituration grit consists of quartz and black iron-rich material

Date range: late first-second century

Gallia Belgica: Fabric 313

More than one pottery, probably all in Gallia Belgica and including one in the Pas de Calais. Fine textured, usually softish, white to brownish-cream fabric, sometimes with a pink core; tiny quartz and flint inclusions. Trituration grit consists mainly of flint with occasional quartz and rare red-brown material. The considerable variation in colour and in rim types associated with this fabric suggest more than one pottery is involved.

The rim types represented are Gillam 238, Gillam 255 and Hartley (1977) Group 1. First occurs in OGL A Period 5-6, OGL B Period 3 and LEL A Periods 2 to 5.

Date range: late first century

Mortaria: Fig 25, 128; Gig 35, 217; Fig 41, 267

Probably Rhineland: Fabric 314

Hard, very fine textured cream fabric with ill sorted transparent and pinkish quartz inclusions. Trituration grit consists largely of translucent quartz with occasional feldspar and red-brown material. Surface notably smooth to the touch. An uncommon fabric, only occurring in OGL A Period 7-8 and OGL B Period 6F.

Date range: second-third century

South Carlton, Lincoln: Fabric 316

Probably other sites in vicinity also. Usually micaceous, fairly fine textured greyish-cream fabric with some fine quartz and red brown inclusions. Trituration grit may include transparent and pinkish quartz, sandstone, haematite, redbrown and blackish, probably iron-rich material. Often has a brownish slip. First occurs in OGL A Period 6 and OGL B Period 4.

Date range late first-second century

Mortarium: Fig 10, 26

Verulamium region: Fabric 320

Workshops at Little Munden (Bricket Wood), Brockley Hill Radlett and Verulamium. Unless the specific workshop is known, the term 'Verulamium region' is used. Granular, greyish-cream fabric, sometimes with pink core, sometimes with black core; abundant inclusions mostly of well sorted quartz, with rare orange brown, black and flint fragments. Trituration grit consists mostly of flint with some quartz and rare red-brown and black fragments. May have a self-coloured or buffslip. The fabric first occurs in OGLA Period 6, and OGL B Period 6A to 6E and LEL A Period 6.

Date range: late first century Mortarium: Fig 41, 268

Mancetter-Hartshill: Fabric 324

Usually fine textured, creamy white fabric, varying from a softish texture to very hard; sometimes with pink core. Usually self coloured, it may occasionally appear to have a pale buff slip. The range of fabric is quite wide, from that with scarcely any inclusions to fabric with moderate fairly small quartz, sparse red-brown and occasionally opaque white inclusions, and a fabric with a fair amount of ill-sorted black slag-like inclusions. Trituration grit consists

of hard red brown or/blackish, re-fired pottery fragments, with only very rare quartz fragments in mortaria later than AD 140. Mortaria earlier than AD 130 usually have mixed trituration grit in which quartz and sandstone are normal components. First occurs in OGL A Period 8-9 and LEL A Periods 14 to 17.

Date range: second-fourth century

Castor-Stibbington area (lower Nene Valley): Fabric 328

Hard, fairly fine textured, off white fabric with a pink or pale grey core; the quartz inclusions are often too small to be seen at x10 magnification; rare red-brown and/or black inclusions. Trituration grit consists entirely of ironstone. May be selfcoloured or may have a brownish slip. This is the most common mortarium fabric produced in the lower Nene Valley. An uncommon fabric here, only occurring in LEL A Period 18.

Date range: third-fourth century

Probably north-east England: Fabric 340

Brownish buff fabric, fairly frequent quartz inclusions; the fabric has some similarity in texture to the finer Verulamium region fabric. Buff slip. Trituration grit includes quartz and dark brown particles. An uncommon fabric, only present in LEL A Period 10.

Date range: uncertain

North-west England, not necessarily Carlisle: Fabric 350

Granular textured, pale brown fabric with orangey brown slip and frequent inclusions of quartz, red-brown and black material. Trituration grit is also mixed, quartz and red brown and black particles. An uncommon fabric, only present in LEL A Period 7.

Date range: late first-second century

Mortarium: Fig 42, 290

Little Chester, Derbyshire: Fabric 351

Fairly fine textured cream fabric with traces of a bright orange-buff surface slip; some randomly dispersed, small red-brown inclusions. Trituration grit includes irregular, ill sorted quartz. An uncommon fabric, only present in OGL B Period 6A to 6E.

Date range: second century Mortarium: Fig 29, 174

Northern England, probably Carlisle area: Fabric 352

Hard cream or creamy pink fabric with quartz sand and some red inclusions. Mixed quartz, red and grey trituration grit. First occurs in OGL B Period 5D and LEL A Period 10.

Date range: late first-second century

Fig 46, 326; Fig 47, 332; Fig 48, 337 Mortaria:

Oxford Colour-coated: Fabric 353

Hard, sandy, micaceous orange-brown fabric with a thick grey core and smooth red-brown slip externally. Trituration grit is rounded, translucent and grey, pink or white in colour. An uncommon fabric, only occurring in OGL A West.

Date range: fourth century?

Carlisle or Gloucester: Fabric 355

Fine textured, micaceous orange brown fabric; grey core thinning below bead. A few ill sorted and opaque red-brown slag like inclusions. Traces of matt self-coloured slip. No trituration grit survives on The Lanes example but there are traces of grit, mainly quartz on the flange. An uncommon fabric, only occurring in LEL A Period 1.

Date range: late first century Mortarium: Fig 39, 231

CHAPTER 3 SUMMARY OF THE ROMAN POTTERY BY SITE

by M L Hird

Crown and Anchor Lane Trench A

This site has two late first-century phases, Periods 2E and 3A, with Period 3B dating to the Hadrianic-Antonine period. The material from Period 5 does not appear to be much later in date, indicating that the activity on the site does not extend beyond the end of the second century.

Period 2E

This period produced one sherd of South Gaulish samian, dating to the early Flavian period.

Period 3A (Fig 7)

Some 162 sherd came from clay loam 80, which covered the entire site (Table 2). This is made up of reeded-rim bowls, ring-neck flagons, rough-cast beakers and jars, all typical of the late first century. It includes a fragment of a Pompeian Red ware dish (Fabric 43; not illustrated). Pompeian Red

ware dishes are present at Annetwell Street in the late/early second century (Hird in prep a).

The two fragments of amphora present were of the South Spanish origin, and the fragment of mortarium (not illustrated) is from a Gallo Belgic vessel (Fabric 313), dating to AD 70-100. The samian is entirely South Gaulish, and the latest vessel is a form 37 dated to c AD 85-110 (Fig 52, 1). Consequently this period could well date to the first century.

1	Fabric 11. Jar CAL A 80	Period: 3A
2	Fabric 11. Jar CAL A 80	Period: 3A
3	Fabric 12. Ring-neck CAL A 80	flagon Period: 3A
4	Fabric 12. Jar CAL A 80	Period: 3A
5	Fabric 12. Reeded-rin CAL A 80	m bowl Period: 3A
6	Fabric 12. Reeded-rin	m bowl Period: 3A

Table 2
Roman pottery from CAL A, expressed as percentages of sherd numbers

		Period				
Fabric group	Fabric	2E	<i>3A</i>	3B and 3C	4	5
Coarse/ fine ware	BB1, Fabric 1 Rustic ware, Fabric 3 Fabric 4 Fabric 6 Grey ware, Fabric 11 Oxidized ware, fabric 12 Fabric 13 Fabric 15 Fabric 29 Fabric 31 Fabric 42 Pompeian Red ware, Fabric 43 Fabric 44		1.2 1.9 15.4 46.9 4.9 1.2	4.3 5.4 1.1 21.5 34.4 1.1	2.6 2.6 1.3 20.5 34.6 1.3	2.8 0.9 7.8 35.5 18.9 2.3 0.5 0.5 0.9
Mortaria	Carlisle/ Scalesceugh, Fabric 301 Carlisle/ Scalesceugh, Fabric 302 Old Penrith, Fabric 305 Gallia Belgica, Fabric 313 Lincoln, Fabric 316 Mancetter-Hartshill, Fabric 324		0.6	1.1	2.6	2.3 0.5 0.5 0.9
Amphorae	Fabric 203 Fabric 207		1.2	3.2	5.1	0.5 2.8
Samian	South Gaulish Central Gaulish	100.0	25.9	19.4 7.5	14.1 14.1	4.6 17.1
Number of sherds	•	1	162	93	78	217

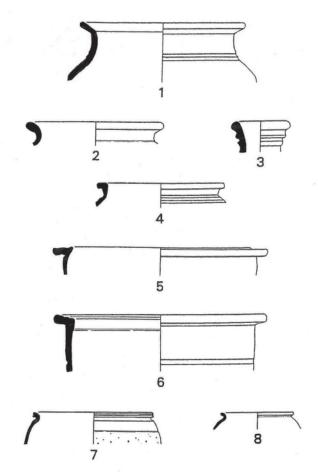


Fig 7 Roman pottery from CAL A Period 3A (scale 1:4)

- 7 Fabric 29. Rough-cast beaker CALA 80 Period: 3A
- 8 Fabric 29. Rough-cast beaker CALA 80 Period: 3A

Periods 3B and 3C (Fig 8)

Periods 3B and 3C produced 93 sherds (Table 2), most of which are of late first/early second-century date. They do, however, include a BB1 dish (Fig 8, 9) of the early/mid second century in soil layer 71, which also yielded two Central Gaulish samian fragments of forms 18/31 and Curle 11, dating to the Hadrianic or early Antonine period. Turf deposits 73 and 75, although producing only first-century and Trajanic samian respectively, also contained BB1.

Table 3
Roman pottery from CAL A: average sherd weights (in g)

Period	Coarse/fine wares	Mortaria	Amphorae
3A	12	60	50
3B and 3C	12	-	60
4	12	65	80
5	15	56	286

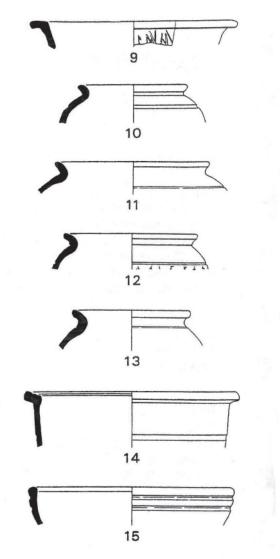


Fig 8 Roman pottery from CAL A Period 3B (scale 1:4)

The three sherds of amphora present were all South Spanish (Peacock and Williams 1986, Class 25).

9	BB1, Fabric 1. Dish CAL A 71	Period: 3B
10	Rustic ware, Fabric 3. Jar; no rus CAL A 71	stication present. Period: 3B
11	Rustic ware, Fabric 3. Jar. Soote CAL A 71	d Period: 3B
12	Rustic ware, Fabric 3. Jar. Soote CAL A 71	d Period: 3B
13	Fabric 11. Jar. CAL A 71	Period: 3B
14	Fabric 11. Jar CAL A 71	Period: 3B
15	Fabric 12. Bowl/dish, sooted CAL A 71	Period: 3B

Period 4 (Fig 9)

Period 4 produced 78 sherds (Table 2), the majority (72%) from soil spread 52 in Period 4A. The group includes fragments of BB1cooking pot (not illustrated), as well as grey jars and lids, oxidized vessels and a beaker (Fig 9,

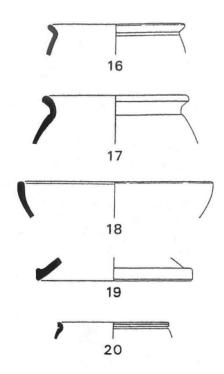


Fig 9 Roman pottery from CAL A Period 4 (scale 1:4)

20) of probable Rhineland origin. The amphorae are all South Spanish.

There is a mortarium of local manufacture, dating to the period AD 130-65. The latest samian includes a Central Gaulish form 18/31 or 31 of Hadrianic or early Antonine date and a form 27, stamped by Bonoxus and dated AD 125-50 (stamp No. 10, p 74 below).

It is suggested that this material was dumped elsewhere and then imported to this area. The average sherd weight is 12g, a respectable size for Lanes material where the average coarse/fine ware sherd is only 18g (Table 3). The average mortarium sherd from Period 4 weighs 65g, which compares with 72g from these Lanes sites as a whole. The amphora sherd size of 80g is only half of the 160g average for these sites, however.

There are two small intrusive medieval sherds from gravel layer 48, Period 4B.

16	Fabric 11. Jar CAL A 52	Period: 4A
17	Fabric 12. Jar CAL A 52	Period: 4A
18	Fabric 12. Dish CAL A 52	Period: 4A
19	Fabric 12. Lid CAL A 52	Period: 4A
20	Rhineland, Fabric 3 CAL A 52	1. Beaker Period: 4A

Period 5 (Fig 10)

There are 217 sherds from Period 5, including those from features which can be related to one another stratigraphically as 5A and 5B (Table 2). The groups dating to this period contain the second-century types frequently found among the pottery from The Lanes, including BB1 (although it only makes up 2.8% of the pottery.) Grey jars (Fig 10, 21-2), beakers (Fig 10, 23) and a rough cast beaker (Fig 10, 24) are present, and a bowl in Fabric 12 (not illustrated) of Gillam form 195, dated to *c* AD 140-200.

Pit 67 (fill 66) produced a bowl of unusually fine grey fabric (Fabric 44; Fig 10, 25), as well as a mortarium in Fabric 316 (Fig 10, 26), produced in the Lincoln area around AD 90-120, and two burnt sherds of possible Mancetter-Hartshill origin. Another mortarium stamp (Fig 61, 1) on a locally-produced vessel, from surface 62, is dated to c AD 100-140 (p 81 below).

The samian ware ranges from Trajanic to Antonine in date; the latest vessel is a form 37 bowl in the style of the Paternus V group, dated *c* AD 160-90, from pit 77 (fill 76). The period as a whole could date to the second half of the second century.

21	Fabric 11. Jar CAL A 66	Period: 5
22	Fabric 11. Jar CAL A 66	Period: 5
23	Fabric 11. Beaker CAL A 66	Period: 5
24	Rough-cast ware, Fabric 2	9. Beaker

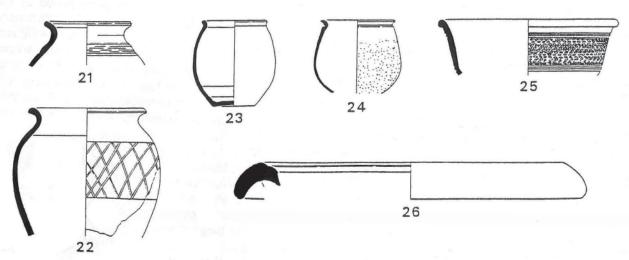


Fig 10 Roman pottery from CAL A Period 5 (scale 1:4)

	CAL A 66.2	Period: 5
25	Fabric 44. Bowl	
	CAL A 66	Period: 5
26	South Carlton, Lincoln, 1 (No 2, p 81 below)	Fabric 316. Mortarium with stamp
	CAL A 66	Period: 5

Crown and Anchor Lane Trench B

The little pottery recovered all appears to be Hadrianic/Antonine or slightly later in date (Table 4). Periods 3B and Post-3B have a certain amount of residual material, dating from the late first/early second century. Average sherd weights are given in Table 5.

Period 2

Period 2 produced only 10 sherds, including one grey cooking pot rim from road 3, and a sherd of East Gaulish form 37 dated to the late second or first half of the third century from surface 12.

Road 3 also produced 17 medieval sherds, which are presumed to be intrusive here.

Table 4
Roman pottery from CAL B, expressed as percentages of sherd numbers

			Peri	od
Fabric Group	Fabric	2	3	Post-3B
Coarse/fine ware	BB1, Fabric 1 Rustic ware, Fabric 3 Fabric 4 Grey ware, Fabric 11 Oxidized ware, Fabric 12	20.0 20.0		11.8 5.9 29.4 23.5
Mortaria	Gallia Belgica, Fabric 313		10.0	
Amphorae	Fabric 202 Fabric 209		10.0	17.6
Samian	South Gaulish Central Gaulish East Gaulish	40.0 20.0	20.0	5.9 5.9
Number of she	rds	10	10	17

Table 5
Roman pottery from CAL B: average sherd weight (in g)

Period	Coarse/fine wares	Mortaria	Amphorae
2	10	35	-
3	20		-
Post-3B	18		28

Period 3

Period 3 also produced only 10 sherds (Table 4). The coarse pottery was not closely datable. The mortarium fragment was of a Gallo-Belgic vessel of the late first century, residual in this period. There are two samian rims of form 18/31 or 31 dating to the Hadrianic or early Antonine period.

Period Post-3B (Fig 11)

There are 17 sherds, including Rustic ware (Fabric 3) as well as a fragment of BB1 cooking pot and a more unusual BB1 form, a lid (Fig 11, 27). The latest samian is a Central Gaulish form 30 or 37 of Hadrianic or early Antonine date.

BB1, Fabric 1. Lid. Cf Wallace and Webster 1989, fig 2, 10-13, although this particular form of handle is not illustrated. Later first or second century.
 CAL B 66 Period: Post-3B



Fig 11 Roman pottery from CAL A Period Post-3B (scale 1:4)

Old Grapes Lane Trench A

The few sherds recovered from Period 1 are of little help for dating, and the Period 2 roundhouse produced no pottery at all. Periods 3 and 4 produced small amounts of pottery of late first-century type (Table 6). Period 5 sees the first appearance of BB1, with one isolated example, and also of Central Gaulish samian ware, suggesting an early second-century date. Period 6 shows a significant increase in activity, and has a dendrochronological date of AD 93-4 (Fasc 1, p103-4 and table 3); the pottery would accord with that starting date or a slightly later one, perhaps in the early Hadrianic period, which is the traditional date for the appearance of BB1 in the North. Period 6 must have extended into the Antonine period, as there is samian ware of that date.

Period 7 has little pottery, mostly residual. Periods 7-8 and 8-9, dated to the Antonine period by their pottery, show another burst of activity; but here the pottery sherds recovered are relatively small in size, indicating secondary breakage. This contrasts with Annetwell Street, where the largest sherds were present in the latest period (Hird in prep a). Periods 10 to 12 are second or very early third century in date, the samian providing most of the dating evidence. By this time much of the pottery is made up of grey ware (Fabric 11) and BB1.

Typical late first- and early second-century wares, such as Rustic ware (Fabric 3) and Terra Nigra, first occur in Period 6, and are present residually (especially Rustic ware) down to Period 10. There are very few flat-rim and reeded-rim bowls characteristic of Flavian-Trajanic sites from OGLA, although they are present in greater quantity from other Lanes sites. There is also no Lyon ware here, although it was found at OGL B and LELA.

 $\begin{tabular}{l} Table 6 \\ Roman pottery from OGLA, expressed as percentages of sherd numbers \\ \end{tabular}$

		Period								
Fabric group	Fabric	1	3 and 4	5 and 5-6	6	7 and 7-8	8, 8-9 and 9	10	10-11 and 11	12
Coarse/fine ware	BB1, Fabric 1 BB2, Fabric 2 Rustic ware, Fabric 3 Fabric 4 Fabric 6 Fabric 7 Fabric 8 Terra Nigra, Fabric 9 Fabric 10		2.3	1.0 1.0 1.0	1.0 2.5 0.8 0.4 0.1 0.1	12.4 1.7 3.7	14.2 0.1 0.6 2.8 0.4	4.6 1.5 1.5 0.8	0.8 0.4 0.4	18.5
	Grey ware, Fabric 11 Oxidized ware, Fabric 12 Fabric 13 Fabric 14 Fabric 15 Fabric 16	50.0 50.0	27.9 41.2	22.4 36.7	41.5 19.2 1.9	26.5 14.1 1.5 0.9	25.9 13.5 2.2 0.6 0.1 0.2	27.7 16.9	33.1	35.6 11.4
	Severn Valley ware, Fabric 17 Fabric 18 Fabric 19 Fabric 20 Nene Valley ware, Fabric 21 Fabric 29		-	1.0	0.1	5.2	0.1		0.4	0.2
	Fabric 30 Fabric 31 Fabric 32 Fabric 33				0.1 0.6 0.1	0.7	0.8			0.5 0.6 0.2
Mortaria	Carlisle/Scalesceugh, Fabric 301 Carlisle/Old Penrith, Fabric 302 Carlisle/Old Penrith, Fabric 303 Carlisle/Scalesceugh, Fabric 306 Carlisle/Scalesceugh, Fabric 312 Gallia Belgica, Fabric 313 Rhineland?, Fabric 314 Lincoln, Fabric 316 Verulamium region, Fabric 320 Mancetter-Hartshill, Fabric 324			1.0	1.8 0.1 0.1 0.1 0.4 0.1	0.2 0.2 0.7	0.2 0.5 0.3 0.2 0.1	2.3 0.8	1.2 0.4	0.5
Amphorae	Fabric 200 Fabric 201 Fabric 202 Fabric 203 Fabric 204 Fabric 205 Fabric 206 Fabric 207 Fabric 208		7.0	5.1 4.1 8.2	0.3 0.1 1.0 1.7 2.2	0.2 1.5	0.1 0.2 0.1 3.5 0.2 0.3 8.4 0.5	3.8 9.2 0.8	0.4 2.4	0.8 1.4 0.2 2.9
Samian	South Gaulish Central Gaulish East Gaulish		14.0	15.3 3.1	7.2 9.4	5.2 19.1 0.9	4.6 18.3	2.3 26.9 0.8	20.2 1.6	0.2 24.5 0.6
Number of sherds		4	43	98	775	461	1063	130	248	660

Apart from a lid in Period 5, which seems to be a special case, BB1 supplies to OGL A begin in Period 6, at about 20% of the coarse wares present. It averages 16% of the coarse wares for Period 6 and later, with the greatest concentration occurring in Period 11 with 40%. The forms are all those current in the second century, with the exception of a couple of vessels (including Fig 12, 89) from Period 12 and medieval Period 13, which could be third century in date.

BB2 occurs in small quantities in north-west England and provides less than 1% of the pottery from OGL A. It is only present in Periods 8-9, 10 and 12; in Period 10 it makes up 1.5% of the pottery recovered. All the vessels are dishes except for one cooking pot from OGL A West.

Local grey ware Fabric 11 increases in popularity as local oxidized ware Fabric 12 decreases through the second century (Table 6). Period 11 sees the appearance of a small

Table 7
Roman pottery from OGL A: average sherd weight (in g)

Period	Coarse/fine wares	Mortaria	Amphorae
1 3 and 4 5 and 5-6 6 7 and 7-8 8, 8-9 and 9 10 10-11 and 11	19 10 16 16 14 14 24 28 18	150 75 62 57 240 214 51	12 30 410 111 160 164 214 290

amount of Nene Valley Colour-coated ware, which appears to reach the Carlisle area only in very small quantities during the second century. Severn Valley ware is present in Periods 7, 8 and 11, although only the rim occurs residually in a modern context.

Several rough-cast fabrics are present, all in small quantities (Fabric 14, 15, 29 and 31). Fabric 15 is normally regarded as Gaulish (Anderson 1980) and Fabric 31 is a Rhineland product. These all date to the first half of the second century.

South Spanish amphorae (Fabrics 207 and 208; Peacock and Williams 1986, Class 25) are a constant feature of supply from Period 3 to Period 12, providing up to about 9% of the pottery. Fabric 202 is also of South Spanish origin. Fabrics 201 and 203-6 are of lesser importance and are probably in the main from Gaulish sources; there are a few rims from OGL A.

There are no mortaria at all in Periods 1 to 5, Period 5-6 has one vessel of Gallo-Belgic origin, dating to the late first century. The first local mortaria, mainly in Fabric 301, are present in Period 6, where they already dominate supplies to the site, although there is some variety at this time with the presence of small amounts from the pas de Calais, Lincoln and Verulamium region. In Period 8-9 there is residual material from these sources, and a small fragment of a Mancetter-Hartshill vessel, but from Period 10 to the end of occupation of the site local sources account for all the mortaria recovered.

Carlisle is known to have a local mortarium industry of importance in the second century, but towards the end of the century and into the third, as the local industry waned, Mancetter-Hartshill supplies reached this area in quantity (Hird in prep a; Talyor 1990), as elsewhere in the country. Their absence from OGL A lends support to the argument that the site was going out of occupation by the end of the second century.

There is an unstratified fragment of crucible which is likely to be Roman; this occurred residually in medieval well 1237 (Fasc 2, p221, No F14).

Period 1

The pottery from Period 1 is relatively unhelpful for dating purposes (Table 6). It comprises four small sherds which

are undoubtedly of Romano-British manufacture, but not distinctive enough or present in sufficient quantities to provide more information. There was one sherd of a grey ware vessel (Fabric 11), possibly a flagon, from a stakehole 1181 in Period 1B; and one grey ware sherd and two oxidized 'rouletted' sherds (Fabric 12), possibly from a beaker, from old ground surface 1173 in Period 1C, where they were almost certainly intrusive.

Periods 3 and 4

Periods 3 and 4 produced 43 sherds of pottery consistent with a late first-century date (Table 6), including everted-rim jars, a flat-rim bowl and a lid. The latest samian is a South Gaulish bowl of form 30 or 37. The amphora fragments include South Spanish and possibly Gaulish material. Sherd sizes are particularly small, with coarse/fine ware sherds averaging 10g and amphora sherds 12g (Table 7).

Periods 5 and 5-6 (Fig 12)

There were 98 sherds from these periods, the majority (74) being from Period 5; the coarse/fine ware sherds averaged 16g in weight, and amphora sherds 30g (Table 7).

The Period 5 pottery suggests an early second-century date, and there is a samian Central Gaulish form 37, in the style of Drusus i (X-3) of Les Martes-de-Veyre, dating to about AD 100-120 (No 11, p 62 below). The amphora fragments are all Gaulish or possibly Gaulish products.

Soil spread 1006 produced three lids, including one in BB1 (Fig 12, 28), the first appearance of BB1 at this site. It does appear to be the case that BB1 lids appear early in the supply of BB1 to the north of England, as at Walton-le-Dale (Hird in prep b), and may occur, as here, in the absence of other BB1 vessels (cf also Annetwell Street: Hird in prep a).

Contexts possibly extending from Period 5 into the early part of Period 6 produced only 24 sherds. The only rim is from a Gallo-Belgic mortarium of Gillam form 238, dated to *c* AD 70-100, and the latest samian is a South Gaulish from 27 of Flavian or Flavian-Trajanic date.

- BB1, Fabric 1. Lid (Wallace and Webster 1989, fig 10-13). The form is dated to the late first and early second centuries.
 OGL A 1006 Period: 5
- 29 Fabric 11. Lid

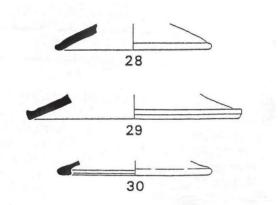


Fig 12 Roman pottery from OGL A Period 5 (scale 1:4)

	OGL A 1006	Period: 5
30	Fabric 12. Lid	
	OGL A 1006	Period: 5

Period 6 (Fig 13)

Period 6 shows a significant increase in activity on the site, and produced 775 sherds (Table 6). Coarse and fine ware sherds averaged 16g in weight and amphora sherds 410g (Table 7); the amphora sherds were the largest from OGL A. Some 152 sherds came from possible hearth 681; the only other contexts which produced over 50 sherds are drain 751 (fill 750; 72 sherds) and external soil deposit 776 (75 sherds). Deposit 776 also produced two tiny intrusive medieval sherds. Some of the largest sherds came from external soil deposit 707, boundary bank 718 and adjacent shallow scoops 732, cobbled surface 758, clay upcast from ditch 1029 (788) and laminated hay-like deposit 817 beyond the south wall of Building 674.

This is the first period where BB1 is present in quantity making up 4% (31 sherds) of the pottery (Table 6). It is, however, present in only 12 of the 51 contexts which produced pottery. The group includes a handle from a BB1 jug (not illustrated).

The period has a dendrochronological date of AD 93-4 (Fasc1, p 103-4), and the pottery accords well with that starting date, although it would not disagree with a later starting date, perhaps Hadrianic, assuming that the timber had been re-used. The early Hadrianic period is the traditional date for the appearance of BB1 in the North (Gillam 1976; Williams 1977), and Carlisle has produced no clear evidence to contradict that date. Period 6 must have extended into the Antonine period, as there is samian ware of that date from external surfaces 632 and 757. Surface 632 produced a Central Gaulish form 37 in the style of Cinnamus ii, dated to *c* AD 150-80, and surface 757, a Central Gaulish bowl of probably Antonine date.

For the first time at this site, grey wares (Fabric 11) make up a larger percentage of the pottery than oxidized wares (Fabric 12; Table 6). From this time on, oxidized wares gradually decline in importance to the end of the second century. This gradual transition from oxidized to reduced wares has been noted at Annetwell Street (Hird in prep a), where the reduced wares first outnumber the oxidized wares in Period 7 (mid second century). The same phenomenon is noted in the mid second century at Ribchester (Hird and Howard-Davis 2000).

There is a certain amount of late first/early second-century material, including rough-cast beakers and Rustic ware. There is just one sherd of Terra Nigra, which is residual here but could indicate considerably earlier occupation of the area. Terra Nigra occurs elsewhere in Carlisle in contexts attributed to the first century, for example at Annetwell Street (Hird 1992 and in prep a). The first-century pottery came from soil spread 737 at the western end, external deposit 776, surface 817 in Building 674, and deposit 970, upcast from the foundation trench of Building 674.

The mortaria include Gallo-Belgic and Verulamium region vessels; both sources decline in importance in the Carlisle area by the end of the first century AD. Local mortaria make up over 2% of the pottery (Table 6), and

include two vessels stamped by Doc(e)ilis (Fig 61, 3-4; Fig 13, 38) dated to AD 125/30-165 (p 81 below).

Despite the large number of amphora fragments present there are no rims; the material is of South Spanish and Gaulish origin.

- 31 BB1, Fabric 1. Cooking pot. Early/mid second century OGL A 681 Period: 6
- 32 BB1, Fabric 1. Cooking pot. Early/mid second century OGL A 681 Period: 6
- BB1, Fabric 1. Bowl. Early/mid second century. OGL A 681 Period: 6
- Fabric 8. Beaker? OGL A 681

Period: 6

35 Fabric 11. Jar

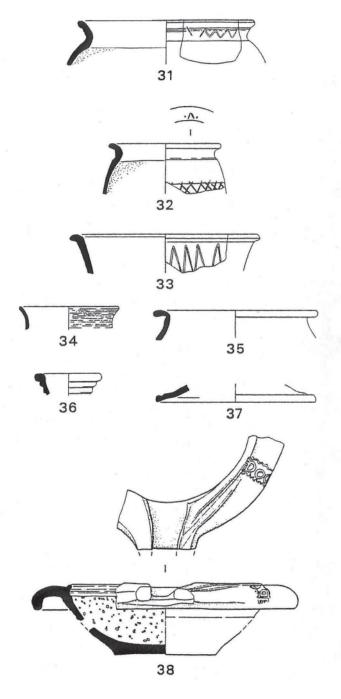


Fig 13 Roman pottery from OGL A Period 6 (scale 1:4)

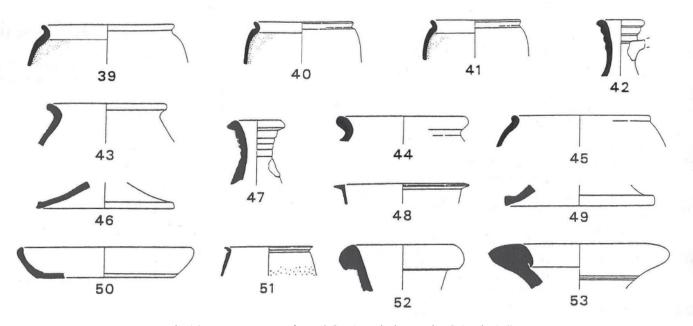


Fig 14 Roman pottery from OGL A Periods 7 and 7-8 (scale 1:4)

	OGL A 681	Period: 6
36	Fabric 12. Ring neck Flagon OGL A 681	Period: 6
37	Fabric 12. Lid OGL A 681	Period: 6
38	Carlisle Scalesceugh area Fabr DOCI (Fig 61, 4) OGL A 681	ric 303. Mortarium stamped Period: 6

Periods 7 and 7-8 (Fig 14)

Period 7 produced only 23 sherds of pottery, much of which appears to be residual; about 22% is Rustic ware (dated c AD 80-130) and 26% is South Gaulish samian, the latest samian being a Central Gaulish form 33 of the Trajanic-Hadrianic period. Contexts extending from Period 7 into Period 8, on the other hand, yielded 438 sherds. Coarse/fine ware sherds average only 14g (Table 7).

Although there are a certain number of earlier second-century forms still present, such as ring-neck flagons, flat rim bowls, lids and everted-rim jars, and much of the samian is Hadrianic, the date of the period would appear to be later, probably Antonine. Soil accumulation 706 produced a Central Gaulish form 30 or 37, a 38 or 44 and a 44, all dating to the early Antonine period.

Amongst the residual pottery is one of the earliest samian pieces from the site, a Neronian or early Flavian form 27(?), with a stamp (No 68, p 78 below).

39	BB1, Fabric 1. Jar. Early/mid sec OGL A 717	cond century Period: 7A-8C
40	BB1, Fabric 1. Small jar/beaker OGL A 705	Period: 7A-8C
41	BB1, Fabric 1. Small jar/beaker OGL A 706	Period: 7A-8C
42	Fabric 4. Flagon. Gillam 4. AD 9 OGL A 717	0-130 Period: 7A-8C
43	Fabric 11. Jar OGL A 717	Period: 7A-8C

44	Fabric 11. Jar OGL A 717	Period: 7A-8C
45	Fabric 11. Jar OGL A 706	Period: 7B-8C
46	Fabric 11. Lid OGL A 705	Period: 7B-8C
47	Fabric 12. Flagon. Gillam 3. AD OGL A 490	9 80-120 Period: 7B-8C
48	Fabric 12. Bowl OGL A 717	Period: 7A-8C
	OGL A 490 Period: 71	B-8C
49	Fabric 12. Lid OGL A 706	Period: 7B-8C
50	Fabric 13. Dish, sooted OGL A 717	Period: 7A-8C
51	Rhineland, Fabric 31. Rough-ca OGL A 717	st beaker Period: 7A-8C
52	North Africa?, Fabric 204. Amp Class 11? First and second centu OGL A 706	
53	South Spanish, Fabric 208. Ampl Class 25.9. Early/mid second ce	

Periods 8, 8-9 and 9 (Fig 15)

OGL A 706

These periods produced only 1,063 sherds; the coarse/fine ware sherds averaged only 14g in weight (Table 7). The latest samian dates to the mid/late Antonine period; the lower fill of slot/gulley 426 (202; Period 9G) and soil deposit 454 (Period 8A-9E) each produced a fragment of form 37 in the style of the Paternus v group, dated to c AD 160-95. Period 9 produced one fragment of BB2, the earliest occurrence of the ware at OGL A.

Period: 7B-8C

There is a greater range of fabrics than in previous periods although many of these are only present in very small quantities (Table 6), and many are obviously residual, such as the Rustic ware. And the Gallo-Belgic (Fabric 313) and the Verulamium region (Fabric 320) mortarium fragments.

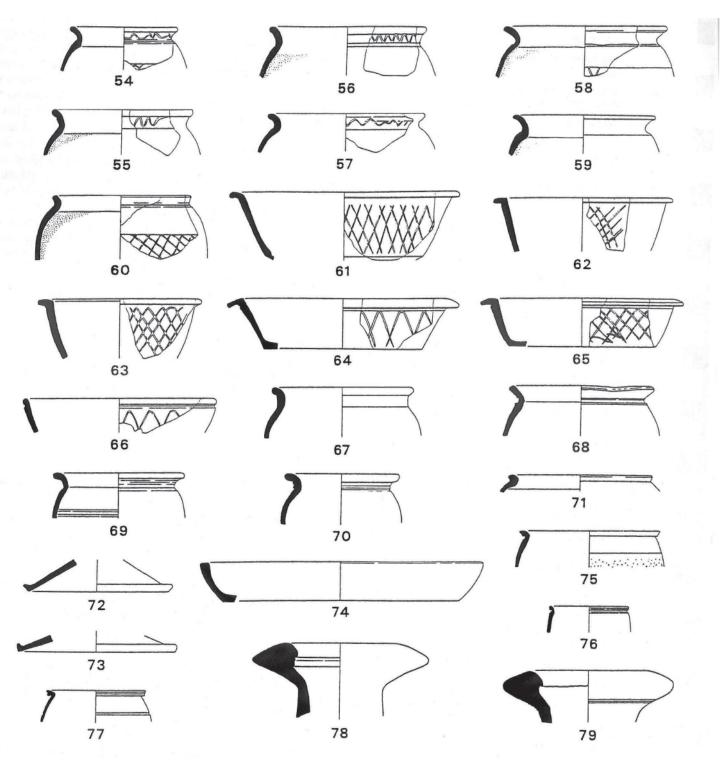


Fig 15 Roman pottery from OGL A Periods 8, 8-9 and 9 (scale 1:4)

Some 14.2% of the assemblage (151 sherds is made up of BB1 cooking pots, dishes and bowls of mid second century date, and local grey wares make up 26% (275 sherds). The wider range of fabrics would seem to indicate that the pottery is made up of an accumulation of rubbish. This argument is supported by the small size of sherds.

Twelve sherds of mortaria in local fabrics were present (Fabrics 301, 302, 303 and 312), and the only stratified sherd of Mancetter-Hartshill mortarium (Fabric 324; from Period 9). More than 13% of the assemblage is made up of amphora fragments, most of these being

South Spanish vessels.

54	BB1, Fabric 1. Cooking pot. OGL A 436	Period: 9E
55	BB1, Fabric 1. Cooking pot OGL A 398	Period: 9G
56	BB1, Fabric 1. Cooking pot OGL A 413	Period: 9E
57	BB1, Fabric 1. Cooking pot OGL A 195	Period: 9H
58	BB1, Fabric 1. Cooking pot	

	OGL A 488	Period: 8A-9E
59	BB1, Fabric 1. Cooking pot OGL A 196	Period: 9D
60	BB1, Fabric 1. Bowl OGL A 489	Period: 9H
61	BB1, Fabric 1. Bowl OGL A 489	Period: 8A-9C
62	BB1, Fabric 1. Bowl OGL A 446	Period: 9E
63	BB1, Fabric 1. Bowl OGL A 433	Period: 9E
64	BB1, Fabric 1. Dish OGL A 202	Period: 9G
65	BB1, Fabric 1. Dish	
	OGL A 487	Period: 8C
66	BB1, Fabric 1. Dish OGL A 436	Period: 9E
67	Fabric 11. Jar OGL A 487	Period: 8C
68	Fabric 11. Jar. A locally-produced OGL A 488	d vessel, a slight 'second' Period: 8A-9E
69	Fabric 11. Jar OGL A 429	Period: 9E
70	Fabric 11. Jar. OGL A 414	Period: 9D
71	Fabric 11. Jar OGL A 429	Period: 9E
72	Fabric 11. Lid OGL A 446	Period: 9E
73	Fabric 11. Lid OGL A 619	Period: 8A
74	Fabric 12. Dish OGL A 196	Period: 9H
75	Rough-cast ware, Fabric 14. Bea OGL A 195	ker Period: 9H
76	Rough-cast ware, Fabric 14. Bea OGL A 446	ker Period: 9E
77	Rough cast ware, Fabric 29. Beal OGL A 452	ker Period: 9A-B
78	South Spanish, Fabric 207. Ampl OGL A 451	hora Period: 9D?
79	South Spanish, Fabric 207. Ampl OGL A 436	hora Period: 9E

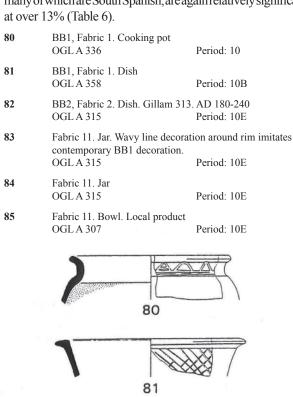
Period 10 (Fig 16)

Period 10 produced 130 sherds, with an average weight of 24g for coarse/fine ware sherds (Table 7). As in earlier periods there is a considerable amount of residual material, which includes 1.5% Rustic ware (Table 6), typical of the late first/early second century, a greater percentage than in Period 6, when the ware was in use. The latest samian includes a Central Gaulish form 33 stamped by Sabinus viii (Fig 58, 51), dated to *c* AD 160-200 (p 77 below).

There is rather less BB1 than in previous periods (4.6%), but the greatest amount of BB2 (1.5%, although this is only two sherds). Until recently, BB2 was considered (by Gillam 1973 and Williams 1977) to be totally absent from the Hadrian's Wall area west of Birdoswald and from the north-western hinterland

of the Wall. Recent work has identified a handful of vessels from north-western sites, however, include Walton-le-Dale (Hird in prep b), Ribchester (Hird and Howard-Davis 2000), Papcastle (Hird in prep c) and Old Penrith (Austen 1992, 139), as well as Annetwell Street (Hird in prep a) and The Lanes at Carlisle. The Carlisle vessels are mostly dishes, and include earlier types dated to the Antonine period, eg Gillam and Mann (1970) type 22, as well as the later Gillam type 313 (AD 180-240) (Fig 16, 82). There were no bowls from The Lanes or Annetwell Street, and most of the cooking pots (Gillam 137 and 139) from The Lanes come from post-Roman contexts. On all the sites mentioned above the quantities of BB2, especially compared to the BB1 present, are small. This contrasts with supplies of black-burnished wares to Antonine Scotland, where the ration of BB2 to BB1 is in the order of 3:2 (Williams 1977).

The mortaria are all local products, and amphora fragments, many of which are South Spanish, are again relatively significant, at over 13% (Table 6).



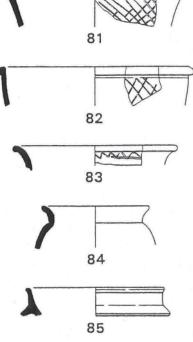


Fig 16 Roman pottery from OGL A Periods 10 (scale 1:4)

Periods 10-11 and 11 (Fig 17)

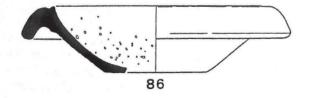
Period 10-11 produced 60 sherds, including eight in BB1, and the soil deposits of Period 11 yielded 188 sherds. BB1 and grey ware (Fabric 11). Each make up about 33% of the combined assemblage (Table 6), and are of forms represented in the earlier periods.

There are two local ractian mortaria dating to the second half of the second century (Fig 17, 86-7). The latest samian is an East Gaulish form 37 in the style of Ianus ii, dated to c AD 160-80, from Period 10-11 (Fig 53, 34), and p 66 below), and a central Gaulish form 37 in the style of the Paternus v group, dated to c AD 160-95, from Period 11.

86 Carlisle/Scalesceugh area, Fabric 301. Mortarium. There is a waster of this form from the English Damside kiln dump (unpublished). Second half of second century.

OGL A 37 Period: 11

87 Carlisle/Scalesceugh area, Fabric 301. Mortarium (cf Taylor 1990, fig 187, 26). c AD 160-200.
 OGL A 64 Period: 11



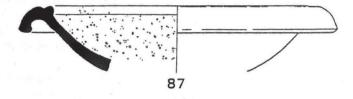


Fig 17 Roman pottery from OGL A Period 11 (scale 1:4)

Period 12 (Fig 18)

Period 12 produced 660 sherds; the coarse/fine ware sherds averaged 18g in weight. Along with material that could be residual (eg Fig 18, 90), and forms that are current throughout the second century, this period produced new BB1 forms (Fig 18, 88-9). Vessel No. 112, from a surface (165), is the only stratified example of BB1 dish Gillam form 329, which is exceedingly common from the late second century into the fourth century, and the scarcity of the type here suggests that occupation of OGL A ceased very soon after the end of the second century.

The latest samian is an East Gaulish fragment which dates to the late second or early third century. There is also a Central Gaulish form 37 dated to *c* AD 160-90 (Fig 53, 36) and an East Gaulish form 37 dated to *c* AD 150-200 (Fig 53, 35).

The mortaria are all from local sources in Fabrics 301 and 302, including a raetian mortarium (Fig 18, 92).

88 BB1, Fabric 1. Cooking pot OGL A 165 Period: 12B

220 45 100 2

89 BB1, Fabric 1. Dish. Gillam 329. AD 190-340 OGL A 165 Period: 12B

90 BB2, Fabric 2. Dish. Gillam and Mann 22. Antonine

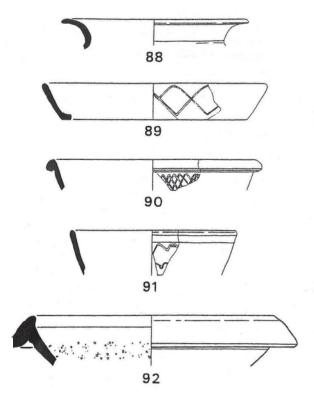


Fig 18 Roman pottery from OGL A Period 12 (scale 1:4)

OGL A 133 Period: 12A

91 BB2, Fabric 2. Dish. Gillam 328. AD 150-200

OGL A 122 Period: 12A

92 Carlisle/Scalesceugh area, Fabric 301. Raetian mortarium OGL A 12 Period: 12B

Unstratified pottery (Fig 19)

The unstratified pottery includes a fragment of a head pot in grey ware.

Fabric 11. Head pot. The sherd shows the nose, eyes and eyebrows formed of applied clay. The eyes are roughly incised.

OGL A + Period: Unstratified



Fig 19 Unstratified Roman pottery from OGL A (scale 1:4)

Old Grapes Lane Trench A West

The pottery from OGL A West contrasts markedly with that from OGL A, and suggests some occupation up to the late fourth century, as indicated by the presence of the East Yorkshire wares, Crambeck and Huntcliff, the latest types occurring in Period 3. The nine sherds of 'Rhenish' ware are likely to be of third-century date (Greene 1978). Some 460

sherds were recovered from Periods 1 to 3, and of those only 16 are of exclusively fourth-century date (Nine of Grey Crambeck ware, two of Parchment Crambeck ware and five of Huntcliff ware).

Sites intensively occupied at that time tend to have very high percentages of Huntcliff and Crambeck wares, as at Piercebridge (Croom et al 2008) and also Birdoswald (Hird 1997), where Huntcliff ware made up approximately 50% and Grey/Parchment Crambeck ware 12% (by sherd count) in a securely dated mid/late fourth-century context. The quantities from OGL A West are small and could indicate only limited activity in the fourth or late fourth century, although their relative importance in terms of sherd numbers may not be apparent if there is a high degree of residuality amongst the other pottery types.

The question of residuality in the OGL A West assemblage is highlighted by samian statistics (69 sherds, of which only three are East Gaulish; Table 8). Although samian had ceased to be imported by the mid third century at the latest, the average percentage present in Periods 1 to 3 is 15%. The samian is all of Central or East Gaulish manufacture, and the latest vessel is a Central Gaulish form 37 dated to *c* AD 165-200.

Notwithstanding the apparently Roman date for Period West 3, it is possible, on stratigraphic grounds, that it does not belong to the Roman period (Fasc 1, p 55) making all of the Roman pottery residual. Despite the uncertainty as to the chronological position of this

Table 8
Roman pottery from OGL A West, expressed as percentages of sherd numbers

		Per	riod
Fabric group	Fabric	West 1 and West 2	West 3
Coarse/fine ware	BB1, Fabric 1 BB2, Fabric 2 Rustic ware, Fabric 3 Fabric 6 Grey ware, Fabric 11 Oxidized ware, Fabric 12 Fabric 13 Nene Valley ware, Fabric 21 Hunteliff ware, Fabric 22 Grey Crambeck ware, Fabric 27 Parchment Crambeck, Fabric 28 'Rhenish' ware, Fabric 34 'Rhenish' ware, Fabric 35	8.5 0.5 0.5 18.1 2.7 2.1 2.1 1.1 0.5 1.6	3.7 0.4 1.8 53.7 6.6 1.1 0.4 2.6
Mortaria	Mancetter-Hartshill, Fabric 324 Oxford Colour-coat, Fabric 353	0.5 0.5	0.4
Amphorae	Fabric 202 Fabric 207 Fabric 208	1.6 9.6 0.5	1.8 16.2
Samian	Central Gaulish East Gaulish	23.4 0.5	8.1 0.7
Number of sherds	188	272	

Table 9
Roman pottery from OGL A West: average sherd weights (in g)

Period	Coarse/fine wares	Mortaria	Amphorae		
West 1 and West 2	16	30	222		
West 3	13	15	126		

period, the assemblage is included in the analysis below, as it contained no medieval pottery.

Periods West 1 and West 2 (Fig 20)

Periods West 1 and West 2 produced 188 sherds (Table 8); the coarse/fine ware sherds averaged 16g in weight (Table 9).

There were 142 sherds from Period West 1. Although this group included many of the types seen in earlier phases in OGLA, there are also two sherds of Huntcliff ware and a greater proportion of Nene Valley Colour-coated ware than was present in OGLA. There is also a fragment of a cup (not illustrated) in Central Gaulish 'Rhenish' ware, Fabric 35 (Gillam 210, dating to the first half of the third century).

There were only 46 sherds from Period West 2, including Nene Valley Colour-coated ware, Grey Crambeck ware and Parchment Crambeck ware in equal quantities. The Parchment Crambeck ware includes a fragment of a bowl of Corder and Birley (1937) type 9 (not illustrated), dated to the later fourth century.

Residual samian of the mid-late Antonine period is present in both periods, including a form 33 stamped by Priscus ii from Periods West 1, dated to *c* AD 160-90 (Fig 58, 46), and a form 37 in the style of Do(v)eccus I from Period West 2, dated to *c* AD 165-200 (Fig 54, 43).

The proportion of late pottery to residual material could be approximately 1:10.

- 94 Huntcliff ware, Fabric 22. Jar. Gillam 163. AD 360-400 OGL A 532 Period: West 2
- 95 Grey Crambeck ware, Fabric 27. Dish. Corder and Birley (1937), type 2. Fourth century
 OGL A 532 Period: West 2

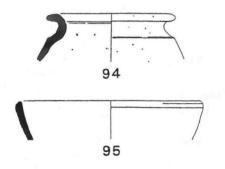


Fig 20 Roman pottery from OGL A Period West 2 (scale 1:4)

Period West 3 (Fig 21)

The uncertain status of Period West 3 has already been mentioned; it is possible that it does not belong to the Roman period, although it contained no medieval pottery. For the purposed of this analysis the assemblage is treated as a possible late Roman one.

Period West 3 produced 272 sherds (Table 8); the coarse/fine ware sherds averaged 13g in weight (Table 9). Grey Crambeck ware and Huntcliff ware of the fourth century are present in soil deposit 514. Deposit 543 includes a bowl of local manufacture (Fig 21, 98), with 'Rhenish' wares (Fabric 34 and 35) and a BB2 cooking pot. The samian is entirely residual at this time.

The identifiably late element of the pottery from this period amounts to only about 20 sherds, giving a ratio of late:residual pottery of approximately 1:14, although this may not be absolutely accurate as the local grey wares may have continued in production into the fourth century with little change of form.

A South Spanish amphora sherd from the eastern wall of Building 550 (551) has a potter's signature, inscribed before firing (Fig 50, 2).

96	Fabric 11. Jar OGL A 543	Period: West 3
97	Fabric 11. Bowl	

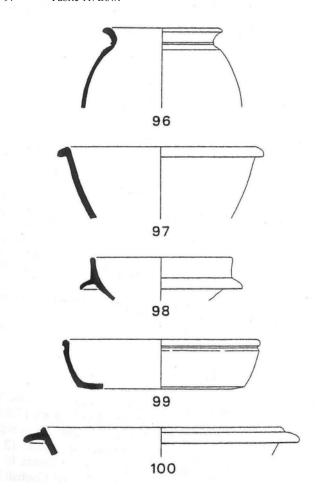


Fig 21 Roman pottery from OGL A Period West 3 (scale 1:4)

	OGL A 543	Period: West 3
98	Fabric 11. Bowl,	locally produced
	OGL A 543	Period: West 3
99	Fabric 11. Dish	
	OGL A 543	Period: West 3
100	Grey Crambeck	ware, Fabric 27. Bowl. Corder and Birley
	(1937) type 1. Fo	ourth century
	OGL A 514	Period: West 3

Old Grapes Lane Trench B

The pottery from Period 2 includes Rustic ware (Fabrics 3 and 5), reeded-rim bowls and South Gaulish samian, which indicates a starting date at the end of the first century, as was the case for OGL A. OGL B shows evidence of increased activity in Periods 5A and 6, which have average coarse ware sherd sizes from OGL B are consistently smaller than those from OGL A (Tables 7 and 11).

Pre-Flavian fine wares, Lyon ware and Terra Nigra are present in extremely small quantities in Period 5. Period 5A which probably dates to the Hadrianic period, has the first BB1 from the site, although at less than 1% of the group, but by Period 5C this has risen to 31%, which is only exceeded in Period 8A where it makes up 35.5%.

BB2 first appears, at less than 1%, in Period 6B, dating to Antonine period. In Periods 6F-7 and 7A it makes up 1.6%, a similar proportion to OGL A Period 10. All the BB2 vessels from OGL B are dishes.

The grey and oxidized wares (Fabric 11 and 12) are present in much the same proportions as at OGLA, and show the same gradual increase in grey wares as oxidized wares decline during the second century (see p 23 above).

The Roman occupation of OGL B ends at much the same time as OGLA, around the turn of the second and third centuries. The pottery from OGL B has, however, none of the types such as Gillam 329 and 227 which are common in the third and fourth-century contexts on other sites, not even amongst its unstratified pottery, as was the case at OGLA.

Period 2 (Fig 22)

Period 2 produced 48 sherds (Table 10); the coarse/fine ware sherds averaged only 9g in weight (Table 11). The pottery included Rustic ware (not illustrated), everted-rim jars (Fig 22, 101-2) and a reeded-rim bowl (Fig 22, 103),

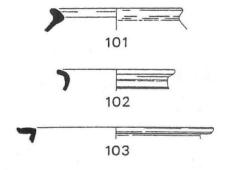


Fig 22 Roman pottery from OGL B Period 2 (scale 1:4)

Table 10 Roman pottery from OGL B, expressed as percentages of sherd numbers

		Period												
Fabric group	Fabric	2	3	4	5A	5B	5C	5D	6A to 6E	6F	6F-7 and 7A	7B	8.4	8B
Coarse/fine ware	BB1, Fabric 1 BB2, Fabric 2 Rustic ware, Fabric 3 Fabric 4 Rustic ware, Fabric 5 Fabric 6 Fabric 7 Fabric 8 Terra Nigra, Fabric 9 Grey ware, Fabric 11 Oxidized ware, Fabric 12 Fabric 13 Fabric 14 Severn Valley ware, Fabric 17 Fabric 19 Nene Valley ware, Fabric 21 Grey Crambeck ware, Fabric 27 Fabric 29 Fabric 30 Fabric 31 Parisian ware, Fabric 37 Lyon ware, Fabric 38 Fabric 39	8.3 14.6 50.0	9.8 66.3 4.3	0.6 6.0 51.8 4.8 0.6	0.6 5.9 0.3 0.2 11.9 43.0 6.6	3.0 0.9 18.3 0.2 0.2 14.8 28.5 5.3	31.0 1.2 1.2 1.2 23.4 14.1 5.2 0.4 1.2	2.6 28.4 20.7 7.8 3.4	12.6 0.1 0.3 0.7 0.3 0.1 0.1 13.9 28.7 2.9 0.1 0.1	9.4 1.1 0.7 12.9 6.1 0.4	13.0 1.6 0.8 1.6 0.8 1.6 13.0 17.9	0.4 0.4 21.2 10.2	35.5 21.5 7.6 0.4 0.4	41.0 3.8 1.3
Mortaria	Carlisle/Scalesceugh, Fabric 301 Carlisle/Scalesceugh, Fabric 302 Old Penrith, Fabric 305 Gallia Belgica, Fabric 313 Rhineland?, Fabric 314 Lincoln, Fabric 316 Verulamium region, Fabric 320 Little Chester, Fabric 351 Probably Carlisle, Fabric 352		0.5	1.2 0.3 2.1	0.8 1.1 0.2	0.2 0.5 0.2		1.7	0.7 0.1 0.3 0.1	3.6 1.1 0.4 0.4	4.9	2.6	2.8	1.3
Amphorae	Fabric 200 Fabric 202 Fabric 203 Fabric 204 Fabric 205 Fabric 206 Fabric 207 Fabric 208			0.3	0.6 0.5	0.2 0.7	0.8	3.4	0.1 1.0 0.6 12.1 0.6	0.4 0.7 40.3 0.7	4.1	9.5 0.4	0.4 0.8 1.2 3.2	1.3
Samian	South Gaulish Central Gaulish East Gaulish	27.1	16.3 1.1	25.1 1.8	19.4 8.3	15.1 10.9	6.9 8.1	10.3 18.1	4.1 15.7 0.7	20.5 1.4	0.8 39.0 2.4	0.7 38.3 5.1	0.4 20.3 5.6	28.2 11.5
Number of sherds		48	184	334	649	431	248	116	700	278	123	274	251	78

all consistent with a late first/early second century date, as at OGL A Period 1 and Annetwell Street periods 3-4 (Hird in prep a). The latest samian is a South Gaulish form 37, dated to c AD 85-110, from slot 304

101 Fabric 11. Jar

OGL B 295 Pe

Period: 2B

102 Fabric 12. Jar, sooted

OGL B 305

Period: 2B

Fabric 12. Reeded-rim bowl, sooted OGL B 304 Period: 2B

Period 3 (Fig 23)

The Period 3 soil spreads overlying the Period 2 structural features and surfaces produced 184 sherds (Table 10); the coarse/fine ware sherds averaged only 8g in weight (Table 11). Oxidized wares predominate, Fabric 12 making up 66.3% (122 sherds) of the group and Fabric 13 over 4% (8 sherds). The latest samian is a Central Gaulish form 18/31, Trajanic in date.

The mortaria comprise one sherd of Pas de Calais (Fabric 313) and two sherds of local ware, Fabric 301.

Table 11 Roman pottery from OGL B: average sherd weights (in g)

Period	Coarse/fine wares	Mortaria	Amphorae
2	9		
3	8	52	
4	10	74	109
5A	12	119	101
5B	9	60	181
5C	12	-	25
5D	13	183	44
6A to 6E	13	86	152
6F	20	26	85
6F-7 and 7A	31	76	321
7B	7	89	22
8A	17	159	159
8B	22	55	47

104	Fabric 11. Jar. OGL B 256	Period: 3
105	Fabric 12. Ring-no 'second' with disto OGL B 256	eck flagon. Locally produced, a slight orted rim. Period: 3
106	Fabric 12. Bowl w OGL B 289	with impressed decoration Period: 3
107	Fabric 13. Jar OGL B 290	Period: 3

Period 4 (Fig 24)

The period produced 334 sherds (Table 10); the majority came from external surfaces and deposits, and gulley 229. Period 4 is equated stratigraphically with OGLA Period 6, but OGLA produced over twice as much pottery, although the area excavated in OGLB was greater.

The pottery is made up of types which were current at the end of the first century and the early part of the second century, everted-rim jars, reeded-rim bowls, ring-neck flagons, Rustic ware and rough-cast beakers. The mortaria include

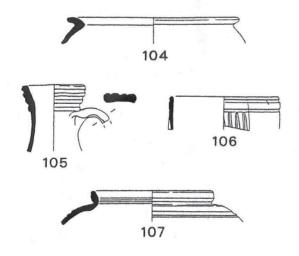


Fig 23 Roman pottery from OGL B Period 3 (scale 1:4)

fragments of South Carlton, Lincoln (Fabric 316), Pas de Calais (Fabric 313) and local products (Fabric 305). The latest samian is early second century in date, and includes a Central Gaulish form 37 from Les Martres-de-Veyre, dated to c AD 100-20 (No 47, p 67 below), from external surface 244.

Period 4 produced no BB1, which was present in 12 of the 51 contexts in OGLA Period 6, comprising 4% of the pottery from that period. Consequently Period 4 could well be shorter lived than OGLA Period 6, as BB1 would surely have been present had the period lasted into the AD 120s.

108	Fabric 11. Jar OGL B 284	Period: 4A
109	Fabric 11. Jar OGL B 229	Period: 4E
110	Fabric 11. Reeded-rin OGL B 229	m bowl Period: 4E
111	Fabric 12. Ring-neck OGL B 224	flagon Period: 4C
112	Fabric 12. Reeded-rii OGL B 222	m bowl Period: 4E-F
113	Fabric 13. Reeded-rii OGL B 226	m bowl Period: 4F
114	Fabric 13. Bowl	

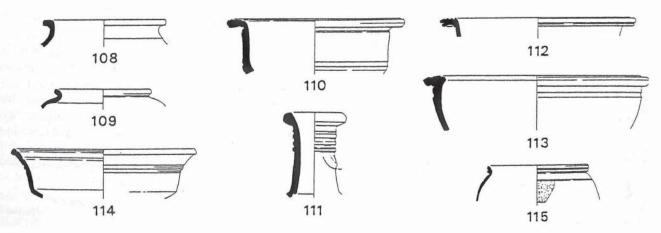


Fig 24 Roman pottery from OGL B Period 4 (scale 1:4)

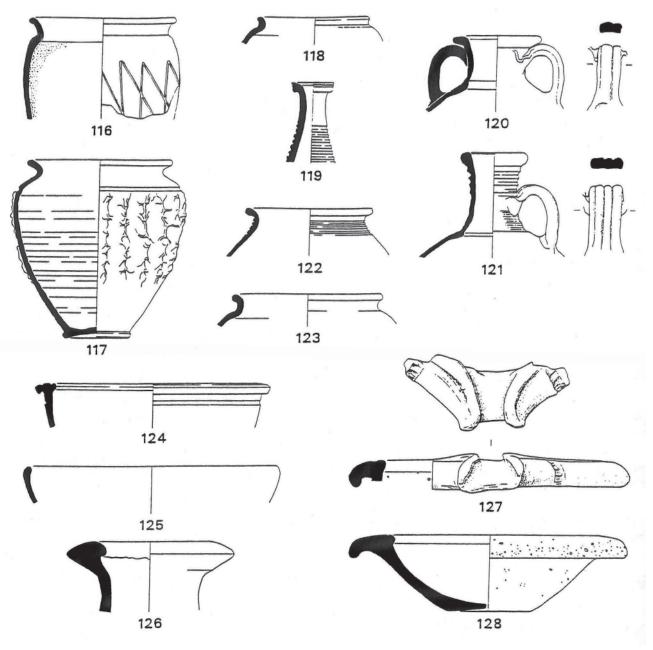


Fig 25 Roman pottery from OGL B Period 5A (scale 1:4)

	OGL B 241 OGL B 220 OGL B 211	Period: 4D Period: 4E Period: 4F
115	Rhineland, Fabric	31. Rough-cast beaker Period: 4E

Period 5A (Fig 25)

This period produced 649 sherds (Table 10); coarse/fine ware sherds averaged 12g in weight (Table 11). The quantities of pottery shows a considerable increase over that from earlier periods, indicating increased activity or dumping on the site. Over half of the pottery (377 sherds) is from extensive soil spread 188, which covered the western half of the site. Well 184 was the only other context to produce a significant amount (145 sherds). Much of the material could come from rubbish deposits deriving from earlier phases,

as late first/early second-century types such as reeded-rim bowls and Rustic ware are still plentiful; soil spread 186 in the eastern half of the site also produced the only Lyon ware, which is pre-Flavian (see p 14).

The period is most likely to date to the early/mid second century, as there are fours sherds of BB1 from well 184 and soil spread 186. The latest samian is Hadrianic/early Antonine, from well 184 (Central Gaulish forms 18/31R and 27). Among the mortaria, which also show a high degree of residuality (with Pas de Calais mortaria, Fabric 313, present along with local products and Lincoln material, Fabric 316), there is a locally-produced vessel (Fig 25, 127) with two trademark stamps (Fig 61, 6), dated to the early second century (p 81 below).

BB1, Fabric 1. Cooking pot OGL B 184.4 Period: 5A

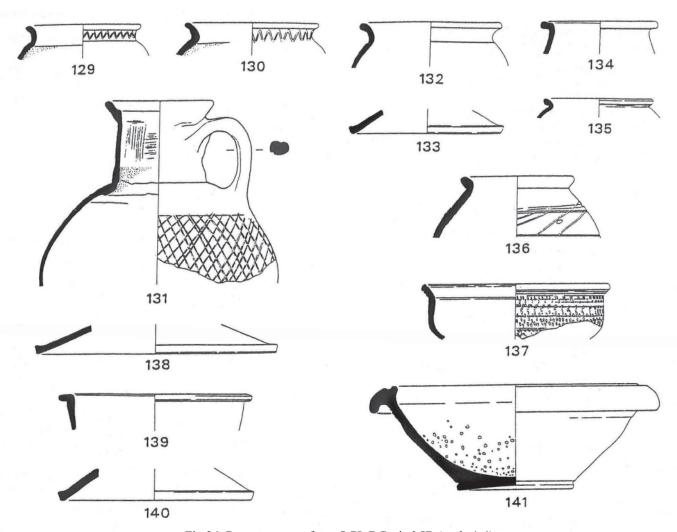


Fig 26 Roman pottery from OGL B Period 5B (scale 1:4)

117	Rustic ware, Fabric 3 OGL B 184.3	
118	Fabric 11. Jar OGL B 186	Period: 5A
119	Fabric 11. Flask, Gill OGL B 184	am 36. AD 90-160 Period: 5A
120	Fabric 12. Flagon OGL B 184	Period: 5A
121	Fabric 12. Flagon OGL B 186 and OGL	B 188 Period: 5A
122	Fabric 12. Jar OGL B 188	Period: 5A
123	Fabric 13. Jar OGL B 188	Period: 5A
124	Fabric 13. Reeded-rin OGL B 184	
125	Fabric 13. Dish OGL B 184	Period: 5A
126	South Spanish, Fabric Class 25.18. Late first OGL B 188	207. Amphora. Peacock and Williams /early second century Period: 5A
127	OGL B 184.2	n with trademark stamp (Fig 61, 6). Local Period: 5A Period: 5C-6B

Fabric 313. Mortarium from the Pas de Calais

128

OGL b 184.3 Period: 5A

Period 5B (Fig 26)

This period produced 431 sherds (Table 10); coarse/fine ware sherds averaged only 9g in weight (Table 11). Significant quantities came from extensive soil deposit 173 in the eastern half of the site (270 sherds), and the deposit and gulley produced fragments of the same vessels. Both produced BB1 cooking pots of the early/mid second century, along with residual material familiar from earlier phases, and both had Antonine samian Central Gaulish form 80 variant from 181. Gulley 185 produced one fragment of a BB1 jug (Fig 26, 131), most of which was found in a Period 5C context.

The majority of the mortaria are local products, one of them being residual from Period 4E, where joining sherds were found. There is only one body sherd of a Lincoln product (Fabric 316).

129	BB1, Fabric 1. Co	oking pot
	OGL B 173	Period: 5B

BB1, Fabric 1. Cooking pot OGL B 173 Period: 5B

131	date the type to the p	fillam 61. Wallace and Webster (1989) eriod from the mid first century to the illam's date of AD 170-200 in the north ext here Period: 5B Period: 5c
132	Fabric 11. Jar. Sooted OGL B 173	Period: 5B
133	Fabric 11. Lid OGL B 181	Period: 5B
134	Fabric 12. Jar OGL B 173	Period: 5B
135	Fabric 12. Jar OGL B 173	Period: 5B
136	Fabric 12. Jar with fa OGL B 173	intly incised line decoration Period: 5B
137	Fabric 12. Bowl OGL B 173 and OGL	B 181 Period: 5B
138	Fabric 12. Lid. Soote OGL B 173	l Period: 5B
139	Fabric 13. Bowl OGL B 173	Period: 5B
140	Fabric 13. Lid OGL B 173	Period: 5B
141	Fabric 305. Mortarium OGL B 173	n. Local Period: 5B

Period 5C (Fig 27)

The soil deposits of Period 5C produced 248 sherds (Table 10); the average coarse/fine ware sherd weighed 12g (Table 11). The pottery includes a similar range of fabrics to Period 5B, except that BB1 vessels of early/mid second-century date now make up 31% of the assemblage. The latest samian is Hadrainic or early Antonine in date, and consists of four Central Gaulish vessels, forms 18/31R and Curle 11 from soil spread 157 and forms 27 and 37 from soil spread 166.

Soil spread 166 also produced several unusual vessels. A beaker (Fig 27, 149) is probably Parisian ware of the first half of the second century (Elsdon 1982), and there is a 'London' ware bowl (Fig 27, 150), also of early second-

century date (Marsh 1978). Some 33 fragments of the Period 5B BB1 jug (Fig 27, 131) were from this context, which also had one intrusive medieval sherd.

BB1, Fabric 1. Bowl/OGL B 161	dish Period: 5C
BB1, Fabric 1. Dish OGL B 166	Period: 5C
Fabric 11. Jar OGL B 166	Period: 5C
Fabric 11. Jar OGL B 166	Period: 5C
Fabric 11. Jar OGL B 166	Period: 5C
Fabric 12. Lid OGL B 166	Period: 5C
Fabric 12. Vessel fragm Bowl? OGL B 166	nent with applied and incised decoration. Period: 5C
	37. Beaker. Elsdon (1982) type 3. second century Period: 5C
'London' ware (Parisi 1982, fig 8, 14) OGL B 166	ian ware), Fabric 37. Bowl (Elsdon Period: 5C
	BB1, Fabric 1. Dish OGL B 166 Fabric 11. Jar OGL B 166 Fabric 11. Jar OGL B 166 Fabric 11. Jar OGL B 166 Fabric 12. Lid OGL B 166 Fabric 12. Lid OGL B 166 Fabric 12. Vessel fragm Bowl? OGL B 166 Parisian ware, Fabric Probably first half of too OGL B 166 'London' ware (Parisi 1982, fig 8, 14)

Period 5D (Fig 199)

This period produced 116 sherds (Table 10); the coarse/fine ware sherds averaged 13g in weight (Table 11). This group produced only one sherd of BB1. The majority of the pottery comprised grey and oxidized wares (Fabrics 11 and 12), which would fit with an earlier second-century date. The samian ware from soil spread 134, clay surface 154, gulley 156 and drain/post-trench 169 has a Flavian-Trajanic date. Only soil spread 153 had samian of the Hadrianic or early Antonine period, Central Gaulish forms 18/31 or 31 and 27.

Mortaria fragments include the local fabric 352, used by the potter Austinus, as well as part of a very large raetian mortarium of local manufacture (Fig 28, 155).

151 Fabric 11. Jar

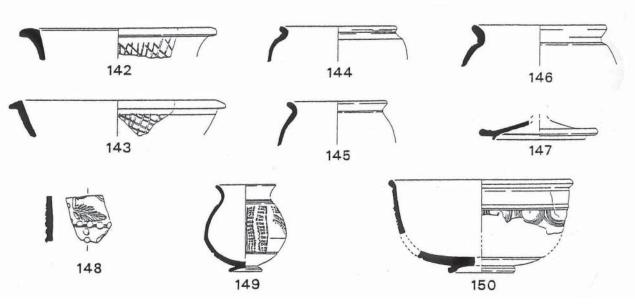


Fig 27 Roman pottery from OGL B Period 5C (scale 1:4)

156

BB1, Fabric 1. Jar

	OGL B 154	Period: 5D
152	Fabric 11. Narrow-ne OGL B 154	3
153	Fabric 13. Jar OGL B 134	Period: 5D
154	Rough-cast ware, Fab OGL B 154	
155	of local manufacture. vessel were recovered prep d) OGL B 153 OGL B 170	rea, Fabric 301. Large raetian mortarium Sherds almost certainty from the same d from Keay's Lane Trench B (Hird in Period: 5D Period: 5C-6B B 130 Period: 6C Period: 6D

Periods 6A to 6E (Fig 29)

Periods 6A to 6E produced 700 sherds (Table 10); the average coarse/fine ware sherd weighed 13g (Table 11). Most of the pottery came from Periods 6C (279 sherds) and 6E (170 sherds). Posthole 137 in Period 6B produced one BB2 dish of Gillam and Mann type 22, dating to the Antonine period (Fig 29, 162); this is the first occurrence of BB2 from OGL B, the only samian from posthole 137 is an East Gaulish form 33 dated to the late second or first half of the third century.

Period 6C produced pottery of early/mid second century date, including a mortarium from Little Chester (Fabric 351), with a trademark stamp (Fig 61, 7) dated to the first half of the second century (pp 81-2). Many of the mortarium fragments from this period are residual, belonging to the large raetian vessel from Period 5D (Fig 28, 155). The latest samian from this phase is mid Antonine.

A mid/late second-century BB1 type appears in Period 6E (Fig 29, 161), and posthole 29 produced a fragment of BB1 cooking pot with right angled lattice decoration. Bidwell (1985) suggests that obtuse-angled lattice decoration is present by AD 220-5, so the right angled lattice, which Gillam believed was produced in the first half of the third century may indeed have been used on late second-century cooking pots. The latest samian dates to the late second or first half of the third century, in Periods 6B and 6E (including No 55, p 67). Surface 32 in Period 6E produced one intrusive medieval sherd.

100	OGL B 130	Period: 6C
157	BB1, Fabric 1. Bowl OGL B 93 Period: 6E	
158	BB1, Fabric 1. Dish OGL B 132	Period: 6C
159	BB1, Fabric 1. Dish OGL 130	Period: 6C
160	BB1, Fabric 1. Dish OGL B 93	Period: 6E
161	BB1, Fabric 1. Dish. I OGL B 79	Mid/late second century Period: 6E
162	BB2, Fabric 2. Dish. OGL B 137.7	Gillam and Mann 22. Antonine Period: 6B
163	Fabric 4. Flagon OGL B 149	Period: 6B
164	Fabric 11. Jar. A locally OGL B 130	y-produced 'second' with distorted rim Period: 6C
165	Fabric 11. Jar OGL B 130	Period: 6C
166	Fabric 11. Jar	

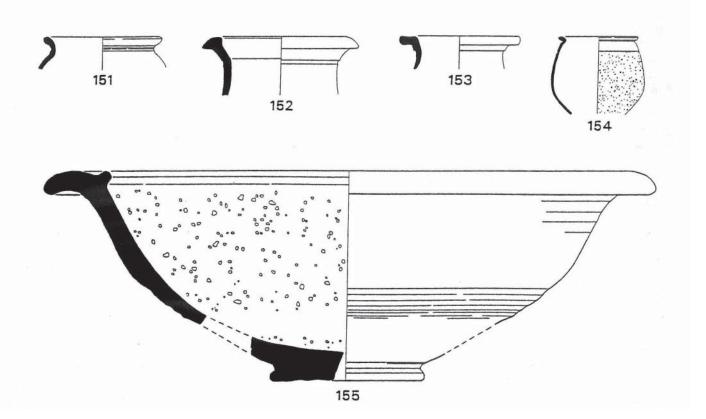


Fig 28 Roman pottery from OGL B Period 5D (scale 1:4)

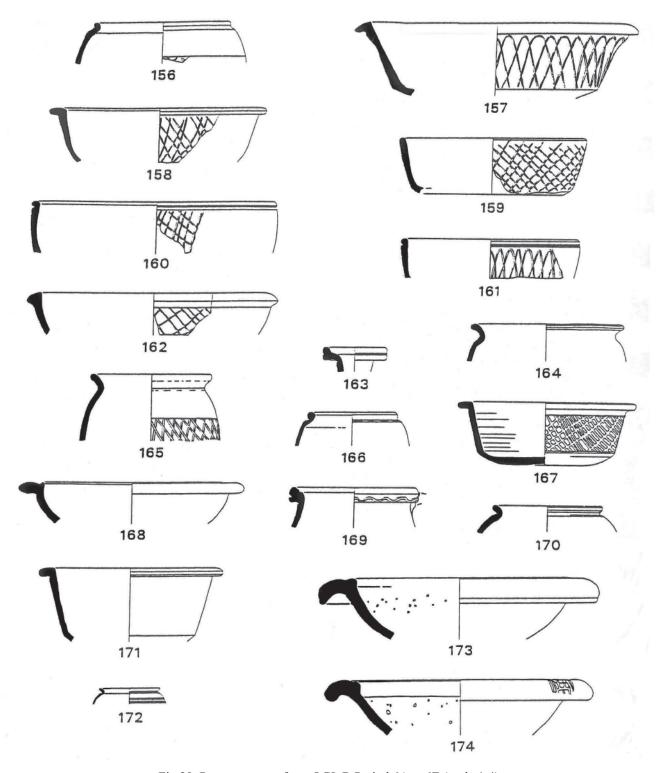


Fig 29 Roman pottery from OGL B Period 6A to 6E (scale 1:4)

	OGL B 83 Period: 61	E		OGL B 125	Period: 6B
167 168	Fabric 11. Bowl OGL B 93 Period: 61 Fabric 11. Bowl	E	171	Fabric 13. Bowl OGL B 139 OGL B 129	Period: 6A Period: 6C
	OGL B 121 OGL B 120	Period: 6C Period: 6D	172	Rhineland, Fabric 31 OGL B 118	. Beaker Period: 6D
169	Fabric 12. Jar with fr OGL B 62 Period: 60	C	173	Carlisle/Scalesceugh OGL B 130	area. Fabric 301. Mortarium Period: 6C
170	OGL B 93 Period: 61 Fabric 13. Jar	E	174		351. Mortarium with trademark stamp and century (see pp 81-2 below).

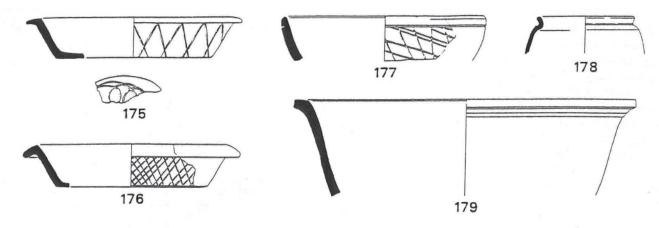


Fig 30 Roman pottery from OGL B Period 6F (scale 1:4)

OGL B 62 Period: 6C OGL B 93 Period: 6E

Period 6F (Fig 30)

The period produced 278 sherds (Table 10); the average coarse/fine ware sherd weighed 20g (Table 11). The latest samian, an East Gaulish dish and an East Gaulish bowl of form 38 or 44, dates to the late second or first half of the third century.

An unusual feature of some of the BB1 dishes from The Lanes, including one from gulley 92 (fill 76) in this period, is a lattice-decorated base instead of the more usual scribbled base. Unfortunately only the base is present here, so it is not known if the profile of these dishes is in any way different.

The mortaria include a vessel stamped by the local potter Doc(e)ilis (Fig 61, 9) and dated to the period AD 125/30-165 (p 82 below).

Cobbled surface 73 produced large quantities of amphora fragments (98 sherds), including rim fragments of a South Spanish vessel dating to the late second or early third century. The sherds, weighed over 9kg, represent at least two vessels (there are three handle scars present), and as an amphora of this type weighs 28-30kg (Bidwell 1985), only a small part of two or more vessels is represented here. The average

amphora sherd weight is only 85g, and so it is possible that the accumulation of amphora fragments here represents packing for the surface rather than amphora broken *in situ*.

175	BB1, Fabric 1. Dish OGL B 80	Period: 6F
176	BB1, Fabric 1. Dish OGL B 73	Period: 6F
177	BB1, Fabric 1. Dish OGL B 75	Period: 6F
178	Fabric 11. Jar OGL B 58	Period: 6F
179	Fabric 11. Bowl OGL B 76	Period: 6F

Periods 6F-7 and 7A (Fig 31)

These periods produced some 123 sherds (Table 10). Only 36 sherds were recovered from Period 6F-7, comprising BB1, grey ware (Fabric 11), oxidized ware (Fabric 12) and a local raetian mortarium dating to the later second century, with a few South Spanish amphora fragments. The samian is Central or East Gaulish, the latest being a Central Gaulish form 18/31 or 31 from metalled area 71, dating to the mid Antonine period.

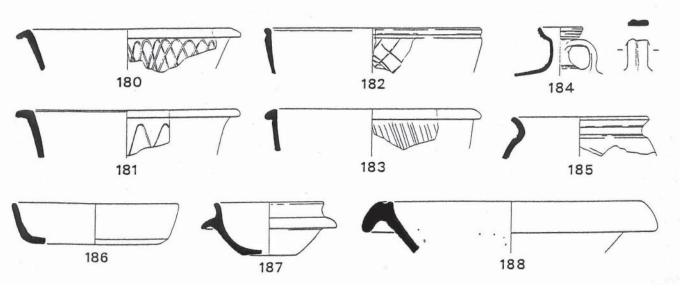


Fig 31 Roman pottery from OGL B Period 7A (scale 1:4)

Soil spread 51, which overlay Building 362 in Period 7A, produced 87 sherds. Apart from Period 6A-E this is the only other period to produce BB2, in this case a later form of dish 5, dated by Gillam to AD 180-240 (Fig 31, 183). Alocally-produced bowl in oxidized ware (Fig 31, 187) is also present.

There are two fragments of local mortaria, one of a ractian vessel (Fig 31, 188), a form which was present among the kiln waste from English Damside, Carlisle (unpublished), and which probably dates to the second half of the second century (K Hartley, pers comm).

The latest samian from 51 is late second century, and includes a Central Gaulish form 33, stamped by Victor iv (Fig. 58, 59) and dated to c AD 160-200 (p. 77, below).

180	BBI, Fabric I. Dish. OGL B 51	Period: 7A
181	BBI. Fabric I. Dish. OGL B 51	Period: 7A
182	BBI, Fabric 1. Dish. OGL B 51	Period: 7A
183	BB2, Fabric 2. Dish. OGL B 51	Gillam 312. AD 180-240. Period: 7A
184	Fabric 6. Flagon. OGL B 51	Period: 7A
185	Fabric 11. Jar. OGL B 51	Period: 7A
186	Fabric 11. Dish. OGL B 51	Period: 7A
187	Fabric 12. Bowl. This form of bowl was found among the kiln waste from English Damside. Carlisle, and is a local product. The English Damside examples are all in grey fabrics; whether the reduction was intentional or not is impossible to say. Second half of second century. OGL B 51 Period: 7A	
188		area, Fabric 301. Raetian mortarium. This ng the English Damside kiln waste. Period: 7A

Period 7B (Fig 32)

The loam and pebble spreads of this period produced 274 sherds (Table 10) the average coarse/fine ware sherd weighed only 7g, the smallest from OGL B (Table 11) The BBI comprises early/mid and mid/late second-century types such as Gillam 1976, types 34 and 70. Two dishes were represented by lattice-decorated bases, but again these lacked a complete profile.

The latest samian dates to the late second or first half of the third century, and includes fragments of East Gaulish forms 18/31 or 31 and 38 or 44.

The mortaria are all local products, and include residual fragments from Period 6F.

189	Fabric 12 Flagon. OGL B 20 Period: 7B
190	Fabric 12. Flanged bowl. OGL B 20 Period: 7B
191	Fabric 12. Lid. OGL B 15 Period: 7B
192	Carlisle/Scalesceugh area, Fabric 301. Raetian mortarium. OGL B 15 Period: 7B
193	Carlisle/Scalesceugh area, Fabric 301. Raetian mortarium. OGL B 15 Period: 7B OGL B 25 Period: 8A

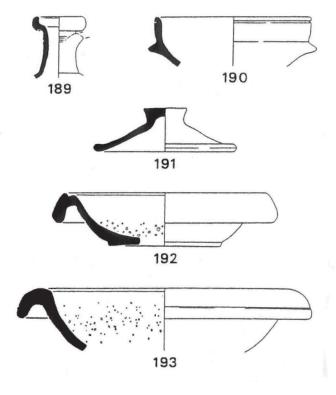


Fig 32 Roman pottery from OGL B Period 7B (scale 1:4)

Period 8A (Fig 33)

This period produced 251 sherds (Table 10); the coarse/fine ware sherds averaged 17g in weight (Table 11). The coarse pottery is all of second-century date, including many bowls and dishes in BB1 and grey ware (Fabric 1 I), dating to the mid/late second century. The only exception to this is a fragment of a Grey Crambeck ware bowl (not illustrated), Corder and Bidey (1937) type lb, of the late fourth century, from soil, gravel and cobble surfaces 25. There is one fragment of Nene Valley Colour-coated ware, which only occurs here and in Period 8B.

The latest samian is late second or early third century, and includes a form 33 and a form 37, both East Gaulish products.

The mortaria are all local products and include residual fragments from Period 6F and 7B. Two of the vessels are raetian, dating to the middle and second half of the second century respectively.

194	BB1, Fabric 1. Bowl OGL B 25	Period: 8A
195	BB1, Fabric 1. Bowl/OGL B 25	dish Period: 8A
196	BB1, Fabric 1. Dish OGL B 27	Period: 8A
197	Fabric 11. Bowl OGL B 25 Period: 8A	L.
198	Fabric 11. Dish OGL B 27 Period: 8A	
199	Fabric 11. Dish OGL B 26 Period: 8A	
200	Fabric 11. Dish OGL B 26 Period: 8A	L.
201	Fabric 11. Dish OGL B 27 Period: 8A	

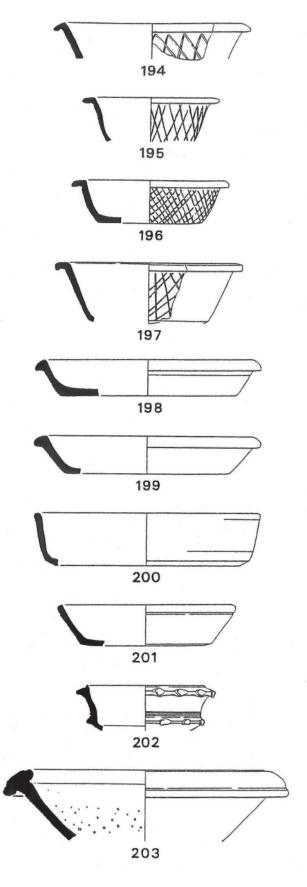


Fig 33 Roman pottery from OGL B Period 8A (scale 1:4)

Nos 232-5 are almost certainly local products, reasonably closely paralleled by vessels from the English Damside waster group (unpublished).

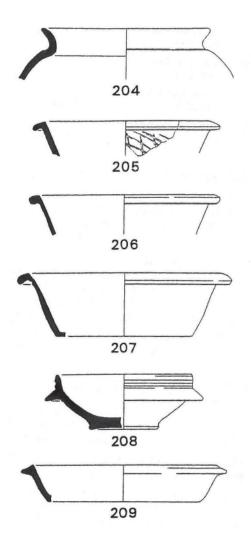


Fig 34 Roman pottery from OGL B Period 8B (scale 1:4)

Fabric 11. Tazza
OGL B 25
Period: 8A

203 Carlisle/Scalesceugh area, Fabric 301. Mortarium. A local product paralleled by an example from the English Damside kiln waste. Second half of second century.
OGL B 25 Period: 8A

Period 8B (Fig 34)

Period 8B produced 78 sherds (Table 10); the coarse/fine ware sherds averaged 22g in weight (Table 11). The pottery differs little from that of earlier periods, but with the occurrence of Severn Valley ware, from hearth 13, and rather more Nene Valley Colour-coated ware than previously, at 1.3%. Unfortunately these fragments are not closely datable. There is one sherd of local mortarium.

The latest samian is an East Gaulish form 31 dating to the late second or first half of the third century, which comes from hearth 13. This is the first period to have no South Gaulish samian, which is residual from about Period 5; East Gaulish samian reaches its peak at this time, making up over 11% of the pottery.

BB1, Fabric 1. Cooking pot OGL B 48 Period: 8B

BB1, Fabric 1. Bowl/dish OGL B 48 Period: 8B

206	Fabric 11. Bowl/ OGL B 48	dish Period: 8B
207	Fabric 11. Bowl OGL B 48	Period: 8B
208	Fabric 11. Flange OGL B 13	ed bowl Period: 8B
209	Fabric 11. Flange OGL B 16	ed dish Period: 8B

Old Grapes Lane Trench C

This trench produced a relatively small amount of pottery (Table 12). There does not appear to be much difference in date between the two periods; both produced Antonine pottery.

The only unstratified pottery of a type not represented amongst the stratified material comprises two sherds of the base of a Mancetter-Hartshill mortarium, which in Carlisle probably dates to the third century. In addition a late fourth century Huntcliff ware jar, Gillam 163, occurred residually in a medieval context.

Periods 2 and 2? (Fig 35)

Period 2 produced 133 sherds, and there were six sherds from pit 3, which may belong to Period 2 (Table 12); coarse/fine ware sherds avenged 17g in weight (Table 13). The date range of the pottery spans the second century. Slot 33 (fill 30) and material associated with wall 51 have particularly late material, including an East Gaulish samian bowl of form 38 or 44 dating to the late second or third century, and a BB2 dish (Fig 35, 211) of mid second- to early third-century date.

The pottery from the remaining contests fits a late first/early second-century date (Fig 35, 40, 42, and 45) except for deposit 4, which produced a samian form 37 bowl dated to c AD 125-50.

210	BB1, Fabric 1. Dish OGL C 51	Period: 2 Ic 2. Dish. Gillam 317. AD 130-220 Period: 2 Reeded-rim bowl. Late first/early secon Period: 2 Jar Period: 2 Reeded-rim bowl. Late first/early secon Period: 2 Lid Period: 2 Dish Period: 2 . Mortarium of Pas de Calais origin				
211	BB2, Fabric 2. Dish. OGL C 53		20			
212	Fabric 11. Reeded-rin OGL C 53		second century			
213	Fabric 12. Jar OGL C 54	Period: 2				
214	Fabric 12. Reeded-rin OGL C 51	•	second century			
215	Fabric 12. Lid OGL C 30	Period: 2				
216	Fabric 13. Dish OGL C 51	Period: 2				
217	Fabric 313. Mortarium OGL C 28	_	in			
218	Fabric 303? Locally-pro OGL C 51, OGL C 53	duced mortarium, Carlisle 3, OGL C 54	e/ Old Penrith area Period: 2			

Periods 3 and 3? (Fig 36)

Period 3 produced only 24 sherds, with a further 71 sherds

Table 12
Roman pottery from OGL C, expressed as percentages of sherd numbers

		Per	riod
Fabric group	Fabric	2 and 27	3 and 3?
Coarse/fine ware	BB1, Fabric 1	6.5	6.3
	BB2, Fabric 2	0.7	
	Rustic ware, Fabric 3	2.9	
	Fabric 4	5.0	3.2
	Grey ware, Fabric 11	14.4	15.8
	Oxidized ware, Fabric 12	32.4	23.2
	Fabric 13	0.7	
	'Rhenish' ware, Fabric 35	0.7	
	Fabric 40	1	1.1
	Fabric 41		1.1
Mortaria	Carlisle/Scalesceugh, Fabric 301		12.6
	Carlisle/Old Penrith, Fabric 303	4.3	
	Gallia Belgica, Fabric 313	0.7	
Amphorae	Fabric 203	6.5	
,	Fabric 206	0.7	1.1
	Fabric 207		7.4
	Fabric 208		1.1
Samian	South Gaulish	5.8	1.1
	Central Gaulish	18.0	26.3
	East Gaulish	0.7	
Number of sherds		139	95

coming from features possibly belonging to this period (Table 12). Of the Period 3 pottery, eight sherds were oxidized ware cooking pot fragments (Fabric 12). There was a single sherd of BB1 and seven amphora sherds, all South Spanish (Peacock and Williams Class 25). The latest samian is a Central Gaulish form 37, by X-6 or an associate, dated to the period c AD 130-65.

Of the features possibly belonging to Period 3, ditch 11 (fill 5) produced much of the pottery; this included two flagons, one ring-neck (Gillam 3) and dated to AD 80-120, and one with a flanged rim (Fig 36, 219), as well as two dishes in unusual fabrics (Fabrics 40 and 41; Fig 36, 220-1). This ditch also contained a mortarium of local manufacture (Fig 36, 222) with a graffito in imitation of a herringbone stamp scored on the rim (Fig 61, 10), which is probably contemporary with the work of the potter Doc(e)ilis, that is, AD 125/30-165 (pp 82-3 below). The samian from ditch 11 is all Central Gaulish, Hadrianic or

Table 13
Roman pottery from OGL C: average sherd weights
(in g)

Period	Coarse/fine wares	Mortaria	Amphorae
2 and 2?	17	94	55
3 and 3?	26	90	146

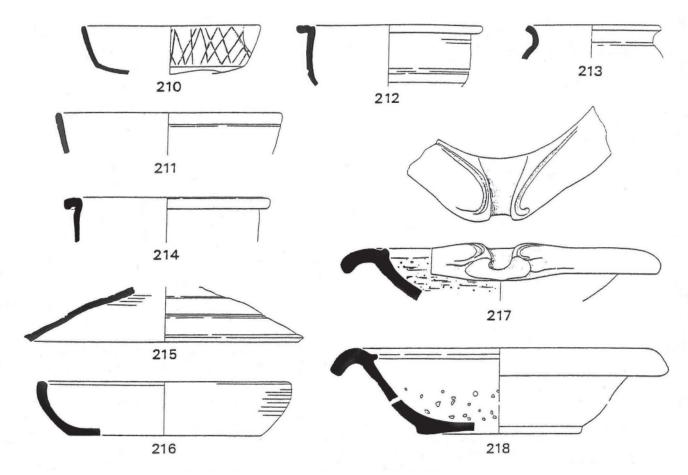


Fig 35 Roman pottery from OGL C Period 2 (scale 1:4)

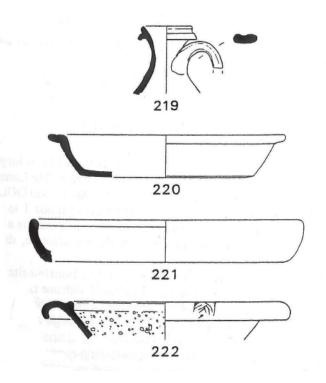


Fig 36 Roman pottery from OGL C Period 3 (scale 1:4)

early Antonine, and includes a form 18/31 stamped by Attianus ii (No 7, p 74 below) and a form 27.

The only other Period 3? feature to produce much pottery was another ditch, 23 (upper fill 20), which produced a couple of sherds in BB1, grey ware (Fabric 11) and oxidized ware (Fabric 12). The latest samian from this ditch was Antonine in date, and included two fragments of Central Gaulish form 33 cups.

219	Fabric 12. Flagon OGL C 5 Period: 3?
220	Fabric 40. Dish OGL C 5 Period: 3?
221	Fabric 41. Dish

Carlisle/Scalesceugh area, Fabric 301. Mortarium with graffito imitating stamp (Fig. 61, 10)
 OGL C 5 Period: 3?

Old Grapes Lane Trench J

OGL C 5 Period: 3?

Period 2 at OGL J is equated with OGLA Period 8 A and OGL B Period 5B; the dating of the Period 2 pottery agrees well with this equation. The pottery from Period Post-2 is only slightly later in date than Period 2, perhaps late Antonine.

Period 2 (Fig 37)

This period produced 60 sherds (Table 14); the coarse/fine ware sherds averaged 20g in weight (Table 15). The pottery is of second-century date and includes BB1, grey and oxidized

Table 14
Roman pottery from OGL J, expressed as percentages of sherd numbers

		Pe	riod
Fabric group	Fabric	2	Post-2
Coarse/fine ware	BB1, Fabric 1	23.3	13.5
	Fabric 4	6.7	5.7
	Grey ware, Fabric 11	10.0	63.3
	Oxidized ware, Fabric 12	13.3	11.0
	Fabric 15		0.2
	Nene Valley ware, Fabric 21	1.7	
	Fabric 29	1.7	
Mortaria	Carlisle/Scalesceugh, Fabric 301		1.5
	Carlisle/Old Penrith, Fabric 303		0.5
Amphorae	Fabric 207	1.7	2.0
	Fabric 210	8.3	
Samian	Central Gaulish	33.3	2.0
	East Gaulish		0.2
Number of sherds	60	401	

wares (Fabrics 11 and 12), and a rough-cast beaker of late first/early second-century date (Fig 37, 225). The latest samian is a Central Gaulish form 31 of Antonine date, from possible drain 33 at the northern end of the trench.

223	BB1, Fabric 1. Dis OGL J 17	sh Period: 2
224	Fabric 12. Bowl OGL J 17	Period: 2
225	Rough-cast ware, I	Fabric 29. Beaker

Period Post-2 (Fig 38)

366 of the 401 sherds from this period (Table 14) came from the surface of road 11; these included samian ware sherds and one amphora fragment, but most were coarse wares including a fairly unusual BB1 pinched-rim jug (Fig 38, 226), the second BB1 jug from The Lanes (cf Fig 26, 131), dating to the second century (Wallace and Webster 1989).

The mortaria were all local products, and the amphora fragments were all South Spanish (Peacock and Williams Class 25).

The latest samian is a Central Gaulish form 31R of

Table 15 Roman pottery from OGL J: average sherd weights (in g)

Period	Coarse/fine wares	Mortaria	Amphorae
2	20		83
Post-2	22	89	456

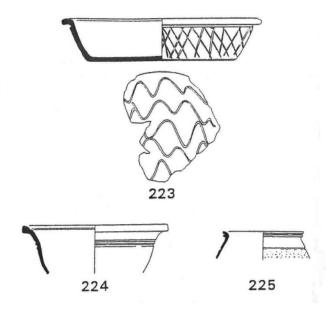


Fig 37 Roman pottery from OGL J Period 2 (scale 1:4)

mid-late Antonine date, from deposit 3. With the exception of the two samian sherds from road 11, which are of Central Gaulish (Les Martres-de-Veyre) manufacture (form 30 or 37) and Trajanic in date, the samian ware is Hadrianic or Antonine.

226	A (1989, fig 1, 1-7, es	ed-rim jug of Wallace and Webster Class specially 1 which has a similar mortice nt). The jugs are broadly dated to the d century. Period: Post-2
227	BB1, Fabric 1. Dish OGL J 11	Period: Post-2
228	BB1, Fabric 1. Dish OGL J 9	Period: Post-2
229	Fabric 4. Ring-neck f	lagon. Late first/early second century Period: Post-2
230	Fabric 11. Narrow-ne OGL J 11	cked jar Period: Post-2

Lewthwaite's Lane Trench A

This site appears to have been occupied for a longer period that the other sites at the southern end of the Lanes. It has a more substantial first-century occupation than OGL A and B, probably starting somewhat earlier. Periods 1 to 6 are first century in date. The only vessel from Period 1 is a mortarium of either Gloucester or Carlisle manufacture, dated to the period AD 60-90.

Early fine wares are more prolific from this site; there were 18 sherds of Lyon ware, compared with one from the OGL B and none from OGL A. Other early wares present here include the 'carrot' amphorae (Fabric 211), although one of these was found residually in Period 11.

Period 7 is an early second-century phase, and the quantities of pottery indicate a marked increase in activity at this time. Period 8 is Hadrianic, and Periods 9 and 10 are late Hadrianic/Antonine in date.

At LEL A, as at OGL A West, there is a problem in defining the latest Roman phases and identifying possible

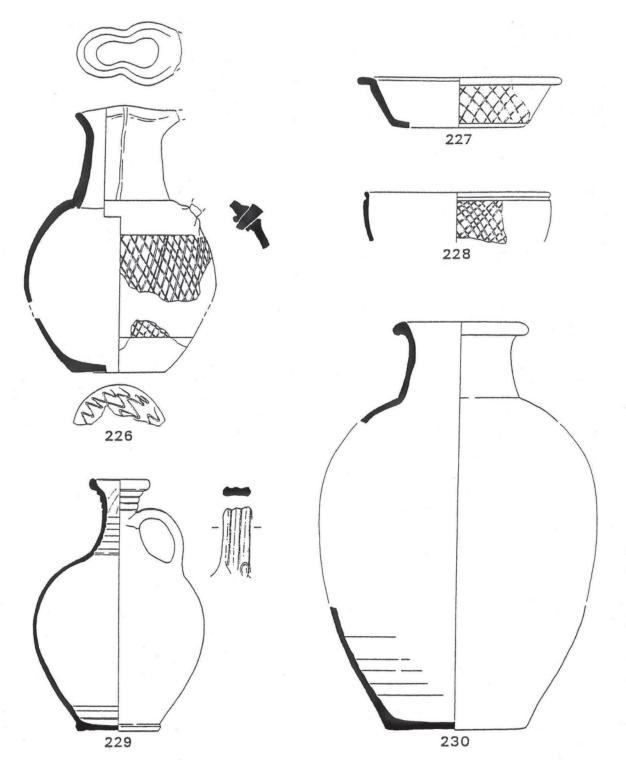


Fig 38 Roman pottery from OGL J Period Post-2 (scale 1:4)

post-Roman activity. The earliest period to produce medieval pottery is Period 19B, and the chronological status of deposits from Periods 13 and 14 onwards is uncertain. Periods 14 to 18 cannot be dated closer than third to twelfth century, and it has been suggested that wattle building 668 in Period 15 may belong to the Anglian or Anglo-Scandinavian period (McCarthy 2000, p 43). Although the Roman pottery from these periods may be entirely residual, the assemblages are nevertheless tabulated and discussed here; they do contain

some indicators of late Roman occupation in the area.

Period 1 (Fig 39)

The buried ground surface (642) produced only two sherds of one mortarium (Table 16). The profile is mainly know in the work of A. Terentius Ripanus, who can be attributed to Gloucester, and it is related to Gillam 237, which was widely made by the army in the north in the first century AD (K Hartley, pers comm).

46

231 Carlisle or Gloucester, Fabric 355. Mortarium. AD 60-90. LEL A 642 Period: 1

Periods 2 to 5 (Fig 40)

Some 268 sherds were recovered from Periods 2 to 5 (Table 16); the coarse/fine ware sherds averaged 13g in weight

(Table 17). The pottery includes coarse wares consistent with a late first-century date, including flat and reeded-rim bowls in Fabrics 11 and 12, a ring-neck flagon of Gillam 3 dated to AD 80-120, and everted-rim jars in Fabric 12. Period 4 produced a rough-cast beaker of probable Rhineland origin, and Periods 4 and 5 had small quantities of Lyon ware, dated to AD 40-70, and mortaria of local

Table 16
Roman pottery from LELA, expressed as percentages of sherd numbers

						,	,	Period						Period									
Fabric group	Fabric	1	2 to 5	6	7	8	9	10	11	124	12B and 12C	13	14 to 17	18									
Coarse/fine ware	BB1, Fabric 1 BB2, Fabric 2 Rustic ware, Fabric 3 Fabric 4 Fabric 6		1.1 0.7	5.3 0.8 0.3	0.1 2.2 0.5 0.3	2.1 1.2 3.3 0.3	16.8 0.5 4.3	5.3 1.7 12.2 0.2	9.7 0.4 0.4 8.1	7.3	0.4 5.7	3.5	0.6	0.0									
	Terra Nigra, Fabric 9 Grey ware, Fabric 11 Oxidized ware, Fabric 12 Fabric 13 Fabric 14 Fabric 15		23.5 35.1	23.2 36.6 0.3	20.4 50.5	31.8 33.8 1.2 0.3 1.2	31.9 19.5 4.9	25.9 16.8 1.5 3.4 0.2	15.3 30.2 0.4	32.7 21.8	19.8 11.5 4.4 0.4	8.5 34.9	20.3 15.7 0.6	52. 15.									
	Severn Valley ware, Fabric 17 Fabric 18 Nene Valley ware, Fabric 21 Grey Crambeck ware, Fabric 27 Fabric 29			0.5	2.1	2.1		0.6	0.4			0.6	5.8 0.6 0.6	0.0									
	Fabric 30 Fabric 31 Fabric 32		2.2	1.5	0.1	0.3	0.5	0.2 0.2				0.3	9.9	0.									
	'Rhenish' ware, Fabric 34 Lyon ware, Fabric 38 Fabric 44 Fabric 45		1.1	2.3	0.8	0.6	0.5							0.									
	Fabric 46 Fabric 48			0.3				0.2	1.2		1.3	1.6		0.									
Mortaria	Carlisle/Scalesceugh, Fabric 301 Carlisle/Old Penrith, Fabric 303 Old Penrith, Fabric 305 Gallia Belgica, Fabric 313		0.7	0.3	0.1 0.3 0.1	0.3	1.1 0.5	0.2			0.4	0.3	0.6	0.:									
	Lincoln, Fabric 316 Verulamium region, Fabric 320 Mancetter-Hartshill, Fabric 324 Lower Nene Valley, Fabric 328 North-east England?, Fabric 340			0.5				0.2			0.9		0.6	0.									
	North-west England, Fabric 350 Probably Carlisle, Fabric 352 Carlisle/Gloucester, Fabric 355	100.0			0.4			0.4	0.8		1.3	0.9	3.5	0.:									
Amphorae	Fabric 202 Fabric 203 Fabric 204		1.9		0.1			7.6	1.2		0.4	0.3 0.3 0.6	2.3	0.:									
	Fabric 206 Fabric 207 Fabric 208 Fabric 209 'Carrot' amphora, Fabric 211			0.8	0.5	2.1	4.9 0.5	6.5 4.2	2.0 1.2 4.8	1.8	8.8 5.7	6.0 2.5	7.0 0.6	4. 2. 0.									
Samian	South Gaulish Central Gaulish East Gaulish		32.8 0.4	24.2 0.5	18.8	13.6 5.6	3.8 8.6	1.9 9.5	0.8 22.6 0.4	9.1 23.6 1.8	1.3 22.5 0.4	1.3 20.1	1.2 10.5 1.2	5. 2.									
Number of sherds		2	268	396	765	337	185	525	248	55	227	318	172	616									

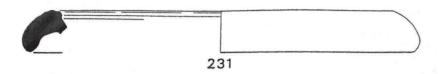


Fig 39 Roman pottery from LEL A Period 1 (scale 1:4)

manufacture, as well as a fragment of imported Fabric 313, dated to AD 70-100.

Period 5 produced sherds of Gaulish amphora, also found in Period 5 at Annetwell Street (Hird in prep a), which dates to the late first/early second century.

The latest samian ware is a Central Gaulish form 30 or 37 from Les Martres-de-Veyre, of Trajanic date.

232	Fabric 11. Everted-rim jar. LEL A 603 Period: 5	
233	Fabric 11. Jar. LEL A 599.	Period: 5
234	Fabric 11. Jar. LEL A 599.2	Period: 5
235	Fabric 11. Bowl. Sooted. LEL A 599 Period: 5	
236	Fabric 12. Ring-neck flagon. Lat LEL A 599.2	e first/early second century. Period: 5
237	Fabric 12. Jar with barbotine dec LELA 599.2	eoration. Period: 5
238	Fabric 12. Flat-rim bowl. LEL A 616 Period : 4 LEL A 599 and LEL A 601	Period : 5

Fabric 12. Flat/reeded-rim bowl.

Table 17 Roman pottery from LELA: average sherd weights (in g)

Period	Coarse/fine wares	Mortaria	Amphorae
1		100	
2 to 5	13	108	54
6	13	79	158
7	11	55	77
8	16	28	227
9	14	57	275
10	16	65	118
11	14	48	98
12A	15	-	40
12B and 12C	15	92	173
13	11	105	253
14 to 17	11	120	150
18	14	39	240

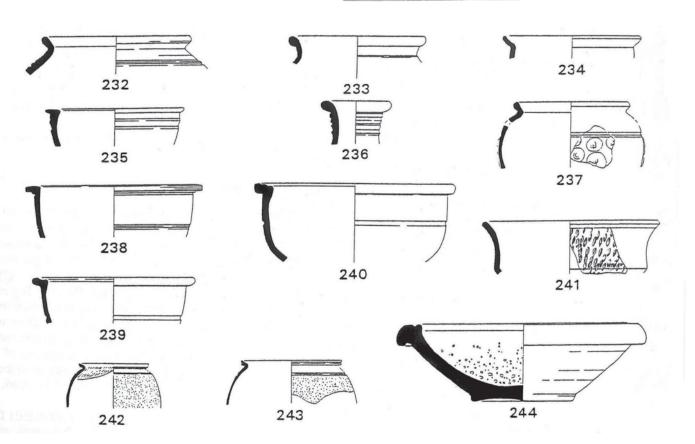


Fig 40 Roman pottery from LEL A Periods 2-5 (scale 1:4)

	LEL A 599.2	Period: 5
240	Fabric 12. Reeded-rin LEL A 599	n bowl. Late first/early second century. Period: 5
241	Fabric 12. Bowl with LEL A 603 LEL A 475	rouletted decoration. Period: 5 Period: 10B
242	Rhineland, Fabric 31. LEL A 604	Rough-cast beaker. Period: 4
243	Lyon ware, Fabric 38 LEL A 599.2	Beaker. First century. Period: 5
244	Fabric 305. Mortariur 130, cf. Austen 1992, LEL A 606 LEL A 550	n of Old Penrith manufacture? AD 90- fig 75, 512. Period: 2C Period: 7A

Period 6 (Fig 41)

This period produced 396 sherds (Table 16); the coarse/fine ware sherds averaged 13g in weight (Table 17). Accumulations of pottery came from deposits 607 in Period 6A (60 sherds) and 566 in Period 6D (37 sherds). Two contexts from Period 6A-E produced sizeable groups: gulley 573 (fill 560) had 39 sherds and wood deposit 578 had 70 sherds. The sherds from all these contexts were relatively small, and only deposit 578 produced joining sherds (six sherds, three joining, belonging to the same vessel; Fig 41, 245).

The pottery from Period 6 is not significantly later in date than that from Period 2 to 5, and the composition of the group is similar to that from OGL A Period 5 and OGL B Period 4. The assemblage fits well into a late first-or very early second-century date range, and includes oxidized and grey jars, reeded-rim bowls (Fig 41, 250, 257-9) and ring-neck and flat-rim flagons. Lyon ware is still present, and at its highest proportion at this site (2.3%). The later samian consists of South Gaulish form 37s (Fig 55, 80-2) dated to the period c AD 85-110 (p 72 below).

Period 6A produced a fragment of Terra Nigra, found on sites occupied to *c* AD 85; this is one of only three sherds from the southern Lanes trenches. Gulley 573 (fill 560) produced an unusual flanged bowl in a mica-dusted fabric (Fig 41, 266) and a double-bead rim bowl, Gillam 301, in Fabric 45 (Fig 41, 265). The earliest appearance and greatest proportion of Rustic ware is in this assemblage, at 5.3% (Fig 41, 245-6).

The amphorae present include fragments of South Spanish origin (Peacock and Williams Class 25), and 'carrot' amphorae (Peacock and Williams Class 12; cfFig 46, 325, for an illustrated example), which are most usually found on early military sites in Britain, including the Annetwell Street fort (Hird 1992; in prep a).

Mortaria include local products and imports from the Pas de Calais (Fabric 313) and the Verulamium region (Fabric 320); both these sources date to the first century.

245	Rustic ware, Fabric 3. LEL A 578	Jar. Heavily sooted. c AD 80-130. Period: 6B-E
246	Rustic ware, Fabric 3. LEL A 588	Jar. <i>c</i> AD 80-130. Period: 6B-E
247	Fabric 11. Handled ja LEL A 607	ır. Period: 6A
248	Fabric 11. Everted-rin LEL A 588	m jar. Period: 6B-E

249	Fabric 11. Jar. LEL A 576	Period: 6C
250	Fabric 11. Reeded-rin LEL A 602	bowl. Late first/early second century. Period:
251	Fabric 11. Lid. LEL A 566	Period: 6D
252	Fabric 11. Lid. LEL A 571	Period: 6C
253	Fabric 11. Lid. LEL A 583	Period: 6B
254	Fabric 12. Jar. LEL A 607	Period: 6A
255	Fabric 12. Flat-rim be LEL A 607	owl. Heavily sooted. Period: 6A
256	Fabric 12. Flat/reeded LEL A 578	l-rim bowl. Period: 6B-E
257	Fabric 12. Reeded-rin LEL A 560	bowl. Late first/early second century. Period: 6A-E
258	Fabric 12. Reeded-rin LEL A 580	bowl. Late first/early second century. Period: 6A
259	Fabric 12. Reeded-rin LEL A 566	a bowl. Late first/early second century. Period: 6D
260	Fabric 12. Rouletted LEL A 560 LEL A 550	oowl. Period: 6A-E Period: 7A
261	Fabric 12. Lid. Soote LEL A 607	d. Period: 6A
262	Fabric 12. Lid. See als LEL A 578	so No 252, a similar form in grey ware. Period: 6B-E
263	Rhineland, Fabric 31. LEL A 612	Rough-cast beaker. Period: 6A
264	Lyon ware, Fabric 38. LEL A 578	Beaker. First century. Period: 6B-E
265	Fabric 45. Bead-rim l LEL A 560 LEL A 566	oowl. Gillam 301. AD 80-130. Period: 6A-E Period: 6D
266	Fabric 46. Bowl with LEL A 560	mica-dusted surfaces. Period: 6A-E
267	Fabric 313. Gallo-Belg LEL A 607	ic mortarium. Gillam 238. AD 70-100. Period: 6A
268	Verulamium region, F LEL A 607	abric 320. Mortarium. AD 60-100. Period: 6A

Period 7 (Fig 42)

This period produced 765 sherds (Table 16), about double the quantity present in earlier periods. Most of the pottery (91.9%; 703 sherds) came from the substantial dump deposits, 550 and 553 in Period 7A. The sherds were mostly small, coarse/fine ware sherds averaging only 11g in weight and amphora sherds 77g (Table 17). This could support the suggestion that Period 7 represents a hiatus or dump, as could the fact that much of the pottery is made up of fabrics and forms that were present in earlier periods, such as Rustic ware and reeded-rim bowls. The fragments of Lyon ware and 'carrot' amphora, belonging as they do to the earliest occupation of roman sites in the north of England, are also likely to be residual at this time.

Deposit 550 produced the earliest BB1 from LEL A, part of an unusual flanged bowl, unfortunately without a complete rim section (Fig 42, 269).

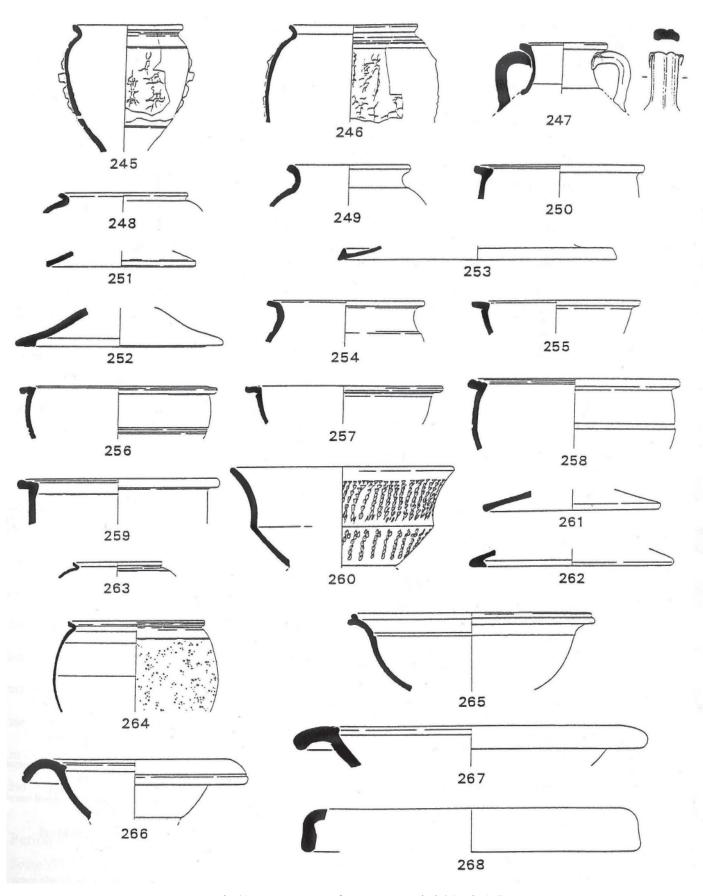


Fig 41 Roman pottery from LEL A Period 6 (scale 1:4)

The mortarium fragments include two sherds of a vessel in Fabric 305 which are residual from Period 2 and the base

of a mortarium in Fabric 301, as well as three fragments of a local ware, Fabric 350, not necessarily made in Carlisle (Fig

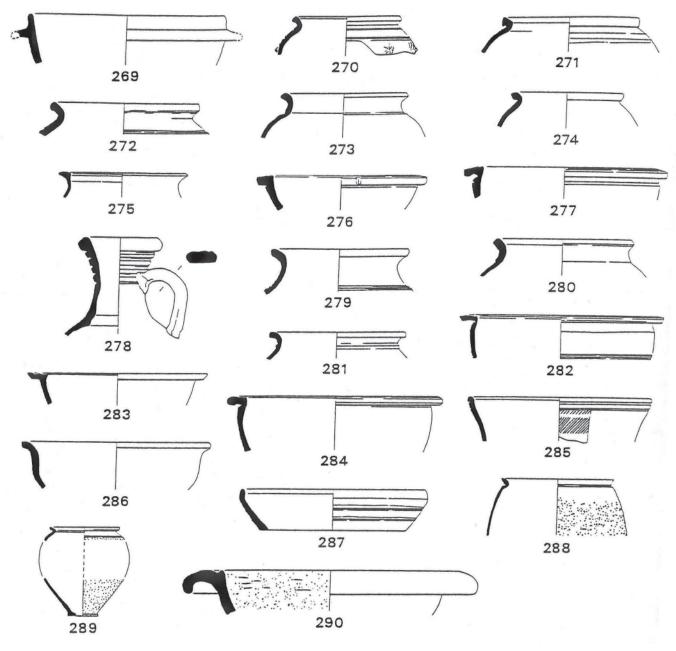


Fig 42 Roman pottery from LEL A Period 7 (scale 1:4)

LEL A 550

42,290). In addition to the residual 'carrot' amphora fragments, there were Gaulish and South Spanish amphorae.

The latest samian is Trajanic in date, and includes a Central Gaulish form 18/31 and a form 37, in the style of X-2 (Fig 55, 83), dated to c AD 100-120 (p 72 below).

269	BB1, Fabric 1. Flanged	lbowl. Flanged bowls are present amongst
	the repertoire of the B	B1 industry in the late first/early second
	century (Holbrook an	nd Bidwell 1991, 96-7).
	LEL A 550	Period: 7A
270		. Jar. Late first/early second century.
	LEL A 550	Period: 7A
271	Fabric 11. Everted/b	ead-rim jar.
	LEL A 547	Period: 7B
272	Fabric 11. Jar.	
	LEL A 550	Period: 7A
273	Fabric 11. Jar.	
273		Period: 7A

274	Fabric 11. Jar. LEL A 553	Period: 7A
275	Fabric 11. Jar. LEL A 550	Period: 7A
276	Fabric 11. Reeded-rin LEL A 550	n bowl. Late first/early second century. Period: 7A
277	Fabric 11. Reeded-rin LEL A 550	n bowl. Late first/early second century. Period: 7A
278	Fabric 12. Ring-neck LEL A 550	flagon. Gillam 3. AD 80-120. Period: 7A
279	Fabric 12. Jar. LEL A 550	Period: 7A
280	Fabric 12. Jar. LEL A 550	Period: 7A
281	Fabric 12. Jar. LEL A 553	Period: 7A

Period: 7A

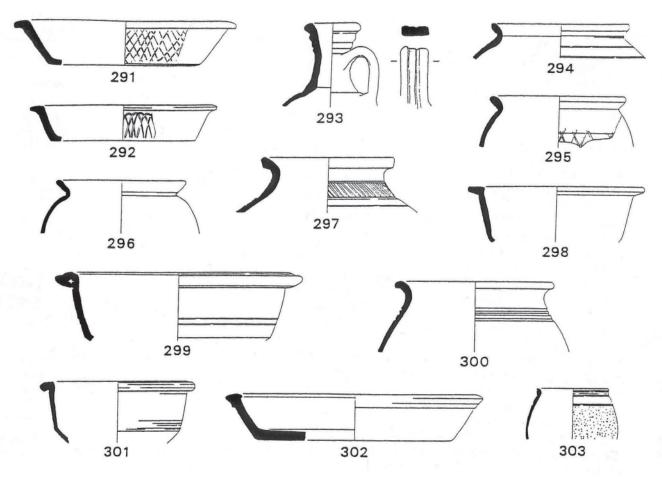


Fig 43 Roman pottery from LEL A Period 8 (scale 1:4)

282	Fabric 12. Reeded-rin LEL A 550	n bowl. Late first/early second century. Period: 7A
283	Fabric 12. Reeded-rin LEL A 550	n bowl. Late first/early second century. Period: 7A
284	Fabric 12. Reeded-rin LEL A 553	n bowl. Late first/early second century. Period: 7A
285	Fabric 12. Bowl. LEL A 553	Period: 7A
286	Fabric 12. Bowl. LEL A 550	Period: 7A
287	Fabric 12. Dish. LEL A 550	Period: 7A
288	Rough-east ware, Fab LEL A 550	ric 29. Beaker. Period: 7A
289	Rhineland, Fabric 31. LEL A 550	Rough-cast beaker. Period: 7A
290	North-west England, LELA 550	Fabric 350. Mortarium. Period: 7A

Period 8 (Fig 43)

Some 337 sherds were recovered (Table 16); the coarse/fine ware sherds averaged 16g in weight (Table 17). Periods 8A to 8D produced small quantities of BB1 but its first real impact is in Period 8E, where gulley 518 (fill 502) and soil deposits 503 and 532 all have BB1 of early/mid second-century dare. All the BB1 sherds at this period are from dishes (Fig 43, 291-2).

The two small mortaria sherds are of local (Fabric 303) and Pas de Calais (Fabric 313) origin. The amphora fragments are all South Spanish (Peacock and Williams Class 25).

The latest samian is a Central Gaulish form 27 of Hadrianic or early Antonine date, from pit 651 (fill 530).

291	BB1, Fabric 1. Dish. G LEL A 502	illam 1976, 57. Early/mid second century. Period: 8E
292	BB1, Fabric 1. Dish. LEL A 532	Early/mid second century. Period: 8E
293		lagon. Gillam 3. AD 80-120. Period: 8E
294	Fabric 11. Jar. LEL A 537	Period: 8B
295	Fabric 11. Jar. LEL A 508	Period: 8E
296	Fabric 11. Jar. LEL A 540 LEL A 535	Period: 8D Period: 8E
297	Fabric 11. Jar. LEL A 505	Period: 8E-F
298	Fabric 11. Bowl. LEL A 532	Period: 8E
299	Fabric 11. Reeded-rim LEL A 528	n bowl. Late first/early second century. Period: 8D
300	Fabric 12. Jar. LEL A 537	Period: 8B
301	Fabric 12. Reeded-rim	bowl. Heavily sooted. Late first/early

second century.

	LEL A 530	Period: 8C
302	Fabric 13. Dish.	
	LEL A 503	Period: 8E
	LEL A 498	Period: 9
	LEL A 451	Period: 10B
303	Rough-cast ware, l	Fabric 15. Beaker.
	LEL A 501	Period: 8E-

Period 9 (Fig 44)

The soil spreads of Period 9 produced 185 sherds (Table 16), coarse/fine ware sherds averaged 14g in weight (Table 17). Like Period 7, this is also a dumping phase, although the average sherd weight is somewhat larger. The assemblage contrasts quite markedly with that from Period 7, however, BB1 makes up 16.8%, compared with less than 1% in Period 7, and grey wares (Fabric 11) formalmost 32% (20.4% in Period 7). Oxidized wares (Fabric 12) have dropped to 19.5% from 50.5% in Period 7, and South Gaulish samian has also fallen dramatically to less than 4%, from 18.8% in Period 7. At the same time, Central Gaulish samian has increased from 1.2% to 8.6% in Period 9.

The pottery from Period 9 is not substantially later than Period 8, except that certain later first- and early second-century wares such as Rustic ware now make up a smaller proportion of the assemblage, and grey wares (Fabric 11) are beginning to increase in volume (almost 32%) as the oxidized wares (Fabric 12) decline (19.5%). The latest samian dates to the Hadrianic or early Antonine period, and consists of Central Gaulish forms 33 and 36 from soil spread 498.

BB1 forms 16.8% of the group, its most abundant occurrence apart from Periods 14 to 17, and the majority of the vessels are dishes. An unusual feature of one BB1 cooking pot base is that it has the scribbled decoration more frequently found on the bases of bowls and dishes.

The amphora fragments are all South Spanish (Peacock and Williams Class 25). The mortaria fragments are all local products (Fabrics 301 and 303).

304	BB1, Fabric 1. Dish. LELA 498	Early/mid second century. Period: 9
305	Fabric 11. Jar. LEL A 498	Period: 9
306	Fabric 11. Jar. LEL A 498	Period: 9
307	Fabric 11. Triple vase LEL A 498	e. Gillam 343. AD 80-120. Period: 9
308	Fabric 11. Bowl with LEL A 498 LEL A 445	rouletted decoration. Period: 9 Period: 10B
309	Rough-cast ware, Fab LEL A 498	ric 15. Beaker. Period: 9
310	Rhineland, Fabric 31. LEL A 498	Rough-cast beaker. Period: 9
311	Fabric 44. Dish. LEL A 498	Period: 9
312	Carlisle/Scalesceugh a LEL A 499	area, Fabric 301. Mortarium. Period: 9

Period 10 (Fig 45)

This period produced 525 sherds (Table 16); the coarse/fine

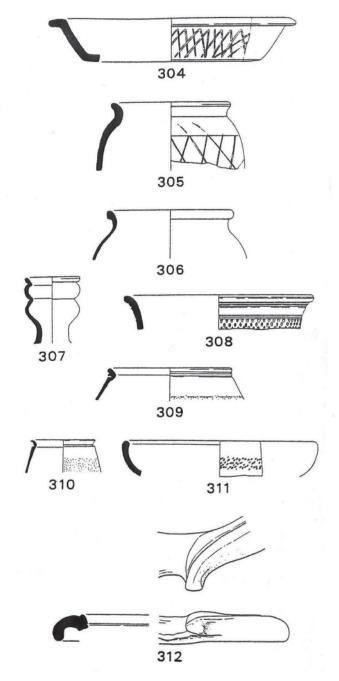


Fig 44 Roman pottery from LEL A Period 9 (scale 1:4)

ware sherds were among the largest from this site, averaging 16g in weight (Table 17). There is a surge of activity on site at this period, associated with Building 663, resulting in increased pottery disposal, especially of amphora, which form nearly 20% of the assemblage. The amphora fragments are almost all of South Spanish origin. Pit 427 (fill 386) and surface 389 produced significant quantities of amphora sherds (40 and 25 sherds respectively); the former includes a vessel of Class 18 (Fig 45, 322), which is likely to be residual here. Surface 389 also produced 17 samian sherds of Antonine date, including a Central Gaulish from 33 and a form 37 in style of Cinnamus ii (No 88, p 72 below), and only three sherds of coarse ware.

BB1 makes up 5.3% of the assemblage, and includes mid second-century types. Grey wares (Fabric 11) form

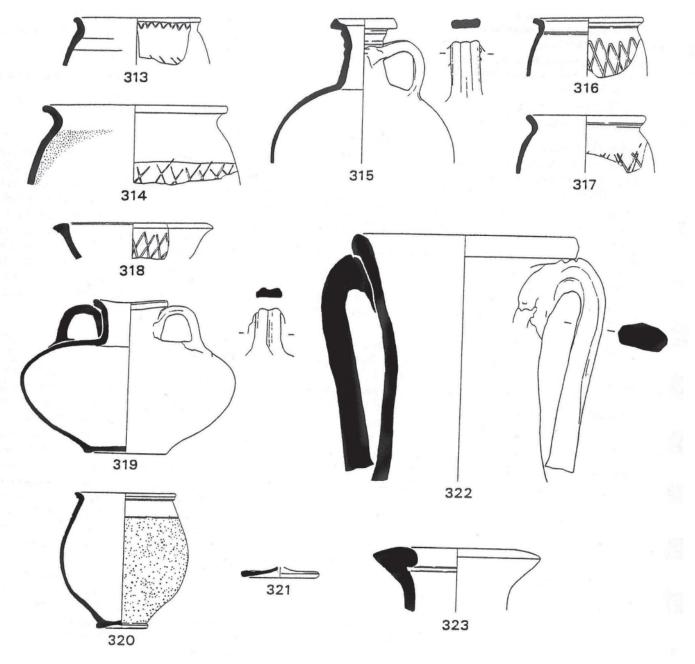


Fig 45 Roman pottery from LEL A Period 10 (scale 1:4)

LEL A 463

about 26% and oxidized wares (Fabric 12) about 17%. Other fabrics are present in very small quantities.

Mortaria make up less than 1% (four sherds), and three of these are local products, including a vessel stamped by Austinus (Fig 61, 12) dating to c AD 125-160 (p 83 below). There is also a fragment of a vessel probably from northeast England (Fabric 340), stamped by Felicioles (Fig 61, 11) and dating to c AD 110-40 (p 83 below).

The percentage of Central Gaulish samian is similar to that from Period 9 at just under 10%, and this is the last phase from which East Gaulish material is absent. The latest samian dates to c AD 150-80 (Nos 87-8, Fig 56 and p 72 below).

313	BB1, Fabric 1. Cookin	g pot. Gillam 1976, 1. Early/mid
	second century. LEL A 424	Period: 10
314	BB1, Fabric 1. Cookin	g pot.

315	Fabric 4. Flagon. LEL A 386	Period: 10	
316	Fabric 11. Jar. LEL A 380	Period: 10	
317	Fabric 11. Jar. LEL A 433	Period: 10	
318	Fabric 11. Dish. LEL A 383	Period: 10	
319	Fabric 12. Two-hand LEL A 463 LEL A 370	led flagon/jar. Period: 10 Period: 11	
320	Rough-cast ware, Fab LEL A 463, LEL A 47		Period: 10
321	Fabric 18. 'Amphora LEL A 380	stopper'/lid. Period: 10	

Period: 10

322	South Spanish, Fabric 202. Amphora. Peacock and Williams
	Class 18. Flavian/early second century. LEL A 386 Period: 10
323	South Spanish, Fabric 207. Amphora. Peacock and Williams
	Class 25.18. Late first/early second century.
	LEL A 379 Period: 10

Period 11 (Fig 46)

Period 11 produced 248 sherds (Table 16); the coarse/fine ware sherds averaged 14g in weight (Table 17). The pottery is not much, if at all, later than that from Period 10, with the exception of soil deposit 364, which produced samian, an East Gaulish form 33, of the late second or first half of the third century. The coarse wares are indicative of a later second-century date, as there are none of the fabrics associated with the third century in Carlisle such as 'Rhenish', Nene Valley and Severn Valley wares (cf Period 18).

BB1 makes up 9.7% of the assemblage, and this period sees the first occurrence of BB2 (otherwise found only in Period 18), one sherd (not illustrated), probably from a dish, from surface 359.

The amphora fragments are all South Spanish (Peacock and Williams Class 25), except for a 'carrot' amphora of first-century date (Peacock and Williams Class 12), which although obviously residual is illustrated here because it is relatively unusual (Fig 46, 325). It came from barrel-lined pit 369 (fill 365), which contained pottery of early/midsecond-century date.

Another unusual vessel is a triple vase similar to Gillam 343, dated *c* AD 80-120 (Fig 46, 324). There were two sherds of mortarium of local manufacture (Fabric 352).

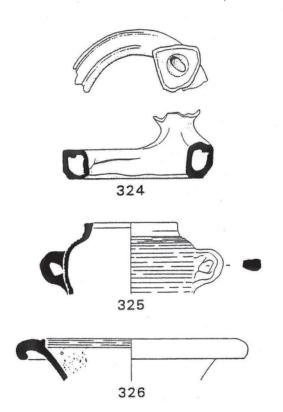


Fig 46 Roman pottery from LEL A Period 11 (scale 1:4)

324	Fabric 11. Base ring of triple vase.		
	LEL A 372	Period: 11	
325	Fabric 211. 'Car	rrot' amphora. Peacock and Williams Class	
	12. First century	<i>1.</i>	
	LEL A 365	Period: 11	
326	Northern England	Northern England, probably Carlisle area, Fabric 352. Mortarium.	
	I FL A 359	Period: 11	

Period 12A

This period produced 55 sherds (Table 16); the coarse/fine ware sherds averaged 15g in weight (Table 17). Most of the pottery from this period came from deposit 335, and included a considerable proportion of residual material, including Rustic ware (2%), everted-rim jars, flat-rim bowls, a lid, and South Gaulish samian (9%). The BB1 dish is of early/mid-second-century date, and the samian from this context includes a Central Gaulish form 33 of Antonine date. Only five sherds came from silt 338, but here the samian includes an East Gaulish form 37 of the late second century or first half of the third century.

Periods 12B and 12C (Fig 47)

Periods 12B and 12C produced 227 sherds (Table 16); and as in Period 12A, the average weight of a coarse/fine ware sherd was 15g (Table 17). Again, the element of residuality is considerable. The samian from most contexts is Hadrianic or Antonine in date; only one context, 339 (upcast from foundation trench 343), has samian dating to the late second or first half of the third century, an East Gaulish form 30 or 37, and the coarse wares from this context are of mid-second-century date. The same context also produced a Verulamium region mortarium likely to be of first-century date; otherwise all the mortaria are local products, including one in the cream fabric (Fabric 352) used by the second-century potter Austinus.

Wall foundation trench 343 (fill 342) produced an unusual amphora (Fig 47, 331), possibly Peacock and Williams Class 15, and if so, certainly residual, but indicative of early occupation on the site and the import of luxury goods. This type of amphora is thought to have carried *defrutum*, a sweet liquid (Peacock and Williams 1986).

327	Fabric 11. Pinched LEL A 280	-rim flagon. Period: 12C?
328	Fabric 11. Bowl. LEL A 342	Period: 12B
329	Fabric 12. Flagon. LEL A 312	Period: 12B
330	Fabric 48. Jar. LEL A 283	Period: 12C
331	South Spanish, Fabr Class 15? LEL A 342	ic 207. Amphora. Peacock and Williams Period: 12B
332	Northern England, pr LEL A 339	obably Carlisle area, Fabric 352. Mortarium. Period: 12B

Period 13

This period produced 318 sherds (Table 16). The average coarse/fine ware sherd size is small, only 11g in weight

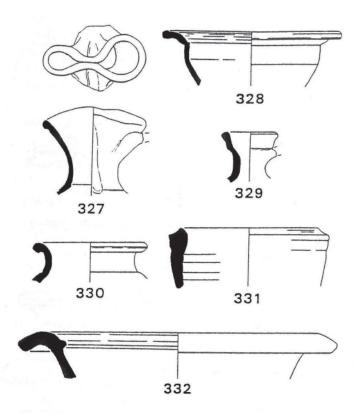


Fig 47 Roman pottery from LEL A Periods 12B and 12C (scale 1:4)

(Table 17), although the same is not true of the amphora and mortarium sherd weights, which are well above average for the site. The excavator has suggested that the bedding and surface deposits of this period represent material brought from elsewhere, a hypothesis which is supported by the Antonine dating of the pottery, which could well therefore, be entirely residual. All the BB1 is of early/mid second-century date, and the latest samian is a Central Gaulish from 31R of mid-late Antonine date.

Internal floor 181 produced three 'amphora stoppers' (Fabric 18), but most of the amphora fragments come from wall foundation trench 373, which also produced BB1, grey wares (Fabric 11) and rough-cast wares (Fabric 14, 29 and 31) in considerable quantity.

Periods 14 to 17 (Fig 48)

Periods 14 to 17 produced only 172 sherds, and so they are considered together here (Table 16); the coarse/fine ware sherds averaged 11g in weight (Table 17). The dating of

these periods is uncertain, as has been mentioned above (p 45), and most if not all of the Roman pottery is likely to be residual here.

Although again much of the pottery is of early/mid second-century date, floor 120 in Period 17 produced one sherd of Grey Crambeck ware and a small fragment of a BB1 flanged bowl or dish (not illustrated); both of these are most likely to date to the fourth century, or the very late third. The latest samian is a Central Gaulish form 33 of mid-late Antonine date, from surface 118, Period 17.

Fabric 31 is over-represented in sherd percentage terms in Table 15, as there are 16 very small sherds (total weigh 30g) belonging to one beaker from posthole 152 (fill 119; Period 16).

Period 14 sees the first appearance of a Mancetter-Hartshill mortarium fragment (not illustrated). From Period 16 there is a mortarium sherd stamped by the local potter Austinus (Fig 61, 13), which joins a fragment from Period 18; this vessel dates to c AD 125-60.

A small group from surface 140 (Period 17) comprised an amphora fragment and three 'amphora stoppers' (Fabric 18); it is of interest that 'amphora stoppers' make up 6% of the combined assemblage from Periods 14 to 17.

333	Fabric 11. Jar/bea	ker.
	LEL A 206	Period: 15
334	Fabric 11. Narrov LEL A 123	v-necked jar. Period: 17
335	Fabric 11. Flange	
555	LEL A 120	Period: 17
336	Fabric 18. 'Amph	ora stopper'/lid.
	LEL A 120	Period: 17
337	0 /1	probably Carlisle area, Fabric 352. Mortarium.
	LEL A 118	Period: 17

Period 18 (Fig 49)

The ceramic assemblage from Period 18 is later in date than any from the other southern Lane sites, apart from OGL A West. It has a Nene Valley beaker of late second- or third-century date, and flanged bowls in BB1 which could be as late as the early fourth century.

The substantial soil deposits which blanketed the site in this period produced 616 sherds (Table 16), a greater quantity than most of the earlier periods; the coarse/fine ware sherds averaged 14g in weight (Table 17).

The assemblage shows a much greater diversity of sources than earlier periods. Lower soil spread 114 produced a fragment of a BB2 dish (not illustrated). Upper soil spread

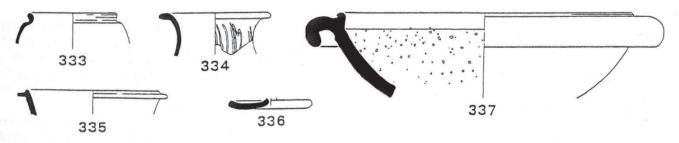


Fig 48 Roman pottery from LEL A Periods 14 to 17 (scale 1:4)

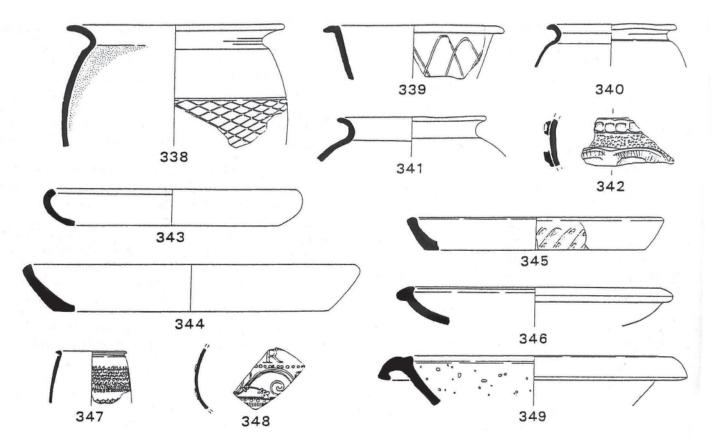


Fig 49 Roman pottery from LEL A Period 18 (scale 1:4)

84 produced BB1 of the third century (Fig 49, 338-9) as well as at least seven grey jars, several of which are locallyproduced 'seconds' (eg Fig 49, 340-1), Severn Valley ware and Nene Valley Colour-coated ware.

Upper soil spreads 106 and 110 produced a Nene Valley beaker dated to the late second or early third century (Fig 49, 647), and BB1 flanged bowls which could be as late as the end of the third or early fourth centuries. There were also large quantities of grey war jars (at least 13), including 'seconds', and a fragment of a Rhenish 'motto' beaker of third-century date (Fig 49, 348).

The mortaria from this period were almost all small fragments of local manufacture, but the group did include a fragment of a mortarium from the lower Nene Valley (Fabric 328). Small quantities of Nene Valley mortaria did reach Carlisle (Hartley 1990, 241).

The latest samian, from upper spread 84 and lower spread 114, is East Gaulish (forms 30, 31R and 37), and dates to the late second century or the first half of the third century.

338	BB1, Fabric 1. Cooking pot. Gillar LELA 84	n 1976, 10. Late third century. Period: 18
339	BB1, Fabric 1. Bowl. Gillam 19 third century. LELA 84	Period: 18
340	Fabric 11. Jar. 'Second'. LELA 84	Period: 18
341	Fabric 11. Jar. 'Second'. LELA 84	Period: 18
342	Fabric 11. Head pot. The sherd formed by applied clay ridges c	1 ,

	and a ridge of clay in LEL A 84	pressed with square indentations. Period: 18
343	Fabric 11. Dish. LEL A 110	Period: 18
344	Fabric 11. Dish. LEL A 110	Period: 18
345	Fabric 12. Dish with LEL A 114	crude rouletted decoration. Period: 18
346	Fabric 12. Dish.	

Period: 18

indicate hair, and above is a band of faintly stamped semicircles

Nene Valley Colour-coated ware, Fabric 21. Beaker. Cf 347 Howe et al 1980, fig 3.33. Late second/early third century. **LEL A 106** Period: 18

348 'Rhenish' ware, Fabric 34. 'Motto' beaker. Third century? LEL A 110 Period: 18

349 Carlisle/Scalesceugh area, Fabric 301. Mortarium. LELA 84 Period: 18 LELA 87 Period: 19B

Unstratified pottery

LEL A 110

The unstratified coarse and fine wares include third-century Rhenish ware and Nene Valley ware, including a Gillam 88, and fourth-century Crambeck and Huntcliff wares. The late fourth century is represented by three vessels, a jar of Gillam 163 and two Parchement Crambeck bowls, Corder and Birley (1937) types 7 and 10.

Unstratified mortaria include fourth-century Crambeck vessels and Mancetter-Hartshill, Nene Valley, Oxford and ?Catterick vessels of third- and fourth-century date.

Old Bush Lane Trench B

What little pottery this trench did produce is very similar to the rest of The Lanes material. Only the mortarium of lower Nene Valley manufacture is relatively unusual.

Period 3

This period produced only one undatable sherd of Fabric 12, possibly from a jar.

Period 5

Period 5 also produced only one sherd of Fabric 12.

Period 6

Period 6 produced 88 sherds (Table 18); the coarse/fine ware sherds averaged 14g in weight (Table 19). The pottery includes BB1 cooking vessels, a cooking pot of Gillam (1976) type 1 and the sooted base of a bowl or dish, as well as Rustic ware (Fabric 3), but the majority of the pottery is in Fabrics 11 and 12.

The amphora fragments are all South Spanish vessels of Peacock and Williams Class 25.

The mortaria comprise two sherds, one of local ware and one from the lower Nene Valley (Fabric 328), which could take the date of the group into the third century.

Period 6 or later

Contexts attributable to Period 6 or later produced 19 sherds (Table 18), the coarse/fine ware sherds averaged 15g in weight (Table 19). The assemblage consists of oxidized wares (Fabric 12) and a fragment of 'amphora stopper' (Fabric 18), along with 13 fragments of South Spanish amphora (Peacock and Williams Class 25). There was a

Table 18
Roman pottery from OBL B, expressed as percentages of sherd numbers

			Per	iod	
Fabric group	Fabric	3	5	6	6 or later
Coarse/fine ware	BB1, Fabric 1 Rustic ware, Fabric 3 Fabric 4 Grey ware, Fabric 11 Oxidized ware, Fabric 12 Fabric 13 Fabric 18 Fabric 29	100.0	100.0	6.8 3.4 1.1 33.0 42.0 3.4 3.4	26.3 5.3
Mortaria	Carlisle/Scalesceugh, Fabric 301 Lower Nene Valley, Fabric 328			1.1 1.1	
Amphorae	Fabric 207 Fabric 208			3.4 1.1	68.4
Number of si	herds	1	1	88	19

Table 19 Roman pottery from OBL B: average sherd weight (in g)

Period	Coarse/fine wares	Mortaria	Amphorae
3 5 6 6 or later	10 5 14 15	50	268 57

graffito on one of the sherds of Fabric 12 from pit 95 (fill 94; Fig 50, 4).

The Coarse Ware Graffiti (Fig 50)

by R S O Tomlin

The fabric identifications for the catalogue entries were supplied by M L Hird.

Old Grapes Lane Trench A

BB1, Fabric 1. Cooking pot. Graffito A or V inscribed after firing, on inner surface of rim..

OGL A 637 Period:6

2 South Spanish, Fabric 207. Amphora (Peacock and Williams Class 25).

OGL A 551 Period: West 3

Wall sherd, inscribed before firing:

POSIN[...]

 \mathbf{CO}

FIIC[...]

Posin[...]/co/fec[it]

'Posin[...] made (this)'

There is an uninscribed space after CO, indicating that this is the end of a word. The edge of the sherd makes it impossible to determine whether FIICIT was originally written in full, or whether it was abbreviated to FIIC.

The graffito is the potter's signature. His name seems to be unattested and so cannot be restored here. The only possibility in Mócsy, *Nomenclator*, is *Posineius*, of which he notes a single instance from Spain (but not in *CIL* ii). Possibly the potter's name was a variant of *Pusinna*, which is quite well attested in *CIL* ii and xiii (Spain and Gaul). *CO* may be the end of his name, if the nominative ended in *-co* like others of Celtic etymology; alternatively it is the place of manufacture the ablative [...?a]/co being used in a locative sense.

Old Grapes Lane Trench B

3 South Spanish, Fabric 208. Amphora (Peacock and Williams Class 25). Graffito on rim, inscribed after firing. OGL B 93 Period: 6E.



Fig 50 Roman coarse ware graffiti (scale 1:4)

Old Bush Lane Trench B

4 Fabric 12.
OBL B 94 Period: 6 or later
Wall sherd, inscribed after firing:

[...]MAR[...]

Possibly Mar[tialis], like the samian ware graffito No 4 (Fig 60, 4 and p 80 below); a common cognomen. The R may have been inscribed over E (part of another name, or written first in error?), and there may be a trace of T to the right.

CHAPTER 4 THE SAMIAN WARE

by B M Dickinson

Introduction

This assemblage contrasts sharply with the finds from Castle Street, Carlisle, as a comparison of the bar-charts showing average annual loss of decorated and stamped samian demonstrates (Fig 51 and Dickinson 1991, archive). It is also quite different from the Annetwell Street samian, where the proportion of first-century to second- and third-century ware is in the order of 2:1; much of the samian from Annetwell Street is early Flavian and there were also a few pre-Flavian and Neronian-Flavian vessels (Dickinson in prep).

The samian from The Lanes sites discussed here also ranges from the pre-Flavian period to the first half of the third century, but the quantities of per-Flavian material are negligible. Much of the assemblage is intrinsically interesting, but unfortunately the greater part of it is either residual or unstratified. Many of the sherds, particularly those dating from the first century or early second century, are small and abraded, as though they had been redeposited, perhaps more than once. On the whole, the material from Lewthwaite's Lane Trench A, apart from that from soil spread 550 (Period 7A), is less abraded and consists of larger sherds. Table 20, which is based on sherd and vessel count, shows the percentages from South, Central and East Gaul for individual trenches and for each site as a whole.

It is not until c AD 85 or later that significant amounts of discarded samian begin to build up. Indeed, the evidence

of the decorated ware suggests that activity in this area did not begin before AD 90. Form 29, which went out of use in South Gaul *c* AD 85, but which was still relatively common at Agricolan sites in Scotland and the Pennines, scarcely features here, while form 37s from La Graufesenque occurs in large numbers. There is a similar shortage of the earlier type of form 37, which appeared in the late 60s and early 70s. The bulk of the first-century decorated ware is of the kind found at Agricolan sites in Britain and at forts in the two Germanies founded in the late 80s or early 90s. All the material in question is from La Graufesenque.

One factor common to all the major sites at Carlisle excavated in the past 15 years is the drop in the quantities of samian discarded in the early second century, shown here on the bar-chart as falling c AD 110-25. This may perhaps be attributed to the inability of the main Trajanic supplier to Britain, the Central Gaulish factory of Les Martres-de-Veyre, to meet demands, or to an uneven distribution of its wares throughout the province, but it is worth noting that at Blackfriars Street there is some hint of a break or reduction in occupation about that time (Dickinson 1990, 213). The trenches which produced above-average percentages of Les Matres ware are Old Grapes Lane Trenches B and C and Crown and Anchor Lane Trenches A and G, although only three sherds in all were recovered from Trench G. Elsewhere the proportions are rather lower than average for Britain as a whole.

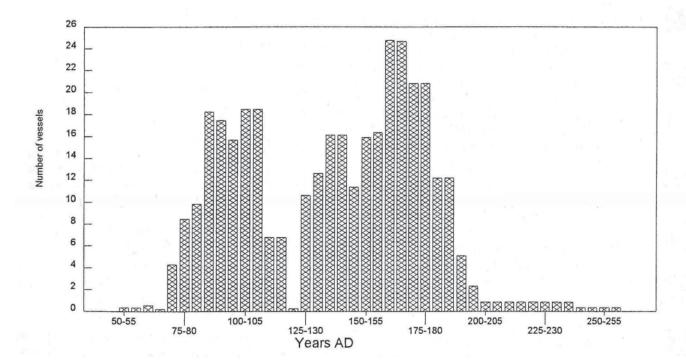


Fig 51 Bar-chart showing average annual loss of closely datable decorated and stamped samian (all Lanes sites)

OGL Total

LEL Total

LEL A

LEL B

21.1

42.4

42.2

,	South Gaul Sherds Vessels		Central Gaul (Les Martres-de-Veyre)			al Gaul Eas toux)		Gaul	Total numbers	
Site			Sherds	Vessels	Sherds	Vessels	Sherds	Vessels	Sherds	Vessels
CAL A	44.6	39.5	20.5	20.1	33.8	38.7	1.0	1.5	195	129
CALB	16.6	20.0	5.5	6.6	72.2	66.6	5.5	6.6	18	15
CAL C	33.3	0.0			66.6	33.3			3	1
CALE	4.0	6.6			96.0	93.3			25	15
CALF					85.7	75.0	14.2	25.0	7	4
CAL G			33.3	33.3	66.6	66.6			3	3
CAL H					100.0	0.0			1	0
CAL Total	36.5	32.9	18.2	16.7	44.8	47.9	1.5	2.3	252	167
OGL A	13.6	16.5	3.7	4.3	76.7	74.0	5.8	5.1	1501	902
OGL B	35.0	32.0	12.6	11.3	46.9	49.9	5.3	6.6	1008	571
OGL C	14.5	18.7	18.2	14.2	65.0	65.1	2.1	1.7	186	112
OGL D					100.0	100.0			4	3
OGL H					100.0	100.0			1	1
OGL J	1.6	2.8	8.1	8.5	80.3	77.1	9.8	11.4	61	35

67.1

45.8

45.6

100.0

65.5

48.7

100.0

48.3

5.5

5.2

5.1

5.5

4.2

4.2

2761

1019

1024

5

1624

657

662

5

6.5

7.4

7.4

Table 20
Relative quantities of samian ware from South, Central and East Gaul, expressed as percentages of sherd and vessel numbers

The rest of the Central Gaulish ware, with two possible exceptions, comes from Lezoux. As at Castle Street, the main source of Hadrianic and early Antonine decorated ware seems to have been the Sacer I and Quintilianus I groups, with the addition here of Pugnus ii and his associates. Also like Castle Street, the best-represented maker of decorated ware is Cinnamus ii, with 31 bowls, followed by Paternus v and his associates, with 21. According to the bar-chart, the maximum use of samian in this part of The Lanes should have been c AD 160-80, which is not abnormal for British sites with continuous second-century occupation, but it should be noted that the ratio of form 18/31R to 31R is in the order of 2:1 and this suggests that denser occupation may have started rather earlier, perhaps c AD 155.

21.8

39.5

39.8

6.8

6.4

6.4

At all three sites the percentages of East Gaulish ware are lower than average. The most interesting aspect of this assemblage is the quantity and composition of the East Gaulish material, although unfortunately it is almost without exception residual or unstratified. The average proportion of East Gaulish ware which might be expected from British sites occupied down to the third century is in the order of 10%. Only 5% was recovered from Old Grapes Lane, 1% from Crown and Anchor Lane, 5% for Lewthwaite's Lane and 4% from Castle Street. Annetwell Street, which produced much less second- and early third-century samian that the other sites, yielded only 2% East Gaulish ware. It may well be, then, that Carlisle in

general received less East Gaulish ware than the norm, in spite of being easily assessable from such likely supply points as Corbridge and Chester. Old finds in Tullie House Museum give a much higher than average proportion of East Gaulish ware for Carlisle, however, although the evidence is based only on potters' stamps (Dickinson and Hartley 1970, 130). The question is one which deserves further attention.

Crown and Anchor Lane

The CAL trenches yielded 6.2% of the samian in this assemblage. All of it may be residual or unstratified. Very little of the second-century decorated ware is closely datable. Although the material includes a few pre-Flavian or early Flavian pieces, there is, as at OGL and LEL, no firm evidence of the use of samian in this area before c AD 85/90. The latest piece, a decorated bowl from Trier (No 2), could well be third century and might be as late as c AD 250-60.

The samian is of little use for phasing, but CALA Period 3 has material ranging from the Flavian to the Hadrianic or early Antonine period, and CAL B Period 2A includes Hadrianic-Antonine sherds.

The first- and early second-century samian from this site is almost twice as much as the Hadrianic and later material. Less than 1% of East Gaulish ware was recovered.

Old Grapes Lane

OGL produced the largest quantity of samian, accounting for 68.7% of the whole. In summary, the assemblage from OGL A-C and J is consistent with the use of samian from *c* AD 90 to the late second or early third century.

OGL A Period 6 has material ranging from the late first century to AD 150 or later. Periods 9 and 10 both have midto late Antonine material and 9F may just possibly have an early third-century vessel. The samian from OGL B Period 4 is all later first century or Trajanic. OGL B Period 5 has material going down to AD 125-45. Period 7 has material later than AD 160. Period 8 contains the latest stratified samian, a vessel dated *c* AD 180-220. OGL C Period 2 has a late Antonine decorated bowl (No 67) and a plain ware sherd of late second- or early third-century date.

The accumulations of discarded samian vary from trench to trench, with more first- and early second-century material coming from OGL B and C than from OGL A and J, and the two last producing correspondingly higher proportions of Lezoux ware.

The sources of the East Gaulish ware are surprisingly varied, in view of the size of the sample. The bulk comes from Rheinzabern, as would be expected, followed by La Madeleine, with lesser contributions from the Argonne and Trier. There are also two decorated bowls from Heiligenberg (Nos 37 and 61), whose wares are comparatively rare in Britain. It is noticeable that much of the Rheinzabern decorated ware is second century and that most of the later

material is from Trier, although even that is not necessarily third century.

The samian evidence suggests that OGL A and B, although adjacent, may perhaps have been used for different purposes. Table 21 demonstrates that OGL A produced less samian of the first and early second centuries and more Hadrianic and Antonine ware than OGL B. It may also be significant that more Trier ware comes from OGL B than OGL A, but the quantities involved are very small.

Lewthwaite's Lane

The samian from LEL accounts for 15.1% of the assemblage; it is mostly from LEL A. LEL B produced only five plain ware vessels, all central Gaulish and Antonine.

The material from LEL A Period 5 ranges from the early Flavian period to the early second century. Period 8 extends to AD 125 or later, and Period 10 goes down to AD 150 or later. Period 11 includes a vessel of the late second century or first half of the third century. The samian from LEL A implies greater intensity of activity in the first and early second centuries than at OGL.

The Lezoux ware includes two decorated bowls by Tetturo (Nos 92 and 101), a potter whose moulds were used at both Lezoux and Toulon-sur-Allier. While it is more likely that the bowls in question were made at Lezoux, they are both in fabrics which are rather coarser than normal and which could belong to the Toulon-sur-Allier range. Otherwise, the Central Gaulish ware was all supplied by Les-Matres-de-Veyre and Lezoux.

Site		Rheinzabern		Heiligenberg		La Madeleine Arg		onne	T)	Trier		EG unspecified	
		No	%	No	%	No	%	No	%	No	%	No	%
CAL A	Sherds									11	100.0		
	Vessels									11	100.0		
CAL B	Sherds					1	100.0						
	Vessels					1	100.0						
CAL F	Sherds	1	100.0										
	Vessels	0	0.0										
OGL A	Sherds	39	44.2	1?	1.1?	17	19.5	9	10.1	1?	1.1?	20	22.9
	Vessels	25	41.6	1?	1.6?	9	15.0	4	6.6	1?	1.6?	20	33.3
OGL B	Sherds	18	33.9	1?	1.8?	3	5.6	7	13.2	5	9.4	19	35.8
	Vessels	12	30.0	1?	2.5?	3	7.5	6	15.0	3	7.5	15	37.5
OGL C	Sherds	1	25.0					1?	25.0?	2?	50.0?		
	Vessels	1	25,0					0?	0.0?	1?	25.0?		
OGL J	Sherds	2	33.3			2	33.3					2	33.3
	Vessels	1	25.0			2	50.0					1	25.0
LEL A	Sherds	18	33.9			8?	15.0?	2	3.7	17?	32.0?	8	15.0
	Vessels	10	21.4			62	35.72	2	7.1	72	28.57	3	7.1

Table 21 Quantities of East Gaulish ware by factory

The proportion of East Gaulish to Central Gaulish ware on this site is higher than at either CAL or OGL, although it represents a mere 5.1(4.2)% of the assemblage (Table 20). The earlier material comes from La Madeleine and the Argonne, with the addition of a decorated bowl from Werkstatt 1 at Trier (No 100). The proportion of Trier to Rheinzabern ware is much higher than at OGL and most of the Trier material is almost certainly third century. The decorated ware, unlike that from OGL, does not certainly include the work of any of the second-century Rheinzabern potters. This implies that samian may have been in use on the site rather longer than at either CAL or OGL.

Catalogue of Decorated Samian Ware (Figs 52-57)

Vessels indicated with an asterisk are illustrated.

The following abbreviations are used: D.= Déchelette 1904; Hermet=Hermet 1934; Ludowici=Ludowici 1927; O.=Oswald 1936-7; Rogers=Rogers 1974; S and S=Stanfield and Simpson 1958; S and S 1990=Stanfield and Simpson 1990

Crown and Anchor Lane Trench A

1* Form 37, South Gaulish. A bowl with a freestyle scene and basal wreath of palmate leaves. The trident-tongued ovolo was used at La Graufesenque by potters such as Albanus iii, Bassinus i and Litugenus i, and appears on many unstamped bowls from Domitianic foundations, such as Cannstatt and Wilderspool. The tree with spindles is on a bowl from Holt (Grimes 1930, fig 40, 76). The spindles on the ground are on a bowl from Rottenburg (Knorr 1910, taf 2, 2). *c* AD 85-110.

CAL A 80 Period: 3A

2* Form 37, East Gaulish. The ovolo, with tongue turned to the right, and perhaps the small rosettes, are on a stamped mould of Criciro vii from Trier (Fölzer 1913, taf 9, 6F). The freestyle scene includes a bear (*ibid*, taf 30, 597), erotic group (*ibid*, taf 29, 519), dog(?) to right and large rosette (*ibid*, taf 31, 851). *c* AD 180-260.

CAL A 12 Period: 5

Form 37, Central Gaulish, with cursive signature of Arcanus, *A*[, upside-down below the decoration, from a mould signed before firing (signature No 1, p 78 below). A freestyle scene includes a panther (O.1519) amid partly-impressed fronds (Rogers J 177). The frond from which the buds come is on a signed bowl from Heilbronn-Böckingen (S and S pl 78, 7). The panther is on a bowl in Arcanus's style from London (*ibid*, 5). *c* AD 125-40. CAL A 66

Form 37, Central Gaulish. A bowl in Lezoux fabric, but from a mould in the style of Les Martres-de-Veyre. The ovolo is replaced by a zone of cogged festoons (Rogers F78), one containing the head of an animal, perhaps a leopard. Between two festoons is a trifid motif used as a pendant (Rogers G89), with a ring at each side. In the zone below are acanthus tips (partial impressions of Rogers K2?). The festoon is on a stamped bowl of Attianus ii from Lezoux, in his early style. *c* AD 120-40.

CAL A 66.2 Period: 5

Crown and Anchor Lane Trench B

5* Form 37, heavily burnt, South Gaulish. The ovolo, with four-pronged tongue, trilobed motif in the top of the saltire and leaves at the sides are all on a stamped bowl of Sabinus iv from Cannstatt (Knorr 1909, taf 3, 1). The stag is D.861 = O.1737. *c* AD 85-110.

CAL B 9 Period: Post-3B

Old Grapes Lane Trench A

6* Form 37, South Gaulish. The freestyle upper zone includes a hare, dog (probably Knorr 1919, taf 57, 6), grass-tufts (*ibid*, 20) and spindles depending from the upper border. The lower zone consists of triple festoons with pendants and spirals. The style

recalls Mercator i, who used most of the details, but the spindles are not know for him. Cf No 46 below. c AD 85-110.

OGL A 728 Period: 1-6 OGL B 222 Period: 4E-F

Form 37, South Gaulish. The trident-tongued ovolo and the motif used here as a pendant between festoons is on a stamped bowl of Severus ii from Nettleton Scrubb (Simpson 1982, 163, 77, but the stamp is not illustrated). The zone of festoons with stirrupleaves is probably identical to one on a bowl from Annetwell Street (Dickinson in prep). The ovolo was also used by Pontus, whose decorative style is not dissimilar. *c* AD 75-100.

OGL A 1130	Period:4
OGL A 355.4	Period: 10A
OGLB 256, OGLB 289, OGLB 290	Period: 3
OGL B 244	Period: 4C
OGL B 208	Period: 5B
OGL B 107	Period: 6B
OGL B 83	Period: 6E

Form 37, South Gaulish. The ovolo, with large, asymmetrically-placed rosette to the tongue, was used at La Graufesenque by Paullus iii and Frontinus (Knorr 1919, taf 65.9). *c* AD 80-110. OGL A 1149

Period: 4

Form 37, South Gaulish. A bowl in the style of Germanus i, with a main zone containing a tree with spindles (Hermet pl 83, 5), conventional rocks (*ibid*, pl 101, 37) and a boar (Knorr 1919, taf 35, 32). A lower zone of chevron festoons (*ibid*, 67) with spirals and tassels of bunches of grapes (*ibid*, 64) appears as the upper zone of a form 29 from Straubing (Walke 1965, taf 1, 4), with an interior stamp of Germanus. The group of Flavian-Trajanic samian from the Bregenz Cellar includes the tree and rocks on a bowl with an ovolo known only for Germanus (Jacobs 1913, no 2). *c* AD 70-95.

OGL A 1006 Period: 5

10* Form 37, South Gaulish. The diagonal wavy lines and the panel with stags (Hermet pl 27, 3-4) and palm tree (ibid, pl 14, 82), but without the corner spirals, are on a form 29 from Gloucester, from a stamped mould of M. Crestio. He also used the trifid wreath, on a stamped form 37 from Strasburg. However, the ovolo (Knorr 1919, taf 57, 19) is not known for him and is normally associated with Mercator i. The style of decoration is a little unusual for Mercator, but cf a stamped form 37 from Richborough (Bushe-Fox 1928, pl 27, 11), on which he uses a slightly larger pair of stags in the same way. He is also known to have used the palm tree, on a bowl from Silchester (May 1916, pl 25, 6), and the wreath is on an unprovenanced bowl in Brecon Museum which has a mould-stamp almost certainly identified with his. In view of the ovolo, therefore, the balance of the evidence is in favour of Mercator. c AD 85-110.

> OGL A 1006 Period: 5 OGL A 736 and OGL A 759 Period: 6

11 Form 37, in the style of Drusus i (X-3) of Les Martres-de-Veyre. The decoration includes a single-bordered ovolo (Rogers B28), with an untidy border of beads below it (Rogers A4), and a winding scroll made up of double festoons joined by astragali. The upper concavity contains a detached saltire with acanthi at the top and sides (Rogers K25) and a trilobed motif (Rogers G173) at the bottom, divided from a leopard (D.798 = O.1521) and a beaded ring (Rogers C294) by a row of beads. The lower concavity has a griffin (D.498 = O.855) and pair of gladiators (a smaller version of D.852 = O.1003-4), separated by a row of beads. Six-beaded rosettes (Rogers C280) join the bead-rows to the scroll, and small cups (Rogers U62) act as space-fillers. The basal wreath is composed of anchors (Rogers G395). A bowl from Les Martres-de-Veyre (Terrisse 1968, pl 2, 10042) is possibly from the same mould. c AD 100-20. OGL A 1048 Period: 5

Form 37, South Gaulish. The small ovolo has a tongue ending in a rosette with a thick straight line, probably originally a cable, below it. The decoration includes a lion (D.715 = O.1399) and a tendril with a striated spindle, perhaps attached to the corner of a panel. c AD 75-100.

OGL A 652 Period: 6

Form 37, from Les Martres-de-Veyre. The ovolo (Rogers B231) originated at Les Martres with X-9, a mould-maker for Medetus and

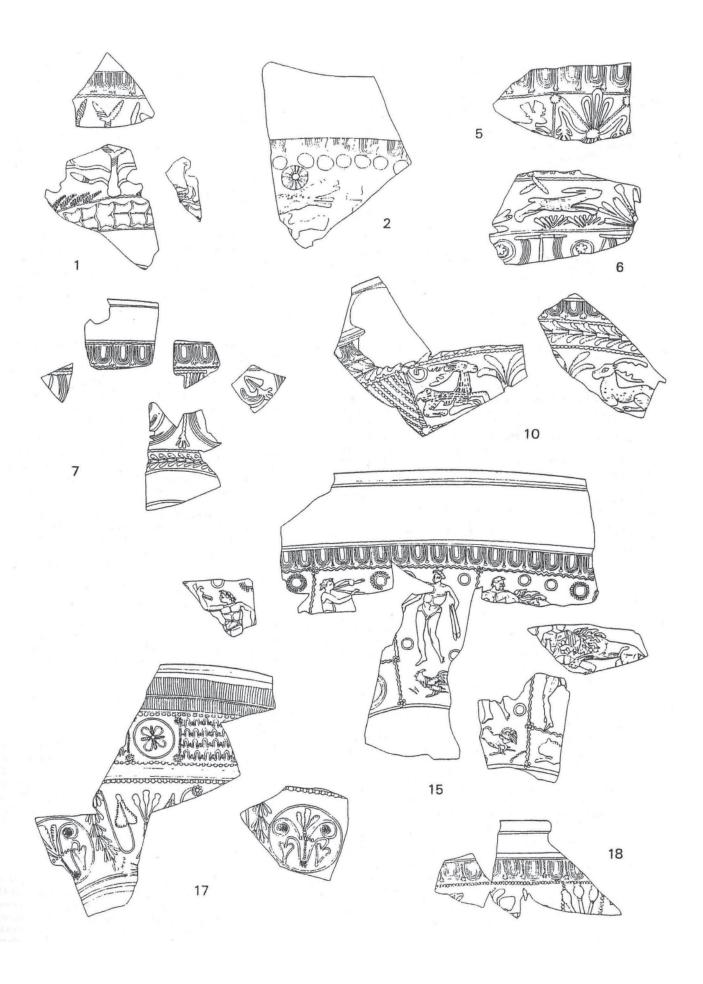


Fig 52 Decorated samian ware (scale 1:2)

Ranto, and was later used at Lezoux by the Sacer i group and Cinnamus ii. One panel contains a double arcade or medallion. The vertical border to the left of this panel has a rosette at the top (Rogers C299), placed asymmetrically to the left and not joined to the horizontal border. The vertical border at the other side is topped by an astragalus. For the ram's horns cf S and S pl 29, 347 and Karnitsch 1959, taf 32, 1. c AD 100-20.

OGL A 736 Period: 6
OGL A 717 Period: 7A-8C
OGL A 489 Period: 8A-9C

Form 37, Central Gaulish. The small, rosette-tongued ovolo (Rogers B14) was used at Les Martres-de-Veyre by the mould-maker X-13 and at Lezoux by the Sacer i group. This bowl is in Lezoux fabric. The panels include: 1) Apollo (D.52 = O.83); 2) a chevron festoon (Rogers F60). The latter is on a stamped bowl of Sacer from Dragonby, and the Apollo is on a bowl in his style from Camelon. For the details cf also bowls in the 'style dit de Sacer' from Les Martres (Terrisse 1968, pl 47, 404, 406, 412). *c* AD 125-40.

OGL A 736 Period: 6 OGL A 706 Period: 7B-8C

15* Form 37, Central Gaulish. A bowl in the style of Arcanus, with ovolo Rogers B76, wavy-line borders (Rogers A24) and panels: 1B) a small medallion; 2) a double-flute player (O.617A); 3) Mercury (D.290 = O.532) and cockerel (probably D.1026 = O.2350); 4) Hercules and the Nemean lion (D.624 = O.796) and crouching lion (D.753 = O.1421). Another panel contains a Bacchus (D.362 = O.622). The motifs include a six-beaded rosette (Rogers C278) and a beaded ring (Rogers C293). The medallion and cockerel are on a signed bowl of Arcanus from Colchester, and the beaded ring and rosette are on another, from Chichester. Other details occur on bowls in his style. The small lion and cockerel are on bowls from Annetwell Street (Dickinson in prep); for the flute-player, both rings, the rosette and the border, see Zwammerdam (Morren 1958, Afb 14, 45). The Hercules and Mercury are on a bowl from Gloucester. c AD 125-40.

OGLA 736, OGLA 737, OGLA 749
OGL A 666
OGL A 717
OGLA 490, OGLA 705, OGLA 706
OGL A 447
OGL A 700
OGL A 700
OGL A +
OGL A 700
OGL A 70

Form 37, from Les Martres-de-Vyre. One panel has a cogged festoon (Rogers F70) over a pair of acanthi (Rogers K22) impressed horizontally, stem-to-stem. CfS and S, pl 30, 65 (Chesterholm) for the acanthi, and pl 31, 366 for the festoon (London). The mould-maker was X-9. c AD 100-20.

OGL A 750 Period: 6

17* Form 29, South Gaulish, with internal stamp OF· L A[BIONIS] (stamp No 30). The upper zone consists of alternate panels of leaftips (from lobed leaves) and single medallions containing rosettes. The lower zone has medallions with trifid motifs, spirals and pointed leaves, alternating with leafy festoons with motifs of serrated leaves and poppy-heads. Bowls with the same stamp have the rosettes in the upper zone (Knorr 1919, taf 32C, from Rheingönheim), the trifid motif in the medallion (*ibid*, A, from Cologne), the five-petalled motif of the wreath (*ibid* B, from London) and the poppy-heads (London). A bowl from Ruscino with a different stamp of Labio has the small medallion of the upper zone (Fiches and Genty 1980, 284). There is no exact paralleled for the serrated leaf, but it clearly belongs to a series associated with stamps of this potter. There is no evidence as yet that Labio made moulds, but he almost certainly patronised only a few mould-makers, and one in particular, whose style is represented by this bowl. c AD 50-65.

OGL A 776 Period: 6
OGL B 294 Period: 2B
OGL b 256 and OGL B 290 Period: 3
OGL B 284 Period: 4A

OGL B 284 Period: 4A OGL B 107.2 Period: 6B

18* Form 37, Central Gaulish. One panel contains a figure with raised arms (not in O.). Another, narrow, panel has triple poppy-heads. The

rosette-tongued ovolo (Rogers B16) was used at Lezoux by Sacer i, but there are not other parallels with this work. Nevertheless, a date of *c* AD 125-45 is likely.

OGL A 776 Period: 6
OGL A 706 Period: 7B-8C
OGL A 463 Period: 8C

Form 29, South Gaulish. A straight wreath below the central cordon is on an early Flavian bowl from Worms stamped with a late die of Castus i (Knorr 1919, taf 85C). A similar, or perhaps modified, version of the fan-shaped motif of the wreath occurs on bowls from La Graufesenque and the Caerleon fortress, stamped by Calvus i. c AD 70-85.

OGL A 965 Period: 6

20* Form 37, Central Gaulish. A freestyle bowl, with bear (D.807 = O.1578), leopard or panther (D.789 = O.1509) and goat (O.1842). Chevrons used as space-fillers are partial impressions of the plant motif Rogers L22. The choice of animals suggests a connection with the Paternus v group. The motif was used in full on a signed bowl of Catussa from Little Chester. The footring is quite well worn. c AD 160-95.

OGL A 637 Period: 6?

21 Form 37, slightly burnt, Central Gaulish. The single-bordered ovolo (Rogers B77) and trifid motif (Rogers G153, blurred) are on a stamped bowl of Sacroticus from the Castleford *vicus*, but this has beads below the ovolo. Sacroticus's plain ware occurs in a pottery shop on the same site, destroyed by fire in the late 140s. The Carlisle bowl also has a double medallion or arcade. *c* AD 130-50.

OGL A 717 Period: 7A-8C

Form 37, Central Gaulish. The scroll is made up of double festoons joined by horizontal astragali. The cockerels in alternate upper concavities are O.2361 and 2348. The warrior is O.219A. The ovolo (Rogers B233) occurs on bowls by Pugnus ii and some of his associates, including X-6. It is on a signed bowl of Pugnus from Blackfriars Street (Dickinson 1990, fig 177, 31). The warrior is on a bowl from Silchester (S and S 1990, pl 171, 6), with a cursive signature perhaps attributable to Cassius i, but with elements used also by Pugnus. The cockerel to right is on a bowl from Lezoux with signature Catull[retrograde, in a style normally assigned to X-6 (ibid, 8). No exact parallels for the cups and spindles have been found in the work of any of these potters. c AD 130-50.

OGL A 490 and OGL A 706 Period: 7B-8C OGL A 569 Period: Unphased

23* Form 37, South Gaulish. A panelled bowl, with: 1) a kilted warrior (O.155A) and seated woman (O.942A); 2) (not necessarily following 1) a draped woman (O.928). Another sherd shows adjacent panels divided horizontally at different levels. The lack of vegetation is unusual in South Gaul and is almost certainly indicative of a Flavian-Trajanic date. c AD85-110, perhaps AD 100-10.

OGL A 629 Period: 8A OGL B 211 Period: 4F OGL B 188 Period: 5A

Form 37, Central Gaulish. A small freestyle bowl with a shallow rim, with ovolo 2 of Cinnamus ii (Rogers B231), a horse and rider (D.156 = 0.245), panther (D.799 = 0.1518, but smaller), bear (0.1588), kneeling stag (D.847 = 0.1704), cornstook (Rogers N15) and striated spindle. All the details occur on stamped Cinnamus bowls, the horse and rider, bear and cornstook at Wels (Kamitsch 1959, taf 77, 2), the spindle at Corbridge (S and S pl 157, 1) and the panther at Cirencester. *c* AD 150-80.

OGL A 488 Period: 8A-9E OGL A 445 Period: 9E

Form 37, Central Gaulish. The rosette-tongued ovolo is probably Rogers B10. The panels include 1) a chevron festoon (Rogers F41?); 2) a Victory (D.484 = O.826). Another sherd has two more panels, both divided horizontally. One has a Cupid (D.247 = O.405) in the middle section, the other has a caryatid (D.655 = O.1207) over a bird (D.1011 = O.2324). The figure-types were all used by members of the Sacer i group, including Drusus ii, whose use of a wavy line under the ovolo and blobby junction masks, as here, suggests that he made the mould. *c* AD 125-45.

OGL A 474 Period: 8C OGL B 173 Period 5B

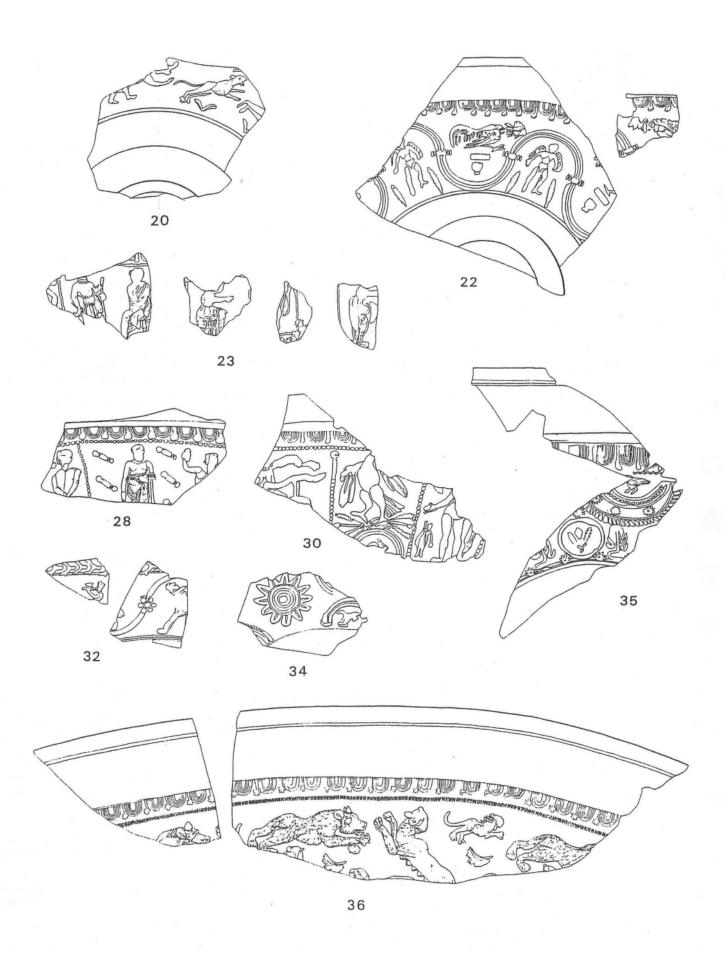


Fig 53 Decorated samian ware (scale 1:2)

26 Form 37, heavily burnt, South Gaulish. The decoration is divided by a horizontal wreath of heart-shaped leaves and the lower part includes a panel with a dolphin (D.1049 = 0.2389). The wreath is on two bowls from Rottweil (Knorr 1912, taf 18, 1, with the dolphin, and 2). Both the ovolos, which were perhaps used by the same potter, occur frequently in Domitianic contexts. *c* AD 85-110.

OGL A 487.3 Period: 8C

27 Form 37, from Les Martres-de-Vyre. The ovolo (Rogers B14) was used by the mould-maker X-13, and a Venus in one of the panels (D.173 = O.278) is on a bowl in his style (Terrisse 1968, pl 28, 211 and 386). c AD 100-20. OGL A 414 Period: 9D

- 28* Form 37, Central Gaulish. The ovolo (Rogers B35) and untidy rectangular beads (Rogers A15) are on a bowl from Lezoux in a style generally attributed to X-6 and bearing the mould-signature *Catull[* retrograde (S and S 1990, pl 171, 8). The captive (D.643 = O.1146), philosopher (D.523 = O.905) and Perseus (D.146 = O.234) are all on bowls by X-6. Cf S and S, pl 74, 5, 10 (London)) for the captive and Perseus. The philosopher is on a bowl with the same ovolo from Leicester. The astragalus is Rogers R7. *c* AD 125-50. OGL A 429 Period: 9E
- Form 37, Central Gaulish, with an ovolo exclusive to X-5 (Rogers B31). c AD 125-40.OGL A 433 Period: 9E
- 30* Form 37, Central Gaulish. The ovolo (Rogers B144) was used mainly by potters in the Cerialis ii-Cinnamus ii group. The panels include:
 1) a scarf-dancer (O.346); 2) an eagle (D.981 = O.2167) over a 'thunderbolt' of striated spindles and a small, double medallion with a pygmy (O.696); 3) a draped figure (D.338 = O.96?) and a tiny figure, perhaps a Venus. See Simpson and Rogers 1969, 8, 19 for a bowl by the same group with the ovolo, eagle, pygmy and thunderbolt. The fabric and glaze of this bowl are unusually orange for Lezoux in general, but not uncommon for this group of potters. *c* AD 135-70. OGL A 446 Period: 9E
- Form 37, Central Gaulish. A freestyle bowl in the style of Paternus with ring-tongued ovolo (Rogers B105), dog (D.919 = O.1940, O.1917), a stag to the left (cf S and S pl 108, 39) and a striated spindle. Cf ibid, pl 106, for bowls in the same general style. c AD 160-95.

OGL A 202 Period: 9G OGL A 204 Period: 10C-11 OGL A 122 Period: 12A

OGL A 2 Period: Modern

32* Form 37, East Gaulish. The wreath (Ricken and Fischer 1963, R4) is on a stamped bowl of Ianus ii from Rheinzabern (Ricken 1948, Taf 13, 21). The seven-beaded rosette (Ricken and Fischer 1963, 042) is also known for him (*ibid*, 25), but the siren (*ibid*, M103) has not yet been noted on a stamped bowl. The other figure is perhaps a gladiator. *c* AD 160-80.

OGL A 191 Period: 9G or later OGL A 19 Period: 13

33 Form 37, Central Gaulish. The ovolo (Rogers B144) is associated chiefly with the Cerialis ii-Cinnamus ii group. A Mercury (D.291 = O.533) is on a bowl by one of this group's members, from Cardurnock (Birley 1947, fig 7, 11). The adjacent panel contains a double medallion. c AD 135-70.

OGL A 196 Period: 9H

- 34* Form 37, East Gaulish. The large rosette (Ricken and Fischer 1963, 0138), festoon with beaded outer border (*ibid*, KB138) and bird (*ibid*, T249) are all on stamped bowls of Ianus ii from Rheinzabern (Ricken 1948, taf 13, 25; taf 11, 3; taf 10, 8, respectively). They appear together on an unstamped bowl from Rheinzabern (*ibid*, taf 18, 2). c AD 160-80.
 OGL A 205 Period: 10F-11
- 35* Form 37, East Gaulish. The triple-bordered ovolo, with narrow core and tongue turned to the right at the bottom, was used at Lavoye (Ricken 1934, taf 12, B). It occurs on a bowl from the York *colonia*, together with the two festoons (*ibid*, 20), but with different rosettes between them. Another bowl from the *colonia* (Hartley and Dickinson 1990, fig 100, 927) has both festoons and the leaf (Chenet and Gaudron 1955, fig 55, G I). The

inner festoon (*ibid*, fig 58K) and the leaf are on a bowl from Blackfriars Street (Dickinson 1990, fig 178, 35). The decoration also includes a bird (Ricken 1934, taf 13, 13), trifid motif (*ibid*, 8), rosettes (*ibid*, 1, 2) and small medallion (*ibid*, the inner part of 23). There is a wide, deep groove above the ovolo. *c* AD 150-200.

OGL A 122 and OGL A 133 Period: 12A OGL A 114 Period: 12A-B

36* Form 37, with freestyle decoration, Central Gaulish. The bear (D.808 = 0.1588) and small leaf (Rogers H167) were both used by Casurius ii, but neither the rosette-tongued ovolo (Rogers B24), used at Lezoux in both the Hadrianic and Antonine periods, nor the lion (a smaller version of 0.1404) nor leopardess (D.793 = 0.1537) are known for him. There may be some connection with Servus ii (Roger's Servus III), but it has yet to be firmly established. A date of *c* AD 160-90 is not in doubt, however.

OGL A 133 Period: 12A OGL A 29 and OGL A 118 Period: 13

Form 30, East Gaulish. The ovolo is replaced by a zone of acanthi (Ricken and Fischer 1963, P112), as at Heiligenberg on a stamped bowl of Ciriuna (Forrer 1911, taf 20, 1). It is not known to have been used at Rheinzabern. *c* AD 140-60.

OGL A 11 Period: 13

Form 37, East Gaulish. The ovolo (Ricken and Fischer 1963, E39), corded borders (*ibid*, 0242) and bifid motifs on the vertical border (*ibid*, P142) are all on a stamped bowl of Ianus ii from Rheinzabern (Ricken 1948, Taf 3, 9). A Minerva in one panel (Ricken and Fischer 1963, M29) is on a bowl in his style (Ricken 1948, taf 7, 21). The figure in the adjacent panel may be a gladiator (Ricken and Fischer 1963, M 227?). *c* AD 160-80.

OGL A 2 Period: Modern
OGL B 20 Period: 7B
OGL B 1 Period: 9

39 Form 37, Central Gaulish. A freestyle bowl in the style of Advocisus, with a doe (D.883 = O.1805) and leopard/dog (D.927 = O.1983). The plant Rogers L22 is used as a space-filler. All the details occur on stamped bowls from Aldborough and in Wisbech Museum (unprovenanced). Freestyle bowls of Advocisus are comparatively rare. c AD 160-90.

OGL A 559 Period: Unphased OGL A 543 Period: West 3

Form 30, Central Gaulish. The sherd may have been roughly trimmed for use as a counter. The bowl is in the style of Do(v)eccus i, with ovolo Rogers B160 and panels. 1) a small, double festoon with bird to right (D.1019 = O.2252); 2) a double medallion. c AD 160-200.

OGL A 564 Period: Unphased

Old Grapes Lane Trench A West

- Form 37, Central Gaulish. A bowl in the style of Paternus v, with ringtongued ovolo (Rogers B105), beads (Rogers A2) and panels: 1) a naked figure on a mask (D.327 = O.538) and an astrgalus, placed diagonally (Rogers R60), over a horizontal column (Rogers P3); 2) an athlete (D.377 = O.650), between astagali (Rogers R60), placed diagonally; 3) Apollo (a variant of D.56 = O.93, with added drapery). One vertical border is topped by a leaf (Rogers J153). All the details have been noted on stamped bowls of Paternus. *c* AD 0160-95.

 OGL A 567

 Period: West 1
- A bowl of unusual form, Central Gaulish. There is external fluting at the junction of vase and wall, with a corresponding internal step. The inside of the base is unstamped, but there are turning marks at the centre, as under the bases of forms 79 and Ludowic Tg. The vertical footring has a diameter of 12.6cm. There is a groove on the outer wall, probably directly a lip or flange. The fabric and glaze suggest a mid to late Antonine date.

OGL A 567 Period: West 1

43* Form 37, Central Gaulish. The panels include: 1A) a single festoon with hare to left (D.950a = O.2116); 1B) a leaf (Rogers JII); 2) a large, striated spindle, topped by a beaded ring (Rogers E58); 3A)

a single festoon. The eight-petalled rosette is Rogers C170. The festoon, hare, ring, astragalus, spindle and beads are all on a bowl with an ovolo exclusive to Do(V)eccus I from Clermont-Ferran, which might be from the same mould. c AD 165-200.

OGL A 532 Period: West 2

Form 37, Central Gaulish. A trident-tongued ovolo has a bead-row below it (Rogers A3). A freestyle zone includes leopards (D.804 = 0.1569 and 0.1512) and a small leaf (Rogers H167). All the details are on a bowl in the style of Servus ii (Roger's Servus III) from Colchester (S and S pl 138, 5). This potter's style shows connections with Casurius ii, but also with Docilis I and the Sacer I group. *c* AD 160-90.

OGL A 551 Period: West 3?

Old Grapes Lane Trench B

- Form 67, South Gaulish. The decoration includes a doe or hare to right, over a partly-impressed grass-tuft (Knorr 1919, taf 57, 13).
 There is also a tree with clusters of buds, in the manner of potters working in the tradition of Germanus i. c AD 85-110.
 OGL B 283
 Period: 4A
- 46 Form 37, South Gaulish. The trident-tongued ovolo is probably the one used by Sabinus iv on a bowl from London (British Museum Acc No M589). The upper zone of decoration includes a dog (Knorr 1919, taf 57, 6) over a partly-impressed grass tuft (*ibid*, 13). A pair of spindles depend from the upper border, as on No 6 above. *c* AD 85-110. OGL B 244 Period: 4C
- Form 37, in the fabric of Les Martres-de-Veyre. The decoration includes two vine-scrolls, conjoined (Rogers M1 and 2), an acanthus (Rogers K11) and a wreath of trifid motifs (Rogers G31), below a wavy line. Cf S and S pl 41, 476 for the acanthus and wreath and 477 for the vine-scrolls. This is probably from a mould of X-12. c AD 100-20. OGL B 244
- Form 37, South Gaulish. A saltire has a bifid motif in the bottom, as on a stamped bowl of Sabinus iv from Cannstatt (Knorr 1909, taf 3, 2) and on a bowl in the style of M. Crestio from Carlisle (Dickinson 1992, fig 5, 2). The basal wreath consists of chevrons. c AD 85-110.
 OGL B 261 Period: 4D-F
 OGL B 43 Period: 6F
- 49* Form 37, from a mould by X-13 of Lest Martres-de-Veyre. The ovolo is replaced by a zone of acanthi (Rogers K10). The double-bordered scroll consists of festoons joined by seven-beaded rosettes (Rogers C280). The leaves are Rogers J65. The scroll may have been incorrectly laid out, necessitating the use of fillers, such as the torch (Rogers U118), cornucopia (Rogers U247) and trifid motif, although some appear more than once. The main zone is closed by a groove, with a bead-row and guide-line above it. The decoration has been completely obliterated in places, as if by wiping before the slip was added. Such carelessness is typical of the potters of Les Martres, although not of the mould-makers. Cf Terrisse 1968, taf 37, 306 for a somewhat similar bowl. c AD 100-20.
- Form 37, South Gaulish. The small ovolo has a tongue to the right, swelling into a blob (probably a blurred rosette). A cable border divides it from a tendril with a cluster of berries. c AD 85-110. OGL B 184.2 Period: 5A

Period: 5A

OGL B 184 and OGL B 184.3

- 51 Form 37, from Les Martres-de-Veyre. A bowl from a mould by X-9, with ovolo Rogers B38 and panels with: 1) a double medallion or arcade; 2) a striated column (Rogers P10); 3) a double festoon, probably containing spirals. Cf S and S pl 34, 408 for a similar, if not identical, arrangement. *c* AD 100-20.

 OGL B 188 Period: 5A
- Form 37, South Gaulish. The main zone of decoration between blurred cable borders, has a trifid motif (Hermet pl 14, 48) and a lion (*ibid*, pl 25, 8A), over partly-impressed S-shaped gadroons. The basal wreath consists of palmate leaves. *c* AD 80-110.
 OGL B 173 Period: 5B

53* Form 37, South Gaulish. A thin-walled bowl, with an ovolo with trident tongue, with the trident pointing to the right. The scroll has a large palm leaf in the lower concavity. The border below the ovolo is very blurred and may be a double one. The plain band above the ovolo is shallow and slightly concave. The ovolo, which also appears on two bowls from LEL (Nos 80 and 82 below), is on a bowl from Ribchester (Wild 1988, 38, 105), but the parallel for it quoted there seems to be larger. All three Carlisle bowls are smaller than average and may have belonged to the same consignment of pottery. *c* AD 85-110.

OGL B 173 and OGL B 175 Period: 5B OGL B 140 Period: 6A

Form 37, Central Gaulish. Borders of beads, not quite parallel, enclose a basal wreath of bifid motifs. Similar, though perhaps not identical, wreaths occur on bowls in the style of Secundinus ii (Roger's Secundinus I) from Verulamium (Dickinson 1984, D97) and Rocester. The main zone seems to include vine-scrolls, which strengthens the attribution. c AD 125-40.

OGL B 170 Period: 5C-6B

Form 37, East Gaulish, with triple-bordered, tongueless ovolo (Fölzer 1913, taf 32, 956), border of rhomboidal bead (*ibid*, 925) and beaded festoons (*ibid*, 820). Trier ware of the late second or first half of the third century.

OGL B 82 Period: 6E OGL B 51 Period: 7

Form 37, East Gaulish, from Lavoye. The triple-bordered ovolo is Ricken 1934, taf 13, A. The vertical and horizontal wavy-line borders meet without a junction-mask. One panel has a small single-bordered medallion with a central rosette (*ibid*, 3). All the details, apart from the ovolo, are on a bowl from Birrens (Wild 1975, fig 59, 100). The Carlisle bowl is in coarse, pale orange fabric with a blotchy, orange-yellow glaze. Antonine.

OGL B 41 Period: 6F

57 Form 37, Central Gaulish. The lower half of a panel contains two satyrs (D.364 = O.627 and D.355 = O.606). Both vertical and horizontal borders consist of astagali (Rogers A10). All the details are on a stamped bowl of Censorinus ii from Corbridge (S and S pl 101, 1). *c* AD 160-90.

OGL B 57 Period: 6F

- 58* Form 37, Central Gaulish. The ovolo (Rogers B145) was used by Carantinus, Cinnamus ii and Illixo, but only Illixo, as far as is known, used the astragalus border (Rogers A10) below it. The freestyle scene includes lions (D.470 = 0.1387 and 0.1425), a horse and rider (D.157 = 0.246), a leopardess (D.971 = 0.1534) and a kilted man (D.103 = 0.177). For the ovolo, border, lion to left and leopardess, cf a bowl from Burpham, Surrey (Bird 1983, 221, 1). *c* AD 150-80. OGL B 57 Period: 6F
- Form 37, Central Gaulish. The combination of T-tongued ovolo (Rogers B206), wavy line and vertical border of astragali (Rogers A10) suggest Quintilianus i, or an associate. The panels include: 1A) a single festoon with partly-impressed leaves and, perhaps, an animal; 1B) an acanthus; 2) a triton (D.20 = O.25) on a pedestal (Rogers P80), over a column (Rogers P3); 3) a large double medallion with seated Hercules (a larger version of D.450 = O.757). The ovolo, both borders, Hercules and acanthus are on a signed bowl of Quintilianus from Birrens (Wild 1975, fig 52, 6). *c* AD 125-50.

OGL B 76 Period: 6F OL B 51 Period: 7

60 Form 37, Central Gaulish. A bowl in the style of Advocisus, with his larger ovolo (Rogers B103) and two panels, each with a Pan (D.411 = O.709 and D.409 = O.707). Another panel has a Diana and hind (D.64 = O.106). The ovolo and Diana are on stamped bowls from Colchester (S and S pl 112, 1) and Kelso. The Pan D.411 is on a bowl from the Wroxeter forum destruction (Atkinson 1942, pl 33, H3). c AD 160-90.

OGL B 76 Period: 6F OGL B 51 Period: 7 OGL B 27 Period: 8A

61 Form 37, East Gaulish. A main zone with single-bordered scroll lies above a basal wreath of trifid motifs (Ricken and Fischer 1963, P135),

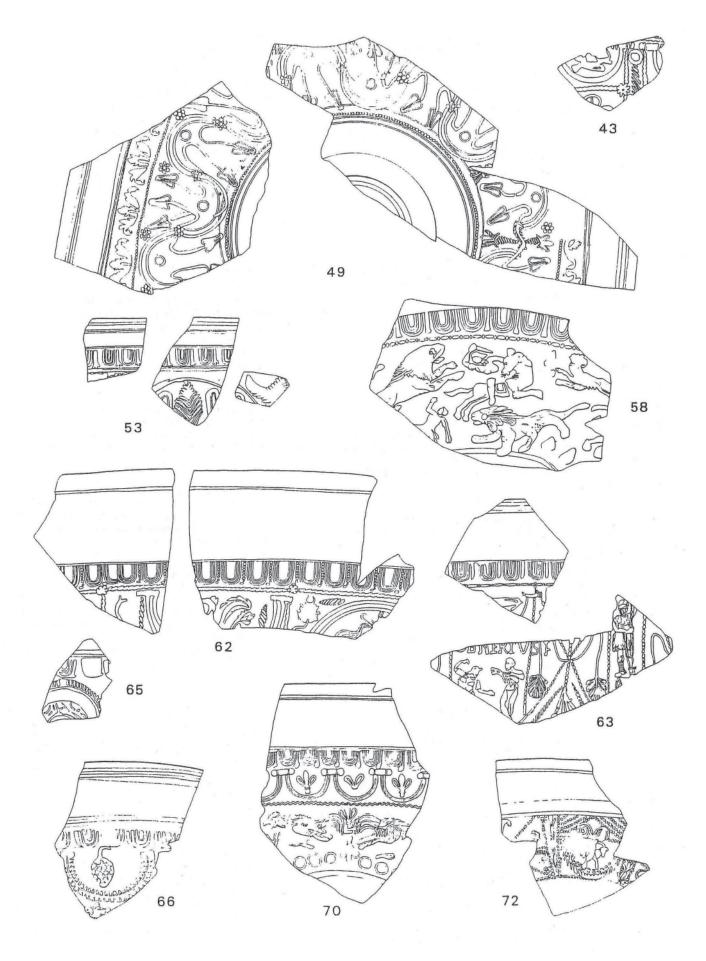


Fig 54 Decorated samian ware (scale 1:2)

with double borders of shallow rectangular beads (*ibid*, 0246). The details were all used at Rheinzabern, but the beads were also used at Heiligenberg (Knorr 1910, taf B, 9, 11) and the wreath and beads are on a bowl from Rottenburg in Ianus ii's Heiligenberg style (*ibid*, taf 13, 1). Mid second century.

OGL B 70

Period: 6F-7

62* Form 37, Central Gaulish. The ovolo (Rogers B234), borders of rhomboidal beads (Rogers A36), dolphin (O.2384 variant) and crab were shared by Iustus ii and Paternus v. The striated spindles suggest Paternus (cf S and S pl 106) and he is known to have used the rosette (Rogers C123) and bifid tendril (Rogers U181), although the last also occurs on bowls in the style of Iustus. The double medallion and crab are on stamped Iustus bowls from Malton (*ibid*, pl 110, 6) and Piercebridge (*ibid*, pl 111, 13) respectively. The use of astragalus and rosette at the junction of the same borders is unusual. On balance, the bowl is slightly more likely to be by Iustus than Patermus, in view of Iustus's fondness for marine scenes (*ibid*, 12-12, 17). *c* AD 160-90.

OGL B 51 Period: 7
OGL B 25 and OGL B 26 Period: 8A

63* Form 30, East Gaulish, with mould-stamp of Cobnertus iv, of Rheinzabern, [C]OBNERTVSF (stamp No 18, Fig 28.8). The ovolo with astragalus border below is Ricken and Fischer 1963, E40a. The figure-types include a warrior (*ibid*, M208), Mercury (*ibid*, M78), figure with staff (*ibid*, M239) and bear (*ibid*, T55). The leaf and trifid motif in the saltire are P91 and P120 respectively (*ibid*). The Mercury has apparently not been noted before for Cobnertus. c AD 160-90.

OGL B 20 Period: 7B OGL B 1 Period: 9

64 Form 37, Central Gaulish. A sherd trimmed as a counter, from a bowl in the style of Cinnamus ii, with his ovolo 4 (Rogers B145) and horizontal border of beads. *c* AD 150-80.

OGL B 25 Period: 8A

- 65* Form 37, East Gaulish. The triple-bordered ovolo (Fölzer 1913, Taf 32, 952) was used by Amator, one of the later Trier potters, and occurs on stamped bowls from Nijmegen and Leiden-Roomburg. A cogged arcade or medallion contains a large mask. c AD 180-260. OGL B 13 Period: 8B
- 66* Form 37, East Gaulish. The ovolo, festoon and grapes are all attested for Trier (Fölzer 1913, taf 32, 944; taf 31, 822 and 731, respectively). No parallels have been found for the tiny bird. The ovolo and festoon are on bowls form Birrens (Wild 1975, fig 60, 111) and Niederbieber (Oelmann 1914, taf 7, 35). c AD 180-220. OGL B 48 Period: 8B

Old Grapes Lane Trench C

67 Form 37, Central Gaulish, with panels: 1) a double festoon with seahorse (D.33 = O.33); 1B) a leaf (Rogers G204?); 2) a large double medallion with Pan-mask, full-face. A corner rosette is Rogers C99. Most of the details are on stamped bowls of Do(v)eccus i and the heavily beaded borders confirm the attribution. The mask is not illustrated by Oswald, but occurs on a bowl from York in the style of Do(v)eccus. c AD 165-200.

OGL C 51 Period: 2

- Form 37, South Gaulish. A panelled bowl, with 1) Venus?; 2A) a dog (D>926=O.2015); 2B) a single festoon, probably over a vertical series of trifid motifs. The blurred cable borders suggest a date of c AD 85-110. OGL C 54 Period: 2
- Form 37, South Gaulish, with a horizontal wreath of trifid motifs, as on No 10 above. A winding scroll in the main zone has a triangular leaf in the upper concavity (Knorr 1952, taf 19F). The horizontally-divided lower concavity has a grass-tuft at the tope (Hermet pl 14, 87), between spirals. The wreath, leaf and 'butterfly' scroll binding are all on a stamped bowl of M. Crestio from Strasbourg. c AD 75-100. OGL C 59 Period: 2
- 70* Form 37, Central Gaulish. The ovolo (Rogers B42 or 233), trifid motifs (Rogers G176?), astragalus, rings and wavy line are all on a

stamped bowl of Pugnus ii from Blackfriars Street (Dickingson 1990, 223, 31). The cockerels (D.1025B = O.2361 and D.1025 = O.2348) were used by associates of Pugnus, such as X-6. The ovolo, astragalus, rings and wavy line are on a bowl in a group of burnt samian of c AD 140-50 at Castleford. c AD 130-50.

OGL C 65 Period: 3

71 Form 37, Central Gaulish. The blurred ovolo has a broad tongue attached to the left hand side and appears to have a triple border. Perhaps from Les Martres-de-Veyre, but not closely datable. c AD 100-50.

OGL C 22 Period: 3

72* A small bowl, Central Gaulish, in the fabric of Les Martres-de-Veyre. The form is approximately 37, but the bowl has a moulding where the ovolo would normally have been, and an internal groove at the level of the top of the decoration. The ram's-horn motif (Rogers G370) and trifid motif (Rogers G99) were used by both the Rosette Potter and X-13. The festoon (Rogers F57) is known only for X-13 (cf S and S pl 43, 491) and he also used the seven-beaded rosette (Rogers C280). *c* AD 100-20.

OGL C + Period: Unstratified

73* Form 37, Central Gaulish. A panelled bowl, with 1) a saltire with rows of astagali for the diagonals and in vertical series down the centre. The upper part of the saltire has wavy tendrils and the sides contain eight-petalled rosettes (Rogers C7?); 2A) a double festoon or medallion with a Pudicitia (D.540 = 0.926); 2B) a cup (Rogers T5?). All the motifs are noted by Rogers for Illixo, or on bowls in his style. The figure is on a bowl from Carmarthen attributed to him. *c* AD 150-80.

OGL C + Period: Unstratified

Old Grapes Lane Trench J

74 Form 37, from the East Gaulish factory of La Madeleine. The decoration includes the ovolo (Ricken 1934, taf 7, B?) and a panel with a beaded rosette (*ibid*, 1) in a festoon (*ibid*, 51). c AD 130-60.
OGL J + Period: Unstratified

Lewthwaite's Lane Trench A

75* Form 37, South Gaulish. The trident-tongued ovolo occurs, in a degraded form, on a stamped bowl of M.Crestio from Strasbourg, but the clear version has not so far been recorded for him. Nevertheless, the bowl is likely to be by him, or an associate. He used the S-shaped gadroons in the wreath (Knorr 1919, taf 28, 8) and the panel with the leaf-tips and diagonal wavy lines is exactly paralleled on a stamped bowl from Günzburg (Knorr 1952, taf 19G). He used the dog (a smaller version of O.2015) on a bowl from Mainz. The chevrons and buds have not been noted for him, nor has the boar (O.1670), but the treatment of its coat and that of the dog is typical of his lavish use of detail on figure-types, particularly on animals. *c* AD 75-100.

LEL A 616 Period: 4 LEL A 601 and LEL A 613 Period: 5

Form 37, South Gaulish. The trident-tongued ovolo (Knorr 1919, taf 57, 19) is chiefly associated with Mercator i, and the bowl is probably by him, though it is not typical of his work. The sequence of panels runs: 1) a pair of gladiators (D.607-8 = O.1020-1), a triangle of rosettes and two partly-impressed grass tufts (Knorr 1919, taf 57, 13); 2A) hare to left (O.2129?); 2B) hare to right, in a chevron festoon; 2C) leaf-tips; 3) Hercules with Hydra (D.468 = O.786); 4) motifs as in 2), but with dog to left (O.2004?) at the top and hare to right at the bottom. The basal wreath of elongated heart-shaped leaves is on a stamped form 37 of Mercator from Epinal, the dog is on one from Ribchester, the chevron festoon is on one from Nijmegen and the Hercules is on one from Heidelberg (Heukemes 1964, taf 30). A bowl in the Bregenz Cellar Hoard, also probably by Mercator, has the Hercules and, probably, the hare to the right (Jacobs 1912, no 18). c AD 85-110.

LEL A 599, LEL A 599.2, LEL A 613Period: 5 LEL A 560 Period: 6A-E LEL A 550 Period: 7A

77* Form 37, South Gaulish, made in a cracked mould. A small bowl with

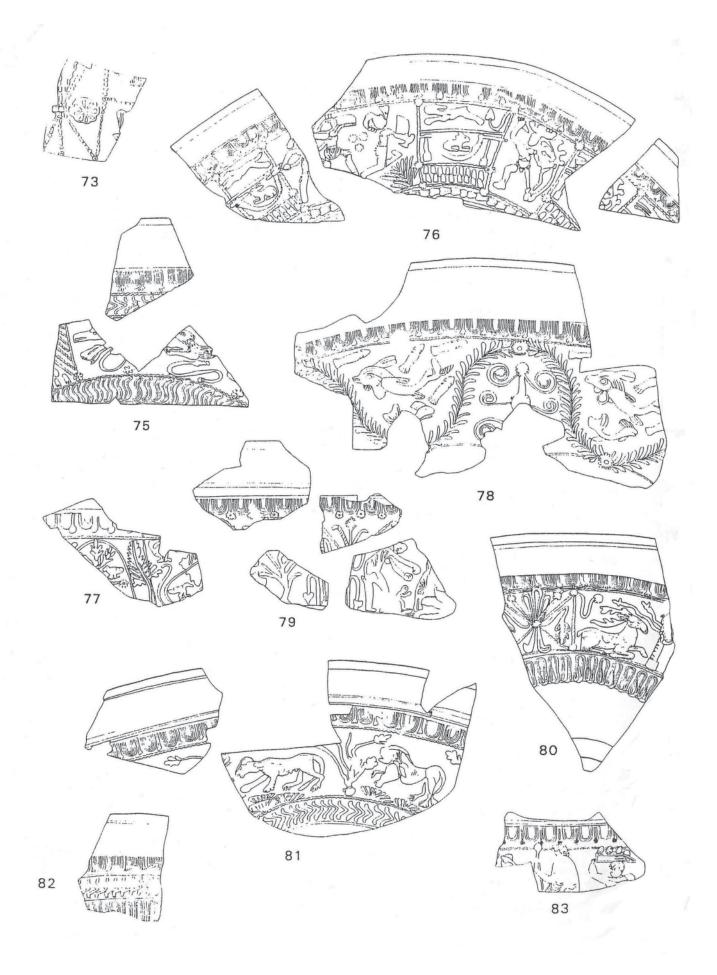


Fig 55 Decorated samian ware (scale 1:2)

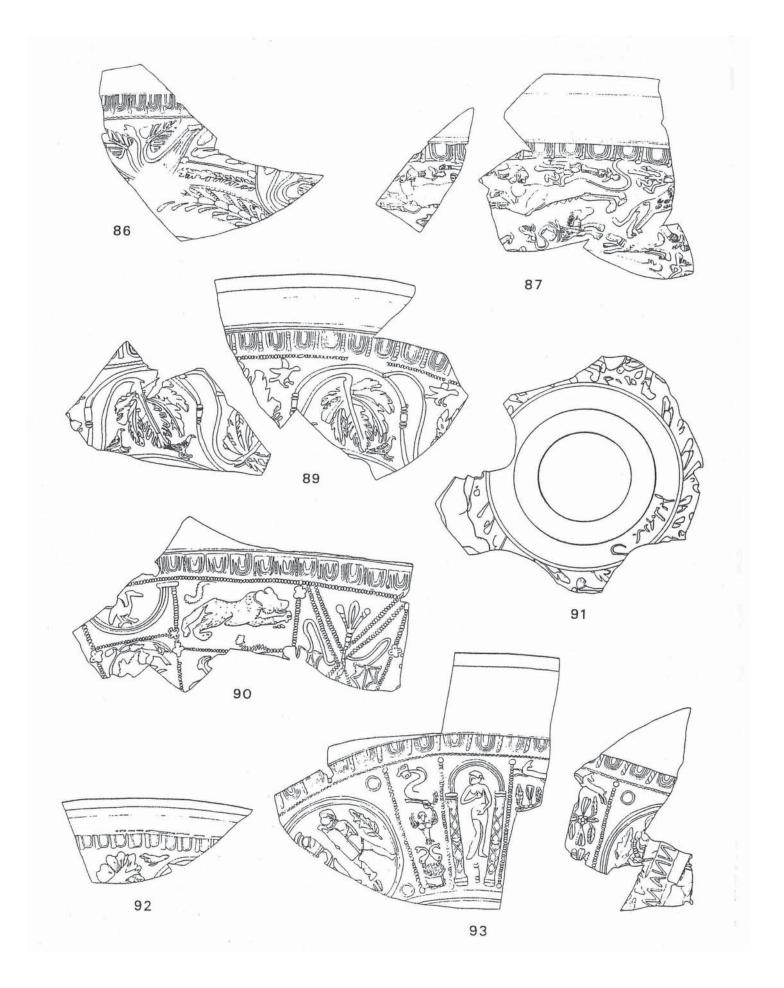


Fig 56 Decorated samian ware (scale 1:2)

a winding scroll and badly blurred rosette-tongued ovolo. No parallels have been found for the triangular leaves, but the bud-clusters and small birds of the same general type were used by some of the Flavian-Trajanic potters of La Graufesenque. c AD 85-110.

LEL A 599.2 Period: 5

78* Form 37, South Gaulish. The style of decoration, with a (different) leafy scroll enclosing dolphins and fish, is reminiscent of Germanus i (cf Knorr 1907, taf 6, 1, from Rottweil), but the ovolo was used by Crucuro i and appears on a stamped bowl of his from Colchester. The large dolphin is Hermet, pl 22, 217, the smaller is like O.2390, but has a different tail. For the same scroll and a motif similar to the spirals in the upper concavity, see a bowl from Rottweil (Knorr 1912, taf 22, 1). A connection between Germanus and Crucuro is shown by a bowl from La Graufesenque (Société des Lettres, Rodez) which comes from a stamped mould of Germanus on which the stamp has been crossed out and a signature *CRV*, retrograde, has been inserted above, after firing. *c* AD 80-110.

LEL A 603 Period: 5
LEL A 592 Period: 6A
LEL A 602 Period: 6A-B
LEL A 550 and LEL A 553 Period: 7A
LEL A 538 and LEL A 547 Period: 7B
LEL A 531 Period: 8A-D

Form 30, South Gaulish. The rosette-tongued ovolo occurs on stamped bowls of Paullus iii and Frontinus, but is also on bowls in the Pompeii Hoard of AD 79, which seem to be by neither potter (Atkinson 1914, nos 48, 50). A panel with corner-tassels of heart-shaped leaves contains a man sacrificing a boar (Hermet pl 22, 195) and a small naked figure (*ibid*, pl 18, 55). The trifid motif in the saltire is close to, but not identical to, pl 14, 39 (*ibid*). The bowl is not assignable to a particular potter, but will fall within the range *c* AD 75-100.

LEL A 592 and LEL A 594 Period: 6A LEL A 5787 Period: 6A-E LEL A 563 Period: 6C-7A LEL A 550 Period: 7A LEL A 530 Period: 8C LEL A 524 Period: 8D LEL A 508 Period: 8E LEL A 479 Period: 10B

80* Form 37, South Gaulish. The ovolo, with trident tongue turning to the right, and bilobed and trilobed motifs are on a bowl from Ribchester (Wild 199, fig 9, 105, but the ovolo quoted there as a parallel appears to be larger). It is also on No 53 from OGL B and on No 82 below. The bilobed and trilobed motifs are both on an unstamped bowl from Saalburg (Richen 1934, taf 14, 13) and recur, together with the side leaves of the saltire, on a stamped bowl of Sabinus iv from Cannstatt (Knorr 1909, Taf 3, 1). No 80 shares with No 82 a zone of sinuous gadroons, as on a stamped bowl of Frontinus from Newstead (Curle 1911, 209, no 4), but there are no other obvious connections with him. The stag has no exact parallel in Oswald. Both this and No 82 are small bowls. c AD 85-110.

LEL A 607 Period: 6A

81* Form 37, South Gaulish. The trident-tongued ovolo is on a stamped bowl of Crucuro i from Colchester and on an unstamped bowl from LELA (No 78 above). The tree with clusters of buds and the grass-tufts occur on bowls by Flavian-Trajanic potters working in the tradition of Germanus i, cf a bowl in the Bregenz Cellar Hoards (Jacobs 1913, No 4). The panther (a variant of D.946 = O.1544) was used by Germanus and Frontinus. The lion (D.763 = O.1438) is on a stamped bowl of Sabinus iv (Hermet pl 80, 1) and on a bowl in the Bregenz Cellar Hoard, with the grass-tufts and the same type of tree (Jacobs 1913, no 12). There is no exact parallel for the chevron wreath. *c* AD 85-110.

 LEL A 578
 Period: 6A-E

 LEL A 550
 Period: 7A

 LEL A 335
 Period: 12A

 LEL A +
 Period: Unstratified

82* Form 37, South Gaulish. A small bowl, with the same ovolo and sinuous gadroons as No 80 above, with an intervening zone of chevrons. *c* AD 85-110

LEL A 569 Period: 6C-E

83* Form 37, Central Gaulish. A bowl in the style of X-2 of Les Martres-de-Veyre. The single-bordered ovolo (Rogers B28) has a wavy line below. The figure-types are an Apollo (D.44 = O.74), a slave (D.322 = O.591) and, perhaps, a figure with a staff (the left hand figure on S and S pl 8, 100?). *c* AD 100-20.

LEL A 550 Period: 7A

Form 37, Central Gaulish. The ovolo (Rogers B7 = B24) and partly-impressed acanthi (the left hand halves of Rogers K2) are both on a stamped bowl of Attianus ii from Alchester (S and S pl 85, I). *c* AD 125-45.

LEL A 505

Period: 8E-F

Form 37, Central Gaulish. A freestyle bowl, with the ovolo chiefly associated with the Cerialis ii-Cinnamus ii group (Rogers B144). A bear (O.1633H) is known for Cinnamus and occurs on a stamped bowl of Paullus iv from York. *c* AD 135-70.

LEL A 440 Period: 10A

Form 37, South Gaulish. The ovolo has a long tongue with a swollen tip, turning to the right. The basal wreath of trifid motifs (Knorr 1919, taf 57, 12), was used by several La Graufesenque potters of the Flavian-Trajanic period, such as Mercator i and L. Tr-Masc(u)lus. The latter also used bud-clusters like the ones which appear here in a band across the scroll and, probably, the same crouching hare (Knorr 1952, taf 37A). An unstamped bowl from the Bregenz Cellar Hoard (Jacobs 1913, no 4) also has the wreath, bud-clusters and, probably, the hare. There are too many variants of the triangular leaf to make precise identification possible. *c* AD 85-110.

LEL A 485 and LEL A 491 Period:10A

Form 37, Central Gaulish. The ovolo is either Cinnamus ii's ovolo 1 or a version of it (Rogers B223), but when used with a straight line, as here, it appears on bowls in the style of Secundus ii, a potter who used some of the same figure-types and motifs as Cinnamus. The freestyle scene includes a lioness (a larger version on D.793 = O.1537), leopard (D.787 = O.1507), dog (D.934 = O.1980), sea-horse (D.36 -0.52, tiny Pudicitia (D.533 = 0.939), and pygmy (D.405 = 0.682). The pygmy is on a stamped Secundus bowl with Cinnamus's ovolo 3 from Great Chesterford (Simpson and Rogers 1969, fig 2, 4) and on a bowl in Secundus style from Carlisle (Tullie House Museum Acc No 41,1931). Other bowls with the Cinnamus ovolo 3 and a straight line below have the leopardess (Mumrills: Hartley 1960-1, 102, 4; and Camelon) and the sea-horse (Elmswell). Bowls with ovolo 1 and the straight line have the lioness (Wels: Karnitsch 1959, taf 78, 1), the leopard (Corbridge: S and S pl 154, 16) and the dog (in the Wroxeter forum destruction: Atkinson 1942, pl 41, H39). c AD 150-80.

LEL A 366 and LEL A 420 Period: 10B LEL A 373 Period: 13

LEL A 28 Period: 21A LEL A + Period: Unstratified

88 Form 37, Central Gaulish, with ovolo 3 of Cinnamus ii (Rogers B143) and an Apollo (D.52 = O.83) in a double medallion. See S and S pl 160, 35 and pl 159, 27 for the medallion and Apollo respectively, both on stamped bowls from London (British Museum). *c* AD 150-80. LEL A 389 Period: 10B

89* Form 37, Central Gaulish. The ovolo (Rogers B144) was used by Cinnamus ii and some of his associates, such as Cerialis ii and Paullus iv, and he is known to have used the birds (O.2239B and D.1038 = O.2315). The leaf in both concavities of the scroll (Rogers H62) is on a bowl from Wels with one of the plain ware stamps which Cinnamus used on moulds, in the earliest part of his career (Karnitsch 1959, taf 73, 6). *c* AD 135-65.

LEL A 464 Period: 10B LEL A 341, LEL! 353, LEL A 359, LEL A 365 Period: 11

Form 37, Central Gaulish, in the style of Attianus ii. The ends of the ovolo tongues (Rogers B204) have been largely obliterated by the border of beads. The panels include: 1A) a crane (not in O.) in a double festoon; 1B) a vine scroll (Rogers M10); 2A) a bear (O.1588) and cornucopia (Rogers U251); 3) a saltire, with trifid motic at the top (Rogers G67?) and palmate leaves (Rogers J89) at the sides. Stamped or signed bowls of Attianus have the ovolo (Chester: S and S pl 87), leaves (London: ibid, pl 85, 6), cornucopia (London: ibid, pl 85, 9)

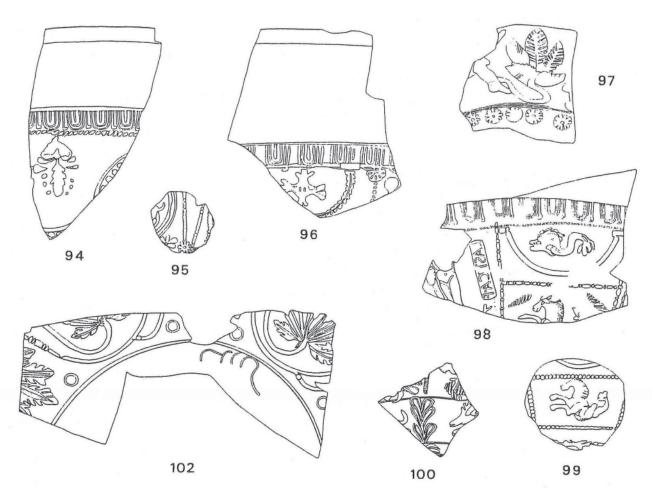


Fig 57 Decorated samian ware (scale 1:2)

LELA+

and rosettes (London: ibid, pl 86, 17). c AD 125-45.

LEL A 370 Period: 11 LEL A 373 Period: 13

91* Form 37, Central Gaulish, with a cursive signature, *Cerealis*, retrograde, below the decoration, from a mould signed before firing (signature No 2, Fig 28.9). The freestyle scene includes a Diana (D.68 = O. 111), the edges of large leaves and two animals, one perhaps the leopard D.794 = O.1540. *c* AD 135-65. LEL A 370 Period: 11

92* Form 37, Central Gaulish. The ovolo (Rogers B247), single scroll and leaf (not in Rogers) are on a signed bowl of Tetturo from Alcester. The bowl is in a distinctive bricky, orange fabric and may have come from Toulon-sur-Allier, where moulds of Tetturo were used. *c* AD 135-65.

LEL A 269 Period: 12C LEL A 280 Period: 12C?

Form 37, Central Gaulish, with large label stamp of Cinnamus ii, [CI]NNAM[I] retrograde, vertically in the decoration (stamp No 16, Fig 28.8). The bowl has his ovolo 3 (Rogers B143) and repeating panels with 1) double medallion with a pair of gladiators (D.852 = 0.1001) between leaves (not in Rogers); 2) dolphin (a variant of D.1050=O.2382), harpy (not in O.) and dolphins on a basket (Rogers Q58); 3) Venus (D.176 = O.286) in an arcade supported by columns (Rogers P87, repeated); 4) a stag (O.1814A), triple leaf (Rogers L11) and trifid motif with striated outer petals (not in Rogers). This is not a typical Cinnamus bowl. The decoration is closed by a groove instead of the usual ridge, and the trifid motif, harpy and dolphin are not known for him. The columns are also uncommon, but occur on bowls in his style from Chester and Catterick (Bainesse Farm). c AD 150-80.

LEL A 269 and perhaps LEL A 280 Period: 12C

LEL A 246, LEL A 251, LEL A 270, LEL A 284 Period: 13

LEL A 235 Period: 14

LEL A 84 Period: 18

LEL A 105 Period: 19B

Period: Unstratified

Form 37, East Gaulish, The ovolo, with the end of the tongue turning horizontally to the right (Fölzer 1913, taf 32, 946), was used at Trier by Censor ii and Dexter ii. The scroll is probably made with alternating impressions of the festoon *ibid*, taf 31, 808 or 809; scroll decoration is not common at Trier. The motif in the upper concavity is probably the middle part of *ibid*, taf 31, 717. For the border of rhomboidal beads, cf *ibid*, taf 32, 925-7. Two bowls from Zugmantel in the style of Censor (*ORL* B8, taf 26, 23-4) have the motif and, probably, the same ovolo. Late second or first half of the third century.

LEL A 84 Period: 18

95* Form 37, Central Gaulish, a sherd shaped to form a medium-sized counter. It comes from a panelled bowl in the late style of Pugnus ii. The decoration includes: 1) a saltire; 2) a seven-petalled rosette (Rogers C145) and a double medallion with a leopard (D.799 = 0.1518). The rosette is on a stamped bowl from Gloucester (S and S pl 155, 20). The hollow rosette, used here as a junction-mask, is on a stamped bowl from Exeter. Pugnus used the same figure-type, but with the tail broken at the end, on bowls in an earlier style (*ibid*, pl 153), and must have replaced it, or had two versions of it. *c* AD 150-80. LEL A 69

Period: 20

96* Form 37, East Gaulish. The ovolo (Oswald 1945, Fig 6, 11), cross (*ibid*, 15) and rosette (*ibid*, 20) are on a stamped mould of Germanus

of Lavoye (Fölzer 1913, 40 and taf 7, 24). All of these details, and the straight line under the ovolo, are on an unstamped bowl from Saalburg (Ricken 1934, taf 13, 54). Second half of the second century. LEL A 69 Period: 20

- 97* Form 37, East Gaulish. Abowl in coarse, orange fabric, with decoration including a leaf, basal wreath of (ten-petalled?) hollow rosettes and, perhaps, a boar or stag. It cannot be assigned to a pottery, though the fabric and glaze suggest an origin at either Lavoye or Trier. Late second century or, more probably, first half of the third century.
 LELA 73 Period: 20
- 98* Form 37, Central Gaulish, with a mould-stamp of Lastuca, LASTVCA·F retrograde, in the decoration (stamp No 31, Fig 28.8). The decoration, almost identical to that of Paternus v, has a ring-tongued ovolo (Rogers B105) and panels with: 1) Pan (D.411 = O.709); 2A) a dolphin (O.2394 variant) in a single festoon; 2B) a sea-horse (D.33 = O.33) and striated spindles. The astragaloid borders are Rogers A10. *c* AD 160-90. LELA 28

 Period: 21A
- 99* Form 37, Central Gaulish, a sherd shaped to form a large counter. It comes from a panelled bowl in the style of Casurius ii. The surviving panel shows a single festoon, a sea-horse (D.33 = O.33) and, perhaps, an arrowhead motif (made with one of the series Rogers U293-5). All the details are on bowls in Casurius style for Wels (Karnitsch 1959, taf 64, 1) and Chester (S and S pl 136, 46). *c* AD 160-90. LELA 28 Period: 21A
- 100* Form 37, East Gaulish. The decoration is effectively divided into zones by a horizontal guide-line and has a siren (Huld-Zetsche 1972, M23), vertical striated rod (*ibid*, 081) and bust (*ibid*, M4) in the upper zone and a dog (*ibid*, T17) and stag (*ibid*, T16) in the lower. The bifid motifs in the vertical divider and the basal wreath are *ibid*, O50. The bowl is in the style of Trier Werkstatt I and the stag, dog, wreath, divider, rod and guide-line are all on a single bowl (*ibid*, taf 26, C48). For the siren and bust, see *ibid*, C46 and taf 27, C53, respectively. Hadrianic or early Antonine.
 LEL A 28 Period: 21A
- Form 37, Central Gaulish, with the remains of one letter of a cursive signature below the decoration (signature No 3, p 79 below). This almost certainly belongs to Tetturo. The lower concavity of a scroll has a pygmy (Rogers C120) at the bottom. Tetturo sometimes used unusual fillers when he had laid out his scrolls unevenly and, since he is known to have used both the pygmy, on a signed bowl from Alcester, and the rosette, the attribution is reasonably secure. Like No 92 above, this could have come from Toulon-sur-Allier, although the fabric is more like those in the Lezoux range. *c* AD 135-65. LELA + Period: Unstratified
- 102* Form 37, Central Gaulish, with cursive signature Ves, retrograde, upside-down below the decoration, from a mould signed before firing (signature No 4, Fig 28.9). The bowl has a winding scroll bound with an astragalus (Rogers R14?) and large leaves (probably Rogers H51) in both concavities. The leaf, if correctly identified, was used by Cinnamus ii on a bowl from Evreux, and he used the same size of ring. The signature appears on an unprovenanced bowl in Southampton Museum in the style of the Cerialis-Cinnamus group. The signature may belong to Vespo. c AD 140-60.
 LELA + Period: Unstratified

The Potters' Stamps (Fig 58)

For ease of reference, the potters' stamps from all the site are listed together, in alphabetical order; they are followed by the unidentified stamps, arranged by site. Each entry gives: potter (i, ii etc, where homonyms are involved), die number, form, reading of the stamp, published example, pottery of origin and date, followed by the site, context and period. Stamps indicated with an asterisk are illustrated.

Key to stamps:

- [a] A stamp is known at the pottery in question.
- [b] Not known at the pottery in question, but other stamps

- of the same potter are attested there.
- [c] A stamp assigned to the pottery on fabric, distribution, etc.
- Albillus i la (probably), 31 **AMBILMMA**] Lezoux [b]. This potter's forms include 31R and 79, indicating that some if not all of his career was after *c* AD 160. Further evidence of this is supplied by stamps from another die at Chesterholm and in a group of late Antonine samian from a pottery store at Corbridge. *c* AD 160-200. OGL A 308.1 Period: 13
- Albucius ii 6b 3 1 **ALB[VCI]** (Durand-Lefebvre 1963, no 30) Lezoux [a]. This stamp occurs in a burial at Rougham, Suffolk, with stamped vessels of Illiomarous ii of Lezoux and two potters who moved from Sinzig to Colchester (Lipuca and Miccio vii). There are also examples from Balmuildy and on form 27, 42 and 44. *c* AD 150-70. OGL B 80 Period: 6F
- Andegenus 1 a 27 [AN]DEGENIM Hartley 1972, S128) Lezous [a]. This stamp is in a pit-group of *c* AD 150-60 at Alcester and in the Second Fire deposits at Verulamium. It is probably from on of his earlier dies, since stamps from other dies occur on form 79 ad should be after AD 160, while 1a was used on forms such as 18/31, 18/31R and 27. *c* AD 140-60.

 OGL B 84

 Period: 6E
 - Annius ii 2a 18/31R **ANNI·F** Lezoux [a]. Annius ii began work at Les Martres-de-Veyre under Trajan and moved to Lezoux in the Hadrianic period. This is in Lezoux fabric; there are two examples

of the stamp from period IIC (AD 140-50) at Verulamium (Hartley 1972, S91). *c* AD 130-50.
OGL A 488 Period: 8A-9E

Aprilis iii la 31 [A]P>RILISFC, in guide-lines, East Gaulish. An

East Gaulish Aprilis is known to have worked at the Argonee

factory on Pont-des-Rèmes, but the distribution of this stamp and

the associated fabrics and glazes make La Madeleine the more likely

source. *c* AD 140-60. Graffito under base (Fig 60, 5). OGL A 190 Period: 13

Asiaticus ii 10a 33 [ASIAT] Lezoux [b]. This is one of Asiaticus ii's less common stamps, otherwise noted only at Aldborough and in the Plicque Collection, probably from Lezoux. Other dies were used to stamp forms 79 and 79R, but one stamp is on a dish of form 18/31-31 from Inveravon, which will not be later than the mid 150s. *c* AD 150-85.

LEL A 93 Period: 19B

- Attianus ii 7a 18/31 [ATTIA]NIM (Durand-Lefebvre 1963, no 17, where it is assigned to Aftianus) Lezoux [b]. Attianus ii's decorated ware is Hadrianic or early Antonine in style. His plain ware falls within the same range and includes forms 18/31, 18/31R, 27 and 81. There are several examples of 7a from a pottery shop at Castleford destroyed by fire in the 140s. c AD 125-45.

 OGL C 5 Period: 3?
- 8* Attillus v 9a 33 AT-TILLVS Lezoux [b]. There is no site dating for this stamp, but its use on forms 80, Tx, and probably Tg, suggests mid- to late Antonine activity, as does another stamp on decorated bowls. c AD 160-90.
 LELA 110 Period: 18

Avitus iii 2a 27 **AVITI[·M]** (Dannell 1971, no 13) Lezoux [a]. Avitus iii's decorated ware is mostly Hadrianic, but his plain ware is common in Antonine Scotland. This particular stamp occurs in the Rhineland, where Central Gaulish ware is rare after *c* AD 150, and this evidence, combined with its use on forms 18/31, 27 and 42, suggests a range *c* AD 125-50.

OGL B 130 Period: 6C

Bonoxus 1a 27 **BO[NOXVS·★·:]** (Hartley 1972, S93) Lezoux [c]. This occurs in period IIC at Verulamium (after AD 140) and at Forden Gaer (probably evacuated by AD 125). *c* AD 125-50. CALA 52 Period: 4

Bonoxus 3b 18/31 [BON]OXSF, retrograde, in guide-lines, Lezoux

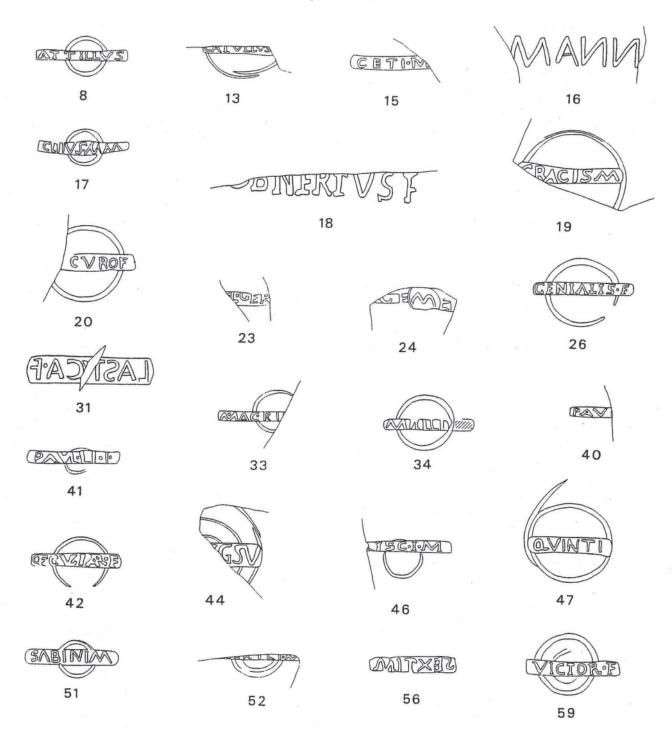


Fig 58 Samian ware stamps (scale 1:1)

[c]. Most of this potter's output consists of forms 18/31, 18/31R and 27. He also stamped forms 79 and 80 occasionally, although not with Die 3b. His stamps turn up at Rhineland forts and in the Saalburg Erdkastell. c AD 125-50.

OGL C +

Period: Unstratified

12 Calvus i 51 15/17 or 18 **[OF]CALVI**(*ORL* B26, 33, 3) La Graufesenque [b]. A stamp noted from Ilkley and the main site at Corbridge. This suggests that the stamp is from one of Calvus's later dies, but the evidence is too slight to be sure, and a range *c* AD 70-95 must be allowed.

OGL A 860

Period: 6

13* Catullus i 2a 27 CATVLLVS[F] Les Martres-de-Veyre [b]. There is no site dating yet for the potter, but the forms of his vessels and

his fabrics and glazes all suggest Trajanic activity. This particular stamp is always on cups, usually of form 27, but with one example on form 33. $\it c$ AD 100-20.

OGL C+

Period: Unstratified

14 Celsianus 8a 38 or 44 **CELSIANIF** Lezoux [a]. This stamp has been noted several times on forms 79 and 80, and once on form 31R. Its site record includes Chester-le-Street and South Shields. *c* AD 160-90.

OGLA2

Period: Modern

15* Cetus 4a 18/31 or 31 CETI-M Lezoux [b]. There are two examples of this stamp from Saalburg. Stamps from other dies occur in Antonine Scotland (Mumrills and Barburgh Mill fortlet). His output includes forms 18/31 and 31R (stamped with Die 4a), 27,

31, 38 and 81. *c* AD 140-60. OGL B 120/121

Period: 6D

16* Cinnamus ii 5b 37 [CI]NNAM[I], retrograde (S and S pl 169) Lezoux [a]. This large label stamp has been noted many times at forts both on Hadrian's Wall and in Antonine Scotland, but is more common in Scotland. c AD 150-80. (see Fig 56, 93).

LEL A 335 Period: 12A

- 17* Cleus 1a 33 CLIIVS·MM: Lezoux [c]. An uncommon Central Gaulish stamp of Antonine date, to judge by the associated fabrics and glazes. OGL B 20 Period: 7B
- 18* Cobnertus iv 4a 30 [C]OBNERTVSF (Ludowici 240, a) Rheinzabern [a]. Cobnertus iv was one of the second-century Rheinzabern potters, to judge by the style of his decorated ware. Some of his bowls carry rim-stamps, including one of Reginus vi, who began his career at Heiligenberg. *c* AD 160-90. (see Fig 54, 63).

 OGL B 20 Period: 7B
- 19* Cracissa 4a 18/31R **CRACISM** Lezoux [a]. This occurs in a Hadrianic-Antonine pit at Verulamium and in a pottery shop at Castleford destroyed by fire in the 140s. The die was also used to stamp forms 27 and 42. *c* AD 130-50.

OGL A 36 Period: 13

- 20* Crucuro ii 3b 18/31R [CRV]CVROF (Vanderhoeven 1975, no 249) Lezoux [b]. This is from a die which was also used on form 27. Stamps from his other dies are on forms 18/31 and 18/31R, suggesting a Hadrianic-Antonine range. One vessel has been noted from Camelon and another, with a stamp which is almost certainly to be attributed to him, is on a Hadrianic or early Antonine dish at Wallsend. c AD 125-50. LEL A 260 Period: 12C
- Donatus iii 1c 31R **DOVATVSF** (Ludowici 214, a) Rheinzabern [a].

 Donatus iii, like many Rheinzabern potters, lacks site dating, but his use of the standard Rheinzabern form 32 suggests a range *c* AD 180-240.

 OGL J + Period: Unstratified
- 22 Ericus 1a 18/31 **ERICI-M** (Knorr 1921, taf 9, 70) Lezoux [a]. Nearly all the vessels with this stamp noted by the author are either form 18/31 or 18/31R, although there are a few examples of form 27. He also stamped form 79/80 (rarely) and, perhaps, form 42. Stamps from other dies occur at Camelon and Verulamium (period IID, after AD 150). *c* AD 130-55. OGL A 385 Period: 9G
- 23* Flavius Germanus Incomplete 1 15/17 or 18 **JFL-GER**[La Graufesenque [b]. No other examples of this stamp are known to the author. Stamps of Flavius Germanus occur at Domitianic foundations, but he occasionally stamped form 29s, which will be before AD 85. *c* AD 80-110.

OGL B 173 Period: 5B

- 24* Gemenus Uncertain 1 31 GEMEN[Lezoux [b]. No other examples of this stamp are known to the author. Gemenus stamped forms 31R and 79R and so must still have been at work after c AD 160. His decorated ware looks mid- to late Antonine and the Carlisle dish with its high basal kick would fit this date range. c AD 160-90.
 OGL A 19 Period: 13
- 25 Geminus vi 6a'33 GEM[INIF] (Durand-Lefebvre 1963, 312) Lezoux [a]. The die for this was made by *surmoulage*, from an impression of Die 6a. There is no site dating for either die, but 6a' was used on form 79. Geminus vi was one of the later Lezoux potters, and was one of the few to stamp the collars of gritted samian mortaria of form 45. *c* AD 170-200.

OGL B 76 Period: 6F

26* Genialis iv 6a 33 **GENIALIS·F** Lezoux [b]. Much of this potter's output is late Antonine. His wares occur in a pottery store at Corbridge destroyed towards the end of the second century (Haverfield 1915, 280) and he stamped 79R, which was probably not made much before AD 170. However, two dishes of form 18/31R come from a pit of *c* AD 150-60 at Alcester. This particular stamp has been noted from Benwell and Housesteads. *c* AD 150-90.

OGL C + Period: Unstratified

- Habilis 5a 18/31R **HA[BILISF]** Lezoux [a]. This was used on forms 18/31R, 80 and Ludowici Tg, and stamps from other dies appear on forms 18/31, 27 and 79, giving evidence of activity in the middle of the Antonine period. His site record includes Benwell, South Shields and Verulamium (in the Second Fire deposits). *c* AD 150-65.

 OGL A 196

 Period: 9H
- Iucundus iii 5e [OF-IV]CVN (Simon 1978, C760) La Graufesenque [a]. Iucundus iii's stamps appear in Flavian contexts and on decorated bowls of form 29, mainly of the period c AD 70-85. This seems to be from one of his later dies, used only on plain ware and noted from Watercrook and the main site at Corbridge. c AD 80-100.
 OGL A 818 Period: 6
- 29 Iullinus i 7a 15/17 or 18 [IVLL]IM Walker 1964, no 28) La Graufesenque [a]. A stamp from on of Iullinus i's later dies. It occurs in the Inchtuthil Gutter find (Hartley 1985, 314, S4) and there are several examples on the latest type of form 33 to be made at La Graufesenque. c AD 80-100. OGL A 717 Period: 7A-8C
- 30 Labio 1a 29 **OF-LA[BIONIS]** (Laubenheimer 1979, no 97) La Graufesenque [a]. The die for this was used almost exclusively on form 29. There are few examples from Flavian foundations, but the style of the decoration is consistently Claudio-Neronian. *c* AD 50-65. (see Fig 52, 17).

OGL B 294 Period: 2B

31* Lastuca 1a 37 **LASTVCA·F**, retrograde (S and S pl 169) Lezoux [a]. A stamp also known on a decorated bowl from South Shields. Lastuca's style is virtually indistinguishable from that of Paternus v (Rogers's Paternus 2) and he will have worked in the period *c* AD 160-90 (see Fig 57, 98).

LEL A 28 Period: 21A

32 Lossa 2a 18/31R LO[SSAFEC] East Gaul [c]. The stamp is always on dishes, usually without rouletting and mostly of form 18/31. This is the first example from Britain, all the rest being from the two Germanies. It seems that Lossa only made dishes and the absence of form 32 suggests an early to mid-Antonine date, rather than later. His distribution gives no clue to his kiln-site.
OGL B 48 Period: 8B

33* Macrinus iii 4a 38 or 44 MACRIN[IM·] Lezoux [a]. Stamps of Macrinus iii, including this one, occur in the Wroxeter Gutter hoard. The die was also used to stamp form 79. His earlier output includes cups of form 27, so he should have begun work before AD 160, but

4a is probably to be dated *c* AD 160-80. OGL B 48 Period: 8B

34* Malledo 6a 33 MALLED[VI] Lezoux [a]. Malledo's stamps turn up at forts in northern Britain founded, or reoccupied, *c* AD 160. His forms include 31R, 79, 80 and Ludowici Tx. There is no internal dating for this particular stamp. *c* AD 160-90.

OGL A 2 Period: Modern

- Malliacus 3a 33 MA[LLIACI] (Miller 1922, pl 36, 16) Lezoux [b]. Malliacus's activity seems to have been mainly Antonine. This particular stamp occurs at Balmuildy and others are in a group of burnt samian from a pottery shop at Castleford destroyed by fire in the 140s. His use of forms 18/31R and 27 suggests that he was at work in the first half of the period, but one possible example of form 79 has been noted. c AD 135-65. LEL A 365
 Period: 11
- Mercator i 1b 15/17 or 18 OFMER(C) (probably Knorr 1919, Taf 57, 26) LaGraufesenque[a]. Mercator i's stamps are common at sites founded under Domitian, both in Britain and the two Germanies. Many of his dishes are closer to form 18/31 than to 18 and the decoration of the few bowls of form 29 which carry his stamps seems to belong to the 80s. c AD 80-110. OGL B 188 Period: 5A
- Montanus i 3a 29 **ofMONTAM**: (Knorr 1907, Taf 31, 254) La Graufesenque [b]. Much of this potter's output is Flavian, although he is known to have stamped forms 27 and Ritterling 8 occasionally, and he is represented in the samian from the Colchester Second Pottery Shop, Flavian contexts include Chesterholm, the main site at Corbridge and the Inchtuthil Gutter and, for Die 3a, Rottweil and York(?). c AD 60-85.

OGL B 184.3 Period: 5A

- Nicephor I 3a 27 NICEPH[ORD] (Terrisse 1968, pl 53) Les Martres-de-Vyre [a]. Stamps from this die occur at Chesterholm and Malton. There are also two examples in the London Second Fire groups. c AD 100-20. OGL A 736 Period: 6
- Ovidius 1a 27 OVIDIM (Terrisse 1968, pl 53) Les Martres-de-Vyre [a]. This stamp has been found in the London Second Fire groups, which contain much Trajanic samian from Les Martres. However, the forms and fabrics associated with it suggest that Ovidius may have had a slightly later career than most of the potters involved, probably working in the period c AD 110-30.
 OGL B 134
 Period: 5D
- 40* Paullus iv 2a 31 **PAVL[IMA]** Lezoux [b]. One of the less common stamps of the man who was associated with potters such as Cerialis ii and Cinnamus ii in the manufacture of decorated ware. His plain forms include 18/31, 18/31R and 27. *c* AD 140-70.

 OGL C + Period: Unstratified
- Paullus v 8b' 31 PAVIA-II- Lezoux [a]. This is from a die which originally gave PAVIAI and was probably scratched during cleaning. A stamp from the original die occurs at Carrawburgh and the later version is known from Benwell and Haltonchesters. Paullus v is one of the potters represented in the samian from Pudding Pan Rock. *c* AD 160-200.

 OGL B 6 Period: 9
- 42* Peculiaris i 5a 33 FECYLIAR-F (Curle 238, 72) Lezoux [a]. This is from the earlier of Peculiaris i's common dies. It was used mainly on forms 18/31 and 27 and only occasionally on later forms, such as 79 and 80. It has been noted form Wallsend and in Antonine Scotland. c AD 140-70. LEL A 256 Period: 13
- Popp(p)illus 1a 18/31 **POPPP[ILLVSE]** East Gaul [c]. Only six other stamps have been noted for this potter, five from the same die as this. Two are from Britain (Carlisle: Tullie House Museum Acc No 6.29.2, and Denver), and the others are from Nijmegen (Hatert cemetery) and Vechten (2). The forms are 18/31 (Tq), 31 and 33. *CIL* 3.13 (1901), 322, 10010, 1546a), which suggests the Argonne or Trier as possible sources. Early to mid-Antonine in any case, in view of the form, 18/31.

 OGL B 25

 Period: 8A
- C. Iulius Primigenius Sur- 3a 15/17R or 19R [PRIM]IGSV (Heukemes 1964,64,3). Astamp noted from Chesterholm, Northwich, Rottweil, and in a late first- to early second-century context at Heidelberg. c AD 80-110.
 LEL A 560 Period: 6A-E
 LEL A 550 Period: 7A
- 45 Primulus iii 2b 31 PRIM[VLI] Lezoux [b]. Stamps from other dies of Primulus iii are known from Camelon, Old Kilpatrick and Newstead. There is no other dating for him, but the type of lettering which he used is typical of Lezoux ware of the second half of the second century. c AD 150-80.
 Clack 1 70 Period: 1-2
- 46* Priscus iii 4d 33 [P]RISC-I-M Lezoux [a]. This comes from a die which was used on both plain and decorated ware. The former includes a dish of form 31 from the group of late Antonine samian recovered off Pudding Pan Rock and forms 31R, 79 and 79R. The stamp is also on a mould from Lezoux with a stamp of Clemens iii. c AD 160-90. OGL A 567 Period: West 1
- 47* Quintus iv 2a 27 **QVINTI** (Hull 1958, 123, 23) Lezoux [a]. This is a stamp of the earlier Lezoux Quintus, noted from Birdoswald and Newstead. A stamp from another die occurs at Camelon. This cup, in view of its form, is unlikely to be much later than *c* AD 160. Unlike most of the samples noted by the writer, it lacks a horizontal bar across the *V. c* AD 140-60. LEL A 183

 Period: 17
- 48 Reburrus ii 3a 33 [REBVR]RI·OF Lezoux [a]. A stamp used on forms 27, 31 and 79. The site evidence for it includes Croy Hill and Lezoux, where it occurs in a mid-Antonine house. c AD 140-70. OGL B 92 Period: 6F

- Reginus iv 1a 33 RE[GINIOF] (Vanderhoeven 1975, nos 590-1)
 Lezoux [b]. Reginus iv's range of forms include 18/31, 18/31R, 27, 79, 79R, 80 and Ludwici Tg/Tx, with the later forms predominating. His stamps are known from the Wroxeter forum destruction material and form Hadrians Wall (Chesters Museum). There is no internal dating for this particular stamp. c AD 150-80.
 OGL A + Period: Unstratified
- Roppus ii 1a 18/31R R[OPPVSFE] (Hartley 1970, Abb 2, 56) Les Martres-de-Veyre [a]. The stamp was used on forms 18/31, 18/31R, 27 and 33, and occasionally on form 15/17, which is rare at Les Martres after the Trajanic period. Other stamps of Roppus occur at the Saalburg Erdkastell (before AD 139) and in a group of burnt samian of the 140s at Castleford, although here they are presumably residual. c AD 105-30. OGL B 120/121
- 51* Sabinus viii 8b 33 SABINIM Lezoux [b]. One of the less common stamps of a potter whose use of forms 31R, 79R and 80 suggests a range of c AD 160-200.
 OGL A 315 Period: 10E
- 52* Sacrillus 2a 31 [SIACRILI-M Lezoux [b]. This stamp has been noted only on forms 31 and 33, and has not so far appeared in a dated context. Other stamps of Sacrillus, however, clearly point to a mid- to late Antonine range, with examples from Hadrian's Wall and Pudding Pan Rock, and on forms 31R, 79, 79R and 80. c AD 160-200. OGL B 48 Period: 8B
- Sarrutus 1a 27 OF.SARRVT (Knorr 1907, taf 31, 88) La Graufesenque [a]. The stamp has been noted from Risstissen (before c AD 75) and, occasionally, on early Flavian bowls of form 29. The latest dating evidence so far consists of stamps from Butzbach and the main site at Corbridge. c AD 70-90.
 OGL C 53
 Period: 2
- Severus iv 6d 18/31 or 31 **2E[VERV2II]** (Dickinson 1990, Fig 183, 38) Lezoux [b]. There are many examples of this stamp, mainly on form 27, from a pottery shop at Castleford destroyed by fire in the 140s. This is the first to be recorded on a dish. His other stamps occur in the Birdoswald Alley, in Antonine Scotland and in period 2D at Verulamium (after AD 150). *c* AD 130-55.

 LEL A 527 Period: 8D
- 55 Sex-Can-4a 27g [OF.S|EXCN (Hermet pl 112, 161) La Graufesenque [a]. Vessels stamped by this potter, or association of two potters, have been noted from Domitianic foundations. The site record for 4a includes Binchester, Butzbach, Saalburg (2) and Watercrook. It is not yet possible to complete either of the names. c AD 80-110.
 OGL B 188 Period: 5A
- 56* Sextus ii 2e 31 **SEXTIM**, retrograde, Lezoux [b]. No other examples of this have been recorded by the author. The bulk of Sextus ii's output consists of cups of forms 27 and 33. Several of them occur in a pottery shop at Castleford destroyed by fire in the 140s. *c* AD 130-60. OGL C + Period: Unstratified
- Sextus v 5b 33 SIIX[TI-M] (Knorr 1907, taf 31, 274) Lezoux [a]. Sextus v's stamps occur in later second-century contexts on Hadrian's Wall and in the group of late Antonine samian recovered off Pudding Pan Rock. This particular stamp lacks site dating, but has been noted on forms 31R and 79. c AD 160-200. OGL A 17 Period: 13
- Sissus i 1a 18/31R SISSI-M (de Schaetzen and Vanderhoeven 1964, pl 12,41) Lezoux [a]. This potter's modest output includes forms 18/31R, 27 and 38. The style of his decorated ware shows that he was connected with Quintilianus i. c AD 125-50. OGL A 429 Period: 9E
- 59* Victor iv 4a 33 **VICTOR** F Lezoux [a]. A stamp of one of the later second-century potters of Lezoux. It appears in the Wroxeter Gutter find and was used on form 31R and 80. A stamp from another die was found in a grave at Sompting, Sussex, with stamped vessels of Lezoux and Rheinzabern potters and an almost mint coin of Geta as Caesar (Dannell and Hartley 1974, 312). *c* AD 160-200. OGL B 51 Period: 7

- Viducus ii 5d 18/31 VID[VCV?F] Les Martres-de-Vyre [a]. There is no site dating for this stamp, but the potter's wares occur in the London Second Fire groups and he occasionally stamped form 15/17, which at Les Martres is almost entirely confined to the Trajanic period. c AD 100-20. CAL A + Period: Unstratified
- Vitalis ii 6d 18 OFVITAL (Knorr 1907, Taf 32, 13) La Graufesenque [a]. Stamps from both this die and a reduced version occur at Flavian foundations. 6d has been noted from Binchester, Ebchester, Malton and Newstead, while the reduced version appears at Saalburg. c AD 70-90. OGL A 487.3 Period: 8C

Unidentified Stamps

Crown and Anchor Lane Trench A

- 62 /[or]/ on form 27, South Gaulish. Flavian-Trajanic. CAL A 25 Period: 5A
- 63 | Nor | On form 27, Central Gaulish. Hadrianic or early Antonine. CALA 66 Period: 5
- **M**[on form 18/31R, Central Gaulish. Antonine. CAL A 66 Period: 5

Old Grapes Lane Trench A

- 65 SV[or]/IC on form 27, South Gaulish. Flavian-Trajanic. OGL A 765 Period: 6
- 66 J\ACIN-O, retrograde, on form 31, Central Gaulish. Antonine. OGL A 637 Period: 6?
- 67 FAZINI on form 27(?), South Gaulish. Flavian. OGL A 705 Period: 7B-8C
- 68 | IT on form 27(?), South Gaulish. Neronian or early Flavian. OGL A 488 Period: 8A
- 69 JF on form 18/31, Central Gaulish. Hadrianic or early Antonine. OGL A 488 Period: 8A-9E
- 70 | F on form 18/31 or 31, Central Gaulish. Hadrianic or Antonine.
 OGL A 125 | Period: 12B
- 71 JM on form 31, Central Gaulish. Antonine. OGL A 5.1 Period: 13
- 72 Form 31R, East Gaulish (Rheinzabern). In the centre of the base is a crude stamp label without letters, perhaps made with a stick. Such labels were not uncommon at Rheinzabern (Ludowici 235, 1a-c) and occasionally occurred at Trier, too. Late second or first half of the third century. OGL A 17 Period: 13



2



Fig 59 Samian ware cursive signatures (scale 1:1)

73 JVS, retrograde, on form 18/31 or 31, Central Gaulish. Hadrianic or early Antonine.

OGL A 19 Period: 13

- 74 M[on form 31, Central Gaulish. Mid to late Antonine. OGL A 33 Period: 13
- 75 ||\(\bigcirc\) or |\(\bigcirc\) of form 31, Central Gaulish. Mid to late Antonine. OGL A 33 Period: 13
- 76 | F on form 31, Central Gaulish. Antonine. OGL A 2 | Period: Modern
- Form 46 or Curle 15, etc, with eight-pettaled rosette stamp, Central Gaulish. Antonine.
 OGL A 2
 Period: Modern

Old Grapes Lane Trench B

- 78 **JOF**[on form 27g, South Gaulish. Flavian. OGL B 216 Period: 4F
- 79 **GF**-[on form 15/17 or 18, South Gaulish. Flavian. OGL B 216 Period: 5A
- **80 JAN**[(?) on form 18, South Gaulish. Flavian. OGL B 188 Period: 5A
- 81 || IIPI-2I on form 27, South Gaulish. Flavian-Trajanic. OGL B 153 Period: 5D

Lewthwaite's Lane Trench A

- 82 VII/\X on form 27g, South Gaulish. Flavian or Flavian-Trajanic. LEL A 612 Period: 6A
- 83 IV[or]NI retrograde, on form 18, South Gaulish. Flavian. LELA 560 Period: 6A-E
- 84 JIIIIIII on form 27, South Gaulish. Flavian-Trajanic. LEL A 550 Period: 7A
- 85 JIM on form 18/31R, Central Gaulish. Hadrianic or early Antonine. LELA 389 Period: 10B
- 86 J\\|A||W\|A\|\) on form 18/31, Cental Gaulish. Hadrianic or early Antonine. LEL A 335 Period: 12A
- lvRLLVS[or |vRITVS[on form 18/31R, from Les Martres-de-Veyre. Trajanic.
 LELA 270 Period: 13
- **88 2**[? on form 31, Central Gaulish. Mid- to late Antonine. LEL A 93 Period: 19B
- 89 J.O., on form 31, Central Gaulish. Antonine.
 LELA 38 Period: 21B

The Cursive Signatures (Fig 59)

Crown and Anchor Lane Trench A

All on form 37, Central Gaulish, from a mould signed before firing. The semi-cursive lettering and the style of decoration show this to be a signature of Arcanus of Lezoux. His decorated ware is Hadrianic. His plain ware, consisting largely of form 18/31 and 27, occurs in the Rhineland, which scarcely received Central Gaulish samian after *c* AD 150. For a discussion of the decoration, see No 3, p 62 above. *c* AD 125-40. CALA 66 Period: 5

Lewthwaite's Lane Trench A

2* Cerialis, retrograde, on form 37, Central Gaulish, from a mould signed before firing (see Fig 56, 91). Signatures of Cerialis ii often

appear on bowls from moulds stamped with plain ware stamps of Cinnamus ii and with decoration earlier than Cinnamus's developed style. $\it c$ AD 135-65.

LEL A 370

Period: 11

3 Form 37, Central Gaulish. Part of one letter, almost certainly from a signature of etturo (see No 101, p 74 above) survives below the decoration. A bowl in his style occurs in a pottery shop at Castleford destroyed in the 140s. Moulds of Tetturo seem to have been in use at both Lezoux and Toulon-sur-Allier, and this bowl is possibly from the latter, although the fabric would not be abnormal for Lezoux. *c* AD 135-65.

LELA+

Period: Unstratified

4* Ves, retrograde, upside-down below the decoration of form 37, Central Gaulish, from a mould signed before firing (see Fig 57, 102). The decoration of the bowl suggests a connection with Cinnamus ii or one of his associates, such as Cerialis ii or Paullus iv. The most likely candidate for the signature is Vespo, whose activity seems to overlap parts of the careers of all three potters, and whose stamps turn up in Antonine Scotland and in the Castleford Pottery Shop, destroyed in the 140s. c AD 140-60.

LELA+

Period: Unstratified

The Samian Ware Graffiti (Fig 60)

by R S O Tomlin

The graffiti are all in capital letters, and were inscribed after the vessels had been fired; they are presumably the owners' names. Information on the forms, fabrics and dating for the catalogue entries below has been supplied by B M Dickinson.

Crown and Anchor Lane Trench A

* Form 18, South Gaulish. Flavian.

CALA+

Period: Unstratified

Rim sherd, scratched on the outside after firing:

[...]R

Unless the letters were widely spaced, there is an uninscribed space to the right of R. Not enough survives to the left of R to determine whether it stood alone or was, for instance, the third of three letters; these would have been, respectively, either the initial letter of the owner's name, or (if a Roman citizen) the initials of his tria nomina.

Old Grapes Lane Trench A

Form 18/13R, Central Gaulish. Early to mid Antonine. OGL A 637 Period: 6?

Rim sherd, scratched on the outside:

V[...]

The first (down) stroke has been deeply incised into the lip of the rim.

3* Form 31, Central Gaulish. Antonine. OGL A 191 Period: 9G or later

Rim sherd, scratched on the outside:

[...]ÅTTVL[...]

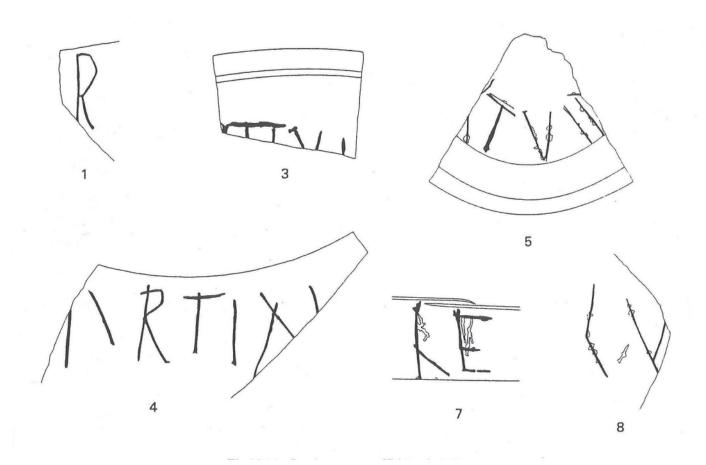


Fig 60 Samian ware graffiti (scale 1:1)

Only the apex survives of A and the beginning of the downstroke of L, M and I respectively could therefore also be read, but neither reading results in a plausible sequence of letters. This does not look like a Latin personal name, but one of Celtic etymology, developed perhaps from a simpler name like Cattus, Matto, Vatto, etc.

4* Form 31, Central Gaulish. Mid- to late Antonine. OGL A 35 Period: 13

Wall sherd, scratched on the outside:

[...]ARTIAL[...]

[M]artial[is], a common cognomen.

5* Form 31, East Gaulish. Base with stamp of Aprilis iii (stamp No 5). Early Antonine.

OGL A 190

Period: 13

Base sherd, scratched underneath:

[...] ATVIN [...]

The sequence of letters suggests that this was not a Latin personal name, but one of Celtic etymology, possibly [M]atuin[us] (cf CIL xiii 6153, etc).

6 Form 31, Central Gaulish. Mid- to late Antonine. OGL A 2 Period: Modern

Scratched inside the vessel, on the upper surface of the base:

L. [...]

The second letter may have been A.

Old Grapes Lane Trench B

7* Form 33, East Gaulish (Rheinzabern), never stamped. Late second or first half of third century.

OGL B 26

Wall sherd, scratched on the outside:

[...]LE [...]

It is not clear whether there was originally an uninscribed space to the left or right of the two letters, which would indicate whether the beginning or end of the graffito is preserved.

Old Grapes Lane Trench C

8* Form 18/31R, Central Gaulish. Hadrianic. OGL C 22 Period: 3?

Wall sherd, scratched on the outside:

LV [...]

Various names are possible, but it is quite likely to be *Lucius* or one of its cognates.

Lewthwaite's Lane Trench A

Form 18/31, Central Gaulish (Les Martre-de-Veyre). Trajanic.
 Graffito X inscribed inside footring.
 LEL A + Period: Unstratified

CHAPTER 5 THE STAMPED MORTARIA

by K F Hartley

Introduction

The thirteen mortarium stamps from this part of The Lanes include several which have been recorded from other excavations in Carlisle. Doc(e)ilis (Nos 3-5 and 9) is known from Annetwell Street (Hartley and Hird in prep, no 1), Blackfriars Street (Hartley 1990, 260-2, fig 195, no 10) and Castle Street (Hartley 1991, nos 1-2). Felicioles (No 11) is known from Annetwell Street (Hartley and Hird in prep, no 5), and Austinus (Nos 12 and 13) from Blackfriars Street (Hartley 1990, 260, fig 195, nos 2-7), although Austinus's vessels from Lewthwaite's Lane are in a different (cream) fabric. The trademark stamp, No 6, from the Carlisle/Kirkbride area, has also been recorded from Annetwell Street (Hartley and Hird in prep, no 3). The Little Chester mortarium with a trademark stamp, No 7, from Old Grapes Lane, is the first from this source to be recorded in Carlisle.

The Mortarium Stamps (Fig 61)

Illustrated stamps are indicated with an asterisk.

Crown and Anchor Lane Trench A

1* The fragmentary stamp probably reads]IA[and is from an unknown die. Well worn. Cream slip. Fabric 301. Carlisle area. Perhaps c AD 100-40.

CAL A 62 Period:5

The fragmentary border can be attributed to a stamp whose reading when complete is **FIICIT** followed by three letters, which appear to read **HDA**. The reversed *C* is detached but is close enough for **HDA** to be understood. The stamp is easy to recognize but only clearer stamps or a second die can clarify its interpretation. Fabric 316. (see Fig 10, 26).

CAL A 66 Period: 5

The fabric of No 2 closely resembles that produced at South Carlton, and the distribution of this stamp is in keeping with production somewhere in the Lincoln region. The potter's rim profiles would best fit a date of c AD 90-120.

Old Grapes Lane Trench A

- 3* The broken, two-line stamp reads DOCEILS |...T and is clearly to be interpreted as *Doceilis* or *Doceilis fecit*; no other stamps from the same die are known. Yellowish-buff slip. Fabric 301.
 OGL A 718 Period: 6
- 4* The stamp appears to read DOCI. Seven sherds, including the base, survive. Heavily worn. The vessel probably suffered considerable reduction during the firing to produce the unusual colouring, with the fabric nearly black, the core brown-red and the surfaces dark red-brown. The cream slip is also discoloured. Fabric 303. (see Fig 13, 38).

OGL A 745 Period: 6 OGL A 706 Period: 7B-8C

5* The fragmentary stamp has part of the upper border and of the D

from a die of Doc(e)ilis. Traces of cream slip. Fabric 301. OGL A 308 Period: 13

Nos 3-5 are three mortaria, all stamped with different dies of the same potter. The stamp on No 3 has a more extended version of his name than any other so far recorded; it gives his name as either *DOCELIS*, with *I* preceding *L* in this stamp for convenience, or *DOCEILIS*, with the second *I* omitted for convenience. I know of no recorded example of either name as such, but Docelis is the more acceptable version and could well be a corruption of, or variation on, the well-attested name Docilis; one of his dies does, in fact, give DOCIL/IS (No 9 below). It should be noted that variations in the spelling of a name are not unknown in potters' stamps, eg Dubetaus/Dubitatus of Colchester, a variation which also includes the interchange of I and E. Doc(e)ilis also has one die probably giving Doelis (Hartley 1990, fig 195, 11) and another, *Docca* (perhaps a Celtic version; Annetwell Street, Hartley and Hird in prep); he also used C and CC at random. It has always been assumed that he was only semi-literate.

This potter is now firmly linked with the West Midland potter stamping *DOCI* and *DOCILIS* who served Wroxeter (Hartley forthcoming).

There is some evidence to suggest that he began to stamp mortaria at Wilderspool but the major part of his activity was undoubtedly in the Carlisle area, where 23 of his mortaria have been found. Although his market in Scotland (10-12 mortaria) is well attrested, it seems to have been on a smaller scale than that of Austinus (19), while a higher proportion of his total products are recorded from English sites. He was active at Carlisle at least throughout the Hadrianic period and perhaps in the early Antonine period. Doc(e)ilis and Austinus were largely contemporary and worked in exactly the same tradition; they could well have shared the same workshop.

Old Grapes Lane Trench B

6* A trademark stamp, composed of simple vertical bars in an oblong panel, survives to each side of the spout. Cream slip. Fabric 305. (see Fig 25, 127).

OGL B 184.2 Period: 5A

OGL B 180 Period: 5C-6B

Other mortaria attributable to the same potter have been recorded form Annetwell Street, Carlisle and Kirkbride. His fabric indicates production within perhaps a 15-mile radius of Carlisle, but his rather crude technique combined with the distribution suggests a very limited market. His fabric and mortaria differ from those commonly attributed to Carlisle (ie mortaria of Austinus and Doc(e)ilis), but other factors point to production not far from Carlisle and Kirkbride. He worked in the second century, possibly in the Trajanic period.

7* A trademark stamp. Mortarium has traces of a bright orange-buff slip. Fabric 351. (see Fig 29,174).

OGL B 62 Period: 6C OGL B 93 Period: 6E

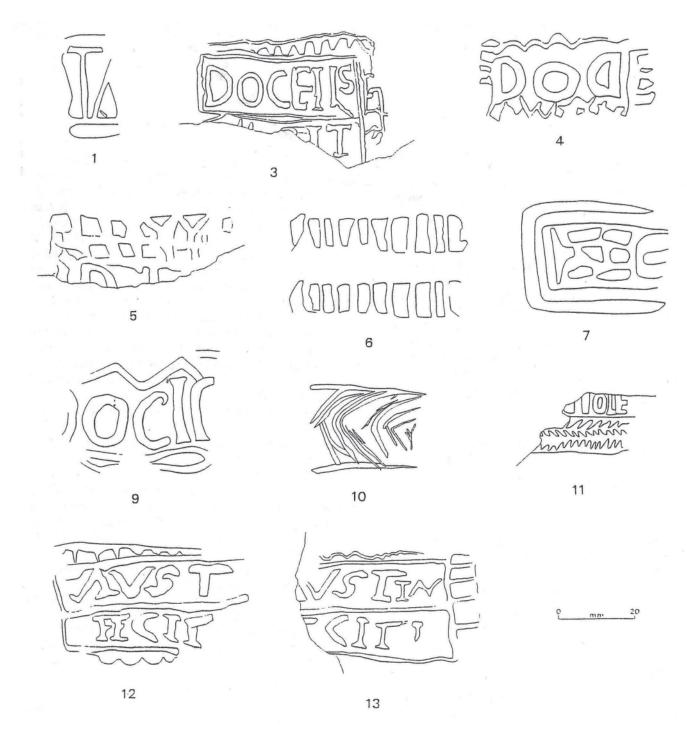


Fig 61 Mortarium stamps (scale 1:1)

This trademark stamp has now been recorded on mortaria from Carlisle, Templeborough and Little Chester (2), where this potter worked in the early second century (Brassington 1980, fig 21, no 566, which is in the alternative Little Chester fabric). This is the only stamp from the Little Chester potteries which has been noted from Carlisle.

Flange fragment. The stamp is too fragmentary for absolute identification but it almost certainly preserves the *A* and upper border of a stamp from the same die of Austinus as Nos 12 and 13 below; it is from a third mortarium. Cream slip. Fabric 301.

OGL B 73

Period: 6F

9* The stamp is from a die which reads **DOCIL**[with upside-down *L*; it can be read as a retrograde stamp but no other stamps of his are necessarily retrograde. Cream slip. Fabric 301.

OGL B 73 Period: 6F

See the discussion of Nos 3-5 above; all of the stamps of this potter from these Lanes sites are from different mortaria.

Old Grapes Lane Trench C

10* Imitation stamp in the form of a graffito simulating a herringbonestyle stamp. The mortarium is very worn; some waster cracking under the flange did not render it unusable. Cream slip Fabric 301 (see Fig 36, 222).

OGL C 5 Period: 3?

The fabric and form can be attributed to a Carlisle workshop contemporary with the activity of Doc(e)ilis (see Nos 3-5 above).

Lewthwaite's Lane Trench A

11* A broken stamp preserving |IOLE| from a stamp of Felicioles.

Cream slip. Fabric 340. c AD 110-40.

LELA 420 Period: 10B

The mortaria of Felicioles are now known from Ambleside, Benwell, Birdoswald, Carlisle (3), Chesters, Corbridge and South Shields. He worked south of Hadrian's Wall; the fabric rather suggests production in Cumbria but the distribution of his work would fit Corbridge better.

- 12* A stamp reading AVST[IN]/FECIT, from the same die of Austinus as No 13. Probably with a brownish-buff slip. Fabric 352.

 LELA 419 Period: 10B
- 13* Incomplete rim-section; the broken stamp reads JVSTIN/
 [F]ECIT followed by space filler for *Austinus fecit*. Buff slip.
 Fabric 352.

LEL A 119 Period: 16 LEL A 84 Period: 18

Nos 12 and 13 are two mortaria stamped with the same die of Austinus (see also No 8 above). The main period of production for Austinus was undoubtedly within the period AD 125-60, in the general vicinity of Carlisle. It is fairly certain that he began making pottery at Wilderspool, moving to Carlisle around AD 125/30; his strong distribution at Antonine forts in Scotland suggests that he may have worked in Scotland during the second Antonine occupation.

CHAPTER 6 THE MEDIEVAL POTTERY

by C M Brooks

Introduction

Some 5,316 sherds of medieval pottery were recovered from stratified levels. The bulk of the pottery (4,271 sherds; 80.3%) is from Old Grapes Lane Trench A and Clack Trenches 1 and 2; the remainder comes from Crown and Anchor Lane Trenches A, B, E and F, Old Grapes Lane Trenches B, C and J, Lewthwaite's Lane Trench A, and Pack Horse Lane Trench A (Table 22).

Some of the smaller trenches and watching briefs had no stratified medieval sequences and produced only small quantities of pottery from isolated pits (CALA and B, OGL B, C and J, PHL A). Of greater interest are the twelfth-century ceramic groups from the pits and road surfaces of CAL E and F. OGL A is notable for a large well-group (well 1237), but otherwise the pottery again comes from a group of disparate pits with no stratigraphic connections.

The only stratified medieval sequences occurred in Clack Trenches 1 and 2, OGLA West and LELA. Unfortunately, Clack 1 has some anomalies in the stratigraphic sequence, highlighted by the pottery cross-joins with well OGLA 1237, and these anomalies cannot now be sorted out.

The only independent dating for any of the pottery groups is that provided by dendrochronology for well OGLA 1237. General date ranges for the pottery types can, however, be deduced from other independently-dated Carlisle groups and from general typological considerations and parallels elsewhere in northern England. It can be seen that much of the area covered by this volume has produced material of twelfth-and thirteenth-century date (CAL A, B, E and F; OGL A, most of the Period 13 features; OGL A West;

Table 22
Quantities of medieval and post-medieval pottery
(* = less than 0.05%)

Site	Trench	No of sherds	%
Crown and Anchor Lane	Α	7	0.1
	В	8	0.2
	E	282	5.3
	F	84	1.6
Old Grapes Lane	Α	1037	19.5
	A West	134	2.5
	В	98	1.8
	C	2	*
	J	179	3.4
Clack	1	1513	28.5
	2	1587	29.9
Lewthwaite's Lane	A	353	6.6
Pack Horse Lane	A	32	0,6
Total		5316	

Clack 1 and 2, lower levels; OGL B, C and J; LEL A; a pit in PHL A).

There is a surprising lack of evidence for later medieval occupation over much of this area, however. An expected late medieval sequence at LEL A failed to materialize, and the only pottery of fourteenth-century date or later comes from the late medieval to post-medieval sequences in Clack 1 and 2 (where the archaeology is not easy to interpret), a few of the pits in OLG A, and a well in PHL A.

This report begins with brief discussions on methodology and residuality, which precede the list of fabrics. This is followed by an analysis of the medieval pottery from each trench, with tables and catalogued pottery drawings. The sites are dealt with in the order given in Table 22. A general overview of the medieval pottery can be found in the monograph (Brooks 2000, 139-43).

Methodology

The pottery was recorded by context, and a computerized catalogue was created using the database management system DBASE III+. Sherds were allocated to fabric types on the basis of examination with a hand-lens, and attributes including form, rim diameter, surface treatment, glaze, decoration, sooting, and cross-joins between contexts were recorded.

Quantification of pottery is always problematical; there is no method of quantifying large numbers of sherds that is universally regarded as completely reliable (Brook 1987, 116-9). Sherd count and weight were used here, and for some groups minimum vessel numbers were estimated, where it was felt to be useful, by close study of the sherds, allocating them to individual vessels. In general, sherd counts and weights gave a similar picture, so quantification in the text and tables is based on sherd count. Data in the tables are expressed as percentages of sherd numbers, to facilitate direct comparison between groups. In some places in the text, however, sherd weights and vessel numbers are also cited where they contribute a slightly different viewpoint. The pottery statistics given here are only of the medieval and post-medieval wares; the residual Roman material in medieval or putative medieval levels has been quantified separately, and is tabulated and discussed below.

The pottery presented here is only that from stratified contexts, although the unstratified material has been scanned for any material worthy of illustration.

Intrusive and Residual Pottery

Excavated material can include pottery intrusive from later periods, as a result of later features of animal/plant disturbances being either unrecognized or incompletely excavated, or as a result of contamination during the

		Roman	1	Medieval an	d later		
Site	Period	No of sherds	%	No of sherds	%	Total sherds	
CALE	Medieval	26	8.4	282	91.6	308	
CAL F	Medieval	, 8	9.8	84	91.3	92	
OGL A	13	1246	54.6	1037	45.4	2283	
OGL A West	4	2	50.0	2	50.0	4	
	5	24	77.4	7	22.6	31	
	6	4	5.5	69	94.5	73	
	7	38	40.4	56	59.6	94	
OGL B	9	143	59.3	98	40.7	241	
OGL J	Medieval	25	12.3	179	87.7	204	
LEL A	19B	412	96.7	14	3.3	426	
0.0000000000000000000000000000000000000	20	224	99.6	1	0.4	225	
	21A	199	91.7	18	8.3	217	
	21B	122	37.9	200	62.1	322	
	22	171	58.8	120	41.2	291	

Table 23
Proportions of residual Roman pottery and medieval pottery from medieval and possible medieval levels at CAL E and F, OGL A, B and J, and LEL A

excavation process

This is not uncommon on urban sites (eg Brooks 1987, 120). While intrusive pottery is usually obvious and not great in quantity (for example, a sherd of porcelain in LELA, Period 21A; p 105 below), intrusive medieval pottery in earlier medieval levels may be more difficult to detect.

Residuality is always a problem on deeply stratified urban sites (*ibid*, 120-5), affecting *inter alia* the interpretation of the pottery and other categories of finds. There appears to be a considerable degree of residuality in many of The Lanes deposits, and while it is readily quantifiable in the case of residual Roman pottery, it is much harder to determine within the medieval ware, where the periods of production are not known in detail and where some ceramic types appear to have been made over a considerable time-span with few changes, although in many cases a degree of residuality is indicated by sherds cross-joining between periods.

Table 23 shows the proportions of residual Roman pottery, by sherd cound and percentage, from medieval levels on a number of The Lanes sites. The small quantities of pottery from the pits at CAL A and B, OGL C and PHL A included no Roman material, and statistics for Roman pottery from Clack 1 and 2 are unavailable.

It can clearly be seen that many periods have very high percentages of residual Roman pottery; the few which do not (CAL E and F Medieval, OGL A Period West 6 and OGL J Medieval) stand out by contrast. Residuality is particularly notable in general soil spreads and dumps; the figures for Period 13 at OGL A in Table 23 include nine soil deposits containing only Roman pottery (366 sherds), and two others (contexts 17 and 118) which yielded only two medieval sherds but 210 Roman sherds. Stratigraphically, however, these all appear to be medieval levels, and must testify to

the large amount of soil movement and disturbance.

Occasionally, circumstances permit the comparison of residuality rates among medieval wares between general soil spreads and features such as postholes and pits, which might be expected to have a lower, 'background' residuality. In Period 10A in Clack 1, for example, there is a minimum residuality rate of 39.6% for the soil spreads (the true rate may be higher, as only sherds cross-joining with earlier periods can be seen as residual in the Late Medieval Reduced Grey ware category), but the features have a residuality rate of only 10.3% (p 102 below).

This high degree of residuality leads to problems over the dating of certain periods, particularly those where all or most of the pottery comes from soil spreads rather than features. The quantities of residual Roman material can be especially confusing when trying to identify the earliest medieval levels, notably in Lewthwaite's Lane Trench A. For the periods with the earliest stratified medieval pottery on this site, it may never be known whether these are simply a few intrusive sherds in levels of late Roman or post-Roman/pre-twelfth-century date (intrusive medieval sherds are known from good Roman levels elsewhere), or whether they can be assumed to be contemporary with the deposition of soils which happened to contain large quantities of residual Roman pottery.

List of Fabrics

The range of medieval fabrics described below is basically that defined for other sites in Carlisle (McCarthy and Taylor 1990; McCarthy and Brooks 1992, 22-9; McCarthy in prep), with some minor modifications and additions. Common names have been given to some of the most frequently occurring wares.

As no definite kiln sites are known in this area, the question of local manufacture is a matter of assumption, based on frequency of occurrence and in some cases on certain diagnostic features. The study of medieval pottery in Cumbria as a whole is in its infancy (McCarthy and Brooks 1992), and so relating pottery from Carlisle to regional traditions can only be a matter of conjecture as yet. It seems likely, however, that the rarer sandy wares such as Fabrics 51, 53, 55, 60 and 63 may be regional imports.

The suggested date ranges are very approximate, and are partly based on general typological considerations and parallels elsewhere, as although there are some well-dated pottery groups from Carlisle that can be used to provide typical ceramic spectra for certain periods, the question of when pottery types were introduced and when they went out of use is problematical. The incidence of a high degree of residuality in many deposits leads to particular difficulty in establishing the date ranges of even the most common fabrics.

In the descriptions below, fabrics are wheel-thrown unless otherwise stated.

Gritty wares

Red Gritty ware: Fabric 1

(McCarthy and Taylor 1990, 302; McCarthy and Brooks 1992, 22-4; McCarthy in prep).

Very hard, coarse gritty red ware with a very dense clay matrix and a hackly fracture. Frequent sub-rounded to sub-angular quartz inclusions up to 1mm across, with other inclusions of sandstone, quartzite, chert, mica, felspar, shale and volcanic rock. Stone inclusions are occasionally up to 4mm across. The fabric is usually fully oxidized to red or reddish-brown, but thick sherds are sometimes partially reduced to grey or dark grey. Forms include jugs and cooking pots, with occasional spouted pitchers, bowls and probable storage jars.

Glazes, which can be dipped or splashed, are usually brown, but are sometimes olive green. Internal glaze sometimes occurs in the bases of large cooking pots. An off-white slip often occurs beneath the glaze and extending beyond the glazed areas. Decoration is rare, an occasional jug having shallow horizontal grooves, wavy combing, or rows of small square rouletting.

Date range: c twelfth-early thirteenth century

Fig 62, 5-6; Fig 63, 24, 26-8; Fig 64, 37; Fig 66, 62 Jugs:

Cooking pots: Fig 62, 9, 11, 14, 20, 22; Fig 63, 29-30; Fig

64, 39-41, 53; Fig 65, 55; Fig 66, 59, 65-6,

71; Fig 68, 87-8, 90-3

Fig 62, 17; Fig 64, 47, 53; Fig 68, 94 Bowls:

Pitcher?: Fig 62, 1

Red Gritty ware: Fabric 2

(McCarthy and Taylor 1990, 302; McCarthy and Brooks 1992, 22-4; McCarthy in prep)

Very hard, coarse red fabric, less gritty than Fabric 1, the inclusions ranging from moderate to sparse, and the clay matrix being correspondingly smoother. This is essentially a finer variation of Fabric 1; in the middle of the range, it is often a very subjective decision whether to allocate sherds to one or other category, and consequently the fabrics are

best considered together for statistical purposes.

The two Red Gritty ware fabrics dominate Carlisle assemblages of twelfth- and early thirteenth-century date. Date range: c twelfth-early thirteenth century

Jugs: Fig 62, 7-8, 19; Fig 63, 23, 25; Fig 66, 60, 63, 68-70 Cooking Pots: Fig 62, 3-4, 10, 12-13, 15-6, 21; Fig 63, 31; Fig 64, 38, 42-3; Fig 64, 54; Fig 66, 64; Fig 68, 95-6

Bowl: Fig 64, 48

Fabric 3

Hard, coarse gritty ware, usually oxidized off-white to buff or pinkish-buff, but sometimes partially reduced to pale grey. Frequent rounded to sub-rounded inclusions, mostly quartz with some sandstone, usually up to 0.5mm across. Yellow to pale olive green glaze, often pitted or splashy, and sometimes with dark green copper speckles. Forms

(McCarthy and Brooks 1992, 24; McCarthy in prep)

include jugs, cooking pots and a rare example of a bottle; jugs are sometimes decorated with applied brown pellets, stripes or arcs.

Date range: c later twelfth-thirteenth century

Bottle: Fig 68, 97

Fabric 4

(McCarthy and Taylor 1990, 302; McCarthy in prep)

Coarse, fairly hard, gritty buff fabric with sub-angular to sub-rounded quartz inclusions and some rounded sandstone, usually up to 0.5mm across. Typically has off-white or buff to reddish-brown surfaces and pale grey or grey core. Pale olive to olive green glaze, often pitted or applied in a splashy way. Forms include jugs, cooking pots and bowls.

Fabric 4 is very similar to Fabric 3 but with less abundant inclusions. Some examples are also close to Partially Reduced Grey ware, Fabrics 17 and 19. Unfortunately Fabrics 3 and 4 are not common on these sites, and only occur as small sherds, so it is not yet possible to elucidate the relationships between these fabrics and Partially Reduced Grey ware.

Date range: c later twelfth-thirteenth century

Bowl: Fig 68, 89

Fabric 5

Oxidized, gritty, orange-buff to light reddish-brown fabric, less hard and dense than Fabrics 1 and 2, with moderate subrounded to sub-angular quartz inclusions up to 0.5mm across. Thicker sherds may have a reduced core. Olive green to brown glaze, sometimes pitted or splashy. Forms include cooking pots, jugs, and occasional pipkins.

Date range: c twelfth-thirteenth century

Jugs: Fig 62, 18; Fig 63, 32

Cooking pots: Fig 62, 2; Fig 64, 44

Fabric 6

Hard, oxidized, gritty, buff to pink or light reddish-brown fabric, sometimes with a reduced grey core. Sparse rounded to sub-angular quartz inclusions up to 0.5mm across. Olive green to brown glaze, sometimes pitted or splashy. Forms include cooking pots and jugs.

This fabric is similar to Fabric 5 but with less frequent inclusions, and may prove to be related to it.

Date range: c twelfth-thirteenth century

Jug: Fig 64, 45 Cooking pot: Fig 64, 52

Fabric 8

Hard, oxidized, gritty pinkish-buff to pink fabric, with moderate rounded sub-angular quartz inclusions up to 1 mm across, and other rock fragments. Pitted yellowish or brownish-olive glaze. Forms include jugs. This fabric is similar to Fabric 6 but grittier.

Date range: c twelfth-thirteenth century

Fabric 9

Hard, reduced, gritty fabric, grey to dark grey with buff, light grey-brown or dark grey surfaces, with moderate to sparse quartz inclusions up to 1mm across. Splashy olive green glaze. Forms include jugs and cooking pots.

Few sherds in this fabric have been recognized; some resemble a reduced version of Red Gritty ware, Fabric 2, although this resemblance may prove to be fortuitous. Rare. Date range: c twelfth-thirteenth century

Fabric 61

Hard, gritty, reduced, hand-made fabric, with frequent small quartz grains and sparse larger quartz inclusions up to 1mm across. Grey core with dark grey surfaces. Only one sherd known, from shoulder of a cooking pot; traces of coils visible in section, while exterior shows signs of finishing on a slow wheel.

Date range: *c* twelfth century (or earlier?)

Cooking pot: Fig 68, 86

Sandy and fine wares

Fabric 11

(McCarthy in prep)

Fairly smooth sandy fabric, usually oxidized to orange-buff, orange or light red, sometimes with a reduced grey core. Moderate to sparse rounded to sub-angular small quartz inclusions. Brown to olive green glaze, occasionally with dark green copper speckles, sometimes dipped and smooth and sometimes splashy. Forms include jugs.

Date range: c late twelfth-thirteenth century

Fabric 12

(McCarthy and Taylor 1990, 302; McCarthy in prep)

Hard, fairly coarse sand red ware with frequent sub-angular to rounded quartz inclusions and some sandstone. Forms include cooking pots and jugs. This fabric is uncommon, but may be related to, or a finer version of, Red Gritty ware (Fabrics 1 and 2).

Date range: c late twelfth-thirteenth century

Fabric 13

(McCarthy and Taylor 1990, 302; McCarthy and Brooks 1992, 28; McCarthy in prep)

Hard, fairly smooth off-white or buff to pinkish-buff sandy fabric, sometimes with a reduced grey core. Frequent small inclusions and moderate larger rounded to sub-angular quartz inclusions up to 0.5mm across. Yellow to olive green glaze, sometimes pitted and splashy but sometime dipped. Forms include jugs and cooking pots.

This fabric is very similar to Buff Sandy ware, Fabric 4, the dominant fabric of this period at Penrith (Brooks 2000); the Carlisle examples appear at the least to belong to the Penrith Buff Sandy ware tradition, if they do not actually originate in the Penrith area.

Date range: *c* thirteenth-fourteenth century

Jugs: Fig 65, 57; Fig 66, 61; Fig 69, 98

Cooking pot: Fig 63, 33

Fabric 14

(McCarthy in prep)

Hard, smooth, fine sandy fabric with sparse medium-sized quartz inclusions, usually oxidized to orange or light reddish-brown but sometimes partially reduced to grey. Olive green to brown glaze, sometimes with added copper, which can be either splashed or dipped. Forms include jugs, sometimes with traces of applied decoration. This fabric is not common but may prove to be related to the other, coarser red wares from Carlisle.

Date range: c late twelfth-thirteenth/fourteenth century

Jug: Fig 63, 34

Partially Reduced Grey ware: Fabric 15

(McCarthy and Brooks 1992, 24-9; McCarthy in prep) Hard, medium to coarse sandy fabric, with frequent tiny inclusions and occasional larger sub-rounded quartz inclusions up to 0.4mm across. The core is usually reduced to dark grey, with a pale grey margin beneath the glaze. Internal surfaces are usually reduced, but can be oxidized white or buff, and external surfaces beyond the glazed areas tend to be oxidized, ranging from buff to reddish-brown. Glaze, which is usually smooth but can be splashy, is typically olive green, but sometimes apple-green with the addition of copper, the use of copper appears to be more common on this fabric than on the other two Partially Reduced Grey ware fabrics.

Partially Reduced Grey ware forms appear to be mainly jugs, usually with strap handles and pinched spouts, but more ornate examples can have bridge or tubular spouts. Decoration includes wavy and straight combing, stabbing, rectilinear rouletting on shoulder rilling or rims, 'wheatear' and 'raspberry' stamps, sometimes coloured with brown slip, incised chequerboard patterns, brown pellets, and anthropomorphic and zoomorphic motifs. There is one example of a possible jug lid.

Date range: c late twelfth-fourteenth century

Jugs: Fig 63, 35; Fig 64, 51; Fig 64, 56, 58; Fig 67,

81-2; Fig 69, 99-100

Jug lid?: Fig 64, 46

Partially Reduced Grey ware: Fabric 17

(McCarthy and Brooks 1992, 24-9; McCarthy in prep)

Hard to very hard, slightly gritty reduced fabric, with some tiny inclusions and sparse to moderate rounded to sub-rounded quartz inclusions, up to 0.4mm across, in a fairly dense clay matrix. The core is usually grey to dark grey, with a pale grey or white margin beneath the glaze. Internal surfaces can be

reduced or oxidized, and the unglazed external surfaces are usually oxidized to cream, buff or reddish-brown. Glazes, forms and decoration areas for Fabric 15 above. While at each end of the range Fabrics 15 and 17 are quite distinct, in the middle of the range it is often a subjective decision whether to allocate sherds to one or other category, and hence the fabrics are considered together for statistical purposes.

Fabric 17 is by far the most common Partially Reduced Grey ware fabric. Although highly decorated jugs and glazes with added copper do occur in this fabric, they appear to be less common than in Farbric 15, with a greater emphasis on plain jugs. Together, the Partially Reduced Grey ware fabrics form the dominant component of later thirteenth- to fourteenth-century assemblages in Carlisle.

Date range: c late twelfth-fourteenth century

Jugs: Fig 64, 49; Fig 67, 80; Fig 69, 101-2

Partially Reduced Grey Ware: Fabric 19

This fabric is very similar to Fabric 17, but is more oxidized; sherds may be fully oxidized to buff or pinkish-buff, or may only be slightly reduced, with a very pale grey core. Fabric 19 may simply represent a variation of firing of Fabric 17. It is not common, forming only a very minor component of the Partially Reduced Grey ware assemblage.

Date range: c late twelfth-fourteenth century

Cooking pot: Fig 64, 50

Late Medieval Reduced Grey ware: Fabric 41

(McCarthy and Brooks 1992, 29)

Hard, smooth, fine sandy grey to dark grey fabric, often with a pale grey margin below the glaze; occasional larger quartz inclusions up to 0.8mm across. Smooth, sometimes flaking, glaze, usually drab olive green but sometimes brownish. Internal surfaces are usually reduced; external surfaces are often completely glazed, but unglazed areas are sometimes oxidized buff to reddish-brown.

Forms include strap-handled jugs, sometimes multiple-handled, bung-hole cisterns, urinals, and dishes/bowls. Decoration is rare, but includes horizontal combing and wavy lines, thumbing or slashing around bung-holes, stamped circles, applied thumbed strips, and, occasionally, anthropomorphic motifs such as applied 'arms'.

The fabric is very common in later medieval deposits in Carlisle, and is part of a widespread northern 'Reduced Green ware' tradition which had a *floruit* in the fifteenth and sixteenth centuries.

A number of burnt sherds in this fabric, some possible wasters, were found associated with burning at a site on Castle Street, Carlisle, and interpreted by Jope and Hodges (1955) as evidence for a kiln. The evidence for production is rather scanty and not wholly convincing, however.

Date range: c fourteenth-early seventeenth century

Jugs: Fig 66, 67, 72-7; Fig 67, 83-4

Dish/bowl: Fig 66, 78

Late Medieval Reduced Grey ware: Fabric 43

This fabric is very similar to Fabric 41 above, and appears to be a variant of it, with a moderate sprinkling of sub-rounded quartz inclusions, usually around 0.5mm across but occasionally up

to 1mm across. It is uncommon, forming only a very minor component of the Reduced Grey ware tradition.

Date range: c fourteenth-early seventeenth century

Jug: Fig 67, 79

Late Medieval Reduced Grey ware: Fabric 45

This is a sandy fabric, represented only by one sherd from this group of Lanes trenches, which has characteristics of both Fabric 15 and Fabric 41; for present purposes it has been regarded as a variant of Late Medieval Reduced Grey ware.

Date range: c fourteenth-fifteenth/sixteenth century

Fabric 51

(McCarthy in prep)

Hard, white to pale pink sandy fabric with frequent small rounded to sub-rounded quartz inclusions. Dipped apple-green glaze, sometimes prone to flaking. Jugs are the only forms known.Rare.

This fabric is similar to unstratified material in the Tullie House Museum collections from the Cumbrian coast (Ravenglass and Eskmeals) and to white sandy wares from Cockermouth, and may represent regional imports from the coastal plain, where the pottery traditions appear to differ from those of Carlisle and the Eden Valley area (McCarthy and Brooks 1992, 34).

Date range: c later twelfth-thirteenth/fourteenth century

Jug: Fig 63, 36

Fabric 53

(McCarthy in prep)

Hard, smooth, fine sandy fabric, usually fully oxidized to offwhite, buff, pale orange or light reddish-brown, but sometimes partially reduced. Glaze smooth and usually olive green, sometimes apple-green with the addition of copper. Jugs are the only forms known. Rare.

Date range: c late twelfth-thirteenth/fourteenth century

Fabric 55

(McCarthy in prep)

Hard, sandy white to pale grey fabric with frequent sub-angular to sub-rounded quartz grains and dark brown inclusions. Dark olive green to blackish glaze. Jugs are the only forms known. Rare.

Date range: c late twelfth-thirteenth/fourteenth century

Fabric 60

Hard, smooth find sandy pinkish-buff fabric, with moderate small sub-rounded to sub-angular quartz inclusions. Glaze splashy or smooth but pitted, yellowish or apple-green with frequent dark green copper speckles. All the sherds known here, from OGL A and Clack 1, belong to one jug.

Date range: c late twelfth-thirteenth century

Fabric 63

Hard, find, smooth, sandy pale buff fabric, with moderate tiny quartz inclusions and sparse dark brown inclusions. Uneven pale olive glaze. One sherd known, from a jug.

Date range: c thirteenth-fourteenth century

Cistercian ware: Fabric 116

Hard, fine, smooth dark red to purplish-grey fabric with dark brown glaze. One sherd only known from these sites. Cistercian ware, which forms a very important component of sixteenth-century assemblages in northern England and the Midlands, is on the whole very rare in Cumbria (McCarthy and Brooks 1992, 36).

Date range: end of fifteenth-sixteenth century

Drinking vessel: Fig 67, 85

Crown and Anchor Lane Trench A (Fig 62)

There is very little medieval pottery from this trench. Apit, 144 (Table 96), revealed when cutting back the section, produced six Red Gritty ware cooking pot sherds (Fabric 2) and one cooking pot rim in gritty ware Fabric 5 (Fig 62, 2); although this group is very small, it might suggest a twelfth-century date.

1 Red Gritty ware, Fabric 1. Unglazed. Small patches of slight sooting on handle and rim. Unusual ?basket-handled form, possibly a pitcher.

CALA1 CALA+ Period: Modern Period: Unstratified

Fabric 5. Cooking pot. Partially sooted exterior. CAL A 144 Period: Medieval

Crown and Anchor Lane Trench B (Fig 62)

This trench produced very little medieval pottery. Possible pit 62, late in the sequence, yielded eight Red Gritty ware (Fabrics 1 and 2) sherds (Table 24), which might indicate a twelfth-century date.

- 3 Red Gritty ware, Fabric 2. Cooking pot. Partially sooted exterior. CAL B 3 Period: 2A
- 4 Red Gritty ware, Fabric 2, reduced, with grey-brown surfaces. Cooking pot. Partially sooted exterior. Glaze spots on top of rim. Rim slightly distorted. CAL B 3 Period: 2A

Crown and Anchor Lane Trench E (Fig 62)

Asequence of road surfaces produced only 14 medieval sherds, from surface 3. Of these sherds, the majority were in Red Gritty ware, but there was one sherd of Partially Reduced Grey ware, Fabric 17 (Table 24). If this last sherd is not intrusive, the group may date to the twelfth or early thirteenth century. This road surface was close to the modern ground surface, however, rendering it more susceptible to contamination by intrusive material. This factor, together with the small size of the group, makes the dating very tentative.

Better dating may be obtained from the two sequences of pits which cut the road surfaces, and which produced very little residual Roman material (Table 23). One sequence (pits 4, 6, 11 and 12) yielded 183 medieval sherds, and the other (pits 7, 13 and 14) produced 85 sherds. The ceramic profiles of these two groups are very similar (Table 24), indicating that the pits are broadly contemporary.

Red Gritty ware dominates the pit group at 95.1% overall; there are also a few other gritty ware sherds. This configuration, together with the absence of sandy wares, suggests a twelfth-century date for these pits.

The ceramic spectrum of the pit groups also differs from that of the slightly later group from well OGL A 1237 (dated to the beginning of the thirteenth century: Tables 25 and 29), in proportions of wares, and, interestingly, in proportions of forms present. Within the Red Gritty wares, which dominate both groups, jugs are the dominant form in the Old Grapes Lane wellgroup (76.1% of the identifiable sherds). In the CAL E group, however, there are nearly twice as many cooking pots (64.4% of the 250 identifiable sherds) as jugs (35.6%). This preponderance of cooking pots is probably as much of an indicator of a twelfth-century date range as the absence of sandy wares.

Table 24 Medieval pottery from CAL A, B, E and F, expressed as percentages of sherd numbers

Site	Period	Contexts	Red Gritty ware, Fabrics 1 + 2	Fabric 3	Fabric S	Fabric 6	Fabric 8	Partially Reduced Grey ware, Fabric 17	No of sherds
CAL A	Medieval	pit 144	85.7		14.3				7
CAL B	Medieval	?pit, 62	100.0						8
CAL E	Medieval	road 3	64.3	14.3	14.3			7.1	14
		pits 4, 6, 11, 12	96.7		1.6	1.1	0.5		183
		pits 7, 13, 14	91.8		3.5		4.7		85
CAL F	Medieval	road 9, soil 4	91.7		4.8	3.6			84

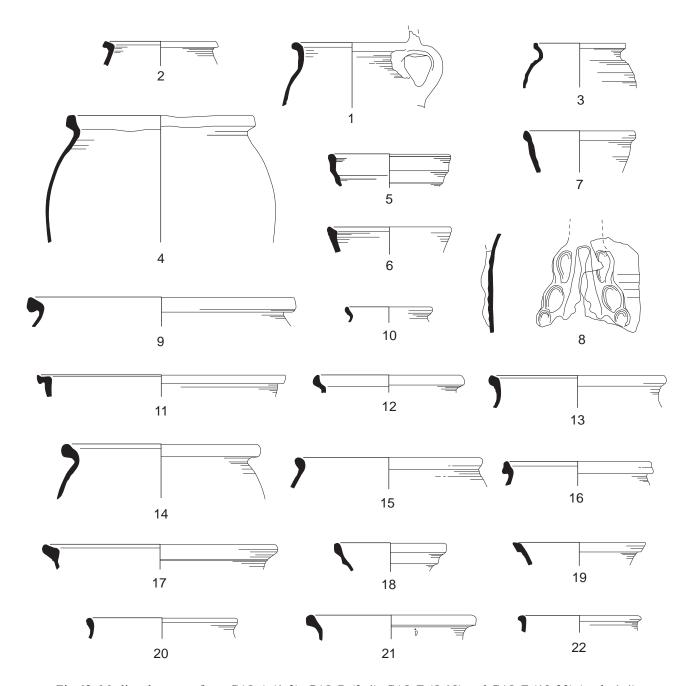


Fig 62 Medieval pottery from CAL A (1-2), CAL B (3-4), CAL E (5-18) and CAL F (19-22) (scale 1:4)

5 Red Gritty ware, Fabric 1. Jug. Pinched spout. Partial brown glaze ext. and over top of rim.

CAL E 13 Period: Medieval

- 6 Red Gritty ware, Fabric 1. Jug. Olive-brown glaze ext. and over top of rim. CAL E 13 Period: Medieval
- Red Gritty ware, Fabric 2. Jug. Brown glaze ext. CAL E 4 Period: Medieval
- 8 Red Gritty ware, Fabric 2. Jug. Pitted brown glaze ext. Part of base of handles, with 3 thumbings down surviving side.
 CAL E 12 Period: Medieval
- Red Gritty ware, Fabric 1. Cooking pot. Brown glaze spots int., sooted ext.
 CAL E 3 Period: Medieval
- 10 Red Gritty ware, Fabric 2. Cooking pot. Slightly sooted ext. CAL E 12 Period: Medieval

11 Red Gritty ware, Fabric 1. Cooking pot. Partial splashy brown glaze over top of rim and ext.

CAL E 13 Period: Medieval

- 12 Red Gritty ware, Fabric 2. Cooking pot. Sooted ext. CAL E 3 Period: Medieval
- 13 Red Gritty ware, Fabric 2. Cooking pot. Partially sooted ext. CAL E 3 Period: Medieval
- 14 Red Gritty ware, Fabric 1. Cooking pot. Blackened surfaces int. and ext. CAL E 12 Period: Medieval
- Red Gritty ware, Fabric 2. Cooking pot. Tiny brown glaze spot ext.
 Surface blackened ext.
 CAL E 12
 Period: Medieval
- 16 Red Gritty ware, Fabric 2. Cooking pot. Partially sooted int. and ext. CAL E 12 Period: Medieval
- 17 Red Gritty ware, Fabric 1. Bowl. Splashes of brown glaze int. and

ext. CAL E 13

Period: Medieval

Fabric 5. Jug. Partial off-white slip ext.
CAL E 4 Period: Medieval

Crown and Anchor Lane Trench F (Fig 62)

Twenty-six sherds of medieval pottery were recovered from a road surface, 9, and 58 from the soil immediately beneath it (4). The two groups are very similar so they are considered together here.

Red gritty ware is predominant (91.7% of the sherds; Table 24). In addition there are a few sherds of gritty wares Fabrics 5 and 6. This ceramic profile, with very little residual Roman pottery (Table 23), is very similar to that of the pits in CAL E. Within the Red Gritty ware fabrics, cooking pots are more numerous than jugs, a phenomenon also noted at CAL E. Cooking pots comprise 57.1% of the sherds (64.1% of the number of vessels represented).

The date range of this assemblage must therefore be similar to that inferred for the CAL E group, that is in the twelfth century.

- 19 Red Gritty ware, Fabric 2. Jug. Olive to brown splashes and runs externally. Partial off-white slip externally.
 CAL F 4 Period: Medieval
- 20 Red Gritty ware, Fabric 1. Cooking pot. Slightly sooted exterior. CAL E 9 Period: Medieval

- 21 Red Gritty ware, Fabric 2. Cooking pot. CAL F 4 Period: Medieval
- 22 Red Gritty ware, Fabric 1. Cooking pot. CAL F 4 Period: Medieval

Old Grapes Lane Trench A

The 1981 excavation of Trench A encapsulated the earlier trench dug by Peter Clack in 1975 (see Clack 1 below), and further work was done on the medieval well there (Clack's context 69, re-numbered OGL A 1237). Consequently some of the medieval pottery from the two trenches needs to be considered together, although apart from the well, which has pottery cross-joins with surrounding layers in the 1975 excavation (p 99 below), it is difficult to link the two trenches stratigraphically.

Period 13 (Figs 63 and 64)

The most notable feature of this period is well 1237; this was defined during the 1975 excavation, and excavated in 1981, but unfortunately it could not be linked with the surrounding stratigraphy. It consisted of a timber-lined shaft constructed with a pit backfilled with clay (see Clack 1, Periods 1 and 2, context 72, p 98 below). The fill was excavated in spits ranging from 0.1m to 0.6m in thickness, numbered from 1, the uppermost, down to 7. A change in fill type occurred at

Table 25
Medieval pottery from OGL A and Clack 1, expressed as percentages of sherd numbers: fill of well OGL A 1237 (Period 13) and overlying feature(s). The lowest levels of the well are at the top of the table

Site	Context	Red Gritty ware, Fabrics 1 + 2	Fabric 3	Fabric 4	Fabric 5	Fabric 6	Fabric 11	Fabric 12	Fabric 13	Fabric 14	Fabrics 51, 53, 60	Partially Reduced Grey ware, Fabrics 15, 17, 19	Late Medieval Reduced Grey ware, Fabrics 41 + 43	No of sherds
OGL A	well 1237 spits 4-7	79.8	1.6	2.1	0.5	0.5	4.7	1.0	2.6	0.5	0.5	6.3		191
	well 1237 spit 3	84.3	1.3	1.7	0.4			0.8	0.8	1.3	3.4	5.9		236
	well 1237 spit 2	81.2	0.4	0.4	1.8	1.1	1.1	1.8	0.4	2.2		9.6		271
	well 1237 spit 1	70.3	0.7	1.4	3.4	0.7	2.0		2.7	2.0		16.9		148
Clack 1	lower fill, pit 10/ top fill of well	62.8			4.7			2.3		14.0	9.3	7.0	4	43
Clack 1 OGL A	upper fill, pit 10 pit 308	58.6	1.7	1.7					1.7			13.8	22.4	58

spit 4, the fill above this comprising clayey silt and cobbles, with abundant pottery (varying from 3.3 to 7.7 medieval sherds per centimetre of depth), and the fill below consisting of organic accumulations, including wooden planks, in which medieval pottery was much less frequent (from 0.8 to 1.8 sherds per centimetre of depth). The bottom of the well was not reached because of instability.

The well produced some 846 medieval sherds (Tables 25 and 29). Red Gritty ware is predominant, at 79.8% of the group as a whole. Within the Red Gritty ware, jugs are far more numerous than cooking pots, comprising 76.1% of the identifiable sherds. Partially Reduced Grey ware is present at 9.1% and there are small quantities of other gritty and sandy fabrics.

Although there are a number of cross-joining sherds and partly reconstructable vessels with the well, there are no complete or near-complete vessels, which is unusual for a well deposit (the best examples can be seen in Fig 63, 23-36). This may simply be a reflection of the fact that the bottom of the well was not excavated, or it may indicate a process of infilling which differs in some way from that used for other wells, with the fill containing deliberately-dumped domestic refuse rather than jugs broken in the course of using the well. Providing corroborative evidence for this is the proportion of residual Roman material from the well, 31.2% of the total ceramic assemblage (383 sherds). Such a percentage would not be at all unusual for soil deposits or pits in The Lanes (see Table 23), but is very high for the fill of a well. At Annetwell Street, for example, two wells, fairly close to OGL A 1237 in date, had Roman residuality rates of 4.0% (1127, construction pit), 1.5% (1127, fill) and 4.5% (2204, fill) and a well of the later thirteenth/fourteenth century, 507,

had no Roman pottery at all (McCarthy in prep).

The range and proportion of pottery types are fairly similar throughout the well fill (Table 25; spits 4-7 are amalgamated here to make up for the deficiency in sherd numbers), although there is a noticeable increase in Partially Reduced ware towards the top of the well (spit 1). A number of vessels have cross-joins between the uppermost three spits, but only four of these also join with spits 4-7, perhaps because there are proportionally fewer sherds from these levels where the fill changes to organic accumulations. On the whole, the ceramic evidence suggests that most of the well was backfilled relatively quickly, with some slightly later material at the top, perhaps being incorporated through slumping.

Dating for this well group is supplied by dendrochronology. The latest dated timber is a plank from the well lining, which derives from a tree felled in AD 1193-6 (Fasc 1, 104). The well was probably filled in at some point in the first half of the thirteenth century.

Context 308 immediately overlay the portion of well 1237 which fell within Trench A, and is stratigraphically equivalent to, if not actually the same as, pit 10 in Clack 1 (see Period 10B, p 102 below). Its 32 sherds include six in Late Medieval Reduced Grey ware, and for the purposes of Table 25 the group has been combined with a similar group from pit 10. There is a high proportion of residual wares deriving from the well (three sherds from 308 belong to two vessels from 1237), but the presence of Late Medieval Reduced Grey ware, which is completely absent from the well, gives this group a general date range from the fourteenth to the sixteenth century.

As is indicated in the discussion of Clack 1, a large number of vessels from the well fill, belonging to 24 jugs, cross-join with sherds in surrounding and overlying layers (Clack 1, Period 3,

Table 26 Medieval pottery from OGL A, excluding well 1237 and pit 308, expressed as percentages of sherd numbers

Period	Context	Red Gritty ware, Fabrics 1 + 2	Fabric 3	Fabric 4	Fabric 5	Fabric 6	Fabric 8	Fabric 11	Fabric 12	Fabric 13	Partially Reduced Grey ware, Fabrics 15, 17, 19	Late Medieval Reduced Grey ware, Fabrics 41 + 45	No of sherds
13	soils 17, 118	50.0			50.0								2
	pit 4	74.2								3.2	22.6		31
	pit 6	85.5	1.6	1.6	3.2	1.6		3.2		1.6	1.6		62
	pit 8	48.5		3.0						3.0	45.5		33
	pit 10	50.0									50.0		2
	pit 33	7.7									23.1	69.2	13
	pit 184	81.3				6.3	6.3		6.3				16

6, 7, 8 and 11). As the stratigraphic relationships of the well are not clear, however, and given the difficulty of interpreting the Clack 1 records, and the fact that only two contexts from Clack 1 were recognised within Trench A (the upper part of which was machine-cleared), it is impossible to work out what these cross-joins might have contributed to the understanding of the site in terms of suggesting contemporaneity of deposits or indicating the complexity of the soil disturbances which resulted in such a chronological distribution of refuse. Consequently the details of the cross-joins are not published in full here, but are presented in tabular form in the site archive.

Of the remaining Period 13 contexts, a number of soil deposits, presumed medieval in date, yielded only Roman pottery, and soil deposits 17 and 118 produced only two medieval sherds (Table 26). Several pits also yielded medieval pottery and although the quantities are small, there is sufficient evidence to suggest that the pits are not all contemporary but span a considerable period of time, presumably to be equated with the periods observed in Clack 1, although the lack of a stratigraphic sequence does not allow such detailed phasing here.

The largest group is from pit 6 (fill; 62 sherds), in which Red Gritty ware predominates at 85.5% (Table 26), cooking pots outnumber jugs, as in CAL E and F (see pp 90-2 above). There is one sherd of Partially Reduced Grey ware. A date in the late twelfth/ early thirteenth century might be appropriate for this group.

Pit 184 (fill 183) has only 16 sherds, mostly Red Gritty ware; it may well be similar in date to pit 6.

Cutting pit 6, pit 4 (fill 3) appears to be rather later in date. Although there are only 31 sherd, 23 of which are in Red Gritty ware, seven (22.6%; Table 26) are in Partially Reduced Grey ware, which suggests a date range somewhere in the first half of the thirteenth century, or later if much of the Red Gritty ware is residual.

Perhaps contemporary or slightly later in date is pit 8 (fill 7), which produced only 33 sherds, of which 15 (45.5% by number, Table 26, but about 68% by weight) are in Partially Grey ware. This might indicate a date range in the later thirteenth or fourteenth centuries, depending upon the extent of residuality among the Red Gritty wares.

Pit 33 seems to be later than the other pits. There are only 13 sherds, but eight of these are in Late Medieval Reduced Grey ware, Fabric 41, and one is in a related fabric, 45. A date range in the later fourteenth-fifteenth century, or perhaps even later, is likely, making this pit broadly contemporary with context 308, overlying well 1237 (see above).

A sixth pit, 10 (fill 9), produced two sherds, for which only a general thirteenth- or fourteenth-century date can be suggested.

Red Gritty ware, Fabric 2. Jug. Partial off-white slip and brown glaze 23 externally. Patches of off-white slip inside rim and neck.

OGL A 1237.1 Period: 13 Clack 1 65 Period: 7

Red Gritty ware, Fabric 1. Jug. Pitted brown to olive-brown glaze 24 externally, becoming splashy near base, over off-white slip; glaze splashes on underside of base.

OGL A 1237.1, .2, .3 Period: 13 Clack 1 66 Period: 3 Clack 1 63 and Clack 1 65 Period: 7 Clack 1 52 Period: 8 Clack 1 10 Period: 11

25 Red Gritty ware, Fabric 2. Jug. Partial off-white slip and brown glaze externally.

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OGL A 1237.2
                                  Period: 13
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- 26 Red Gritty ware, Fabric 1. Jug. Partial brown glaze externally. OGL A 1237.3 Period: 13
- 27 Red Gritty ware, Fabric 1. Tubular spout from jug. Overall pitted brown glaze externally. OGL A 1237.2 Period: 13
- Red Gritty ware, Fabric 1. Jug. Pitted olive-brown glaze externally. Rows of small square rouletting.

OGL A 1237.2, .3 Period: 13 OGL A 308.1, .2 Period: 13 Clack 1 52 Period: 8

- Red Gritty ware, Fabric 1. Cooking pot. Brown glaze splashes over rim and exterior. Spots of off-white slip internally. Period: 13
- Red Gritty ware, Fabric 1. Cooking pot. Off-white slip and brown 30 glaze splashes internally. Slightly sooted exterior. Period: 13 OGL A 1237.6
- Red Gritty ware, Fabric 2. Cooking pot. Pinkish-cream slip and 31 brown glaze splashes internally. Slightly sooted externally. OGL A 1237.2 Period: 13
- Fabric 5. Jug. Splashy yellowish-brown glaze with dark coppergreen speckles externally, down to about 50-100mm above basal angle. Decorated with horizontal grooves.

Period: 13 OGL A 1237.1 Clack 1 66 Period: 3 Clack 1 63 and Clack 1 65 Period: 7 Clack 1 52 Period: 8 Clack 1 10 Period: 11

- 33 Fabric 13. Cooking pot. Sooted externally. OGL A 1237.2
- Fabric 14. Jug. Splashy olive-green glaze with brown margins externally; off-white slip extending beyond the glaze in places. Glaze spots and traces of slip internally, on neck.

Period: 13

OGL A 1237.1, .2, .3, .4 OGLA+ Period: Unstratified Clack 1 66 Period: 3 Clack 1 67 Period: 6 Clack 1 65 Period: 7 Clack 1 52 Period: 8 Clack 1 9 and Clack 1 10 Period: 11

Partially Reduced Grey ware, Fabric 15. Jug. Apple-green glaze with darker copper-green streaks externally. Handle decorated with stabbing. OGL A 1237.2, .3 Period: 13

Clack 1 63 Period: 7

- Fabric 51. Jug. Scale decoration. Dipped glaze externally., now blistered but may have been pale olive green. OGL A 1237.4
- 37 Red Gritty ware, Fabric 1. Jug. Brown glaze and off-white slip externally. OGL A 183 Period: 13
- 38 Red Gritty ware, Fabric 2. Cooking pot. Sooted externally. OGLA3 Period: 13
- $Red \ Grittyware, Fabric \ 1. \ Cooking pot. \ Brown \ glazes plashes internally and$ 39 externally. Run of off-white slip internally. Partially sooted externally. Period: 13
- 40 Red Gritty ware, Fabric 1. Cooking pot. Tiny glaze spot externally. OGLA3 Period: 13
- Red Gritty ware, Fabric 1. Cooking pot. 41

OGL A 183 Period: 13

- 42 Red Gritty ware, Fabric 2. Cooking pot. Partially sooted externally. OGLA5 Period: 13
- 43 Red Gritty ware, Fabric 2. Cooking pot. Splashes of brown glaze internally. Partially sooted externally. Period: 13

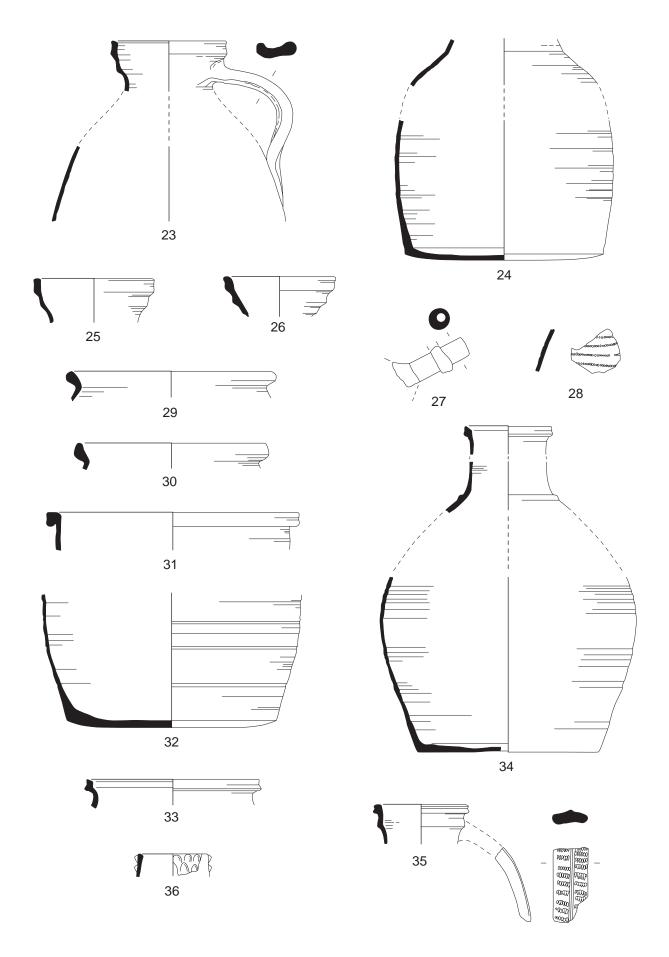


Fig 63 Medieval pottery from OGL A, well 1237 (scale 1:4)

Fabric 5. Cooking pot. Partially sooted externally.

OGL A 5

Period: 13

- 45 Fabric 6. Jug handle, thumbed along edges, with applied thumbed strip down centre. Pitted, splashy yellow-brown glaze. OGL A 5 Period: 13
- 46 Partially Reduced Grey ware, Fabric 15. Knob, perhaps from a jug lid. Applegreen glaze with frequent dark copper-green speckles and streaks.
 OGL A 7
 Period: 013

Unstratified (Fig 64)

47 Red Gritty ware, Fabric 1. Bowl. Olive green glaze internally., running up to rim in places; splashes of glaze on rim and exterior. Slightly sooted externally.

OGL A 2 Period: Modern

48 Red Gritty ware, fabric 2. Bowl. Partially sooted externally.
OGL A 2 Period: Modern

49 Partially Reduced Grey ware, Fabric 17. Jug handle. Light olive green glaze, slightly lustrous. Stabbed decoration.
 OGLA 2 Period: Modern

50 Partially Reduced Grey ware, Fabric 19. Cooking pot. Splashy pale yellowish-green glaze externally, and over rim; runs of glaze internally. Traces of probable handle springing from rim.
OGLA 2
Period: Modern

Old Grapes Lane Trench A West

Periods West 4 and West 5 (Fig 64)

The area abutting the main excavation at its western end produced only nine medieval sherds from Periods West 4 and West 5 (Table 27). The earliest stratified medieval pottery comprises two Red Gritty ware cooking pot sherds from post-pit 541/2, Period West 4; these may date to the twelfth or early thirteenth century.

Black soil spread 513 (Period West 5) produced seven medieval sherds, to which only a general thirteenth-to early fourteenth-century dare range can be ascribed.

Partially Reduced Grey ware, Fabric 15. Jug. Pale olive glaze externally.

OGL A 513 Period: West 5

Period West 6 (Fig 64)

Cutting black soil 513 was a timber building; a pit (506) underlying a post-pad and its overlying soil deposit (504) yielded 46 sherds and 22 sherds respectively. Five vessels are represented by sherds in both contexts. In addition, possible clay wall base 526 produced one sherd.

Red Gritty ware forms 30% of the group (Table 27). There is a little Partially Reduced Grey ware (10.1%). This is a fairly small group, and the extent of residuality is unknown, although the pottery is not from soil spreads and so residuality is likely to be low. There is certainly very little residual Roman material (Table 23). A date range in the early thirteenth century may be suggested.

Fabric 6. Cooking pot. Brown glaze spot externally. Partially sooted externally.
 OGL A 504
 Period: West 6

Period West 7 (Fig 64)

Black soil 199, which covered all the features of Period 6, produced 56 medieval sherds. Most of these are in Red Gritty ware (92.9%; Table 27), some 37 belonging to one vessel, a cooking pot (Fig 64, 53). Within the remaining Red Gritty ware sherds, cooking pots outnumber jugs.

This is again a small group, but appears to represent a twelfth-century ceramic spectrum, making it earlier than the Period 6 assemblage. It may be that the Period 7 group is largely, or even completely, residual in the context of this soil spread, it certainly contains a much higher proportion of residual Roman pottery than the preceding period (40.4%; Table 23). Consequently no reliable date can be suggested for this period on the basis of the ceramics alone; its position in the stratigraphic sequence presumably indicates a date range in the thirteenth century.

Red Gritty ware, Fabric 1. Cooking pot. A few tiny glaze spots externally. Sooted on underside of base and lower walls, patches of slight sooting externally on walls and rim.
OGL A 199
Period: 7

Table 27
Medieval pottery from OGL A West, expressed as percentage of sherd numbers

Period	Red Gritty ware, Fabrics 1 + 2	Fabric 3	Fabric 4	Fabric 5	Fabric 6	Fabric 11	Fabric 51	Partially Reduced Grey ware, Fabrics 15 + 17	No of sherds
West 4 and 5	22.2		11.1			11.1	33.3	22.2	9
West 6	30.4			14.5	24.6	20.3		10.1	69
West 7	92.9	1.8	3.6		1.8				56

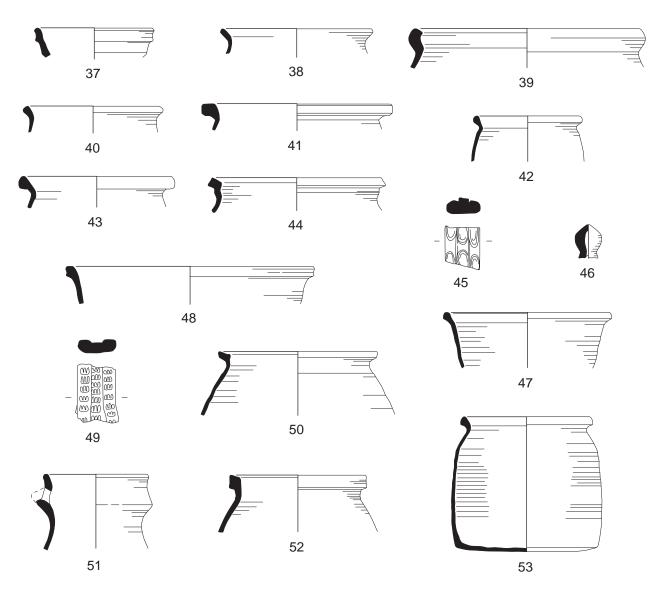


Fig 64 Medieval pottery from OGL A and OGL A West (scale 1:4)

Old Grapes Lane Trench B

Period 9 (Fig 65)

Medieval pottery was recovered from a series of pits (1, 3, 5-10, 12), which were revealed after machining. With the exception of pit 1, they were arranged in a grid pattern, and may have been associated with some industrial process such as tanning.

As the pits appear to be broadly contemporary, and each produced only a few sherds (one pit, 5, had 37 sherds, but no other pit had more than 14 sherds), the pottery from them is considered together here.

Red Gritty ware is the most common type present, at 59% of the group by sherd count (Table 28); it forms approximately 76% in terms of vessel numbers. There is some bias in the quantity of Partially Reduced Grey ware in Table 28 (25.5% of the sherds), due to the presence of 20 sherds belonging to a single Fabric 19 jug in pit 5; Partially Reduced Grey ware comprises only about 6% of the vessel numbers. Although the assemblage is not

large (98 sherds), and the extent of residuality among the Red Gritty ware fabrics is unknown (the Roman residuality rate is quite high; Table 23), a date range in the early thirteenth century might be appropriate for the infill of the pits.

- 54 Red Gritty ware, Fabric 2. Cooking pot. Sooted externally. OGL B 3 Period: 9
- 55 Red Gritty ware, Fabric 1. Cooking pot. Sooted externally. OGL B 10 Period: 9
- Partially Reduced Grey ware, Fabric 15. Jug. Olive green glaze with copper-green streaks. Incised chequerboard decoration and vertical applied stabbed strips. Partially sooted externally.
 OGL B 12
 Period: 9

Old Grapes Lane Trench C

There are two stratified Red Gritty ware sherds from pit 61 (Table 28), assigned to Period Post-3, which may suggest a twelfth- or early thirteenth-century date range for this feature.

Site	Period	Context	Red Gritty ware, Fabrics 1 + 2	Fabric 3	Fabric 5	Fabric 6	Fabric 9	Fabric 11	Fabric 12	Fabric 13	Partially Reduced Grey ware, Fabrics 15, 17, 19	No of sherds
OGL B	9	pits 1,3, 5-10, 12	59.2	1.0	3.1	5.1	1.0	1.0	2.0	2.0	25.5	98
OGL C	Post-3	pit 61	100.0									2
OGL J	Medieval	pit 1	26.1			2.2		69.6		2.2		46
		pit 2	5.3							94.0	0.8	133

Table 28
Medieval pottery from OGL B, C and J, expressed as percentage of sherd numbers

Old Grapes Lane Trench J (Fig 65)

Medieval pottery was recovered from two pits, 1 and 2, but no stratigraphic interpretation of these is possible as the trench was largely machine-excavated and the pits were recorded in section only.

Pit 1 was assigned to Period 2, but the presence of 46 medieval sherds (Table 28) representing six vessels, and only one Roman sherd, suggests that this is a medieval pit. The assemblage included 30 sherds comprising the circumference of a jug shoulder in sandy ware Fabric 11 (not illustrated), with a copper-speckled splashy olive glaze. There are also 12 sherds (representing two vessels) in Red Gritty ware. An early thirteenth-century date range may be suggested.

Pit 2, which may have been a well, yielded 133 sherds (Table 28), of which 125 belong to a near-complete jug in Fabric 13 (Fig 65, 57). The Partially Reduced Grey ware comprises a tubular spout form a jug (Fig 65, 58) in Fabric 15. As with pit 1, a date range in the first half of the thirteenth century would be appropriate.

Fabric 13. Jug. Pinched spout; strap handle. Horizontal grooves on shoulder. Splashy olive to yellow-brown glaze ext.
 OGL J 2
 OGL J +
 Period: Medieval
 Period: Unstratified

58 Partially Reduced Grey ware, Fabric 15. Tubular spout from jug. Olive green glaze with copper-green streaks.
OGLJ 2
Period: Medieval

Clack Trench 1

This trench, excavated by Peter Clack in 1975, was incorporated into OGL A in 1981, but apart from the cobble bank Clack 1 66/OGL A 28 and the medieval well Clack 1 69/OGL A 1237, which were identified in both trenches, it is difficult to link the two trenches stratigraphically.

Periods 1 and 2

Yellow clay deposit 72 and overlying cobbles (70) produced only four Red Gritty ware sherds (Table 29). Clay 72 appears from a section drawing to belong to the fill of the construction pit of well 69/OGL A 1237, and if so, it must be of late twelfth-century date.

Period 3 (Fig 66)

A bank of cobbles, 66, which was also recognised in Trench A as context 28, Period 12A (where it produced no pottery), yielded 86 medieval sherds. If the stratigraphic sequence as originally postulated is correct, the cobble bank should pre-date well OGL A 1237, but further examination of the excavation records, together with the ceramic evidence, suggest that in fact the cobble bank is contemporary with or later than the well.

The predominant type is Red Gritty ware, at 44.2% of the sherds (38 sherds; Table 29) but about 69% of the vessel numbers. There is some bias in the quantities of Fabrics 5, 14 and 15 (10, 21 and 7 sherds respectively), for in each case only one vessel is represented. Some 48 medieval sherds (55.8%), representing nine vessels, cross-join with vessels from the fill of well OGL A 1237 (see pp 93-4 above).

The group includes six sherds of Late Medieval Reduced Grey ware, which if they are not intrusive would probably place the date range somewhere in the late fourteenth/early fifteenth century. In view of the ceramic spectra for the subsequent phases (Table 29), however, it is likely that these sherds are in fact intrusive, which casts doubt on the integrity of this group of pottery and the interpretation of the stratigraphic sequence at this point.

Red Gritty ware, Fabric 1. Cooking pot. Brown glaze splashes externally.
 Clack 1 66
 Period: 3

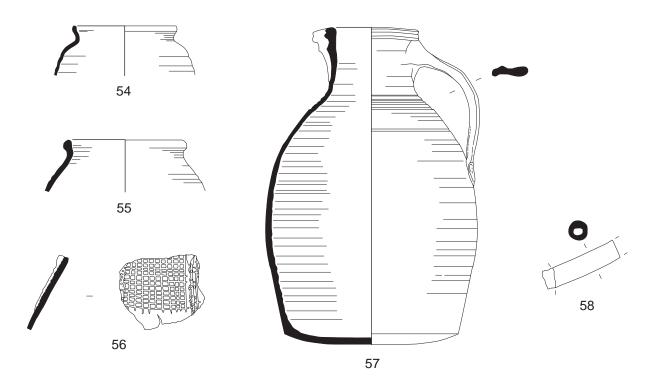


Fig 65 Medieval pottery from OGL B and J (scale 1:4)

Period 4 (Fig 66)

Dark clayey deposit 68, which accumulated against bank 66 (Period 3), produced only 11 sherds (Table 29); five of these are in Red Gritty ware, and four in Partially Reduced Grey ware, Fabrics 17 and 19. Little information can be obtained from such a small group; it presumably dates to the thirteenth century, but may, like the Period 3 assemblage, be subject to contamination.

60 Red Gritty ware, Fabric 2. Jug. Partial off-white slip and brown glaze externally.

> Clack 1 68 Period: 4 Clack 1 67 Period: 6

Period 5

The well OGL A 1237 (see pp 92-4 above), here numbered as context 69, is the only feature attributed to the period, and is said to post-date all previous periods; but as has been noted under Period 3 above, its stratigraphic position now appears less clear.

Only the uppermost fill was excavated in 1975, and as at the time it was thought to be the same feature as overlying pit 10 (see Period 11 below), the pottery is all identified as from 10 (Table 25). For the purposes of Table 29, the pottery from OGL A 1237 is included as representing Period 5 in the Clack 1 sequence. The fill of the well probably dates to the early thirteenth century (p 93 above).

Period 6 (Fig 66)

Black clayey deposit 67, overlying Period 4, produced only nine sherds (Table 29), of a similar range to Period 4. Sherds on four vessels belong to vessels from the fill of well OGL A 1237, one of which is also represented in cobble bank 66,

Period 3, and three of which are also represented in later phases, form Period 7 onwards. One other sherd joins with one in clay 68, Period 4. The group probably dates to the thirteenth century.

61 Fabric 13. Jug. Runs of olive-green and dark copper-green glaze on underside of base and splash of glaze on wall.

Clack 1.67 Period: 6

Period 7 (Fig 66)

Deep soil deposits 63 and 65, which overlay Period 6, produced 314 sherds. These are dominated by Red Gritty ware at 76.1% (Table 29), with small quantities of Gritty wares, Fabrics 4, 5 (40 sherds, 12.7%, but these only represent two vessels) and 6, Sandy wares, Partially Reduced Grey ware (Fabrics 15, 17 and 19), and Late Medieval Reduced Grey ware.

Some 85 sherds belong to 17 vessels from the fill of well OGL A 1237, and many of these also cross-join with context 66 on Period 3, as well as contexts in Periods 6, 8 and 11. These cross-joins indicate a minimum residuality rate of 27.1%, assuming that this period post-dates the well; the true rate for these soil spreads is probably much higher, as the presence of four sherds of Late Medieval Reduced Grey ware would suggest at least a fourteenth-century date (unless they are intrusive here).

- Red Gritty ware, Fabric 1. Jug. Partial off-white slip and pitted olive green glaze externally. Pinched spout.
 Clack 1 63 Period: 7
- Red Gritty ware, Fabric 2. Jug. Partial off-white slip and splashy brown glaze externally.
 Clack 1 63
 Period: 7
- 64 Red Gritty ware, Fabric 2. Cooking pot. Partially sooted externally. Clack 1 63 Period: 7

Table 29
Medieval and post-medieval pottery from Clack 1, expressed as percentage of sherd numbers.
Pottery from Period 5 is that from well OGL A 1237

Period	Red Gritty ware, Fabrics I + 2	Fabric 3	Fabric 4	Fabric 5	Fabric 6	Fabric 11	Fabric 12	Fabric 13	Fabric 14	Fabrics 51, 53, 55, 60, 63	Partially Reduced Grey ware, Fabrics 15, 17, 19	Late Medieval Reduced Grey ware, Fabrics 41 + 43	Brown-glazed red earthenware, 17th-18th century	18th-20th century wares	No of sherds
1+2	100.0														4
3	44.2			11.6	2.3		1.2		24.4	1.2	8.1	7.0			86
4	45.5				9.1			9.1			36.4				11
5	79.8	0.9	1.3	1.4	0.6	1.8	1.1	1.4	1.5	1.1	9.1				846
6	55.6							11.1	11.1		22.2				9
7	76.1		0.3	12.7	0.3	2.2			4.1	0.3	2.5	1.3			314
8 (early)	59.9	0.3	2.4	3.0	0.3	0.6		1.2	2.4		27.7	2.1			329
8 (late)	10.0										27.5	62.5			40
9	5.3		1.3					1.3			21.1	71.1			76
10A	8.6		3.2	0.9		0.9		0.5	0.5		10.4	75.2	- 14 17 1 1.		222
10B (not pit 10)	16.2	0.9		0.9	0.9		0.9	1.7		0.9	13.7	64.1			117
11	9.3		2.1	1.7		0.4		0.8	0.8	0.8	11.9	57.2	1.7	13.1	236

Red Gritty ware, Fabric 1. Cooking pot. Olive green glaze splashes on top of rim.Clack 1 63Period: 7

Red Gritty ware, Fabric 1. Cooking pot. Partially sooted externally.
 Clack 1 65
 Period: 7

67 Late Medieval Reduced Grey ware, Fabric 41. Jug. Partially oxidized fabric. Splashes of pale olive glaze externally.

Clack 1 63 Period: 7

Period 8 (Fig 66)

This period comprised a complex sequence of buildings and other features. Medieval pottery was recovered from twig layer 61 (1 sherd), overlying clay layer 52 (323 sherds), and surfaces 60 (40 sherds) and 64 (5 sherds). The pottery from surface 60 appears to be later than the rest, with a high proportion of Late Medieval Reduced Grey ware, and so is treated separately, as a later subphase, in Table 29

Of the pottery from 52, 61 and 64, the bulk is again in Red Gritty ware (59.9%, Table 29), with an increasing proportion of Partially Reduced Grey ware (27.5%). Other gritty and sandy wares are present in small amounts, and there is some Late Medieval Reduced Grey ware (2.1%). As with the previous periods, there are a number of sherds

(48, representing 13 vessels) which cross-join with well OGL A 1237, and five sherds (three vessels) which join with the soil deposits of Period 7.

The ceramic spectrum suggests a fourteenth-century date, judging by the ration of Partially Reduced Grey ware to Late Medieval Reduced Grey ware of 13:1 (assuming that the latter is not intrusive, and that the stratigraphic sequence is reliable). This would imply that most if not all of the Red Gritty ware and other gritty and sandy fabrics are residual, giving a residuality rate of about 70%. The cross-joins with the well and with earlier periods confirm a high degree of residuality, as might be expected from a general soil spread such as 52, which produced most of the pottery.

Surface 60 appears to be somewhat later in date; it produced on 40 sherds, but there is very little residual Red Gritty ware (10.0%), and although there is 27.5% of Partially Reduced Grey ware, the dominant fabric is now Late Medieval Reduced Grey ware, at 62.5%. A late fourteenth- or fifteenth-century date might be appropriate for this feature.

Red Gritty ware, Fabric 2. Jug. Partial smooth olive green glaze externally.
 Clack 1 52
 Period: 8

69 Red Gritty ware, Fabric 2. Jug. Splashy olive green glaze externally. Clack 1 52 Period: 8

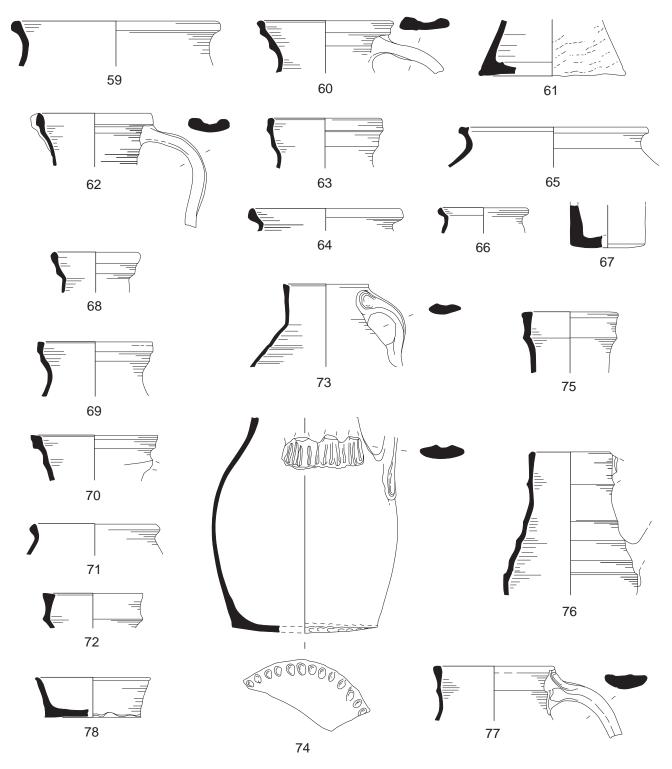


Fig 66 Medieval pottery from Clack 1 (scale 1:4)

- 70 Red Gritty ware, Fabric 2. Jug. Splashy brown glaze externally. Clack 1 52 Period: 8
- 71 Red Gritty ware, Fabric 1. Cooking pot. Partially sooted externally. Clack 1 52 Period: 8

Period 9 (Fig 66)

The trench was covered by cobbled surface 56, cut by pits 54 and 57. Other deposits with medieval pottery include pit 59 and layers 53 and 62. These contexts produced 76

medieval sherds, of which the majority (71.1%; Table 29) are in Late Medieval Reduced Grey ware. There is little residual Red Gritty ware (5.3%). Partially Reduced Grey ware is present at 21.1%; it may be mostly, or entirely, residual. An early fifteenth-century date range may be suggested for this period.

- 72 Late Medieval Reduced Grey ware, Fabric 41. Jug. Olive green glaze externally.
 - Clack 1 54a Period: 9
- 73 Late Medieval Reduced grey ware, Fabric 41. Jug. Fabric partly oxidized. Olive green glaze externally.

Clack 1 54a Period: 9

74 Late Medieval Reduced Grey ware, Fabric 41. Jug. Overall olive green glaze, abraded in places, running on to underside of base. Base thumbed underneath. Decorated with applied 'arms'. Clack 1 54a Period: 9

Clack 1 34a Period: 9
Clack 1 2 Period: 11

Period 10A (Fig 66)

Contexts producing medieval pottery are posthole 26, burnt timber 42, possible hearth 40, burnt daub and charcoal layers 24A ad 24B, and soil deposits 41, 45, 46 and 48. There are 222 sherds; 75.2% (Table 29) are in Late Medieval Reduced Grey ware, at least some of which is residual as there are 16 sherds belonging to two vessels from contexts in Period 9. Only 10.4% of the sherds are in residual Partially Reduced Grey ware. The proportion of overtly residual material is higher among the soil spreads (39.6%, including the crossjoining sherds of Late Medieval Reduced Grey ware) than the features (10.3%).

In the absence of any obvious sixteenth-century ceramic types, a fifteenth-century dare may be presumed for this period, although it should be said that diagnostic fabrics such as Cistercian wares and Rhenish stonewares are rare in Cumbria generally (McCarthy and Brooks 1992, 36), and their absence is not necessarily significant.

75 Late Medieval Reduced Grey ware, Fabric 41. Jug. Glaze burnt and blackened externally.

Clack 1 48 Period: 10A

Period 10B (Fig 66)

Of the Period 10B structure, postholes 43 and 44, hearth 39 and soil deposits 28 and 35 produced a few sherds, but the bulk of the pottery (109 sherds) is from clay levelling deposit 33, which pre-dates the building. Late Medieval Reduced Grey ware comprises 64.1% of the group (Table 29), a lower proportion than in Period 10A; this is due to a high level of residuality. Of the Late Medieval Reduced Grey ware, five sherds are also known to be residual, belonging to three vessels from earlier periods. Including these sherds, the known level of residuality for the period is about 36%.

Period 10B probably dates to the fifteenth century, or possibly to the sixteenth century, given the caveat expressed above (Period 10A) concerning the absence of sixteenth-century ceramic types.

Pit 10, which overlies well OGL A 1237, appears from the site records to have been cut from this level. The pit cut into the top fill of the well (see Period 5 above), and the two features were excavated as one, the distinction becoming clear later; thus the pottery identified as from 10 could include sherds from both, and does in fact contain much pottery deriving from the well. This group includes 23 sherds, in Red Gritty ware and Fabrics 5, 14, 15 and 60, which join with seven vessels in the well. Although there are only 43 sherds, the ceramic spectrum of this group is similar to that of the well, with Red Gritty ware at 62.8% of sherd numbers (Table 25), but about 72% of vessels represented.

A later group of 26 sherds, probably from the upper levels of pit 10, include Late Medieval Reduced Grey ware. For the purposes of Table 25, this group has been combined with the 32 sherds for OGL A 308, which has a similar ceramic spectrum. Context 308 was excavated in 1981 at the top of the portion of well 1237 which lay outside the 1975 trench, and is stratigraphically equivalent to, if not actually the same as, pit 10 (see p 93 above).

Period 11 (Fig 66)

The contexts of Period 11 comprise post-medieval to modern levels and features, including drainpipe trenches, and little can be said about these. There are 236 sherds of non-Roman pottery, of which 57.2% are in Late Medieval reduced Grey ware (much if not all of which must be residual), 13.1% are in eighteenth- to twentieth-century fabrics, 1.7% are in seventeenth/eighteenth-century red coarse ware, and the remainder are residual medieval ware (Table 29).

76 Late Medieval Reduced Grey ware, Fabric 41. Jug. Vessel burnt when broken, as some sherds oxidized and some reduced. Glaze burnt and blistered, ranging from blackish to olive green and yellow.

Clack 1 2, Clack 1 4, Clack 1 14, Clack 1 23 Period: 11

Late Medieval Reduced Grey ware, Fabric 41. Jug. Handle oxidized.
 Olive green glaze externally.
 Clack 1 14
 Period: 11

78 Late Medieval Reduced Grey ware, Fabric 41. Dish/bowl. Olive green glaze internally and externally.
 Clack 19 Period: 11

Clack Trench 2

This trench was excavated by Peter Clack in 1975. It lay 2m east of Clack Trench 1. Although Periods 8 to 11 may have been regarded by the excavator as equivalent to Periods 8 to 11 in Trench 1 (see above), the pottery evidence suggests that, with the exception of Period 11, this is not the case. The relationships indicated by the pottery are given below. Periods 10A and 10B in Trench 1 do not seem to have an equivalent in this trench, and this may be suggestive of a clearance of fifteenth/sixteenth-century levels.

Period 8

Clay layer 43 produced only two sheds of Red Gritty ware (Table 30), which may suggest a twelfth- to early thirteenth-century dare for this period.

Period 9

Some 30 sherds were recovered for pit 39 and clay and cobble feature 42. Although this is only a small group, it is dominated by Partially Reduced Grey ware (19 sherds), with some Late Medieval Reduced Grey ware (Table 30). This suggests a fourteenth-century date range, making the Red Gritty ware residual here.

The pottery from Periods 9 to 10B appears to date these periods to the fourteenth century, with Period 10B probably running into the fifteenth century, which makes them approximately equivalent to Periods 7-9 on Clack 1.

Period 10A (Fig 67)

Most of the pottery (320 of the 430 sherds) is from clay levelling deposits 37 and 38, and soil spreads 36, 40 and 41, with the remainder coming from pits 20 and 35, and charcoal spreads 21 and 22, which were associated with a timber beam.

Again, Partially Reduced Grey ware is dominant, at 76.5% of the assemblage, with Late Medieval Reduced Grey ware at 20.2% (Table 30). As with Period 9, a fourteenth-century date range may be suggested. There is very little obviously residual material, and it is impossible to estimate whether any of the Partially Reduced Grey ware is residual. As so much of the pottery comes from levelling deposits and general soil spreads, however, where residuality is likely to be high, the assemblages from these contexts have been compared with those from the pits and charcoal spreads, contexts more likely to have a higher proportion of contemporary pottery. It is noticeable that the pits and charcoal have a lower level of obviously residual material, and the ratio of Partially Reduced Grey ware to Late Medieval Reduced Grey ware is much lower (1.4:1) than in the levelling deposits and soil spreads (6.5:1). This suggests that there is a higher degree of residuality in the latter group of contexts (unless they are somewhat earlier in date), and that the dating of the former group may be refined to the second half of the fourteenth century, when the Late Medieval Reduced Grey wares were starting to catch up with and overtake the Partially Reduced Grey wares in popularity.

79 Late Medieval Reduced Grey ware, Fabric 43. Jug. Pinched spout.
 Olive green glaze externally.
 Clack 2 35 Period: 10A

Period 10B

The pottery from this period is dominated by the assemblage from timber-lined pit 8, a possible well

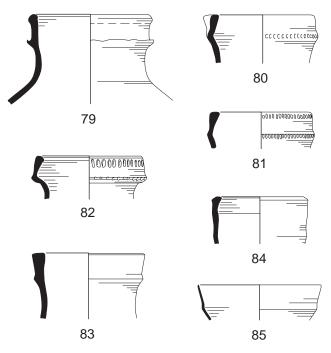


Fig 67 Medieval pottery from Clack 2 (scale 1:4)

(795 of the 976 sheds), which comprises 50.1% of all the pottery from Clack 2. The remaining pottery is from pit 30 (8 sherds), postholes 23 and 25 (2 sherds), wood fragments 31 (6 sherds), and soil spreads 17 (133 sherds) and 33 (32 sherds).

Partially Reduced Grey ware comprises the largest category, at 83.9%, with Late Medieval Reduced Grey ware at 13.5% (Table 30). Pit 8 is stratigraphically the earliest feature of the period, and its proportion of Partially Reduced Grey ware to Late Medieval Reduced Grey ware (10.3:1) is far higher than in the remaining contexts. This suggests a mid fourteenth-

Table 30 Medieval and post-medieval pottery from Clack 2, expressed as percentage of sherd numbers

Period	Red Gritty ware, Fabrics 1 + 2	Fabric 3	Fabric 4	Fabric 5	Fabric 6	Fabric 13	Partially Reduced Grey ware, Fabrics 15, 17, 19	Late Medieval Reduced Grey ware, Fabrics 41 + 43	Cistercian ware	17th-18th century wares	18th-20th century wares	No of sherds
8	100.0											2
9	16.7			3.3		3.3	63.3	13.3				30
10A	1.4	0.9		0.2	0.2	0.5	76.5	20.2				430
10B	1.5	0.2	0.1		0.1		83.9	13.5		0.5	0.1	976
11	3.4	0.7	0.7				10.1	14.1	0.7	7.4	63.1	149

century date range for the upper fill of pit 8, perhaps with a high degree of residuality if the stratigraphic relationship with Period 10A is correct. The six sherds of post-medieval and modern pottery from pit 8 are presumably intrusive, deriving from the late demolition rubble in the top fill, but this is such a small amount (0.6%) that it does not seem to invalidate the general dating given to this group.

Most of the pottery from other contexts derives from soil spreads 17 and 33, which might be expected to have a high degree of residuality. Within the small amount of pottery from contexts 23, 25, 30 and 31, which may have the least residual material, Late Medieval Reduced Grey ware sherds outnumber Partially Reduced Grey ware, suggesting perhaps an early fifteenth-century date range, similar to Period 9 in Clack 1, for these features.

80 Partially Reduced Grey ware, Fabric 17. Jug. Pinched spout. Rouletted. Olive glaze externally.

Clack 2 8 Period: 10B

81 Partially Reduced Grey ware, Fabric 15. Jug. Rouletted. Olive glaze externally.

Clack 2 8 Period: 10B

Partially Reduced Grey ware, Fabric 15. Jug. Pinched spout. Rouletted. Olive glaze externally.

Clack 2 8 Period: 10B

83 Late Medieval Reduced Grey ware, Fabric 41. Jug. Olive glaze externally.

Clack 2 8 Period: 10B

84 Late Medieval Reduced Grey ware, Fabric 41. Jug. Olive glaze externally. Clack 2 30 Period: 10B

Period 11 (Fig 67)

The contexts of Period 11, stratigraphically equivalent to Period 11 in Clack 1 (p 102 above), comprise post-medieval to modern levels and features about which little can be said. There are 149 sherds, of which 70.5% are post-medieval,

dating to the later seventeenth to nineteenth/twentieth centuries (Table 30), with a residuality rate for the medieval ware of about 29%. Of interest is a single sherd of Cistercian ware (Fig 67, 85), residual in this period.

85 Cistercian ware, Fabric 116. Cup. Clack 2 19 Period: 11

Lewthwaite's Lane Trench A

Period 19B (Fig 68)

Only 14 medieval sherds were recovered from this period, the earliest to produce medieval pottery; of these, 11 were from a post-pit, 85, which cut through a layer of cobbles covering most of the site. One sherd was from a soil-filled gap (93) in the cobbling which may represent part of a wall, and two sherds were from an overlying sandy loan, 80.

The majority of the sherds are in Red Gritty ware (12 sherds; Table 31). There is one sherd in a reduced gritty hand-made fabric (Fabric 61; Fig 68, 86); it has traces of coils visible in the section, and may have been finished on a slow wheel. This fabric has not as yet been recognised elsewhere in Carlisle.

Although this is a very small group, the types present, and the preponderance of cooking pot forms - there are no definite jug sherds among the Red Gritty wares — might suggest an early twelfth-century date range, assuming that the group is not intrusive here. There is a considerable amount of Roman pottery from this period, and Periods 20 and 21A (Table 33), which makes it difficult to be certain whether these deposits represent twelfth-century or pre twelfth-century activity (see pp 44-5 above).

86 Fabric 61. Cooking pot. Probably coil-built and finished on slow wheel. Sooted externally.

LEL A 93 Period: 19B

Table 31 Medieval pottery from LELA, expressed as percentage of sherd numbers

Period	Red Gritty ware, Fabrics 1 + 2	Fabric 61	Fabric 3	Fabric 4	Fabric 5	Fabric 6	Fabric 11	Fabric 12	Fabric 13	Fabrics 52, 53	Partially Reduced Grey ware, Fabrics 15, 17, 19	Late Medieval Reduced Greyware, Fabrics 41 + 43	Porcelain (întrusive)	No of sherds
19B	85.7	7.1		7.1										14
20	100.0													1
21A	88.9					5.6							5.6	18
21B (early)	98.1				1.3							0.6		160
21B (late)	10.0		5.0	10.0	2.5		25.0		2.5		45.0			40
22	67.5		2.5	2.5	2.5	2.5	5.0	1.7	3.3	1.7	10.0	0.8		120

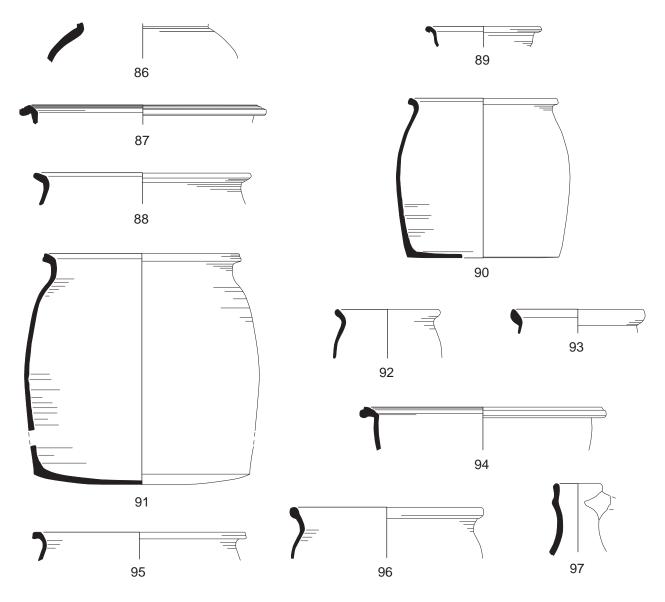


Fig 68 Medieval pottery from LEL A (scale 1:4)

- 87 Red Gritty ware, Fabric 1. Cooking pot. Fabric mostly reduced, with surfaces partially oxidized.
- 88 Red Gritty ware, Fabric 1. Cooking pot. Sooted externally on rim.

LEL A 80 Period: 19B LEL A 7 Period: 22

89 Fabric 4. Bowl. Unglazed. LEL A 85 Period: 19B

Period 20

Dump deposit 74 produced one cooking pot sherd in Red Gritty ware (Table 31), and 224 Roman sherds (Table 23).

Period 21A

The only post-Roman pottery from this period is a small group from a probable robber trench (72 fill 28). Of the 18 sherds, 16 are in Red Gritty ware (Table 31); again, cooking pots are the most common form, although at least one jug is represented. There is one intrusive sherd of

modern porcelain.

The medieval and post-medieval pottery comprises only 8.3% of the total assemblage (Table 23). If the medieval pottery from this period and Period 20 is not intrusive, a twelfth-century date can be assigned to these periods.

Period 21B

Pottery was recovered from a number of post-pits (26; 27, fill 13; 40, fill 39; 41, fill 36; 50, fill 33; 55, fill 51; 67, fill 64) apparently defining a three-bay timber building (669), from a slot (25, fill 6) which is stratigraphically later than some of the posts, and from several pits (29, fill 15; 75, fill 31; 57, fill 38) which do not appear to be part of the building and may post-date it. Medieval pottery comprises 62.1% of the total assemblage (Table 23), making 21B the first period on this site to which a medieval date may be assigned with confidence.

The range of medieval pottery types from this period as a whole resembles the ceramic spectrum of the group from

well OGL A 1237 (pp 92-4), which probably dates to the early thirteenth century. It is suggested here, however, that the contexts of this period can be divided, on stratigraphic and/or ceramic grounds, into two group with different date ranges, relating to the construction and early use of the building, and to its final stages and possibly the period after its demolition. The sub-phases are designated 21B (early) and 21B (late) in Table 31.

There are only 15 sherds from the post-pits of Building 669. Of these, most are Red Gritty ware, including an increasing proportion of jugs, and there is an intrusive sherd of Late Medieval Reduced Grey ware. The bulk of the pottery from this period (145 sherds) is from pit 57; all but two sherds are in Red Gritty ware, and there is no Partially Reduced Grey ware. On the grounds of the pottery, therefore, it may be tentatively suggested that pit 57 does not post-date the building but is broadly contemporary with it.

Pits 29 and 75 yielded 10 sherds, but only two of these are Red Gritty ware, and the range of sandy wares present tends to confirm the suggestion that these pits could post-date the building. This small group can be considered together with the pottery from slot 25, stratigraphically late in the building's history, which produced 30 sherds, nearly half in Partially Reduced Grey ware, and only two sherds in Red Gritty ware. This range of ceramic types is obviously different from that in the earlier group of contexts (Table 31).

The dominance of Red Gritty ware in the earlier contexts suggests a later twelfth-century date for the construction and early use of Building 669. The second group of contexts, on the other hand, appears to be somewhat later. Although the assemblage is small, the importance of the Partially Reduced Grey ware fabrics (45.0%; Table 31) and other sandy wares, with Red Gritty ware at only 10.0%, might indicate a date range in the second half of the thirteenth century for the alter use, and perhaps demolition, of the building.

90 Red Gritty ware, Fabric 1. Cooking pot. Spots of brown glaze internally., on top of rim and on underside of base. Sooted all over exterior and on top of rim.

LEL A 38 Period: 21B

91 Red Gritty ware, Fabric 1. Cooking pot. Brown glaze internally on base and part-way up the walls; a few glaze spots externally on underside of base. Sooted externally, except on shoulder.
LEL A 38 Period: 21B

LEL A 38 Period: 21B LEL A 5 Period: 22

92 Red Gritty ware, Fabric 1. Cooking pot. Partially sooted on rim. LELA 38 Period: 21B

Red Gritty ware, Fabric 1. Cooking pot. Sooted externally and partially internally.
 LELA 38 Period: 21B

94 Red Gritty ware, Fabric 1. Bowl. Fabric reduced dark grey in places. Sooted externally and partially internally.
LELA 13 Period: 21B

Period 22 (Fig 68)

Dump deposits (2, 7-10) and cobbles (5) overlying Building 669 produced 120 medieval sherds.

The pottery is again dominated by Red Gritty ware (Table 31), with a range of other gritty and sandy wares including Partially Reduced Grey ware. There is one sherd of Late Medieval Reduced Grey ware. The proportion of ceramic types present might seem to contradict the suggested date

range for the later contexts of Period 21B. The nature of the contexts as general soil spreads and dumps may, however, suggest that a good deal of the pottery could be residual; there is certainly a considerable amount of residual Roman material (increasing from 37.9% in Period 21B to 58.8% here; Table 23). This is confirmed by the large number of known residual medieval sherds, which join with sherds in the earlier periods; this residual category comprises 18 sherds representing four vessels in Red Gritty ware, and one sherd of a jug in Fabric 13. These sherds represent 15.8% of the medieval assemblage; the true rate of residuality, particularly for Red Gritty ware, is probably much higher.

Consequently it is difficult to suggest a date for the deposition of these layers, especially in the absence of later medieval levels stratigraphically post-dating Period 22. The near-absence of Late Medieval Reduced Grey ware, together with the relatively low proportion of Partially Reduced Grey ware, might suggest a late thirteenth/early fourteenth-century deposition date. A late medieval and post-medieval sequence had been hoped for, as the building at 65 Scotch Street, where this trench was located, was uncellared. On the evidence of the pottery, however, there appears to have been a clearance of these levels.

95 Red Gritty ware, Fabric 2. Cooking pot. Splash of glaze externally.

Partially sooted externally.

LEL A 5 Period: 22

96 Red Gritty ware, Fabric 2. Cooking pot. Sooted internally and externally.

LEL A 2 Period: 22

Fabric 3. Bottle. Dipped olive green glaze with vertical streaks of darker copper green.
 LELA 8 Period: 22

Pack Horse Lane Trench A (Fig 69)

This watching brief produced very little medieval pottery (Table 32). Most was from a timber-lined well (1) which yielded 27 sherds, representing nine vessels (including Fig 69, 98-102); several of these were substantial portions of jug bases. Red Gritty ware is absent, and Partially Reduced Grey

Table 32 Medieval pottery from PHL A, expressed as percentage of sherd numbers

	+ 2			re,	
Context	Red Gritty ware, Fabrics 1 + 2	Fabric 5	Fabric 13	Partially Reduced Grey ware, Fabrics 15 + 17	No of sherds
well 1		3.7	37.0	59.3	27
?pit, 15	100.0				5

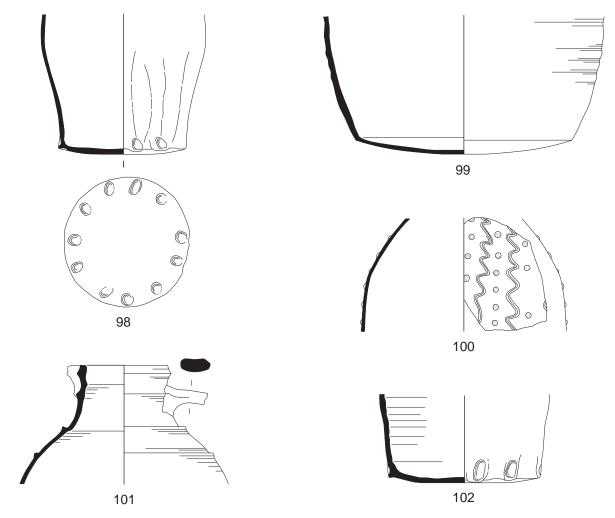


Fig 68 Medieval pottery from PHL A (scale 1:4)

ware comprises the bulk of the pottery (16 sherds, 59.3% of the group by sherd numbers but about 70% and 67% of the group by sherd weight and vessel numbers respectively). If this small group can be taken as representative of the well contents, it suggests a date range in the later thirteenth or early fourteenth century for the use and infill of this feature.

In addition, there are five sherds of Red Gritty ware from a possible pit, 15 (Table 32), which may suggest a twelfth- or early thirteenth-century date.

98 Fabric 13. Jug. Knife-trimmed towards base. Single thumbings on wall and underside of base. Splashy yellow glaze, olive green in places, externally down to base.

PHL A 1 Period: Medieval

- 99 Partially Reduced Grey ware, Fabric 15. Jug. Splashy olive glaze externally down almost to basal angle. Base pushed upwards where another vessel has rested on it during firing.
 PHLA 1
 Period: Medieval
- 100 Partially Reduced Grey ware, Fabric 15. Jug. Olive glaze externally. Vertical wavy combing and rows of applied brown-stained pellets. PHL A 1 Period: Medieval
- Partially Reduced Grey ware, Fabric 17. Jug. Partial olive glaze externally.
 PHL A 1
 Period: Medieval

102 Partially Reduced Grey ware, Fabric 17. Jug. Single thumbings around base. Splashy olive glaze externally.

PHL A 1 Period: Medieval

BIBLIOGRAPHY

- Anderson, A C, 1980 A guide to Roman fine wares, VORDA Res Ser 1, Highworth
- Arthur, P, and Marsh, G (eds), 1978 Early fine wares in Roman Britain and beyond, BAR Brit Ser, 57, Oxford
- Atkinson, D, 1914 A hoard of samian ware from Pompeii, J Roman Stud, 4, 27-64
- Atkinson, D, 1942 Report on excavations at Wroxeter (the Roman city of Viroconium) in the County of Salop, 1923-1927, Birmingham
- Austen, P.S., 1992 Bewcastle and Old Penrith: A Roman outpost fort and a frontier vicus, excavations, 1977-78, Cumberland Westmorland Antiq Archaeol Soc Res Ser, 6, Kendal
- Bidwell, P T, 1985 The Roman fort of Vindolanda, at Chesterholm, Northumberland, English Heritage Archaeol Rep, 1, London
- Bird, J, 1983 Roman pottery from Burpham, Surrey Archaeol Collect, 74,
- Birley, E, 1947 The samian ware, in F G Simpson and K S Hodgson, The coastal mile-fortlet at Cardurnock, Trans Cumberland Westmorland Antiq Arch Soc, n ser, 47, 78-127
- Brassington, M, 1980 Derby Racecourse kiln excavations 1972-3, Antiq J, 60, 8-47
- Brooks, C M, 1987 Medieval and later pottery from Aldwark and other sites, Archaeol of York, 16/3, London
- Brooks, CM, 2000 The medieval and post-medieval pottery, in RM Newman, N J Hair, C L E Howard-Davis, C Brooks, and A White, Excavations at Penrith Market, 1990, Trans Cumberland Westmorland Antiq Arch Soc, n ser, 100, 105-30
- Bushe-Fox, J P, 1928 Second report on the excavations of the Roman fort at Richborough, Kent, Rep Res Comm Soc Antiq London, 7, Oxford
- Caruana, I D, 1992 Carlisle: excavation of a section of the annexe ditch of the first Flavian fort, 1990, Britannia, 23, 45-109
- Caruana, I D, in preparation The Roman forts at Carlisle: excavations at Annetwell Street 1973-84
- Chenet, G, and Gauldron, G 1955 La céramique sigillée d'Argonne des 2e et 3e siècles, Gallia Supplément, 6, Paris
- Corder, P, and Birley, M, 1937 A pair of fourth-century Romano-British kilns near Crambeck, *Antiq J*, **17**, 392-413
- Croom, AT, McBride, RM, and Bidwell, PT, 2008 The coarse wares, in HE M Cool and D J P Mason (eds), Roman Piercebridge. Excavations by D W Harding and Peter Scott 1969-1981, Architect Archaeol Soc Durham Northumberland Res Rep, 7, Durham, 208-30
- Curle, J, 1911 A Roman frontier and its people. The fort of Newstead in the Parish of Melrose, Glasgow
- Dannel, G B, 1971 The samian pottery, in B W Cunliffe, Excavations at Fishbourne 1961-1969. Vol 2: the finds, Rep Res Comm Soc Antiq London, 27, Leeds, 260-316
- Dannel, G B, and Hartley, B R, 1974 The samian pottery, in C J Ainsworth and B A Ratcliffe-Densham, Spectroscopy and a Roman cremation from Sompting, Sussex, Britannia, 5, 312-5
- Déchelette, J, 1904 Les vases céramiques ornès de la Gaule romaine, Paris Dickinson, BM, 1984 The samian ware, in SSFrere, Verulamium excavations Vol 3, Oxford Univ Comm for Archaeol Monog, 1, Oxford, 175-97
- Dickinson, B M, 1990 The samian ware, in McCarthy 1990, 213-36
- Dickinson, B M, 1991 The samian ware, in Taylor 1991, 344-65
- Dickinson, B M, 1992 Samian ware, in Caruana 1992, 51-8
- Dickinson, B M, in preparation Samian pottery, in Caruana in preparation
- Dickinson, B M, and Hartley, K F, 1970 The evidence of potters' stamps on samian ware and mortaria for the trading connections of Roman York, in R M Butler (ed), Soldier and civilian in Roman Yorkshire, Leicester, 127-42
- Dore, JN, 1981 Flavian coarse pottery in north Britain, Scot Archaeol Forum, 11,62-9
- Durand-Lefebvre, M, 1963 Marques de potiers gall-romains trouvées à Paris, Paris
- Elsdon, S M, 1982 Parisian ware. A study of stamped wares of the Roman period in Lincolnshire, Humberside and South Yorkshire, VORDA Res Ser, 4, Highworth
- Evans, J, 1989 Crambeck: the development of a major northern pottery industry, in P R Wilson (ed), Crambeck Roman pottery industry, Leeds, 43-90
- Fiches, J-L, and Genty, P-Y, 1980 La céramique sigillée de Ruscino: estampilles et formes estampillèes, Revue Archéol Narbonnaise Supplément, 7. Narbonne

- Fölzeer, E, 1913 Die Bilderschüsseln der ostgallischen Sigillata-Manufakturen. Römische Keramik in Trier, Bonn
- $Forrer, R, 1911 {\it Die\, r\"{o}mischen\, Terrasigillata-T\"{o}pfereien\, von\, Heiligenberg-Dinsheim}$ und Ittenweiler im Elsass, Stuttgart
- Gillam, JP, 1970 Types of Roman coarse pottery vessels in northern Britain, 3rd edn, Newcastle upon Tyne
- Gillam, J P, 1976 Coarse fumed ware in northern Britain, Glasgow Archseol J, 4.57-80
- Gillam, J P, and Mann, J C, 1970 The northern British frontier from Antoninus Pius to Caracalla, Archaeol Aeliana, 4 ser, 48, 1-44
- Greene, KT, 1978 Imported fine wares to Britain to AD 250, in Arthur and Marsh 1978, 15-30
- Grimes, W F, 1930 Holt, Denbigshire: The works depot of the Twentieth Legion at Castle Lyons, Y Cymmrodor, 41, London
- Hartley, B R, 1960-1 The samian ware, in K A Steer, Excavations at Mumrills Roman fort 1958-60, Proc Soc Antiq Scot, 94, 100-10
- Hartley, BR, 1970 The dating evidence for the end of the Saalburn Erdkastell, in H Schönberger, Die Namenstempel auf glatter Sigillata aus dem Erdkastell der Saalburg, Saalburg Jahrbuch, 27, 28-30
- Hartley, BR, 1972 The samian ware, in SS Frere, Verulamium excavations Vol 1, Rep Res Comm Soc Antiq London, 28, London, 216-62
- Hartley, BR, 1985 The samian pottery, in LF Pitts and JK St Joseph, Inchtuthil, the Roman legionary fortress. Excavations 1952-65, Britannia Monog Ser, 6, London, 314-22
- Hartley, BR, and Dickinson, BM, 1990 Samian ware, in JR Perrin, Roman pottery from the colonia 2: General Accident and Rougier Street, Archaeol of York, 16/4, London, 264, 275-303
- Hartley, K F, 1977 Two major potteries producing mortaria in the first century AD, in J N Dore and K Greene (eds), Roman pottery studies in Britain and beyond, BAR Int Ser, 30, Oxford, 5-18
- Hartley, K F, 1990 The mortaria, in McCarthy 1990, 237-63
- Hartley, K F, 1991 The catalogue of mortaria stamps, in Taylor 1991, 365-7
- Hartley, KF forthcoming The mortaria, in M Johnson, A Croom, K Hartley, and R McBride, Two Flavian to early Antonine Romano-British pottery kilns at 7a Fisher Street, Carlisle, J Roman Pottery Stud
- Hartley, K F, and Hird, M L, in preparation, Mortarium stamps, in Caruana in preparation
- Hassall, MWC, and Tomlin, RSO, 1986 Roman Britain in 1985; II. Inscriptions, Britannia, 17, 428-54
- Haverfield, F, 1915 Conspectus of potters' stamps on plain samian ware found 1906-1914, Archaeol Aeliana, 3 ser, 12, 273-86
- Hermet, F, 1934 La Graufeenque (Condatomago), Paris
- Heukemes, B, 1964 Römische Keramik aus Heidelberg, Materialien zur römishgermanisch Keramik, 9, Bonn
- Hird, ML, 1992 Coarse pottery, in Caruana 1992, 58-65
- Hird, M L, 1997 The coarse pottery, in T Wilmott, Birdoswald: excavations of a Roman fort on Hadrian's Wall and its successor settlements, 1987-92, English Heritage Archaeol Rep, 14, London, 233-54
- Hird, M L, in preparation a The coarse pottery, in Caruana in preparation
- Hird, M L, in preparation b Roman pottery from excavations at Walton-le-Dale, Lancashire
- Hird, ML, in preparation c The coarse pottery, in H Quartermaine, CLE Howard-Davis, and A Olivier, in preparation, Papcastle, the vicus excavations
- Hird, M L in prep d The coarse pottery, in J Zant and C L EHoward-Davis in preparation, Roman and medieval Carlisle: the northern Lanes, excavations 1978-82. Vol 1, the Roman period
- Hird, ML, and Howard-Davis, CLE, 2000 Coarsewares, in K Buxton and CLE Howard-Davis, Bremetenacum. Excavations at Roman Ribchester 1980, 1989-1990, Lancaster Imprints, 9, Lancaster, 155-202
- Holbrook, N, and Bidwell, PT, 1991 Roman finds from Exeter, Exeter Archaeol Rep. 4. Exeter
- Howe, M D, Perrin, J R, and Mackreth, D F, 1980 Roman pottery from the Nene Valley: a guide, Peterborough City Mus Occ Pap, 2, Peterborough
- Huld-Zetsche, I 1972 Trierer Reliefsigillata: Werkstatt I, Materialien zur römishgermanischen Keramik, 9, Bonn
- Hull, MR, 1958 Roman Colchester, Rep Res Comm Soc Antiq London, 20, Oxford
- Jacobs, J 1913 Sigillatafunde aus einem römischen Keller zu Bregenz, Jahrbuch für Altertunskunde, 6, Vienna, 172-84
- Jope, EM, and Hodges, HWM, 1955 The medieval pottery from Castle Street, in R Hogg, Excavations in Carlisle, 1953, Trans Cumberland Westmorland Antiq Archaeol Soc, 2 ser, 55, 78-107

- Karnitsch, P, 1959 Die Reliefsigillata von Ovilava, Linz
- Knorr, R, 1907 Die verzierten Terra-Sigillata-Gefässe von Rottweil, Stuttgart
- Knorr, R, 1909 Ein Cannstatter Sigillata-Gefäss des Töpfers Sabinus und eine Rottweiler Schüssel des Sasmonos, Fundberichte aus Schwaben, 17, 26-30
- Knorr, R, 1910 Die verzierter Terra-Sigillata-Gefäss von Rottenburg-Sumelocenna, Stuttgart
- Knorr, R, 1912 Südgallische Terra-Sigillata-Gefäss von Rottweil, Stuttgart
- Knorr, R, 1919 Töpfer und Fabriken veerzierter Terra-Sigillata des ersten Jahrhunderts, Stuttgart
- Knorr, R, 1921 Cannstatt zur Römerzeit, 1, Stuttgart
- Knorr, R, 1952 Tera-Sigillate-Gefäss des ersten Jahrhunderts mit Töpfernamen, Stuttgart
- Laubenheimer, F, 1979 La collection de céramiques sigillées gallo-romaines estampillées du Musée de Rabat, *Antiquités Africaines*, **13**, 99-225
- Ludowici, W, 1927 Katalog V. Stempel, Namen und Bilder römischen Töpfer aus meinen Ausgrabungen in Rheinzabern 1901-1914, Speyer
- Marsh, G, 1978 Early second century fine wares in the London area, in Arthur and March 1978, 119-223
- May, T, 1916 The pottery found at Silchester, Reading
- Miller, S N, 1922 The Roman fort at Balmuildy, Glasgow
- Morren, CGA, 1958 Terra sigillata van de Romeinse Nederzetting bij Zwammerdam, Berichten van de Rijksdienst voor het Oudheidkundig Bodemonderzoek, 8, 54-75
- McCarthy, M R, 1990 A Roman Anglian and medieval site at Blackfriars Street, Carlisle: excavations 1977-9, Cumberland WestmorlandAntiqArchaeol Soc Res Ser, 4, Kendal
- McCarthy, MR, 2000 Roman and medieval Carlisle: the southern Lanes, excavations 1981-2, Univ Bradford Res Rep, 1, Carlisle
- McCarthy, MR, in preparation Medieval pottery, in Caruana in preparation
- McCarthy, M R, and Brooks, C M, 1992 The establishment of a pottery sequence in Cumbria, England, in D Gaimster and M Redknap (eds), Everyday and exotic pottery from Europe c 650-1900: studies in honour of John G Hurst, Oxford, 21-37
- McCarthy, M R, and Taylor, J, 1990 Pottery of the Anglo-Saxon to post-medieval periods, in McCarthy 1990, 301-11
- Oelmann, F, 1914 Die Keramik des Kastells Niederbieber, Frankfurt
- Oswald, F, 1936-7 Index of Figure-Types on Terra Sigillata ('Samian Ware'), Liverpool
- Oswald, F, 1945 Decorated ware from Lavoye, J Roman Stud, 25, 49-57
- Peacock, D P S (ed), 1977a Pottery and early commerce: characterization and trade in Roman and later ceramics, London
- Peacock, D P S, 1977b Pompeian Red ware, in Peacock 1977a, 147-62
- Peacock, D P S, and Williams, D, 1986 Amphorae and the Roman economy. an introductory guide. London and New York
- Ricken, H, 1934 Die Bildershüsseln der Kastelle Saalburg und Zugmantel, *Saalburg Jahrbuch*, **8**, 130-82

- Ricken, H, 1948 Die Bidlershüsseln der römischen Töpfer von Rheinzabern, Tafelband, Speyer
- Ricken, H, and Fischer, C, 1963 Die Bidlershüsseln der römischen Töpfer von Rheinzabern, Textband, Bonn
- Rigby, V, 1973 Potters' stamps on Terra Nigra and Terra Rubra found in Britain, in AP Detsicas (ed), *Current research in Romano-British coarse pottery*, CBA Res Rep, **10**, London, 7-24
- Ritterlin, E, 1913 Das frührömische Lager bei Hofheim im Taunus, Annalen des Vereins für nassauische Altertumskunde und Geschichtsforschung, 40, Wiesbaden
- Rogers, G B, 1974 Poteries sigillées de la Gaule Centrale, I: les motifs non figurés, Gallia Supplément, 28, Paris
- Schaetzen, P de, and Vanderhoeven, M, 1964 De Terra Sigillata te Tongeren, 2, Tongeren
- Simon, H-G, 1978 Terra sigillata, in H Schönberger, Kastell Oberstimm. Die Grabungen von 1968 bis 1971, *Limesforschungen*, 19, 227-58
- Simpson, G, 1982 The samian pottery, in W J Wedlake, *The excavation of the shrine of Apollo at Nettleton, Wiltsshire, 1956-71*, Rep Res Comm Soc Antiq London, **40**, London, 154-76
- Simpson, G, and Rogers, G, 1969 Cinnamus de Lezoux et quelques potiers contemporains, *Gallia*, **27**, 3-14
- Stanfield, J A, and Simpson, G, 1958 $\it Central~Gaulish~potters$, London
- Stanfield, J A, and Simpson, G, 1990 Les potiers de la Gaule Centrale, Revue Archéol Sites, Hors-série, 37, Gonfaron
- Taylor, J, 1990 The pottery, in McCarthy 1990, 197-311
- Taylor, J, 1991 The Roman pottery from Castle Street, Carlisle: excavations 1981-2, in M R McCarthy (ed), *Excavations at Castle Street, Carlisle, 1981-2*, Cumberland Westmorland Antiq Archaeol Soc Res Ser, **5**, Fasc **4**, Kendal
- Terrisse, J-R, 1968 Les céramiques sigillées gallo-romaines des Martresde-Veyre (Puy-de-Dôme), Gallia Supplément, 19, Paris
- Vanderhoeven, M, 1975 De Terra Sigillata te Tongeren, Tongeren
- Walke, N, 1964 Liste der Stempel auf Terra Sigillata, in J Werner (ed), Studien zu Abodiacum-Epfach, 14, Munich
- Walke, N, 1965 Das römische Donaukastell Straubing-Sorvidurum, Limesforschungen, 3, Berlin
- Wallace, C, and Webster, P V, 1989 Jugs and lids in Black burnished ware, J Roman Pottery Stud, 2, 88-91
- Webster, P V, 1976 Severn Valley ware: a preliminary study, *Trans Bristol Gloucestershire Archaeol Soc*, **94**, 18-46
- Wild, F, 1988 The samian ware, in B J N Edwards and P V Webster, Ribchester excavations, 3, Cardiff, 9-50
- Williams, D F, 1977 The Romano-British black-burnished industry: en essay on characterization by heavy mineral analysis, in Peacock 1977a, 163-220
- Young, C J, 1980 Guidelines for the processing and publication of Roman pottery from excavations, DOE Occas Pap, 4, London



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