

# APPENDIX 2

## THE COARSE POTTERY

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### Methodology

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In total, the northern Lanes produced 46,751 sherds of Roman pottery, of which 30,770 are coarse/finewares, 6455 are from amphorae, 1666 from mortaria, and 7860 from samian vessels. In all, 57% of these (26,888 fragments) were from phased Roman contexts. Together, the stratified material (excluding samian; *Appendix 1*) weighed approximately 1079 kg.

The stratified pottery was recorded by context, and originally a detailed computer database was created using DBASE III+. When the post-excavation programme was restarted, an outline database using Access was created to confirm quantifications and facilitate recalculation after limited rephasing. The pottery was quantified in conventional fashion, by weight in grams and by sherd count, and the fabrics, forms, rim diameters, and percentages were recorded. In addition, evidence for decoration, repair, sooting, and residues were all noted (in the site archive). The format broadly follows that of the southern Lanes (Hird and Brooks 2010), to facilitate comparisons between what are essentially two elements of the same site.

The fabrics are listed, with brief discussion of pertinent points. A generally accepted date range is given for each fabric, this being the range for its occurrence in the north of England, but it must be noted that analysis of assemblages from more recent excavations in Carlisle and elsewhere has led to some revision of the original dating for some fabrics. Where fabrics have common names, these have been included, together with the Carlisle fabric number, and, where available, the National Fabric Archive code (Tomber and Dore 1998), the series having not been compiled when the analysis was originally undertaken. It should be noted that the fabric numbers are not those given in Taylor (1991, 337-42), as more recent work on the Carlisle fabric series has prompted some renumbering. They are, however, the same as those used in the southern Lanes Roman pottery report (Hird and Brooks 2010). Coarse- and fineware fabrics are numbered from 1, amphora fabrics

from 200, and mortarium fabrics from 300. With a few notable exceptions, for example Black-burnished ware category 1 (Fabric 1), all the coarsewares are wheel-thrown unless otherwise stated.

The largest coarse/fineware sherds came from the well groups, for example Period 11D well 226 (*Ch 4; p 119*), and from the fills (677.01-677.08) of Period 11D-12 well 678 (*Ch 4, pp 113-14*). Relatively large sherds also came from those periods where a substantial amount of the pottery was recovered from relatively well-sealed pit groups, for example those of Period 7-8A, which produced large amphora sherds.

The date range of the pottery extends from the late first/early second century AD (Periods 1-5) to the late fourth century (Periods 11E, 12, and 11D-12), with the great bulk of it dating to the early/mid-second century (Periods 4-8B). There was a large quantity of second-century pottery, but, because Carlisle's second-century material has already been recorded in some detail in assemblages from the southern Lanes (Hird and Brooks 2010), Blackfriar's Street (Taylor 1990), Castle Street (Taylor 1991), and Annetwell Street (Hird in prep), the main emphasis for this analysis centres on the third- and fourth-century groups (see also Swan *et al* 2009, for pottery from the fort). Only a few particularly interesting or important second-century vessels are illustrated in the catalogue, and thus the illustrated material should not be seen as typical of the pottery assemblage as a whole.

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### The Problems of Intrusive and Residual Pottery

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No pottery assemblage is without elements which might be thought contradictory to the main body of dating, being either intrusive (more recent than the deposit) or residual (earlier than the deposit). The latter is by far the more common occurrence, with such chronological confusion being largely the result of intensive disturbance and reworking of deposits, especially on long-lived urban sites like the Lanes. Intrusive pottery proved a considerably greater

problem on the northern Lanes than it had been on for the southern Lanes, partly as a result of the excavation strategy adopted, but the intrusive element is usually clearly discernible, being mainly medieval and later, and thus not of particular significance to an understanding of the stratigraphic succession. It is at its most problematic in the later parts of Period 11, and Period 12, when small amounts of later fourth-century pottery appear in only slightly earlier contexts. There is also later material (medieval and post-medieval) appearing in clearly much earlier contexts, and where this happens in phased Roman contexts it is noted in the period-based discussion (the material will be discussed in Zant and Howard-Davis in prep).

Residuality posed a considerably more significant problem, especially because the dated ceramic assemblages played a large part in the refinement of an overall site chronology. From the earliest days of Roman activity, there is a perceptible element of residuality, and many of the later Roman contexts show very high levels, indicated by the frequent association of well-dated early pottery types with obviously later material, as well as by the dispersal of sherds from individual vessels through several different site periods, reflecting large-scale and continued disturbance and churning of deposits. In addition, it is highly likely that the repeated dumping of rubbish from elsewhere (possibly including middens associated with the fort; *Ch 5*) means that much of the pottery reaching the site was already long out of use, and thus technically residual, when it first arrived.

The judgement of residuality and intrusiveness must always be, in part, based on experience and subjective reaction, but there are some features of a pottery assemblage that can aid in the matter. The extent and nature of abrasion can give some indication of the extent of disturbance, although this is difficult to quantify. Sherd sizes, or more specifically average sherd weights, may give a guide to the degree of residuality, again testifying to the amount of soil movement and disturbance. It must be borne in mind, however, that this depends on the comparison of like with like, as finewares, being generally thinner-walled and often rather more brittle, tend to be more fragmentary. Similarly, amphora sherds, often much larger and heavier than those of coarseware jars and dishes, are omitted from the calculations.

The high level of residuality is again far more obvious in material from the northern Lanes than it was in that from the southern Lanes (Hird and Brooks 2010). To an extent, it might be suggested that this is an artefact of deposition, as, within the southern Lanes, with the notable exception of two sites (LEL A and OGL A West), there was very little third- or fourth-century occupation. Care must be taken, however, as there are

instances in the northern Lanes where a few sherds of fourth-century pottery can be regarded as intrusive in a period which may equally have only a few sherds of third-century pottery, and yet the third-century sherds are assumed to date it.

The overwhelming bulk of the pottery recovered can be dated to the second century, with early- to mid-second-century vessels from Periods 4-8B. Periods 9-10B are dated to the later second century, and Periods 10C-11C are of late second- to mid-third-century date. Periods 11A and 11B together produced less than 1% (by sherd count) of the coarsewares securely dated to the third century, and Period 11C has about 1% of the third-century pot, as does Period 11D (if the group from the fills (232) of well 226 (*Ch 4*, p 120) is excluded). Mid-late fourth-century pottery does not appear in any significant amount until Periods 11D-12 and 12, by which time it comprises c 14% of the assemblage at most.

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## The Stratigraphic Sequence

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### Periods 1-5 (pre-Roman and early Roman activity)

The earliest periods in the development of the site produced very little pottery (*Ch 2*). Most came from contexts which could only be broadly allocated to Periods 1-5, which together produced 23 sherds, of which 21 are from a single greyware (Fabric 11) jar of late first/early second-century date from pit 559 (fill 546; *Ch 2*, p 48), in the eastern part of the site. A reeded-rim bowl of the same date (Gillam (1970) form 215, in Fabric 12) came from pit 1097 (fill 1096), in the eastern part of the site. The latest samian vessel in the group is a Central Gaulish form Dr 30 from Les Martres-de-Veyre, also from pit 559, and dating to the Trajanic period (*Appendix 1*, p 265).

Unsurprisingly, deposits allocated specifically to Period 1, interpreted as pre-Roman agricultural activity, produced no pottery. Only four sherds of coarseware, all of Black-burnished ware 1 (Fabric 1) were recovered from three layers associated with Period 2 (old ground surfaces 1192 and 1209.02 in the central part of the site, and layer 1346; *Ch 2*, p 40). All date to the Hadrianic period at the earliest, with the latest samian being a Central Gaulish form Dr 31 of Hadrianic or early Antonine date.

By Period 3, pottery was appearing in small amounts, especially in ditch 461 (*Ch 2*, p 23), and included a fragment of western Mediterranean amphora (possibly Peacock and Williams (1986) Class 10, dating to the later first to mid-second century, from fill 430). The beginning of Period 4 (Period 4A) was marked by the construction of several buildings, including Building 1560, a possible

*mansio* (Ch 6). Surface 1377, associated with this building, produced 12 coarseware sherds, including two of Black-burnished ware 1 (Fabric 1), one of which was from a flat-rim bowl/dish of second-century date; the remainder were all from a single greyware jar (Fabric 11). The latest samian is a South Gaulish form Dr 37 bowl of Flavian or Flavian-Trajanic date.

Contexts associated with Period 4B, all from the north-western part of the site (KLA F and LAL D), produced a total of 46 sherds of coarseware, four of amphora, and one of mortarium. Ten of the coarseware sherds were from a single flagon, found in burnt deposit 1086 (Ch 2, p 41), and 13 came from burnt clay 1235, which included the latest pottery seen in the period, a Black-burnished ware 1 bowl (Fabric 1) of Gillam (1976) form 34, dated to the early/mid-second century, and a lid (Gillam (1970) form 339) of c AD 80-140. A dish of Gillam (1970) form 337 (Fabric 68), dating to the first century, came from the same context but is clearly residual. The amphorae included South Spanish and ?Gaulish vessels (Fabrics 207 and 217). A mortarium sherd from soil 1166 is a local product (Fabric 305), possibly from the Old Penrith area (Austen 1991, fig 75, 512), and can be dated to c AD 90-130. The latest samian is from 1235, with Central Gaulish vessels of form Curle 11 (1911) and form Dr 18/31 or 31, being of Hadrianic or early Antonine date.

Period 4C contexts, all from the north-west quadrant (LAL D), produced 34 sherds of coarseware. Greyware vessels (Fabric 11) include a wide-mouthed jar/bowl from soil 1335, and a jar with wavy-line decoration from pit 1501 (fill 1357), both of which joined sherds from Period 6 pit 1281 (fill 1255). The latest vessels are a Black-burnished ware 1 (Fabric 1) cooking pot and flat-rim bowl/dish from layer 1342 (Ch 2, p 41) and pit 1501 (fill 1357), both dating to the early/mid-second century. The latest samian is a South Gaulish form Dr 37, dating to AD 80-110, from fill 1494 in the same pit.

Pottery deposition continued to increase, albeit slowly, during Period 5. Contexts associated with Period 5A produced six sherds of coarseware and nine of amphora. A fragment of greyware (Fabric 11) from slot 1270 (fill 1269), part of Building 1993 (Ch 2, p 43), joins with others from Period 4C, demonstrating its residuality, and there is a greyware jar of probable late first/early second-century date from ditch 237 (fill 224; KLA B, in the eastern part of the site). The amphora fragments from fill 1269, all of which are abraded and burnt, and thus likely to originate in the preceding period, are from a South Spanish vessel (Peacock and Williams (1986) Class 25; Fabric 207). There was no samian from this period.

Only the central part of the site (KLA C) produced pottery spanning Periods 5A-B, with a total of 29 sherds of coarseware and seven of amphora. Eighteen of the coarseware sherds came from pit 1270 (fills

1269.01 to 1269.03). The latest vessels, from 1269.03, included a Black-burnished ware 1 dish (Gillam (1976), type 54) dated to the early/mid-second century, and a greyware bowl, which is almost certainly a local product. A fragment of Hadrianic or early Antonine samian was recovered from layer 1271.

A further 28 coarseware sherds came from contexts associated with Period 5B. A reeded-rim bowl in Fabric 13, Gillam (1970) 215, of late first- or early second-century date, came from slot 1251 (fill 1250), and a flagon of Gillam (1970) form 3 in Fabric 12 (dated to AD 80-120), along with sherds of late first/early second-century rusticated ware (Fabric 3), were from gully 73 (fill 69), in the western part of the site. The latest samian is Hadrianic or early Antonine in date, being a Central Gaulish form Dr 37 from trench 56 (fill 55) and a form Dr 18/31 or 31 from gully 39 (fill 38), in the same area (KLA F).

### Periods 6-10 (the early development of the Roman town)

The quantity of pottery shows a considerable increase in Period 6 (Ch 3), possibly as a result of the increased dumping which had facilitated the accumulation of dark soils, with associated contexts producing a total of 443 sherds of coarse/finewares, 13 of amphora, and 12 of mortarium. Many of the vessels date to the late first/early second century and include reeded-rim bowls, in Fabrics 11 and 12, from deposits 1934 and 1935 in the central part of the site (KLA C). Two greyware (Fabric 11) bowls of similar date come from soil 523, to the north (KLA D), which also produced a beaker/jar of Annetwell Street type 164 (Hird in prep) in Fabric 12, for which a late first/early second-century date would be appropriate. A jar in an oxidised fabric (Fabric 13) from soil 413 (LAL C, in the north) is also likely to be of this date. Black-burnished ware (Fabric 1) vessels of early/mid-second-century date include a bead-rim jar (Gillam (1976), type 30) and a rather unusual bowl/dish with an inward-sloping flat rim from soil 523. The amphora in deposit 275 (LAL B; Fabric 206; Peacock and Williams (1986) Class 16) is a first-century South Spanish product, used for transporting fish sauces.

There were, in addition, two stamped mortaria from this period. One, the product of a probably local, but as yet unidentified, potter (Fabric 303) of c AD 125/30-65, came from soil 384, in the north (LAL C), and a Lincoln product (Fabric 339) stamped by Vitalis and dated to AD 90-120 (Fig 113) was from trench 1102 (fill 1094; Ch 3, p 52). Layer 177 to the south-east (KLA B) produced a Black-burnished ware 1 (Fabric 1) cooking pot of late third-century date (Gillam (1976), form 10) and a sherd of Huntcliff ware (Fabric 22) of fourth-century date, as well as medieval sherds, all of which must be seen as intrusive. Except for two sherds from deposit 1249, and the fill (1267) of pit 1268, in the north-western corner of the site, which

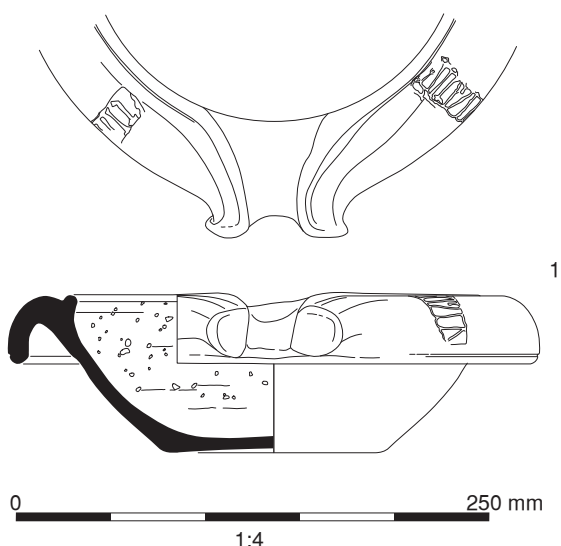


Figure 113: Mortarium from Period 6

are Hadrianic or early Antonine in date, the samian from this period is entirely Trajanic or earlier.

- 1 Fabric 339. Mortarium, stamped on each side of the spout (Fig 113; see also stamp 55). LAL D 1094, Period 6

Period 7 activity seems somewhat nebulous, and questions remain as to the date of origin for several features. It produced a total of 230 sherds of coarseware, 29 of amphora, and seven of mortarium, and it is clear that, even by this relatively early stage, there is a considerable residual element of late first/early second-century pottery in the group. This includes a flat-rim bowl in Fabric 12 from gully 1921 (fill 1858.01; Ch 3, p 55), and a reeded-rim bowl in Fabric 11 from its northern element (526; fill 524), as well as five fragments of a single rusticated jar (Fabric 3) from soils 1190 and 1191, in the north-west corner of the site. A first-century stamped dish (Fabric 68) from layer 1194 (Ch 3, p 65) is undoubtedly residual. A locally produced mortarium (3) in Fabric 301, from gully 1070/1072 (fill 1064; Fig 114), has the distal bead regarded as a Hadrianic feature (K Hartley *pers comm*), and other locally produced examples (Fabrics 301 and 305) came from deposits 1172 and 1191 (Ch 3, p 56).

Early/mid-second-century Black-burnished ware 1 appeared in soils 1190 and 1191, and includes a cooking pot of Gillam (1976) type 1. A dish of Gillam (1976) type 54 was recovered from gully 1325 (fill 1324; Ch 3, p 56). A *tazza* in Fabric 13 came from ?gully 1273 to the south-east (KLA B); see Annetwell Street type 196 (Hird in prep), which appeared there in an early/mid-second-century phase, although the form is dated by Gillam (1970, form 347) to AD 140-200. A reeded-rim bowl of Gillam (1970, form 15, in Fabric 11, dated to AD 80-125, came from ?gully 1195. The latest samian came from gully 1991 (fill 1933) to the west, and is of Hadrianic - early Antonine date.

All the amphorae from this period are from Southern Spain, those in Fabric 202 used for transporting fish sauce, and those in Fabric 207 for olive oil. There are also three sherds in Fabric 200 and three in Fabric 213. The latest samian, Hadrianic or early Antonine in date, is from gully 1030 (fill 982; Ch 3, p 55), and includes a Central Gaulish form Dr 37 of AD 125-50.

- 2 Fabric 68. Greyware dish of Gillam (1970), form 337, stamp of Reditas on inner base. Probably made near Doncaster, and a well-known form in the area of the Humber estuary. These dishes may have accompanied the military advance northwards after AD 70 or later (Rigby 1976, fig 92, 1). See also 190. KLA C 1194, Period 7

- 3 Fabric 301, mortarium (Fig 114). Local product, Hadrianic. KLA A 1064, Period 7

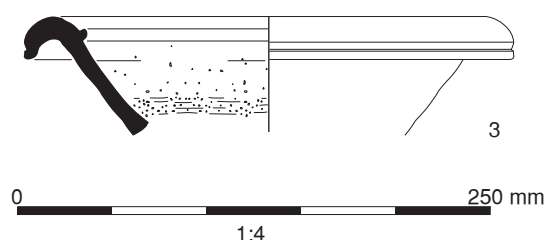


Figure 114: Mortarium from Period 7

A poorly stratified pit group assigned to Period 7-8A could well have been associated with timber Building 1308 (Period 7-9; Ch 3, p 61). The pits produced 163 sherds of coarseware, five of amphora, and one of mortarium. Most (122; 72%), were from the fill (188) of pit 211 (Ch 3, p 61), which also produced a range of organic objects, including leather shoes (*Appendix 11*). The pottery included several Black-burnished ware 1 (Fabric 1) vessels (Fig 115.4-7) of early/mid-second-century date, a flagon (Fig 115.8), a greyware (Fabric 11) jar (Fig 115.9), and a beaker (Fig 115.10). The fill was, however, contaminated by intrusive medieval pottery and modern glass. Another 15 sherds came from pit 396 (fill 358; Ch 3, p 61) and 11 from pit 397 (fill 382; Ch 3, p 61), including a Black-burnished ware 1 (Fabric 1) cooking pot (Gillam (1976), type 1) of the early/mid-second century. The latest samian is of Hadrianic or early Antonine date, and came from layers 340, 354, and pit 396 (fill 358), in the eastern part of the site (KLA B).

In addition, two sherds of coarseware, neither closely datable, were recovered from posthole 29, associated with Building 1308 (Ch 3, p 59), attributed to Period 7-9. The latest samian is a Central Gaulish form Curle 21 (1911), dated to AD 150-200.



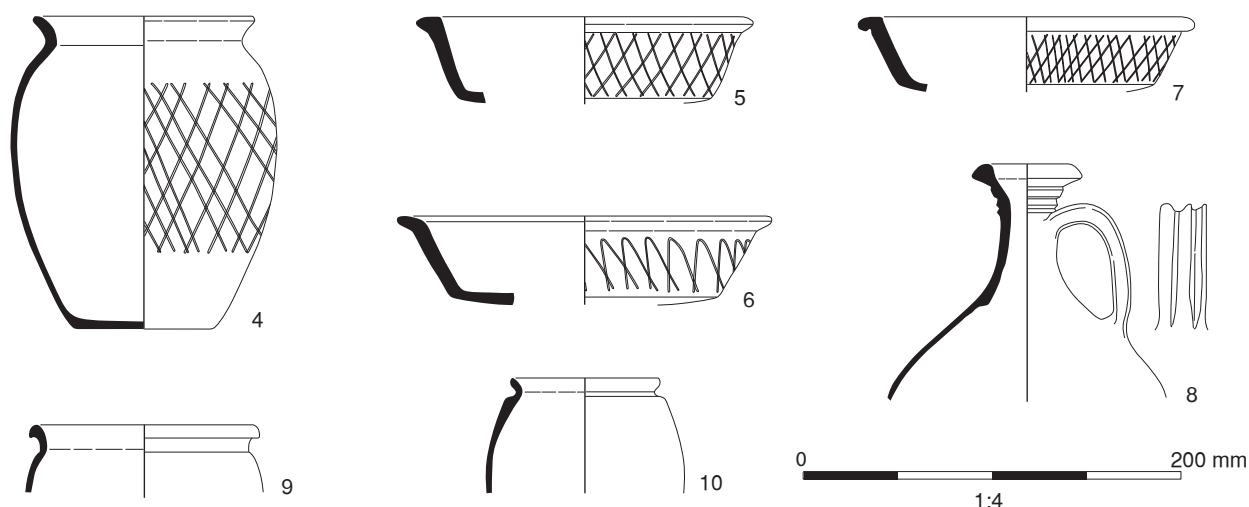


Figure 115: Coarsewares from Period 7-8A

- 4 Black-burnished ware 1, Fabric 1 (Fig 115), cooking pot, heavily sooted. Gillam (1976), 1. Early/mid-second century. KLA B 188.05, Period 7-8A
- 5 Black-burnished ware 1, Fabric 1 (Fig 115), dish. Burnt grey/orange in patches. Gillam (1976), 57. Early/mid-second century. KLA B 188.05, Period 7-8A
- 6 Black-burnished ware 1, Fabric 1 (Fig 115). Dish, sooted, Gillam (1976), 55. Early/mid-second century. KLA B 188.05, Period 7-8A
- 7 Black-burnished ware 1, Fabric 1 (Fig 115). Dish, Gillam (1976), 54. Early/mid-second century. KLA B 188.05, Period 7-8A
- 8 Fabric 4 (Fig 115). Flagon, Gillam (1970), type 4. AD 90-130. KLA B 188.05, Period 7-8A
- 9 Fabric 11 (Fig 115). Jar, sooted. KLA B 188.05, Period 7-8A
- 10 Fabric 11 (Fig 115), beaker. KLA B 188.05, Period 7-8A

Period 8 saw the probable establishment of three individual properties within the western part of the site, all fronting the Roman road beneath modern-day Scotch Street (*Ch 3, pp 61-2*). Contexts assigned to this development in Period 8A, all from the central part of the site (KLA C and KLA D), produced a total of 225 sherds of coarsewares, 49 sherds of amphora, and three of mortarium. The residual element of late first/early second-century pottery includes a flat-rim bowl from

surface KLA D 485 (with a joining sherd from deposit 482 (KLA D)). Drain 1859 (fill 1851) to the south produced a substantial part (46 sherds) of a flagon of Gillam (1970) form 4, dated to *c* AD 80-130, and rustic ware (Fabric 3) of similar date. The 'eggshell'-ware cup/bowl (Fig 116), from posthole 571 (fill 489) in Building 587 (*Ch 3, p 63*), is also likely to be of late first/early second-century date. Early/mid-second-century vessels, likely to be contemporary with activity on the site at this period, include Black-burnished ware 1 (Fabric 1) vessels of Gillam (1976) types 1 and 34 (a cooking pot and a bowl) from gully 1859 (fill 1851).

As in earlier periods, the amphorae are all of Southern Spanish origin (Fabric 207), apart from two sherds of Fabric 202. The two mortaria are local products; a base in Fabric 350 comes from deposit 1218 (*Ch 3, p 65*), and road 1836 (*Ch 3, pp 61-2*) produced a vessel in Fabric 301, which has a distal bead on the flange, considered a Hadrianic feature (K Hartley *pers comm*). The fact that it joins a second sherd from Period 10A layer 1782 in the same area (KLA C) is a good indicator of the degree of disturbance. The latest samian from the period is a Central Gaulish form Dr 27 cup of AD 140-60, stamped by Aunus ii (stamp 15), from gully 1196 (fill 1182), to the north of lane 1163 (*Ch 3, p 62; Appendix 1, p 270*).

- 11 Fabric 25 (Fig 116), 'Eggshell'-ware cup/bowl. Late first/early second century? KLA D 489, Period 8A

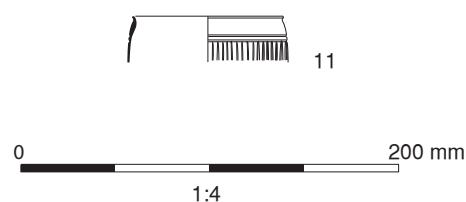


Figure 116: 'Eggshell'-ware cup/bowl from Period 8A

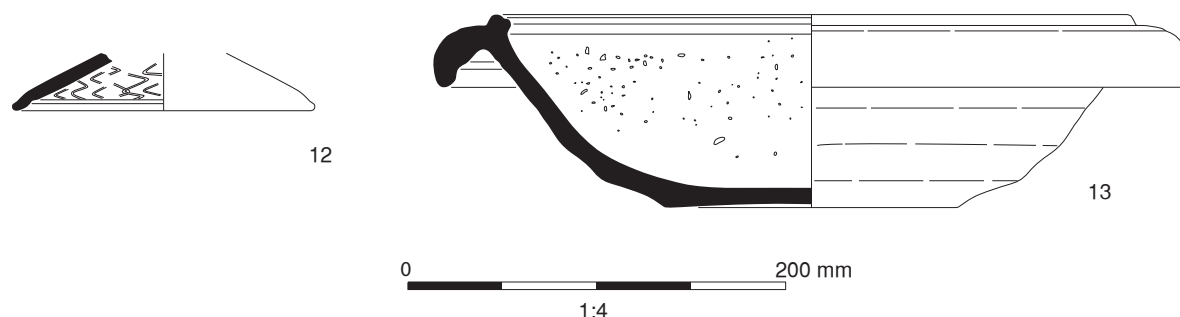


Figure 117: Coarsewares from Period 8B

A large part of the northern Lanes subsequently fell into disuse (Period 8B), although it is clear that one building, **1308** (Period 7-9; *Ch 3, p 56*), remained standing and probably continued in occupation. Period 8B produced a total of 300 sherds of coarseware, 59 of amphora, and six of mortarium. Residual vessels of the late first/early second century included two reeded-rim bowls, in Fabrics 12 and 13, from pit 1069 (fill 1055; *Ch 3, p 66*). Pottery from pit 1287 (fill 1249.01; *Ch 3, p 66*) included part of a reeded-rim bowl in Fabric 12 (which joined a sherd from Period 10A layer 1118, from the same area) and a flat-rim bowl. A two-handled flagon in Fabric 11 from pit 569 (fill 464.01; *Ch 3, p 66*) is also a late first/early second-century type (see Annetwell Street, type 87; Hird in prep).

One very small (5 g) sherd of first-century Lyon ware (Fabric 38), the only fragment from the northern Lanes, came from gully 1187 (fill 1127) in the north-west corner of the site; the southern Lanes (LELA and OGLA) also produced small amounts (Hird and Brooks 2010). Lyon ware is a marker of early activity, appearing on sites founded up to c AD 75 (Young 1980), and presumably the fragments from the Lanes derive directly from the fort, where it was found in small quantities (Swan *et al* 2009, 597). Rough-cast beakers, usually dated to the period c AD 80-130/5, appear in Fabrics 14 and 15 during this period, and were recovered from layers 1817 and 433 (*Ch 3, p 65; p 73*), and 438 (in KLA D).

Early/mid-second-century Black-burnished ware 1 (Fabric 1) vessels include a cooking pot (Gillam 1976, 1) from pit 1287 (fill 1249), and two dishes of Gillam (1976) form 54 were found in pit 1069 (fill 1055; *Ch 3, p 66*) and on surface 1218; the latter joins a sherd from Period 9 surface 1226, in the same eastern part of the site, again illustrating the level of disturbance. Black-burnished ware 1 vessels also include a lid (Fig 117.12, which dates to the later first or second century (see Wallace and Webster 1989, fig 2, 10-11). Lids in Black-burnished ware 1 are relatively uncommon, although they occur sporadically on sites in Northern England, including another example from Period 9 layer 1226, and a few fragments from the southern Lanes (Hird and Brooks 2010, fig 11, 27 and fig 12,

28). There was a curved-sided dish in Fabric 12 from gully 1219 (*Ch 3, p 65*). Originally current in the Flavian period, this form became popular again in the early third century, with the introduction of African-style vessels (Swan *et al* 2009; *p 334*), and because of this, it is hard to date securely, but no other pottery from this period suggests a third-century date.

The mortaria from gully 1219 (Fig 117.13) and deposit 482 (KLA D) are local products in Fabrics 350 and 305, and are of second-century date. A vessel of North Gaulish origin (Fabric 313) dating to the period AD 100-60 (see Taylor 1990, fig 192, 84) came from pit 1186 (fill 1185.07), but also joins a sherd from Period 10A-11B layer 1073, both in the central part of the site. The latest samian, a Central Gaulish form Dr 31, stamped by Doccus (samian stamp 51), dated to AD 155-85, came from layer 438, to the north. South Spanish amphora are present (Fabrics 202 and 207), but there is also a Gaulish vessel (Peacock and Williams (1986) Class 27), in Fabric 200, from layer 438, and a Flavian/early second-century amphora in Fabric 218 (Peacock and Williams (1986) Class 18, used for transporting fish-based products), came from foundation trench 114 (fill 93).

- 12 Black-burnished ware 1, Fabric 1 (Fig 117). Lid, Wallace and Webster (1989), fig 2, 10-11. Later first or second century. KLA C 1135.03, Period 8B
- 13 Fabric 350 (Fig 117), mortarium. Second century. KLA B 815/1219, Period 8B

Apart from the construction of one, or possibly two, clay-floored structures (589, 590; *Ch 3, pp 68-9*) on the central property, little changed during Period 9. Pottery, however, continued to accumulate in relatively large quantities, with a total of 1072 sherds (908 coarsewares, 167 amphora, and 70 mortarium). This substantial number indicates a marked, if somewhat nebulous, increase in activity, which appears to have disturbed many of the earlier deposits, and thereby introduced considerable amounts of intrusive pottery, although there is also a

greater amount of material which dates to the middle years of the second century, and a handful of vessels which date to its later years.

It is of interest that some of the late first/early second-century types only appear for the first time in Period 9. These include a lid in Fabric 12, from pit 1094 (fill 1022, KLA A), a sherd of oxidised rustic ware (Fabric 5) from layer 364 (LAL C), and sherds in the more common grey rustic ware (Fabric 3) from clay layer 1095 (LAL D), all in the northern part of the site. A cooking pot in oxidised ware (Fabric 12) from deposit 1268 (KLA B, to the south) is of similar date; oxidised cooking pots are unusual after the early second century (*pers obs*). Other late first/early second-century types include a two-handled flagon, in Fabric 12 from layer 267 (LAL B) and a flagon (Gillam (1970) form 4) from loam 1104 (LAL D), in the north. A greyware lid (Fabric 11) came from gully 1197 (KLA B), and flagon in Fabric 4 (Gillam (1970) form 4), dated to AD 90-130, came from posthole 187, both in the eastern part of the site.

Rough-cast beakers in Fabric 15 (probably imports) came from surface 1227 (*Ch 3, p 69*), and from soil 1268 in the same area. A rough-cast beaker in Fabric 14, from soil 461 (*Ch 3, p 70*), is almost certainly a locally made imitation, as this vessel is clearly a 'second'. There is another curved-sided dish in Fabric 12 from soil 377 (LAL C; see *p 310* for problems with dating these vessels). A flagon in Fabric 12 (Gillam (1970) form 6), dated to AD 120-200, came from ditch 40 (KLA E, in the south-east of the site), and a Black-burnished ware 1 (Fabric 1) dish of early/mid-second-century date (Gillam 1976, form 55) came from ditch 51, in the same area.

Black-burnished ware 1 (Fabric 1) vessels from this period include cooking pots of Gillam (1976) form 1 from deposits 377 and 378, and form 2 from pit 302 (fill 231; LAL B). A flat-rim bowl (Gillam 1976, form 34) came from deposit 1234 (KLA B), and flat-rim dishes (Gillam 1976, form 54) from soils 364 and 377 (*Ch 3, p 70*), and 1104 (LAL D). Two of the latest vessels from the period are dishes of Gillam (1976) form 70, dating to the mid/late second century, from deposit 1226 (KLA B) and surface 1227 (*Ch 3, p 69*).

A total of 340 sherds (32% of the pottery from this period) came from deposit 461 (*Ch 3, p 70*), and the group is representative of pottery from the entire period. It includes such late first/early second-century vessels as a bowl with rouletted decoration in Fabric 11 (see Castle Street; Taylor 1991, fig 326, 359), a lid in Fabric 12, and a flagon in Fabric 4, Gillam (1970) form 4, dated to c AD 90-130. Black-burnished ware 1 vessels from the same context include a cooking pot, a bowl, and a dish of early/

mid-second-century date, and a later type, Gillam (1976) form 76, of the mid/late second century.

Unusual vessels include a lid in Black-burnished ware 1 (Fig 118.14) from deposit 1226; a flask (Fig 118.15) from surface 1831 (*Ch 3, p 68*); and a 'triple vase' (Fig 118.16), fragments of which came from pit 323 (fill 295.01; *Ch 3, p 78*), with joining fragments from depression 379 (fill 376) and Period 10B foundation trench 351 (*Ch 3, p 81*; both in the north of the site). An unusually elaborately decorated, narrow-necked jar in greyware (Fabric 11) came from deposit 231 (to the south-east; LAL B).

The mortaria from this period include examples of fabrics and forms in use in the late first/early second century, for example, a possible Old Penrith product from the north-west part of the site (LAL D; deposits and ?surface 1104/1132/1172/1191; see Austen 1991 (fig 75, 510) for the type, dated there to AD 90-130). Sherds of Lincoln origin came from layers 1104 and 1108. Three stamped mortaria came from layer 461 (stamps 31-33; *pp 375-6*); two are stamped by local potter Doce(i)lis, dated to AD 130-60, and the other is by a local, semi-literate potter, dated to AD 110-40. Other mortaria from this context include a residual first-century vessel originating in the Verulamium region (Fabric 320) and one of local manufacture, which joins a sherd from deposit 458 (KLAD; not closely phased). A second-century 'raetian' mortarium of local manufacture (Fig 118.17) was recovered from layer 895, with joining sherds residual in Period 10B 894 (both KLA A). Mortaria from other features include a Gallo-Belgic vessel (Fabric 313), sherds of which came from surfaces 1227/1235/1248 (*Ch 3, pp 35, 65, 69*). An example from Blackfriar's Street was dated to c AD 100-60 (Taylor 1990, fig 192, 84).

As well as the South Spanish fabrics (Fabrics 202, 207, and 208), there were other amphora fabrics present, including South Spanish Fabric 215, from Cadiz, found in layer 461. There are also sherds of Gaulish wine vessels (Fabrics 200 and 217) from layer 1136 in the north-west of the site. The latest samian is an East Gaulish form Dr 33 from Trier, dated to the late second or early third century, which came from pit 305 (fill 248), to the east.

- 14 Black-burnished ware 1, Fabric 1 (Fig 118). Lid, Wallace and Webster (1989), fig 2, 11. Late first/second century.  
KLA B 1226, Period 9
- 15 Fabric 11 (Fig 118). Triple vase, represented by three non-joining sherds. Similar to Gillam (1970), forms 343-344, with a date range of AD 80-150.  
LALC 295.01/351/376, Period 9, and residually in Period 10A and 10B contexts

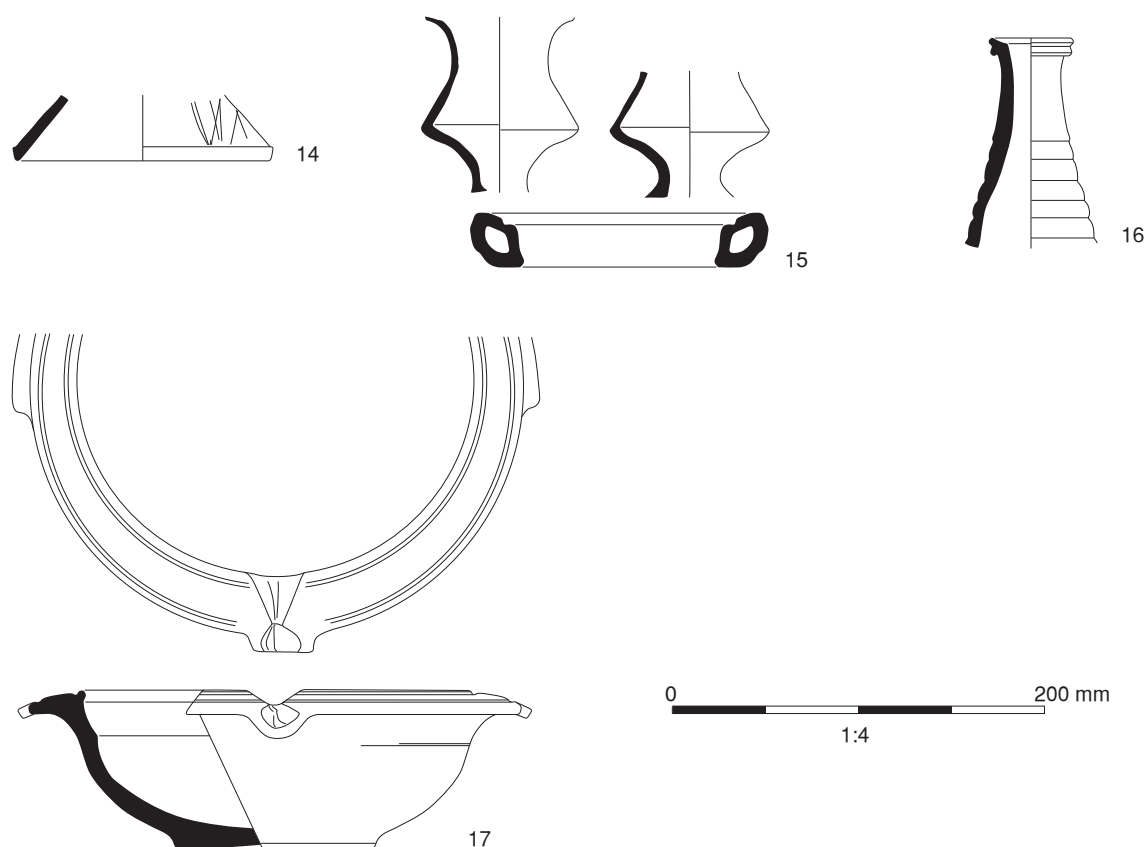


Figure 118: Coarsewares from Period 9

- 16 Fabric 12 (Fig 118), flask. This vessel is not exactly paralleled in Gillam (1970), but is reminiscent of forms 36-39, dated to *c* AD 80-220. KLA C 1831, Period 9
- 17 Fabric 301 (Fig 118). 'Raetian' mortarium of local manufacture, with wire-cut spout and lug handles. The trituration grit is completely worn away. See Gillam (1970), type 268, for similar vessel. Second half of second century. KLA A 894/895, Period 9, and residually in Period 10B

By Period 10, the division of the site into three properties had become well-established (*Ch* 3). In Period 10A, a large strip building (591; *Ch* 3, p 71) and several ancillary buildings (for example, 1998; *Ch* 3, p 74) were erected on the central property, and a stratigraphically isolated well (1016, assigned to 'before' Period 10C; *Ch* 3, p 75) may well have been associated with this complex. The properties to the north and south, however, remained largely unoccupied.

Period 10A produced a total of 957 sherds of coarseware, 210 of amphora, and 28 of mortarium. This relatively large amount could be taken to suggest considerable activity during the period, but the nature of the sherds, especially their small size and degree of

abrasion, suggest that it was largely generated by the disturbance and trampling of earlier accumulations of rubbish.

Late first/early second-century pottery included a number of lids in Fabrics 11 and 12 (see, for example, those from surfaces 129, 1130, and 1179; KLA B). There was also a reeded-rim bowl in Fabric 12, from slot 1003 (fill 1000.2), and a mortarium of Gallo-Belgic origin (Fabric 313; see Taylor 1990, fig 192, 84), dated to *c* AD 100-60, came from the same fill, in the north-east of the site. Single sherds of a first-century Verulamium region mortarium (Fabric 320, dated to *c* AD 60-100) came from surface 1114, to the south, and a Lincoln vessel (Fabric 339) from posthole 1890 (fill 1837; KLA C).

Many of the early/mid-second century Black-burnished ware 1 vessels (Fabric 1), already familiar from earlier periods, are still well-represented, including a cooking pot (Gillam 1976, form 1) from layer 232 (*Ch* 3, p 78), and dishes of Gillam (1976) form 54 from, for example, deposit 1196 (KLA B), surface 239 (LAL B), and deposit 274 (*Ch* 3, p 78). Only a few vessels can be dated to the second century with certainty. A Black-burnished ware 2 bowl (Fabric 2; Fig 119.19), from layer 232 (joins a sherd from Period 10B layer 228 (LAL B)), dates to *c* AD 150-210, and is the earliest occurrence of Black-burnished ware 2 at the northern Lanes. It appeared first in the southern Lanes (OGL A



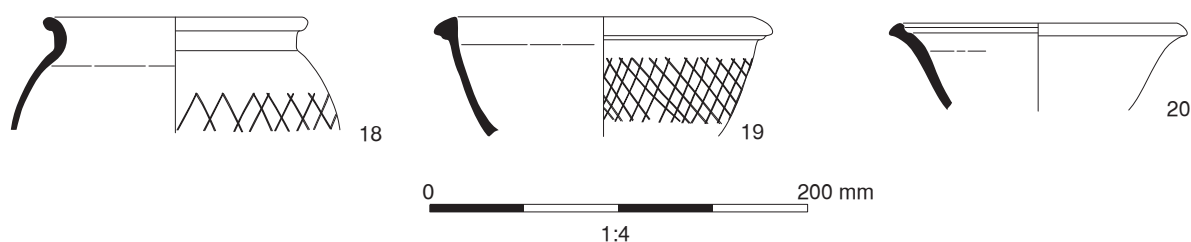


Figure 119: Coarsewares from Period 10A

period 8-9, OGL B period 6, and LEL A period 11; Hird and Brooks 2010). A mid/late second-century Black-burnished ware 1 (Fabric 1) dish (Gillam 1976, form 76) came from surface 116 (KLA B), and a rather more unusual vessel, a cooking pot in South Western Black-burnished ware 1 (Fig 119.18), was recovered from pit 323 (fill 290.01; Ch 3, p 78).

An unusual, almost certainly locally produced, bowl with a streaky red slip (Fabric 52) came from layer 232 (Fig 119.20). By association with locally made 'raetian' mortaria, it is likely to date to the second half of the second century, and was almost certainly made in the same factories. There is also a *tazza* in Fabric 12 from surface 1130, in the east of the site; similar to Gillam (1970), form 347, it can be dated to AD 140-200.

The other mortaria are all local products in Fabrics 301, 302, 350, and 352. They include a vessel stamped by Doce(i)lis, whose *floruit* was AD 130-60 (mortarium stamp 9; p 371), from gully 1184 (KLA B), and a vessel stamped by Malvd, Matvd, or Maevd, dated to AD 100-40 (stamp 8; pp 370-1) from surface 1130. The latest samian is a Central Gaulish form Dr 37 of early to mid-Antonine date from wall construction trench 272 (fill 268.2), part of Building 591 (Ch 3, p 71).

- 18 Black-burnished ware 1, Fabric 1 (Fig 119). Cooking pot in the South Western fabric, with characteristic black slip visible on the inner surface of the rim. Holbrook and Bidwell (1991) type 20. Early/mid-second century. LAL C 290.01, Period 10A
- 19 Black-burnished ware 2, Fabric 2 (Fig 119). Bowl with rather unusual double-bead rim. Gillam (1970), form 222. AD 150-210. LAL B 228/232, Period 10A and residually in Period 10B
- 20 Fabric 52 (Fig 119), bowl. The streaky red slip suggests that this bowl could have been made in Carlisle, in a factory producing 'raetian' mortaria (Swan *et al* 2009). Bowls with red-slipped decoration were also produced at Wilderspool (Hartley 1981a). Probably second half of second century. LAL B 232, Period 10A

Period 10B was characterised by slight alterations to the existing buildings and the addition of a single new structure, Building 1309, on the central plot (Ch 3, p 80). This period produced a total of 1471 coarseware, 300 amphora, and 56 mortarium sherds, the vast majority of which must, again, be considered residual, with late first/early second-century forms and fabrics present in many contexts, for example deposit 13, in the east of the site (KLA B), which also contained a seemingly intrusive sherd of fourth-century Huntcliff ware (Fabric 22).

As well as the early/mid-second-century Black-burnished ware 1 types, such as Gillam (1976) forms 1, 30, 34, 54, 55, and 61, from many contexts (eg Fig 120.21), there are Black-burnished ware 1 (Fabric 1) types typical of the second half of the second century, including Gillam (1976) type 4 from gully 1111 (fill 1068; KLA B), Gillam (1976) type 76 from surfaces 181 and 300 (LAL C), and Gillam (1976) type 70 from soil 991, in the east of the site. An unusual flanged dish (Fig 120.22) in Black-burnished ware 1 (Fabric 1) came from surface 1145 in the same area. It could be of third-century date (having intersecting arc decoration), but Holbrook and Bidwell date the type (1991, type 54.1) to the Antonine period. A Black-burnished ware 2 (Fabric 2) dish, Gillam (1970) type 313, dated to AD 180-240, came from deposit 1030, also in that area, and a jar or beaker in Fabric 12 (Fig 120.23), complete except for chips around the rim, came from deposit 1639, to the south-west.

A bowl in Fabric 53 (Fig 120.24), an oxidised fabric with a red slip, came from gully 974 (fill 940; Ch 3, p 80). It is probably a local product and is very similar, although not identical, to bowls produced at Wilderspool using a similar technique (Hartley and Webster 1973, fig 5, 54). It seems likely that these bowls were made by the same kilns that produced 'raetian' mortaria (Hartley 1981a), and it is probable that they were produced in Carlisle alongside the 'raetian' mortaria already known to have been made there (from English Damside; Swan *et al* 2009, 595). A sherd of African Red Slip ware (Fabric 56) was recovered from pit 1103 and could be from the same vessel as a fragment from a later, Period 10C, layer (1038; both KLA B). It probably dates to the early/mid-second century (but the fabric has a long date range (Tyers 1996), meaning that it could be earlier or later).

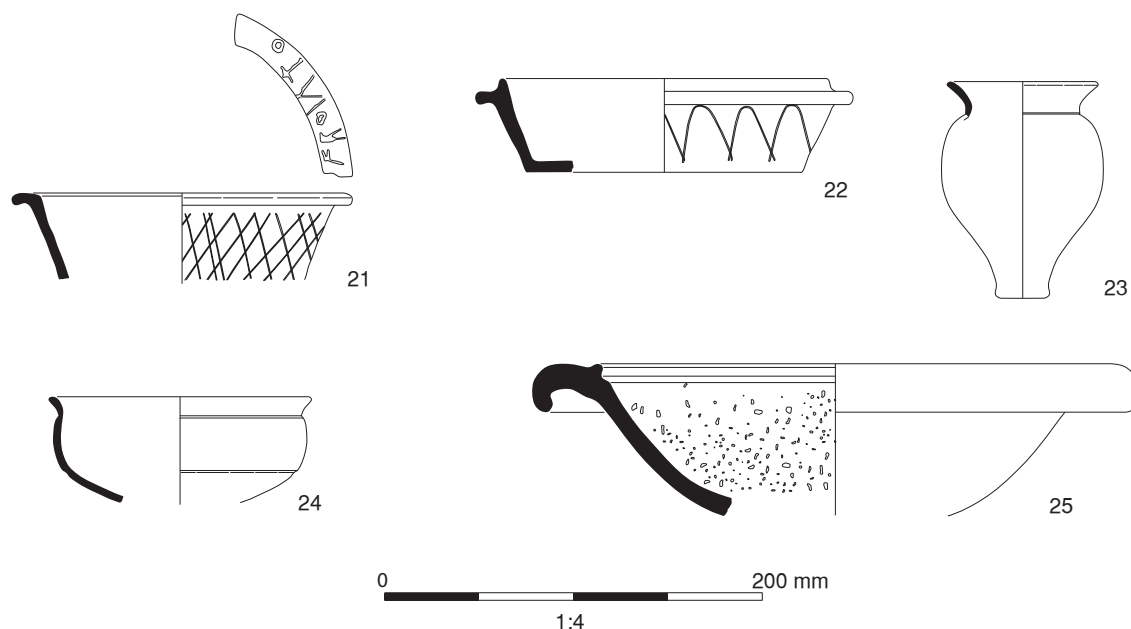


Figure 120: Coarsewares from Period 10B

Residual mortaria include vessels from Aldborough (Fabric 359) stamped by the potter Viator(?) (stamp 58, *p* 382) and dated to AD 100-40, from deposit 1011, and also from the Verulamium region (Fabric 320), Gaul (Fabric 313), and Lincoln (Fabric 339), the latter stamped by Vitalis (AD 90-120), from soils 1062 and 1084 (perhaps one vessel – see stamp 61, *p* 383), all in the north-west of the site. Locally produced mortaria stamped by Doce(i)lis (*floruit* AD 130-60) were recovered from deposits 988 and 222 in the same area. A 'raetian' vessel (Fabric 301), dating to the second half of the second century, came from soil 229 (*Ch* 3, *p* 81), while deposit 1736 (KLA C) produced part of a wide mortarium, sherds of which seem to have been spread over a wide area, including southern Lanes site OGL B, and surface 811.01/1009 to the east (see Hird and Brooks 2010, fig 28, 155). Mancetter-Hartshill vessels (Fabric 324) were recovered from layer 1030, and ditch 1079/1112 (fill 1048), in the same area.

The amphora sherds are all of South Spanish origin (Fabrics 202, 207, and 208) and include the rim of a Peacock and Williams (1986) Class 25.18 vessel of late first- or early second-century date, from posthole 1156 (KLA B), and another of the same form from layer 1 in the south-east of the site (KLA E), as well as a stamped vessel in Fabric 208 (dated to *c* AD 120-70?) from surface 13 to the north. The latest pottery from the period was from layer 1030 and included the Black-burnished ware 2 dish, the Mancetter-Hartshill mortarium, and the latest samian, an East Gaulish form Dr 38 from Rheinzabern, dating to the late second or early third century.

- 21 Black-burnished ware 1, Fabric 1 (Fig 120). Dish with graffito (see *p* 349). Second century. LAL C 307, Period 10B

- 22 Black-burnished ware 1, Fabric 1 (Fig 120). Flanged dish, an unusual form, Holbrook and Bidwell (1991) type 45.1. Sooted. Antonine, although the decoration suggests a third-century date. KLA B 1145, Period 10B
- 23 Fabric 12 (Fig 120), jar/beaker, complete vessel. KLA C 1639, Period 10B
- 24 Fabric 53 (Fig 120), bowl. Probably a Carlisle product, but similar to Hartley and Webster (1973) fig 6, 54, which is dated to the Hadrianic/Antonine period. KLA A 940, Period 10B
- 25 Fabric 301 (Fig 120), mortarium, local product. Second century. KLA A 939, Period 10B

Barrel-lined well 1016 cannot be phased with precision, but has been recognised as pre-dating Period 10C (Pre-10C; *Ch* 3, *p* 75). It produced a total of 80 sherds of coarseware, four of amphora, and one of mortarium. All but one came from within the well shaft (fills 1016-1016.08), with the other sherd coming from its construction trench (fill 1027.03). Twelve of the 14 sherds of Black-burnished ware 1 (Fabric 1) are from a single bowl of Gillam (1976) type 50 (Fig 121.26) from fill 1016.06, and date to the early/mid-second century. These also join two sherds from Period 10C pit 955.02 to the north. The remainder of the group comprises at least two greyware jars (Fabric 11) of second-century date (Figs 121.27, 121.28) and a greyware beaker. The only mortarium present is a local product (Fabric 350) from fill 1016.08. All the amphora sherds are of South

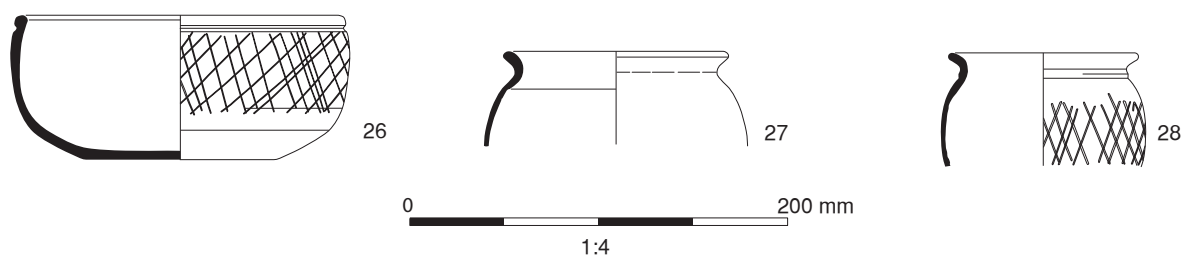


Figure 121: Coarsewares from well 1016

Spanish origin (Peacock and Williams (1986) Class 25; Fabric 207). The latest samian is a Central Gaulish form Dr 31 of early-mid-Antonine date, from fill 1016.08.

- 26 Black-burnished ware 1, Fabric 1 (Fig 121). Bowl, Gillam (1976), 50. Early/mid-second century. Gillam noted that about half of the published examples of this form come from the Antonine Wall.  
LAL D 955.02/1016.06, Period pre-10C and residually in Period 10C
- 27 Fabric 11 (Fig 121), greyware, jar/cooking pot. Brownish-grey fabric. Sooted around rim.  
LAL D 1016.02, Period pre-10C
- 28 Fabric 11 (Fig 121), greyware, jar/cooking pot, locally produced. Heavily burnished. Second century.  
LAL D 1016.02, Period pre-10C

Activity in Period 10C was likewise confined to minor alterations, and one of the earlier buildings (1309) was replaced by a new one (1310; Ch 3, p 82). The period

produced a total of 2568 sherds of coarse/fineware, 601 of amphora, and 112 of mortarium. As in earlier periods, much of the material is residual, originating in late first- to early/mid-second-century activity, including rustic ware (Fabric 3), reeded-rim bowls (Gillam 1970, type 215), including one with an inturned reeded rim from gully 938/958 (fill 933; KLA B), and lids of Gillam (1970) type 339. The African Red Slipware dish (Fabric 56; Fig 122.34), from layer 1038 in the same area, is an uncommon vessel of early/mid-second-century date (Hayes 1972, type 3C; 29). Many contexts produced Black-burnished ware 1 vessels typical of the middle years of the second century, for example, Gillam (1976) types 1, 19, 30, 34, 54, 55, 57, 68, and 75. A dish of mid/late second-century date, Gillam (1976) form 76, came from pit 269 (fill 224; LAL B), and there is an unusual handled dish in Black-burnished ware 1 from layer 1028 to the south.

Mid/late second-century pottery from the phase includes cooking pots of Gillam (1976) form 2, from soil 219 (Ch 3, p 85), and form 4, from soil 230 to the west. There is also a small jar (Gillam 1976, form 21) from layer 953 (KLA B). Pottery of the later second century is represented by Black-burnished ware 2

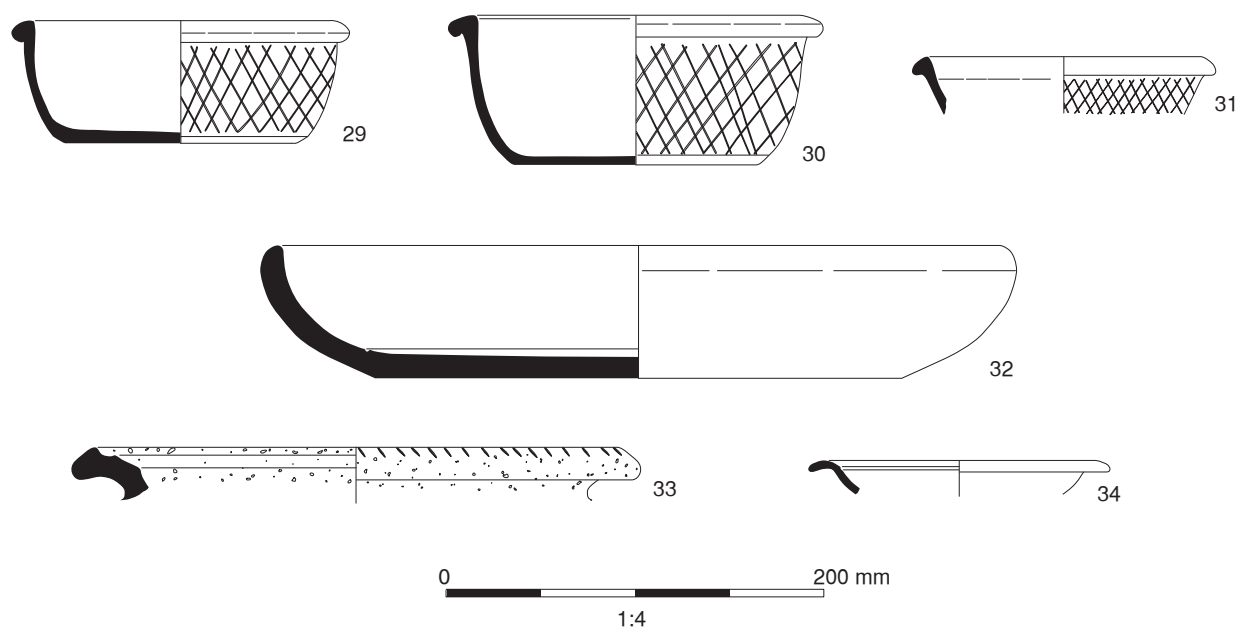


Figure 122: Coarsewares from Period 10C

bowls of Gillam (1970) form 222, dated to AD 150-210, from surface/deposit 197 (Fig 122.29) and soils 895 (Fig 122.30) and 920. A dish (Gillam and Mann 1970, type 22) came from an external soil (953; Fig 122.31), and another, with a repair, from pit 269 (fill 224; LAL B). The latest coarseware vessel is probably a dish in Fabric 12 (Fig 122.33) from deposit 905, which could be an African-style vessel dating to the early third century (Swan 1992).

The residual nature of this group is emphasised by the mortaria. There are several of late first/early second-century date, including vessels from Lincoln (Fabric 316), one of which is stamped by Vitalis, the Verulamium region (Fabric 320), and *Gallia Belgica* (Fabric 313). There is also a sherd stamped by the Aldborough potter Viator(?) from layer 972 (LAL D), other fragments of which were seen in an earlier context (stamp 58, Period 10B; p 382). Locally made mortaria (Fabrics 301 and 352) were recovered from many contexts, and there is a sherd from surface 1009 (KLA B) which belongs to the very large vessel first seen in Period 10B (p 345; Hird and Brooks 2010, fig 28, 155). Locally made mortaria stamped by Doce(i)lis came from layer 926 (Stamp 57; p 382) and surface 894 in the north-west of the site; a third locally made stamped vessel, from pit 460 (fill 397) in the same area, is dated to AD 110-40. Layer 895 produced a vessel in Fabric 301 stamped DIS/LDB, a potter from Wilderspool, known to have moved to the Carlisle area, and working in the Hadrianic period (Stamp 62, p 383). Later mortaria include imports from the Rhineland, including one probably from Soller, Kreis Duren (Fabric 318), from soil 829 (Ch 3, p 84). The same context produced a Mancetter-Hartshill vessel (Fabric 324) of Annetwell Street type 364 (Hird in prep), dating to c AD 150-200.

Fourth-century pottery, at this time probably intrusive, came from two contexts associated with this period. Deposit 1028 (KLAB) produced two sherds of Huntcliff ware (Fabric 22) and one of Crambeck greyware (Fabric 27; as well as a fragment of medieval pottery). A later fourth-century Huntcliff-ware jar, similar to Gillam (1970) form 163 (Fig 122.33), came from post trench 1013 (fill 1012), part of Building 1316 (Ch 3, p 81), where it was associated with modern glass.

Amphorae of South Spanish origin (Fabrics 202, 207, and 208) made up much of the supply at this point, and appear in many contexts, occasionally in large fragments, with one sherd from pit 269 (fill 224.02; LAL B) weighing 1 kg. A considerable amount was undoubtedly residual, including a late first/early second-century type (Peacock and Williams (1986) Class 25.18) from surface 993 (KLA B). Surface 898/937 in the north-west of the site produced over 30 kg of amphora sherds, representing at least five

South Spanish vessels, including one of Peacock and Williams (1986) Class 25 with a graffito (graffito 10, p 353), and there was a stamped handle, possibly Callender 378a (1965; amphora stamp 3, p 357), from layer 906 (KLA B).

Several contexts produced samian of Antonine date. The latest vessels include an East Gaulish Dr 31 of mid/late Antonine date, from layer 1028 in the east of the site, a Central Gaulish Dr 37 bowl from layer 874 (Ch 3, p 85), dated to AD 150-80, and a Central Gaulish Dr 37 bowl stamped by GIPP[IM], from deposit 897 in the north-west, dated to AD 155-75.

- 29 Black-burnished ware 2, Fabric 2 (Fig 122). Bowl, Gillam (1970), type 222. AD 150-210. LAL C 197, Period 10C
- 30 Black-burnished ware 2, Fabric 2 (Fig 122). Bowl, Gillam (1970), type 222. AD 150-210. LAL D 895, Period 10C
- 31 Black-burnished ware 2, Fabric 2 (Fig 122). Dish, Gillam and Mann (1970), type 22. Sooted. Antonine. KLA B 953, Period 10C
- 32 Fabric 12 (Fig 122). African-style dish. Swan (1992, fig 3, 57-58). Early third century. KLA B 905/933, Period 10C
- 33 Huntcliff ware (Fig 122), Fabric 22. Jar, Gillam (1970), type 163, with unusual double-grooved rim. Stabbed decoration on upper surface of rim. Second half of fourth century. Intrusive. KLA B 1012, Period 10C
- 34 African Red Slip ware (Fig 122), Fabric 56. Dish, Hayes (1972), type 3C. Early / mid-second century (perhaps both earlier and later). An early / mid-second-century date accords well with other coarsewares from the same context. KLA B 1038, Period 10C

Several contexts within the southern part of the site (KLA C) could only be broadly attributed to Period 10A-11B, meaning that they were accumulating during the period of time represented by Periods 10A, 10B, 10C, 11A, and 11B elsewhere on the site (see Ch 4). In all, these produced 823 coarseware sherds, 159 of amphora, and 58 of mortaria. Around 22% of these (234 fragments) were from layer 945, and included two sherds of fourth-century Huntcliff ware (Fabric 22), which must again be regarded as intrusive. Another 76 sherds (7%) came from deposit 948, and 391 sherds (38%) from deposit 1073 (Ch 3, p 78). Surface 1050 produced 120 sherds (11%) and 129 (12%) came from deposit 1080. Together, these appear to represent an accumulation



of rubbish over an extended period during the later second, and perhaps into the early third, century. Compared to the earlier part of the second century, it appears that a considerably wider range of forms and fabrics were in use, with the appearance of Nene Valley ware (Fabric 21), Rhenish ware (Fabric 34), and Mancetter-Hartshill mortaria (Fabric 324).

Second-century pottery includes locally made bowls in greyware (Fabric 11) from loam 945 and 948 (see Taylor 1991, fig 309, 34 for an oxidised version), and gully fill/deposit 1158 (*Ch 3, p 78*). Mid/late second-century Black-burnished ware 1 (Fabric 1) vessels include a cooking pot of Gillam (1976) form 1 (Fig 123.35), and a dish of form 76 from layer 945. This deposit also produced the earliest examples of Black-burnished ware 1 dish form 329 (Gillam 1970), which, after the very late second century, became a very common vessel in the Black-burnished ware 1 repertoire (Fig 123.36); it is of note that this dish form was absent from stratified contexts at the southern Lanes (Hird 2010). An Antonine Black-burnished ware 2 (Fabric 2) dish (Fig 123.37) also came from 945 (with a joining sherd from Period 12 deposit 904; *Ch 4, p 131*). There is also a jar/beaker in Nene Valley colour-coated ware (Fabric 21; Fig 123.42)

from 945, and a Rhenish ware (Fabric 34) beaker of late second- or first half of third-century date (Fig 123.43) from layer 948. Layer 1073 (*Ch 3, p 78*) produced two *tazze* in Fabric 4 (Figs 123.38, 123.39) and a greyware lid-seated 'Dales-type' jar (Fig 123.41).

Residual late first/early second-century mortaria include sherds from the Verulamium region (Fabric 320) and of Gallo-Belgic origin (Fabric 313), and a possible North-Eastern sherd (Fabric 340). Second-century local vessels are represented by examples in Fabrics 301, 306, and 352, including one stamped by Austinus, dated to AD 130-65 from layer 945 (stamp 15; *p 371*) and two stamped by Doce(i)lis from 1073 (stamps 16, 20). Another stamped by Doce(i)lis came from layer KLA C 1080, as does one of ..TTA, dating to the Hadrianic period (stamp 23), and one of EM, dated to AD 100-40 (stamp 22, *p 373*). There is also a vessel in Fabric 352 (Fig 123.46) from 1073. Sherds of Rhineland origin (Fabric 317), dated to the mid-second to mid-third century, appear in layers 945 and 948. A Mancetter-Hartshill mortarium of the second half of the second century (Fig 123.45) came from 945, and a vessel of probable Catterick origin (Fig 123.44), from deposit 949, can be dated to AD 250-400.

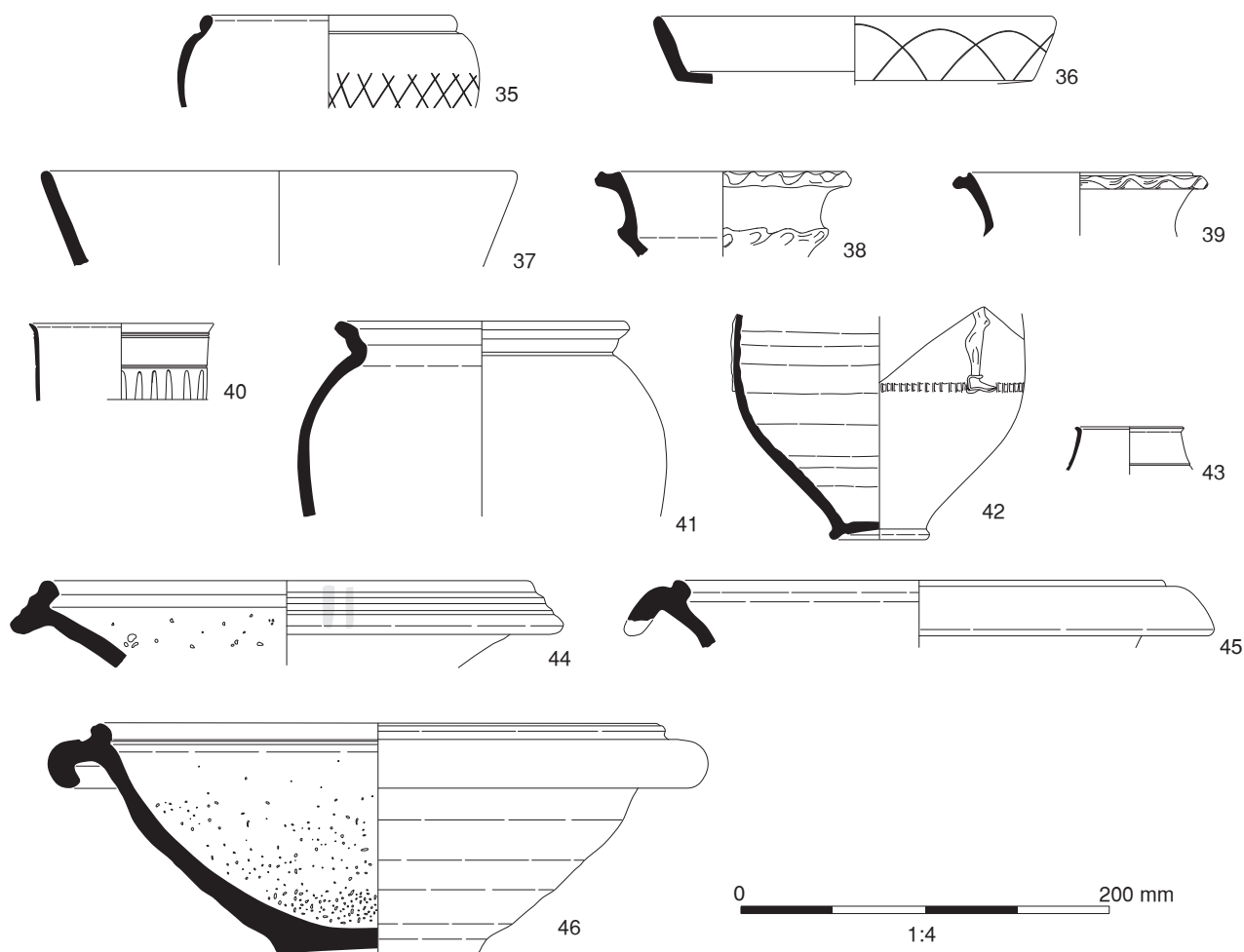


Figure 123: Coarsewares from Period 10A-11B

The majority of the amphorae are South Spanish (Fabrics 202, 207, and 208), with only one sherd of Gaulish Fabric 200, from layer 945, and three small sherds of Fabric 204 from posthole 1030. Sherds in Fabric 207 include a rim, possibly Peacock and Williams (1986) Class 20, from layer 1158 (*Ch 3, p 78*), with a broad date-range, from the first to the third century. Layer 948 produced a South Spanish (Fabric 207) amphora stamp (amphora stamp 1) of c AD 120-60. The latest samian is a stamped Central Gaulish form Dr 37, dated to AD 150-80, from layer 1073 (with joining fragments from Period 11C deposit 1050), and there are Dr 37 bowls of the same date from layers 945 and 948.

- 35 Black-burnished ware 1, Fabric 1 (Fig 123). Cooking pot with unusual rim form. Sooted. KLA C 945, Period 10A-11B
- 36 Black-burnished ware 1, Fabric 1 (Fig 123), dish. Gillam (1970), form 329, AD 190-340. KLA C 945, Period 10A-11B
- 37 Black-burnished ware 2, Fabric 2 (Fig 123), dish. Colchester, Hull (1963) type 40A. The form usually has wavy-line decoration, but this example is abraded. Antonine. KLA C 904/945, Period 10A-11B and residually in Period 11D-12
- 38 Fabric 4 (Fig 123), *tazza*. See Gillam (1970), form 347. AD 140-200. KLA C 1073, Period 10A-11B
- 39 Fabric 4 (Fig 123), *tazza*, slightly sooted internally. See Gillam (1970), form 347. AD 140-200. KLA C 1073, Period 10A-11B
- 40 Fabric 6 (Fig 123). Bowl with impressed indentations. KLA C 1080, Period 10A-11B
- 41 Fabric 11 (Fig 123). 'Dales-type' jar, sooted. KLA C 1073, Period 10A-11B
- 42 Nene Valley colour-coated ware (Fig 123), Fabric 21. Jar/beaker with barbotine decoration, showing the leg of a figure. Anthropomorphic designs are not uncommon on Nene Valley beakers and religious or mythological scenes are known on folded beakers (Going 1981), although the fragments show no signs of folding. Third century? KLA C 945, Period 10A-11B
- 43 'Rhenish' ware (Fig 123), Fabric 34, probably a Trier product. Late second/first half of third century. KLA C 948, Period 10A-11B

- 44 Fabric 311 (Fig 123), mortarium. Pale pink slip along reeds of rim, and vertical brown-painted stripes, Northern England, probably Catterick. Annetwell Street type 328 (Hird in prep). AD 250-400. KLA C 949, Period 10A-11B
- 45 Mancetter-Hartshill (Fig 123), Fabric 324. Mortarium, Annetwell Street type 365 (Hird in prep). AD 150-200. KLA C 945, Period 10A-11B
- 46 Fabric 352 (Fig 123). Locally produced mortarium. Second century. KLA C 1073, Period 10A-11B

### Periods 11 and 12 (the Later Roman Town)

Although the three putative properties established in the second century seem to have continued as separate entities, the nature of occupation, at least on the central one, seems to have changed appreciably at the beginning of Period 11 (Period 11A), with the erection of a large stone, or stone-footed, building (2000), most easily interpreted as a town house (*Ch 7; p 203*). New buildings also seem to have been erected on the northern plot, but the southern one remained largely unoccupied during this period.

Although, stratigraphically, this period has been dated to the late second/early third century, it seems that, with the exception of floor 841 (KLAA) within Building 2000, and soil 804 (KLA B; and possibly pit 221 (fills 145 and 146; *Ch 4, p 93*), and posthole 186; *Ch 4, p 92*), the assemblage is made up entirely of fabrics and forms associated, in Carlisle, with the late first and second centuries. Of the seven coins from this period (*Appendix 3*), there are two of Vespasian, one each of Domitian and Trajan, and two of Hadrian, with only one coin of third-century date, from layer 836 (LALD; *Appendix 3, p 391*).

Interestingly, late first/early second-century vessels include a rustic-ware jar (Fabric 3) from surface 352 (similar to Hird and Brooks 2010, fig 41, 245-6), and a 'carrot' amphora (Peacock and Williams (1986) Class 12, Fabric 211) from gully 344 (fill 317; both in KLA D); the latter are usually found on first-century military sites (see Hird and Brooks 2010, fig 46, 325, for a similar vessel). Other vessels of similar date include flagons of Gillam (1970) form 3 (including fragments of at least six examples from midden 842 (KLA B)), reeded-rim bowls, and lids. One sherd of first/second-century green-glazed ware (Fabric 66) was recovered from midden 829 (Fig 124.53).

Early/mid-second-century vessels in Black-burnished ware 1 (Fabric 1) include examples of Gillam (1976) forms 1, 30, 34, 54, 55, and 68, from a number of

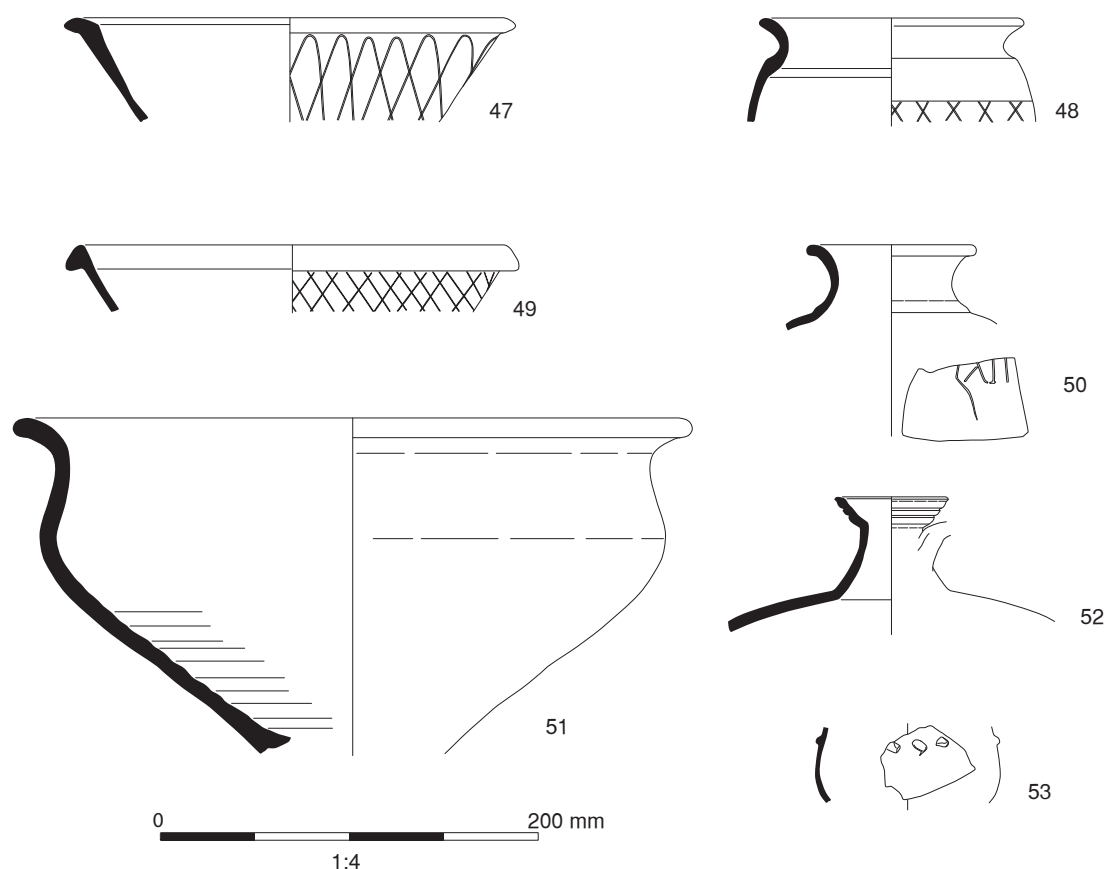


Figure 124: Coarsewares from Period 11A

contexts. None of the types conventionally dated to the third century are present, although a bowl (Fig 124.47) from deposit 979 has an unusual combination of second-century rim form and third-century decoration. Black-burnished ware 2 (Fabric 2) is represented by only two vessels. One, a cooking pot (Fig 124.48), dated to AD 150-250, from soil 836, is the earliest example from the northern Lanes in this fabric; the other, a dish of Antonine date (Fig 124.49), is from surface 811, associated with Building 2000 (Ch 4, p 88). Black-burnished ware 2 cooking pots are never as common, in Carlisle, as bowls and dishes. A red-slipped bowl of possible 'raetian'-style was recovered from surface 750 (Ch 4, p 91), again associated with Building 2000, and is likely to be of mid-late second-century date (p 340).

The group of potentially third-century pottery remains small. Amongst it is a curved-sided dish in Fabric 13, from surface 841 (KLAA), in the north-east of the site. This is possibly an early third-century African type, but, as only 7% of the rim is present, it is difficult to make an entirely confident identification. Layer 804 (KLA B, to the south) produced a single rather small (5 g) sherd of 'Rhenish' ware (Fabric 34), possibly from Trier, and five fragments of Nene Valley colour-coated ware (Fabric 21), including a scale-patterned vessel, a decorative technique which Gillam (1970) dates to the period AD 210-320. Considered together, the

potentially third-century sherds represent less than 1% of the assemblage from this period. One sherd from a fourth-century Crambeck greyware bowl (Corder and Birley 1937, type 1) came from layer 178 (KLA D), where it must be intrusive.

Second-century mortaria of local origin include two stamped vessels by Doce(i)lis (*floruit* AD 130-60) and one by an unidentified local potter, all from pit 209 (fills 209.04 and 209.05; stamps 44, 45; p 379), one by Austinus (AD 130-65), from surface 821 (stamp 65; Ch 4, p 385), and another by an unidentified local potter from layer 341 (KLAD). Deposit 854 produced a vessel of the period c AD 90-120, stamped by the Lincoln potter Atepacius (stamp 56), together with late first-century Gallo-Belgic vessels (Fabric 313). Only four contexts (layer 804, pit 221 (fills 145, 146; Ch 4, p 93), and posthole 186 (Ch 4, p 92), produced third-century Mancetter-Hartshill (Fabric 324) vessels.

Apart from the early 'carrot' amphora (p 345), many of the amphorae are South Spanish vessels of Peacock and Williams (1986) Class 25, in Fabrics 207 and 208. Deposit 834 (LALD) produced 49 sherds (12 kg) from a single vessel, representing a little less than half of an average complete vessel, which would originally have weighed c 28 kg when empty (Bidwell 1985, 182). Other amphorae include fragments of a Peacock

and Williams (1986) Class 15 (Fabric 207) from pit 221 (fill 215), and Peacock and Williams (1986) Class 18 (Fabric 202) from layer 836 (LAL D). The latest samian present is a Central Gaulish form Curle 23 (Curle 1911), of mid-late Antonine date, from layer 804 (KLA B).

- 47 Black-burnished ware 1, Fabric 1 (Fig 124). Unusual bowl. Flat rim with intersecting arc decoration. Date is likely to be late second or early third century.  
KLA B 979, Period 11A
- 48 Black-burnished ware 2, Fabric 2 (Fig 124). Cooking pot, Gillam (1970), form 139. AD 150-250. The first stratified example of a cooking pot in Black-burnished ware 2 from the northern Lanes; similar vessels occurred residually at the southern Lanes (OGL A West, period 3, Hird and Brooks 2010, fig 49, 338).  
LAL D 836, Period 11A
- 49 Black-burnished ware 2, Fabric 2 (Fig 124). Dish, Gillam and Mann (1970), type 22. Antonine.  
KLA B 811, Period 11A
- 50 Greyware (Fig 124), Fabric 11. Narrow-necked jar with graffito (22; p 356). One non-joining sherd.  
LAL C 204, Period 11A
- 51 Greyware (Fig 124), Fabric 11. Large bowl.  
LAL C 209.04/209.05/228, Period 11A, but perhaps intrusive in 228
- 52 Oxidised ware (Fig 124), Fabric 12. Flagon, Gillam (1970), form 9, AD 140-80.  
KLA D 317.03, Period 11A
- 53 Glazed ware (Fig 124), Fabric 66. Body sherd of a beaker, with barbotine decoration, an apple-green external glaze, and a yellow-brown streaky glaze internally. Source unknown. Likely to be late first- or early second-century in date.  
KLA B 829, Period 11A

On the whole, Period 11B can be seen as a time of slight changes and modifications to extant buildings, with cross-wings and a corridor being added to Building 2000 (see Ch 4). The period again produced a significant amount of pottery (1536 of coarseware, 348 of amphora, and 100 mortarium sherds). Residual vessels still form a very significant part of the assemblage, with the third-century element being less than 1% of the total, although there is an increase in the numbers of later second-century types represented. Fourth-century material, at this point still intrusive, comprises only 0.3% of the group.

Early vessels included a late first/early second-century mica-dusted bowl (Fabric 46) from post trench 695 (fill 683), part of Building 1568 (Ch 4, p 101; see Hird and Brooks 2010 for an example from the southern Lanes (fig 41, 266)). Many familiar early/mid-second-century Black-burnished ware 1 (Fabric 1) types are still present, including Gillam (1976) forms 1, 30, 34, 54, 55, 57, 68, and 75. There are also several types dating to the mid/late second century, including Gillam (1976) forms 21, 60, 70, and 76. A bowl (Fig 125.54) of late second- or early third-century date came from layer 843, and there are examples of dish form 329 (Gillam 1970), from surface 609 (Ch 4, p 99) and layer 616 (KLAA). This dish appeared at the very end of the second century and continued in use into the mid-fourth (*ibid*). Apart from an example from Period 10A-11B, this is its earliest occurrence at the northern Lanes.

Other mid/late second-century types include a complete flask (Fig 125.56) from ?occupation deposit 164, and 'raetian' mortaria sherds (Fabric 301) from stone structure 69 and floor 290 within Building 594 (Ch 4, p 99). One sherd of Nene Valley colour-coated ware (Fabric 21) came from floor 705 within Building 2000 (Ch 4, p 99), and a *tazza* in Fabric 4, similar to Gillam (1970), type 347, came from metalised surface 139.01 (Ch 4, p 102). Black-burnished ware 2 (Fabric 2) vessels include a cooking pot of Gillam (1970) type 137, dated to AD 150-250, from 69 (KLA D), and a dish of Gillam and Mann (1970) type 22, from external surface 823 (KLA A).

The mortaria include several residual stamped vessels; cobbled surface 162 and soil 133, both from the northern part of the site (LAL C), both produced stamps of the local potter Doce(i)lis (*floruit* AD 130-60; stamps 49, 50), and vessels stamped by Mancetter-Hartshill (Fabric 324) potters Sarrius (stamp 2; AD 135-70), and RBIVSII (stamp 47), dated to AD 140-70, came from posthole 813 (fill 809; KLA A), and deposit 124 (Ch 4, p 99), respectively. Other mortaria include one of Rhineland origin (Fabric 318), dated to the period AD 150-250, which was from a floor (177) within Building 2000 (Ch 4, p 97). The amphorae are mostly South Spanish products in Fabrics 202, 207, and 208. The stamp on the handle of a Peacock and Williams (1986) Class 25 vessel, from ?surface 143 in the central northern part of the site, is possibly Callender (1965) 1484, and, if so, is dated to AD 130-80 (amphora stamp 5).

Fourth-century sherds, still apparently intrusive, were recovered from several contexts; Huntcliff ware (Fabric 22) came from surface 611 in Building 1106 (Ch 4, p 99), construction trench 252 in Building 2000 (fill 251; KLAD), metalised surface 151 (LAL C); a jar of Gillam (1970) type 163, and stone-lined drain 568/600 (fill 657.02; Ch 4, p 101). There are later fourth-century Crambeck greyware sherds (Fabric 27) from the same



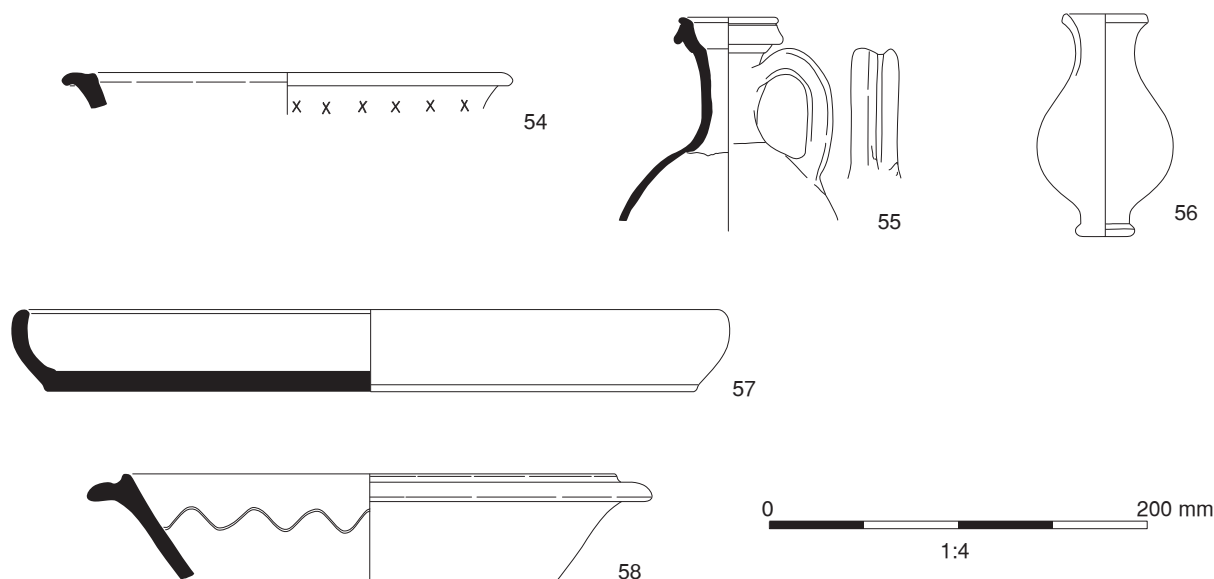


Figure 125: Coarsewares from Period 11B

stone-lined drain (fills 660 and 657.02 to the west (LAL D)). Surface 707 (*Ch 4, p 102*) produced a sherd of Crambeck parchment-ware mortarium (Fabric 323), along with a coin of AD 364-78 (*Appendix 3, A254*). The latest samian is an East Gaulish bowl of form Dr 30 from Rheinzabern, dating to the period AD 160-90, from deposit 164 (LAL C).

- 54 Black-burnished ware 1, Fabric 1 (Fig 125). Bowl, Gillam (1976), 42. Late second/early third century.  
KLA A 843, Period 11B
- 55 Oxidised ware (Fig 125), Fabric 12. Flagon, similar to Gillam (1976), 17. AD 180-360.  
LAL D 695, Period 11B
- 56 Oxidised ware (Fig 125), Fabric 12. Flask, complete vessel. See Gillam (1970), forms 36-39, with a date range of AD 90-200, although this example most resembles form 39, dated to AD 160-200.  
LAL C 164, Period 11B
- 57 Oxidised ware (Fig 125), Fabric 12, dish. A finer fabric than most Fabric 12, with a slight micaceous glint. African-style? Early third century?  
LAL D 657.01, Period 11B
- 58 Crambeck greyware ware (Fig 125), Fabric 27. Bowl, sooted round rim and very worn internally. Corder and Birley (1937), type 1b. Later fourth century.  
LAL D 660, Period 11B

Activity in Period 11C seems to have continued with little difference; Building 2000 was again modified,

with the addition of a hypocausted room at its western end (see *Ch 4, p 104*). It produced a total of 930 sherds of coarseware, 224 of amphora, and 27 of mortarium, with a single layer, 293 (*Ch 4, p 117*), producing 42% (496 sherds) of the group. Residual second-century pottery still forms a huge element of the assemblage, appearing in most contexts. Early/mid-second-century types in Black-burnished ware 1 (Fabric 1) include Gillam (1976) forms 1, 30, 34, 54, 57, 60, and 68. Mid-second-century types include Gillam (1976) forms 2, 20, and 21, and mid-/late second-century type Gillam (1976) form 76 is also present. Two relatively unusual Black-burnished ware 1 dishes, from surfaces 702 and 659 (Figs 126.59, 126.61), are probably of late second- or early third-century date.

There is also, amongst the residual material, a sherd of African Red Slip ware (Fabric 56) from surface 83 (*Ch 4, p 118*), and two mortarium stamps of the local potter Austinus (AD 130-65), from surface 1408 (KLAC) and deposit 123 (LAL C), to the north. Also amongst the mortaria, there are vessels stamped by the potter Mascellio, dated to AD 135-65 (stamp 35), from surface 93 (*Ch 4, p 113*), and sherds of 'raetian' mortaria of the second half of the second century, from gully 278 (fill 277; *Ch 4, p 114*). Additionally, a stamped vessel of a local potter (Fabric 301), dated to AD 130-70 (stamp 25), was recovered from deposit 1018 (*Ch 4, p 117*). Late second/early third-century types are present in small quantities, and include a Black-burnished ware 1 bowl (Gillam 1976, form 42; Fig 126.60) from metallised surface 1050 (*Ch 4, p 117*), and there is a local greyware (Fabric 11) version from the same context (Fig 126.67).

Third-century vessels include an early third-century African-style dish (Swan 1992, fig 3.57-58), from ?surface 1528 (KLA C), and fragments of Rhineland

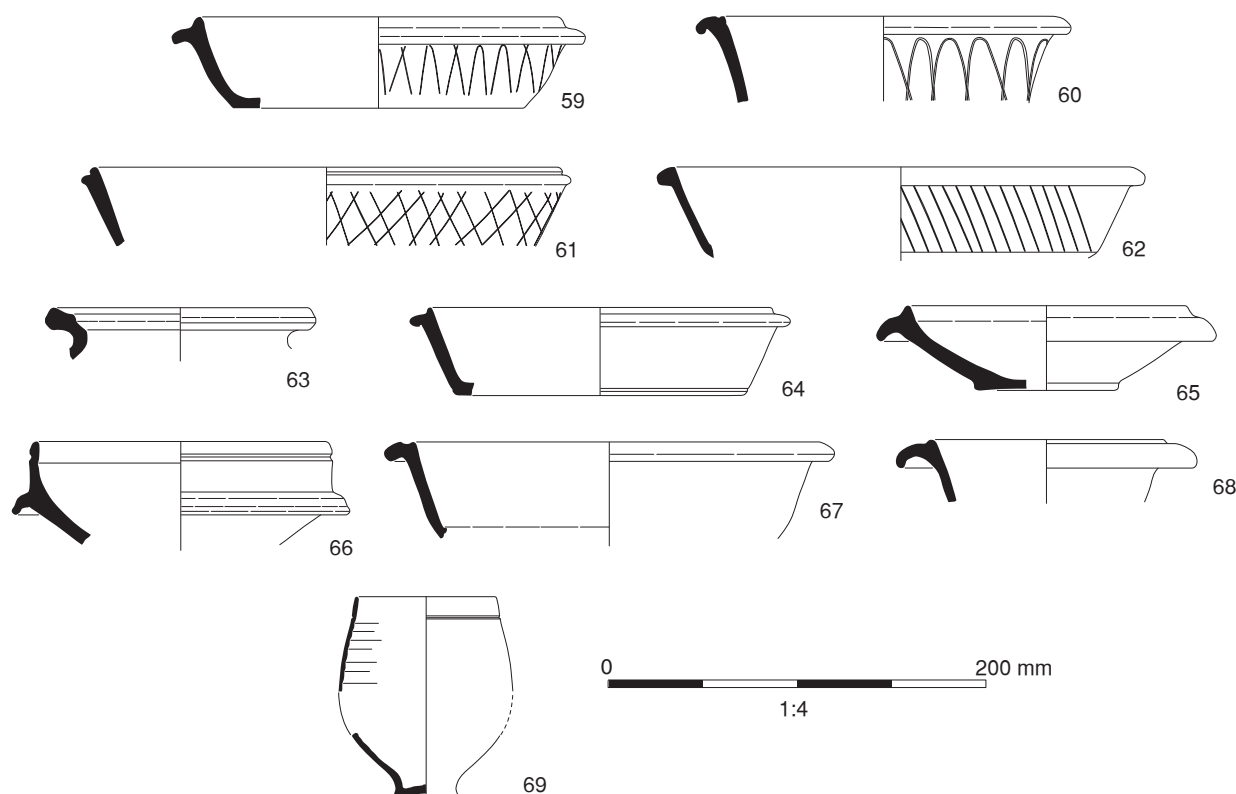


Figure 126: Coarsewares from Period 11C

beakers (Fabric 34), from layers 822 (KLA B) and 957 (KLA C). Additionally, a Black-burnished ware 2 (Fabric 2) dish, Gillam (1970) 313, dated to AD 180-240, came from drain 347 (fill 329.02; KLA D). A greyware flanged bowl, from 1050 (Fig 126.68), is likely to date to the third century.

Other potentially third-century fabrics and types include a Mancetter-Hartshill mortarium (Fabric 324) from pit 729 (KLA B, in the eastern part of the site); equating to Annetwell Street type 369 (Hird in prep), it is dated to AD 130-370. The same pit also produced a sherd of Severn Valley ware (Fabric 17), which, in Carlisle, appears largely in third-century deposits (Hird and Brooks 2010, 339). A Nene Valley colour-coated 'box' fragment (Fabric 21), dated to AD 180-320, came from layer 756 (*Ch 4, p 102*). The later form of Black-burnished ware 2 (Fabric 2) dish, Gillam (1970) type 313, dated to AD 180-240, first appears in the assemblage from this period, with two vessels from deposit 293.03 (*Ch 4, p 117*; Fig 126.62).

Fourth-century pottery, still presumably intrusive, comprises *c* 0.5% of the assemblage at this point. Huntcliff ware (Fabric 22) jars of Gillam (1970) form 161 came from layer 293, as did Crambeck Parchment ware (Fabric 28), seen also in surface 608 (*Ch 4, p 117*), and a Crambeck greyware bowl (Fabric 27) of Corder and Birley (1937) type 1 was recovered from surface 614 (*Ch 4, p 117*).

The amphorae are mostly South Spanish vessels of Peacock and Williams (1986) Class 25, with a group of 31 sherds of Fabric 207, weighing almost 3 kg, coming from posthole 1440 (fill 1439; *Ch 4, p 115*). Posthole 161 (fill 128) produced a stamp of S.F.E (Fabric 207; Callender (1965) 1617), dated to *c* AD 120-60 (amphora stamp 6). The latest samian is an East Gaulish mortarium (Dr 45) with lion's head spout, from Trier, and dated to the late second or early third century. As is the case with the coarsewares, much of the samian is of Hadrianic or early Antonine date.

- 59 Black-burnished ware 1, Fabric 1 (Fig 126). Flanged dish, of unusual form. Holbrook and Bidwell (1991) South-Eastern type 54.1. Later second or early third century. KLA A 702, Period 11C
- 60 Black-burnished ware 1, Fabric 1 (Fig 126). Bowl, burnt grey/orange. Gillam 1976, form 42. Late second/early third century. KLA C 1050, Period 11C
- 61 Black-burnished ware 1, Fabric 1 (Fig 126). Flanged dish/bowl, of unusual form. The very small flange is similar to Holbrook and Bidwell (1991), type 47.1, which is dated to the late fourth century, but the lattice decoration on this example suggests a second-century date. LAL D 659, Period 11C

- 62 Black-burnished ware 2, Fabric 2 (Fig 126). Dish, Gillam (1970), 313, sooted. AD 180-240. KLA B 293.03, Period 11C
- 63 Black-burnished ware 2, Fabric 2 (Fig 126). Cooking pot, Gillam (1970), type 137. AD 150-250. KLA C 923, Period 11C
- 64 Greyware (Fig 126), Fabric 11. Flanged dish, very dark grey, burnished surfaces. KLA B 293.03, Period 11C
- 65 Greyware (Fig 126), Fabric 11, flanged bowl. A local product similar to bowls made at the English Damside kiln site (Swan *et al* 2009). Probably second half of second century. KLA B 293.05, Period 11C
- 66 Greyware (Fig 126), Fabric 11, flanged bowl. A local product? KLA D 277, Period 11C
- 67 Fabric 11 (Fig 126), bowl. Imitates Black-burnished ware 1 bowls of the same period. See 60. Late second/early third century. KLA C 1050, Period 11C
- 68 Fabric 11 (Fig 126). Flanged bowl of a type common in the third and fourth centuries. KLA C 1050, Period 11C
- 69 Colour-coated fabric (Fig 126), Fabric 31. Beaker, possibly a Rhineland product. KLA B 293.03, Period 11C

From Period 11D onwards, to the end of the Roman period, the stratigraphic sequence is divided into two strands. Within the northern part of the site, a sequence of three stratigraphic phases (Periods 11D, 11E, and 12) was recorded, but in the central and southern areas, which appear to have been largely abandoned, only a single broad phase (Period 11D-12) could be recognised.

In the northern part, Period 11D produced almost 1500 sherds. As in previous periods, much of the pottery is residual, mostly of early/mid-second-century date. Familiar early/mid-second-century Black-burnished ware 1 (Fabric 1) types (Gillam (1976) 1, 30, 54, 57, and 68) are all present, as are those of mid/late second-century date (Gillam (1976) types 2, 21, and 76). Two particularly early vessels were recovered from metalled surface 607 (*Ch 4, p 119*): a fragment of 'carrot' amphora (Fabric 211; see Hird and Brooks 2010, fig 46, 325); and an early mortarium (Fabric 355), dated to AD 60-90, Annetwell Street type 314 (Hird in prep; Hird and Brooks 2010, fig 39, 231). Again, the probable third-century pottery only accounts for c 1% of the assemblage.

The majority of the mortaria are local products and mostly residual. They include a herringbone stamp (stamp 66), dated to AD 140-70, from a construction trench (751, fill 666) for Building 1569 (*Ch 4, p 97*). Sherds of 'raetian' mortaria of the second half of the second century came from internal surface 214 (LAL B), and soil 676 (LAL D). Layer 121 produced a flanged bowl (Fig 127.73) with red slip over the rim, almost certainly made in a 'raetian' factory.

A Black-burnished ware 2 (Fabric 2) sherd came from deposit 212 (LAL B), whilst third-century vessels include a Nene Valley beaker (Fig 127.74) of Gillam (1970) form 80, dated to AD 220-60, from ?wall foundation 675 (*Ch 4, p 122*). The amphorae are mostly South Spanish vessels of Peacock and Williams (1986) Class 25. The latest samian is of late second- or early third-century date, being an East Gaulish form Dr 31 from Rheinzabern. There was only a single intrusive fourth-century sherd in this period, namely a Crambeck Parchment bowl (Fabric 28) of Corder and Birley (1937) type 8, from layer 135 (*Ch 4, p 122*).

- 70 Oxidised ware (Fig 127), Fabric 4. *Tazza*, similar to Gillam (1976), 347. AD 140-200. LAL D 758, Period 11D
- 71 Oxidised ware (Fig 127), Fabric 6. Flagon, Gillam (1976), 9. AD 140-80. LAL C 121, Period 11D

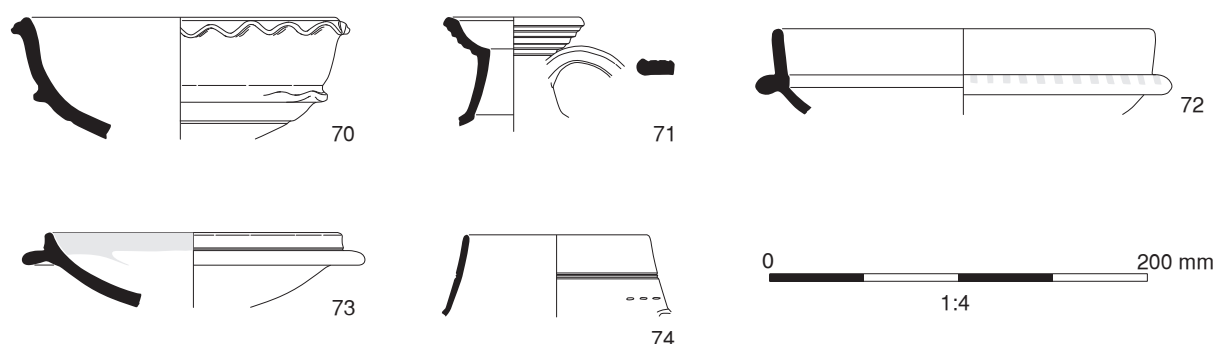


Figure 127: Coarsewares from Period 11D

- 72 Greyware (Fig 127), Fabric 11. Flanged bowl with white slipped decoration around flange. LAL D 149, Period 11D
- 73 Oxidised ware (Fig 127), Fabric 12. Flanged bowl, with red slip over upper rim and part way down inner surface. Probably made locally in a workshop producing 'raetian' mortaria. LAL C 121, Period 11D
- 74 Nene Valley colour-coated ware (Fig 127), Fabric 21. Beaker, Gillam (1976), 80. AD 220-60. LAL D 675, Period 11D
- The assemblage from well 226 (fills 232-232.21; *Ch 4, pp 119-20*) differs markedly from all other pottery groups at the northern Lanes, in having only a very small residual element. The fills produced 254 sherds of coarseware, 27 of amphora, and 21 of mortarium, which were almost entirely third-century types. A large proportion of the pottery (49%) came from fills 232.12-232.17, immediately above the human body deposited in it during backfilling (*Ch 4; p 120*), and forms a group of vessels with several cross-joins, many of which could date to the third quarter of the third century.
- From the base of the well (232.21), there is a dish of Gillam (1970) form 329, dated to AD 190-340, and a sherd of Mancetter-Hartshill mortarium. Other Black-burnished ware 1 (Fabric 1) types of third-century date include bowls of Gillam (1976) forms 42 (Fig 128.77) and 46 (Fig 128.78), and cooking pots of Gillam (1976) types 8 (Figs 128.75, 128.76) and 10. In addition, there are early third-century African-style vessels, comprising two lids and a dish (Figs 128.90, 128.91, 128.92; Swan 1992), a few sherds of Severn Valley Ware (Fabric 17), and one of Nene Valley colour-coated ware (Fabric 21).
- In contrast to the remainder of the Period 11D assemblage, the mortaria from the well are predominantly Mancetter-Hartshill vessels (Figs 129.96, 129.97, 129.98, 129.99), with a few Lower Nene Valley sherds (Fig 129.100), one of Rhineland Fabric 314, and two of local products (Fabric 301). The well group also included 48 sherds of samian (almost 14% of the group; *Appendix 1, p 268*), although most of this is likely to be residual. It is noticeable, however, that a much greater proportion of it belongs to the end of the second century than in previous periods, the latest being an East Gaulish Dr 30 or Dr 37, from 232.12, and dating to the late second or early third century.
- 75 Black-burnished ware 1, Fabric 1 (Fig 128). Cooking pot, Gillam (1976), 7-8, sooted. Early/mid-third century. LAL D 232.12, Period 11D
- 76 Black-burnished ware 1, Fabric 1 (Fig 128). Cooking pot, Gillam (1976), 8. Mid-third century. LAL D 232.17, Period 11D
- 77 Black-burnished ware 1, Fabric 1 (Fig 128). Bowl, Gillam (1976), 42. Late second/early third century. LAL D 232.13, Period 11D
- 78 Black-burnished ware 1, Fabric 1 (Fig 128). Bowl, Gillam (1976), 46. Late third/early fourth century. LAL D 232.12, Period 11D
- 79 Black-burnished ware 1, Fabric 1 (Fig 128). Dish, Gillam (1970), 329, sooted. AD 190-340. LAL D 232.16, Period 11D
- 80 Greyware (Fig 128), Fabric 11, jar/cooking pot. LAL D 232.17, Period 11D
- 81 Greyware (Fig 128), Fabric 11, jar/cooking pot. LAL D 232.15/232.16, Period 11D
- 82 Greyware (Fig 128), Fabric 11, jar/cooking pot. 'Second', with distorted rim. LAL D 232.17, Period 11D
- 83 Greyware (Fig 128), Fabric 11. Jar/cooking pot, sooted. LAL D 232.19, Period 11D
- 84 Greyware (Fig 128), Fabric 11. Jar/cooking pot, sooted. LAL D 232.15, Period 11D
- 85 Greyware (Fig 128), Fabric 11, jar/cooking pot. LAL D 232.18, Period 11D
- 86 Greyware (Fig 128), Fabric 11, storage jar. LAL D 232.11, Period 11D
- 87 Greyware (Fig 128), Fabric 11, bowl. LAL D 232.17, Period 11D
- 88 Oxidised ware (Fig 128), Fabric 12, flagon. LAL D 232.18, Period 11D
- 89 Oxidised ware (Fig 128), Fabric 12, flask. LAL D 232.10, Period 11D
- 90 Oxidised ware (Fig 128), Fabric 12. Lid, African-style. Early third century. Swan (1992), fig 3, 59. LAL D 232.21, Period 11D
- 91 Oxidised ware (Fig 128), Fabric 12. Lid, African-style. Early third century. Swan (1992), fig 3, 61. LAL D 232.18, Period 11D



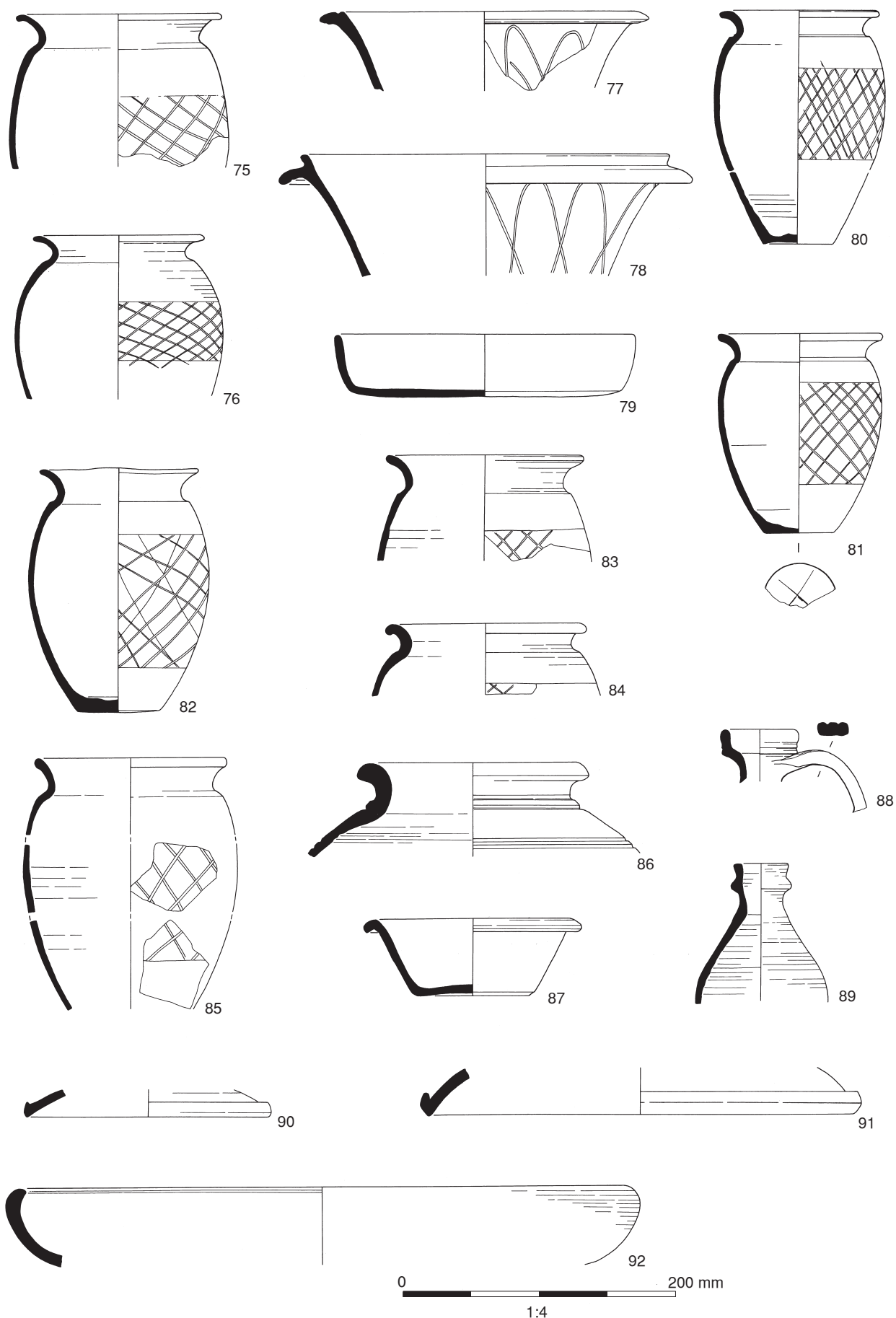


Figure 128: Coarsewares from Period 11D well 226

- 92 Oxidised ware (Fig 128), Fabric 13. Dish, African-style. Early third century. Swan (1992), fig 3, 57-58.  
LAL D 232.09, Period 11D

All the parallels for the African-style vessels (Figs 128.90, 128.91, 128.92) are from Castle Street, Carlisle (Taylor 1991; see, for instance, fig 335).

- 93 Colour-coated ware (Fig 129), Fabric 30. Beaker with barbotine decoration. A Rhineland product?  
LAL D 232.17, Period 11D
- 94 Amphora (Fig 129), Fabric 207. Peacock and Williams (1986), Class 25.36. Second half of second century/early third century.  
LAL D 232.10, Period 11D
- 95 Mortarium (Fig 129), Fabric 301. Raetian slip, Carlisle area. Second half of second century.  
LAL D 232.05, Period 11D
- 96 Mortarium, Mancetter-Hartshill (Fig 129), Fabric 324. Burnt.  
LAL D 232.14/232.16, Period 11D

- 97 Mortarium, Mancetter-Hartshill (Fig 129), Fabric 324. Burnt internally. Annetwell Street type 367 (Hird in prep). AD 170-220.  
LAL D 232.09, Period 11D

- 98 Mortarium, Mancetter-Hartshill (Fig 129), Fabric 324. Annetwell Street type 369 (Hird in prep). AD 130-370.  
LAL D 232.11, Period 11D

- 99 Mortarium, Mancetter-Hartshill (Fig 129), Fabric 324. Burnt and discoloured. Annetwell Street type 371 (Hird in prep). AD 190-250.  
LAL D 232.12/232.13, Period 11D

- 100 Mortarium, Lower Nene Valley (Fig 129), Fabric 328. Annetwell Street type 383 (Hird in prep). c AD 230-300?  
LAL D 232.05, Period 11D

Only within the northern plot did there appear to be some continuation of intensive occupation (Period 11E), which again produced a large group of pottery (in excess of 2000 sherds). The pottery shows a greater diversity of fabrics and sources of supply than that of earlier periods, although the wide date

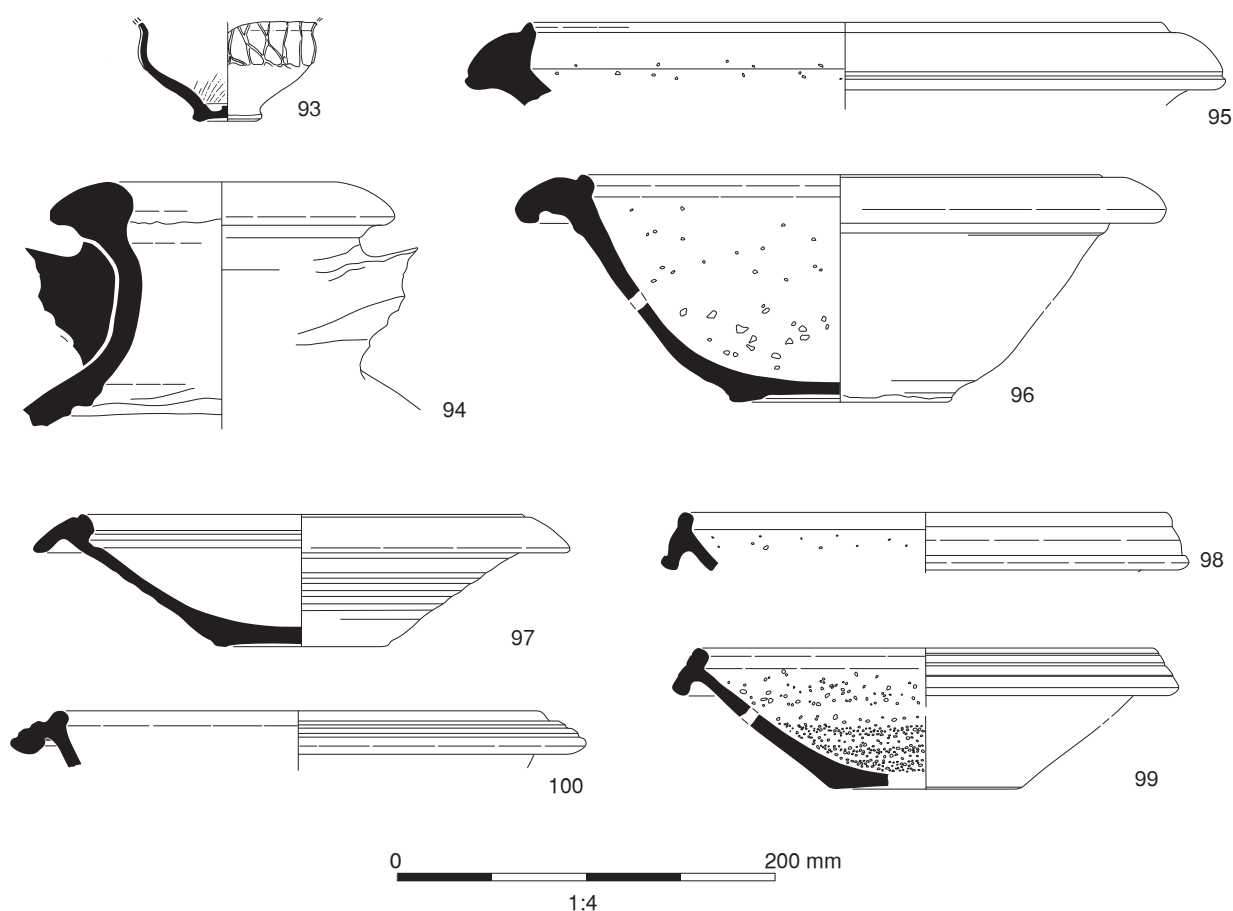


Figure 129: Colour-coated ware, amphora, and mortaria from Period 11D well 226

range is still apparent, with residual second-century material still making up a considerable element of the assemblage. Indeed, the third- and fourth-century element still remains small, with very little being of definite third-century date. The greater diversity of sources exploited at this time was also seen in third-century contexts at the southern Lanes (Hird and Brooks 2010).

Second-century Black-burnished ware 1 (Fabric 1) types include Gillam (1976) forms 1, 4, 30, 54, 55, 57, 60, 68, and 76. Mortaria include a vessel of the Mancetter-Hartshill potter Iunius, dated to AD 140-80, represented by sherds from surface 575 (*Ch 4*, p 123). 'Raetian' mortaria (Fabric 301) came from a number of contexts. A locally produced greyware jar (Fig 130.104) from posthole 96 is worthy of note, as it is a clear imitation of Black-burnished ware 1 cooking pots of second-century date (see Gillam 1976, form 1). The stamped handle (amphora stamp 8) of a South Spanish Peacock and Williams (1986) Class 25 amphora (Fabric 207) dates to the period AD 130-80.

Black-burnished ware 1 vessels of very late second- or third-century date include examples of Gillam (1976) bowl form 42, from layers 516 (Fig 130.103) and 522 (*Ch 4*, p 123), and pit 579 (fill 574.02; *Ch 4*, p 123). Third-century Black-burnished ware 1 vessels include a Gillam (1976) type 42 bowl from surface 522 (*Ch 4*, p 123), and Black-burnished ware 1 dishes of Gillam (1970) type 329, dated to AD 190-340, appeared in several contexts. Vessels produced in the Oxford region occasionally appear in the North of England, but are not common at any period, and only a single sherd came from Period 11E.

A probable third-century mortarium in Fabric 314 came from layer 88 (LAL C) and surface 604 (Fig 131.124), and sherds of Rhineland mortaria (Fabric 317) also came from layer 112 (also LAL C). Nene Valley colour-coated wares of probable third-century date include a folded beaker (Fig 130.108) from layers 161 and 164 (LAL B). Examples of late second- or early third-century Black-burnished ware 2 (Fabric 2) vessels include a cooking pot of Gillam (1970) form 137, dated to AD 150-250, and dish form Gillam (1970) 313, dated to AD 180-240.

The only two fragments of Derbyshire ware (Fabric 59) from the northern Lanes appeared in this period, both being jars from surface 575 and overlying layer 585 (Figs 131.121, 131.122). The full date range of these vessels extends from the second to the fourth centuries, but in Carlisle they are likely to be third- or possibly fourth century in date. Other third-century vessels are an African-style dish (Fig 130.105) and a Severn Valley-ware jar (Fig 130.107), although the latter is a form which lasted into the fourth century.

Fourth-century pottery from sources in East Yorkshire is well-represented by this time. Huntcliff jars (Fabric 22) of Gillam (1970) forms 161 (Figs 130.109, 130.110) and 163 (Fig 130.111) are present in many contexts, the later form (Gillam 163) outnumbering its predecessor (Gillam 161) by a factor of 3:1. Crambeck greyware vessels (Fabric 27) include Corder and Birley (1937) type 1 (Fig 130.112), type 1a (Fig 130.113), late type 1b, and jar type 3. Crambeck Parchment ware (Fabric 28) vessels of the later fourth century are also represented, with examples of Corder and Birley (1937) types 5b (Fig 131.116), type 8 (Figs 131.117, 131.118), type 9 (Fig 131.119), and type 10 (Fig 131.120).

Elsewhere, pit 665 (fill 628; *Ch 4*, p 125) produced 93 sherds of very late Roman pottery, including five Huntcliff-ware jars (Gillam 1970, type 163), and two bowls in Crambeck greyware (Corder and Birley 1937, type 1b), both of which are fabrics strongly indicative of the very latest Roman activity in the north of England. It is an unusual group, being 49% (by sherd count) distinctively fourth-century fabrics, with another 5% of the group dating more generally to the third or fourth century. Other distinctively fourth-century types include a Black-burnished ware 1 flanged bowl (Gillam 1976, type 46) from layer 721 (Fig 130.101; *Ch 4*, p 127), and a Huntcliff jar (Fabric 22), Gillam (1970) type 163, from drain 348 (fill 322; KLA D). A bowl of Corder and Birley (1937) type 9, dating to the later fourth century, came from pit 672 (fill 615; *Ch 4*, p 125), and, from another pit 670 (fill 641; *Ch 4*, p 130), there is a Huntcliff-ware dish, Gillam (1970) type 332, of mid/late fourth-century date. Another distinctively fourth-century vessel, a Crambeck-ware dish of Corder and Birley (1937) type 2a, was recovered from pit 698 (fill 696; *Ch 4*; p 130).

- 101 Black-burnished ware 1, Fabric 1 (Fig 130). Bowl, heavily sooted and burnt. Gillam 1976, type 46, Late third/early fourth century. KLA B 721, Period 11E
- 102 Black-burnished ware 1, Fabric 1 (Fig 130). An unusual flanged bowl with lattice decoration. See Holbrook and Bidwell (1991) type 44.1. Later second/third century? LAL D 604, Period 11E
- 103 Black-burnished ware 1, Fabric 1 (Fig 130). Bowl, Gillam (1976), type 42. Late second/early third century. LAL D 516, Period 11E
- 104 Greyware (Fig 130), Fabric 11. Cooking pot. The wavy-line decoration on this jar is an imitation of Black-burnished ware 1 cooking pots of the early/mid-second century. Locally produced. LAL C 96, Period 11E

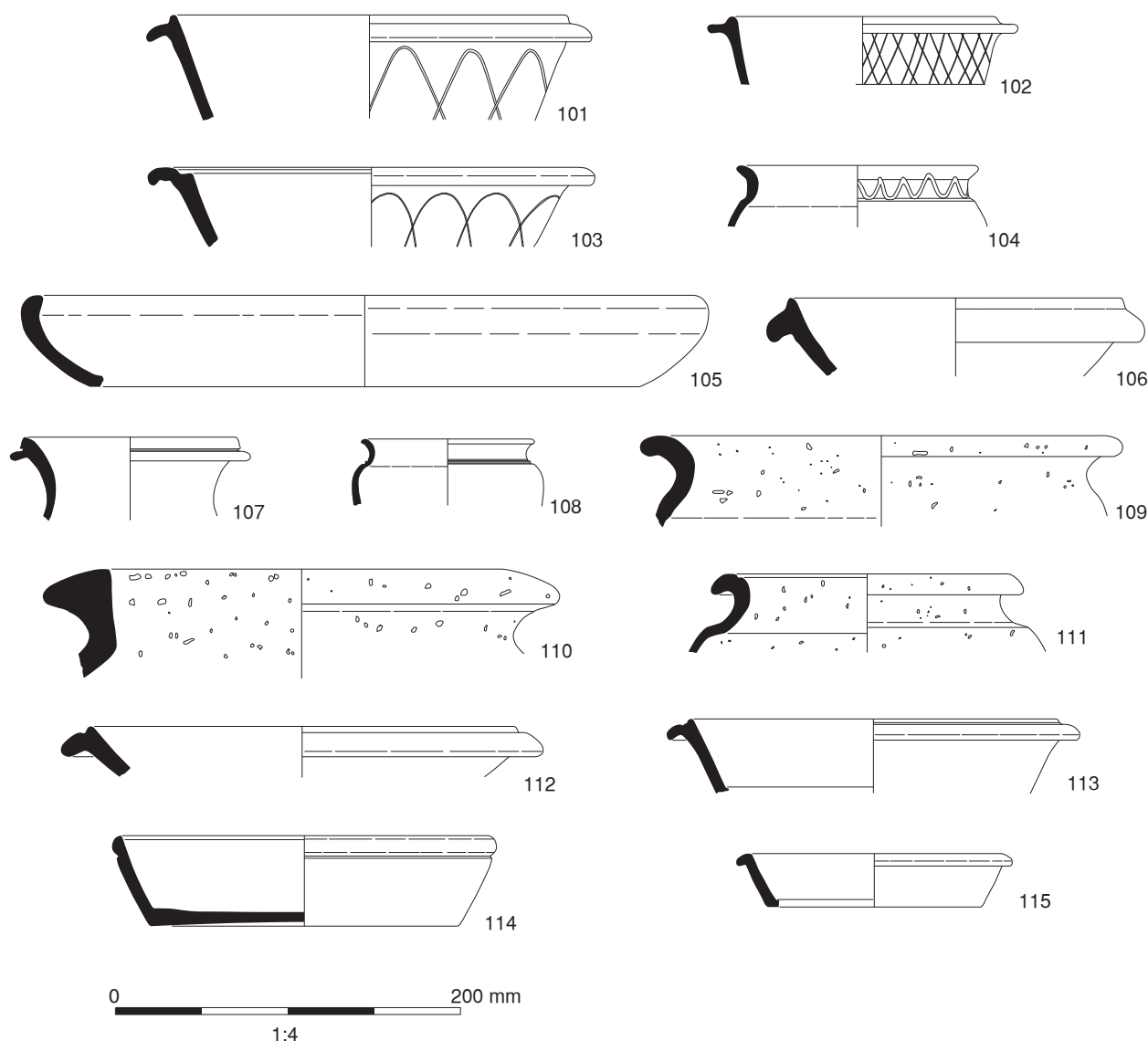


Figure 130: Coarsewares from Period 11E

- |   |  |
|---|--|
| <p><b>105</b> Oxidised ware (Fig 130), Fabric 12. Dish, African-style, reddish surface. Swan (1992) fig 3, 57-58. Early third century. LAL D 575/620, Period 11E</p>              | <p><b>109</b> Huntcliff ware (Fig 130), Fabric 22. Jar, sooted. Gillam (1970), type 161. Earlier fourth century. LAL D 137, Period 11E</p>                 |
| <p><b>106</b> Oxidised ware (Fig 130), Fabric 12. Bowl, heavily burnt. Likely to be fourth-century in date. LAL B 161, Period 11E</p>   | <p><b>110</b> Huntcliff ware (Fig 130), Fabric 22. Very large jar, abraded. Gillam (1970), type 161. Fourth century. LAL C 88, Period 11E</p>              |
| <p><b>107</b> Severn Valley ware (Fig 130), Fabric 17. Webster (1976), type 9. Third and fourth centuries. LAL D 567, Period 11E</p>  | <p><b>111</b> Huntcliff ware (Fig 130), Fabric 22. Jar, Gillam (1970), type 163. Second half of fourth century. LAL D 572, Period 11E</p>                  |
| <p><b>108</b> Nene Valley colour-coated ware (Fig 130), Fabric 21. Folded beaker. Howe <i>et al</i> (1980), fig 4, 40. Late second/early third century. LAL B 164, Period 11E</p> | <p><b>112</b> Crambeck greyware (Fig 130), Fabric 27. Bowl, Corder and Birley (1937), type 1, sooted around rim. Fourth century. LAL D 643, Period 11E</p> |



- 113 Crambeck greyware (Fig 130), Fabric 27. Bowl, Corder and Birley (1937), type 1a. Fourth century.  
LAL C 88, Period 11E
- 114 Crambeck greyware (Fig 130), Fabric 27. Dish, Corder and Birley (1937), type 2a. Fourth century.  
LAL D 97, Period 11E
- 115 Crambeck greyware? Fabric 27 (Fig 130). Dish, sooted, unusual form. Fourth century.  
LAL C 97, Period 11E
- 116 Crambeck Parchment ware (Fig 131), Fabric 28. Bowl, Corder and Birley (1937), type 5b. The decorative motifs are two of the commonest at Beadlam (Evans 1989, E005 and E20). Later fourth century.  
LAL C 88, Period 11E
- 117 Crambeck Parchment ware (Fig 131), Fabric 28. Bowl, Corder and Birley (1937), type 8. The decorative motif is Evans (1989), E002. Later fourth century.  
LAL D 544, Period 11E
- 118 Crambeck Parchment ware (Fig 131), Fabric 28. Bowl/mortarium, Corder and Birley (1937), type 8. Later fourth century.  
LAL C 115, Period 11E
- 119 Crambeck Parchment ware (Fig 131), Fabric 28. Bowl, Corder and Birley (1937), type 9. Red-painted decoration on inner surface. Later fourth century.  
LAL B 161, Period 11E
- 120 Crambeck Parchment ware (Fig 131), Fabric 28. Dish, slightly burnt. Corder and Birley (1937), type 10. Later fourth century.  
LAL D 485, Period 11E
- 121 Derbyshire ware (Fig 131), Fabric 59. Kay (1962) type A lid-seated jar, dated by Gillam (1970, form 152) to AD 140-350. Jones and Webster (1969) date the ware to the later third century or later on Hadrian's Wall.  
LAL D 575, Period 11E
- 122 Derbyshire ware (Fig 131), Fabric 59. Kay (1962) type B jar, the less common of the two Derbyshire-ware rim forms. See also 121. Later third century?  
LAL D 585, Period 11E
- 123 Mortarium, Northern England, probably Catterick (Fig 131), Fabric 311. Cream slip over rim and red-painted decoration. Sooted along upper surface of rim. Similar to Annetwell Street type 323 (Hird in prep). Could be dated to AD 160-200.  
LAL B 180, Period 11E
- 124 Mortarium, Rhineland (Fig 131), Fabric 314. Gose (1950), type 453, which probably dates to the period AD 150-250. Perhaps, in Carlisle, the date is more likely to be third than second century.  
LAL D 604, Period 11E
- 125 Mortarium, Rhineland (Fig 131), Fabric 317. Pink core and pinkish-brown slip under rim and on outer surface. Annetwell Street type 345 (Hird in prep). *Floruit* c AD 150-250.  
LAL C 112/121/123, Period 11E
- 126 Mortarium, Rhineland (Fig 131). Soller product, Fabric 318. Second half of second to early third century.  
LAL D 468, Period 11E
- 127 Mortarium, Crambeck (Fig 131), Fabric 323. Corder and Birley (1937), type 7. Later fourth century.  
LAL D 525, Period 11E
- 128 Mortarium, Crambeck (Fig 131), Fabric 323. Corder and Birley (1937), type 8. Red-painted decoration only remains as slight traces on and above lower flange. Later fourth century.  
LAL D 480, Period 11E
- 129 Mortarium, Mancetter-Hartshill (Fig 131), Fabric 324.  
LAL D 336/422/519/551/555, Period 11E
- 130 Mortarium, Mancetter-Hartshill (Fig 131), Fabric 324. Annetwell Street type 367 (Hird in prep). AD 170-220.  
LAL D 574, Period 11E
- 131 Mortarium, Mancetter-Hartshill (Fig 131), Fabric 324. Similar to Taylor (1990), fig 193, 71. AD 180-260.  
LAL D 575, Period 11E
- Period 12 saw the northern part of the site falling into disuse, with a widespread build-up of dark soils over most of the area (*Ch* 4). In all, there were c 2500 sherds of coarseware. Although this large group includes several contexts which produced vessels dating to the later fourth century, third- and fourth-century pottery still only makes up around 15% of the overall assemblage.

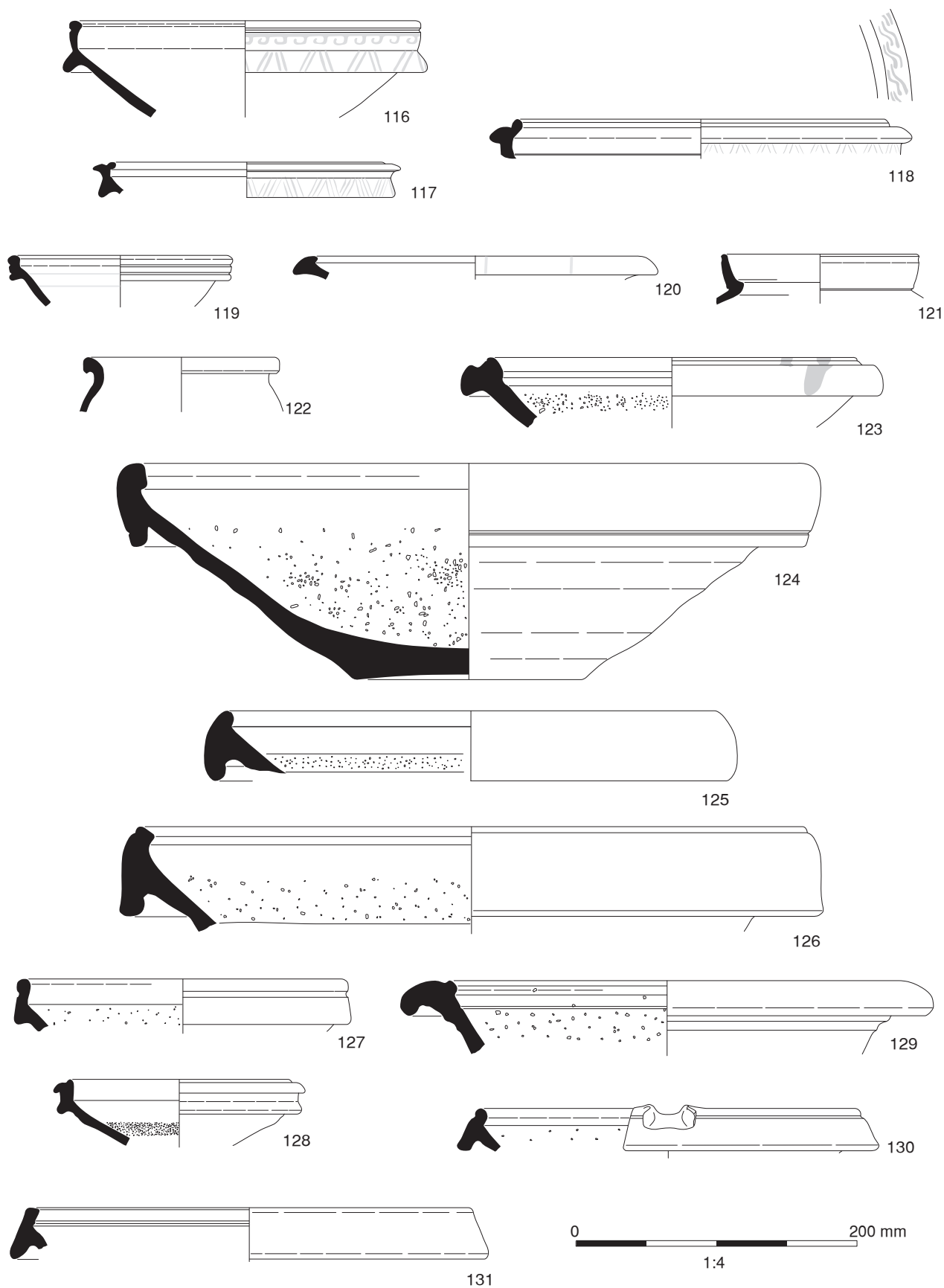


Figure 131: Coarsewares and mortaria from Period 11E

Residual late first- and second-century pottery includes rustic ware (Fabric 3), flagons of Gillam (1970) type 4, as well as a range of Black-burnished ware 1 types (Gillam (1976) 1, 4, 34, 55, 57, 60, 68, and 76). A Mancetter-Hartshill mortarium, Annetwell street type 377, dated to AD 230-350 (Hird in prep) was recovered from layer 349 (Fig 132.141).

There was a concentration of late fourth-century pottery in layers 73, 78, 80, and 85, elements of a 'dark earth' that accumulated over the whole of the area investigated in the northernmost building plot (Period 12; *Ch 4, p 126*), with *c* 37% being distinctively fourth-century types. This deposit also produced coins of AD 341-6 and AD 367-75 (*Appendix 3*). The pottery included Crambeck greyware (Fabric 27) vessels of Corder and Birley (1937) type 1b (Fig 132.136, 132.137), type 5a (Fig 132.138), and Crambeck Parchment (Fabric 28) type 5b. There were also Huntcliff ware (Fabric 22) jars of Gillam (1970) types 161 and 163 (Fig 132.134) and a dish, Gillam (1970) type 332 (Fig 132.135). In the same area, a later fourth-century Crambeck mortarium of Corder and Birley type 7 (Fig 132.140) came from deposit 430 (LAL D, in the northern property).

132 Greyware (Fig 132), Fabric 11, jar.  
LAL C 73, Period 12

133 Greyware (Fig 132), Fabric 11. Bowl, possibly a local product. Fourth century?  
LAL C 73, Period 12

134 Huntcliff ware (Fig 132), Fabric 22. Jar, Gillam (1970), type 163. Later fourth century.  
LAL C 73, Period 12

135 Huntcliff ware (Fig 132), Fabric 22. Dish, Gillam (1970), type 332. AD 340-400.  
LAL C 78, Period 12

136 Crambeck greyware (Fig 132), Fabric 27. Bowl, Corder and Birley (1937), type 1b. Later fourth century.  
LAL C 73, Period 12

137 Crambeck greyware (Fig 132), Fabric 27. Bowl, sooted, Corder and Birley (1937), type 1b. Later fourth century.  
LAL C 78, Period 12

138 Crambeck greyware (Fig 132), Fabric 27. Bowl, Corder and Birley (1937), type 5a. Fourth century.  
LAL C 85, Period 12

139 Mortarium, Crambeck (Fig 132), Fabric 322. Corder and Birley (1937), type 6. Fourth century.  
LAL D 422, Period 12

140 Mortarium, Crambeck (Fig 132), Fabric 323. Corder and Birley (1937), type 7, with the commonest decorative motif at Beadlam, E003 (Evans 1989). Later fourth century.  
LAL D 430, Period 12

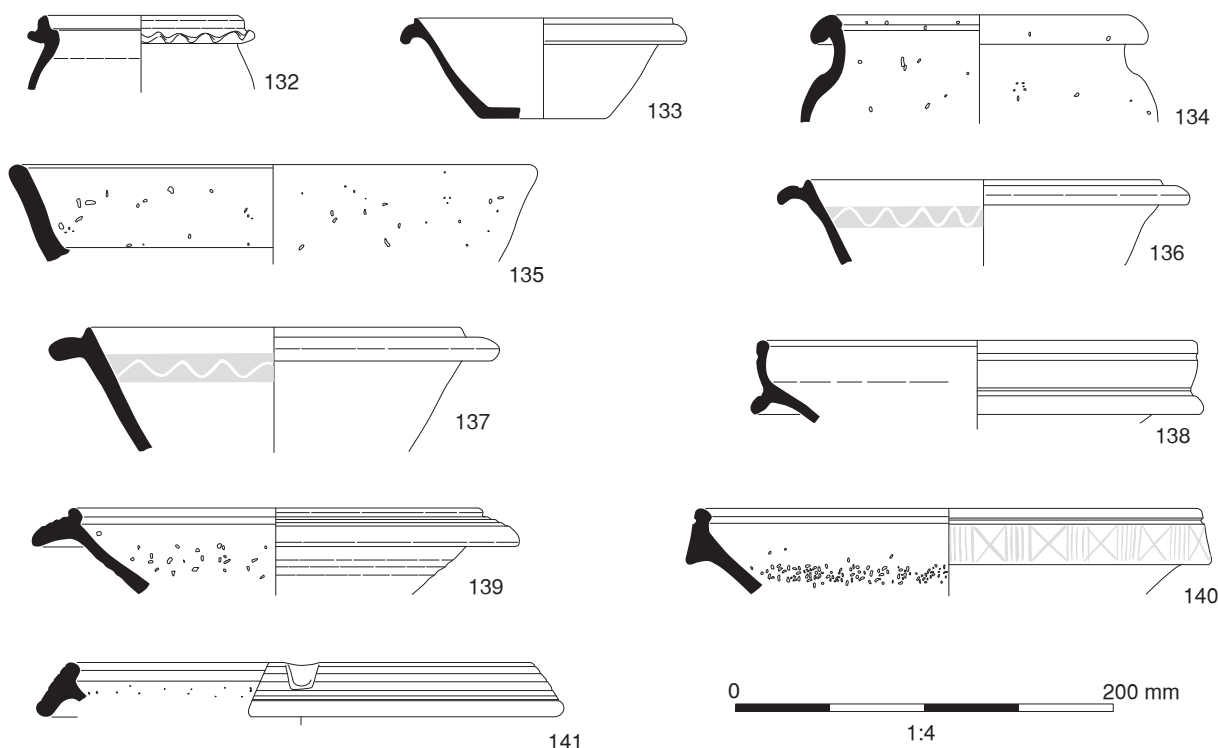


Figure 132: Coarsewares from Period 12

- 141 Mortarium, Mancetter-Hartshill (Fig 132), Fabric 324. Annetwell Street type 377 (Hird in prep). AD 230-350.  
LAL D 349, Period 12

In the central and southern parts of the site, the chronological period represented to the north by Periods 11D, 11E, and 12 was marked by a single, undifferentiated stratigraphic phase (Period 11D-12), suggesting that these areas had been largely abandoned, at least in terms of intensive or 'formal' occupation. Small quantities of fourth-century pottery and a few coins (*Appendix 3*) attest to limited activity into the late fourth century, and included limited occupation within the stone building in the central part of the site (Building 2000, *Ch 4*, p 127), followed by partial demolition of the structure.

As in the northern part of the site, most of the mortaria from Period 11D-12 deposits are local products, and undoubtedly residual. They include a second-century stamp of the Mancetter-Hartshill potter Sennius, dated to AD 150-75, from deposit 923 (stamp 27; *Ch 4*, p 130). Another Mancetter-Hartshill vessel, Annetwell Street type 365 (Hird in prep), dated to AD 150-200, was recovered from deposit 730 (*Ch 4*, p 127), and a mortarium of Rhineland origin (Fabric 317), with a *floruit* dated to AD 150-250 (Fig 133.159), was recovered from surface 1000 (*Ch 4*, p 131). Probable third-century Mancetter-Hartshill mortarium sherds (Fabric 324) were present in deposit 1060 (KLA C), but the latest mortarium from this phase, again a Mancetter-Hartshill product, dated to the period AD 270-350, came from surface 961 (*Ch 4*, p 131; see Taylor 1990, fig 193, 80, for the type).

A third-century Nene Valley colour-coated 'box' fragment (Gillam 1970, type 341, dated to AD 180-340) was recovered from 38 (KLA D), and third-century Black-burnished ware 1 vessels include cooking pots of Gillam (1976) types 8 and 10 (five examples from layer 904 (*Ch 4*, p 131), within the southern part of the site). Black-burnished ware 1 dishes of Gillam (1970) type 329, dated to AD 190-340, appeared in several contexts, including deposits 289.04 and 714, and layer 886 (*Ch 4*, p 131). Black-burnished ware 2 vessels of second/third-century date included cooking pots of Gillam (1970) type 137 from deposit 923 (*Ch 4*, p 130), and dishes of Gillam (1970) type 313 were found in deposits 285.02, 289.02, and 704 (Fig 133.142; *Ch 4*, p 127). Two sherds of 'Rhenish' ware (Fabric 34) came from a hypocaust fill 838 (*Ch 4*, p 129). A sherd of a 'box' lid, Gillam (1970) 341, from deposit 725 (*Ch 4*, p 130), is dated to AD 180-340.

However, the best third-century group came from soil 886 (*Ch 4*, p 131), within the southern part of the site, one of the few contexts from the entire

site that produced an almost entirely third-century assemblage (128 sherds, with only one sherd of fourth-century Crambeck ware). The group includes a Black-burnished ware 1 dish (Gillam 1970, type 329), dated to AD 190-340, a Black-burnished ware 2 dish (Gillam 1970, type 313), dated to AD 180-240, a Severn Valley-ware jar (Webster 1976, type 9), of third- or fourth-century date, an African-style dish of early third-century date (Fig 133.146), and a Central Gaulish beaker (Fig 133.155) of third-century date. Also of interest are two 'head'-pot fragments, one (Fig 133.145) in grey ware (Fabric 11), from soil 886, the other (Fig 133.148), from soil 63 in the central northern part of the site, in oxidised ware (Fabric 12).

Later fourth-century pottery was present in a group of 25 coarseware sherds and 11 amphora fragments from the fills (677.01-08) of well 678 (*Ch 4*, p 112). Amongst the assemblage is a fourth-century Nene Valley-ware beaker (Howe *et al* 1980, fig 5, 56-57) and a sherd of Severn Valley ware (Fabric 17). Fourth-century Crambeck greyware (Fabric 27) includes a flanged bowl of Corder and Birley (1937) type 1 and a jar of their type 3. There are also two vessels of later fourth-century date, representing two of the latest known Romano-British types in the north of England, being a Huntcliff (Fabric 22) jar of Gillam (1970) form 163 and a Crambeck Parchment-ware (Fabric 28) bowl (Fig 133.154).

- 142 Black-burnished ware 2, Fabric 2 (Fig 133). Dish, Gillam (1970), 313, no visible decoration. AD 180-240.  
KLA B 704, Period 11D-12
- 143 Black-burnished ware 2, Fabric 2 (Fig 133). Dish, Gillam (1970), 313. AD 180-240.  
KLA D 47, Period 11D-12
- 144 Greyware (Fig 133), Fabric 11. Flanged bowl, locally produced? Fourth century?  
KLA B 704, Period 11D-12
- 145 Greyware (Fig 133), Fabric 11, 'head' pot. Incised decoration for eyes, applied nose, ear, and blobs to represent hair, which have then been impressed with a curved tool. There is stabbed decoration between the blobs of hair. The pot shows no particular affinities with other head pots published by Braithwaite (1984). Head pots have a thin but wide distribution in the Roman period.  
KLA C 886, Period 11D-12
- 146 Oxidised ware (Fig 133), Fabric 12. Dish, African-style. See Hayes (1972), form 181 of second half of the second-century to first half of third-century date, and Swan (1992), fig 2,



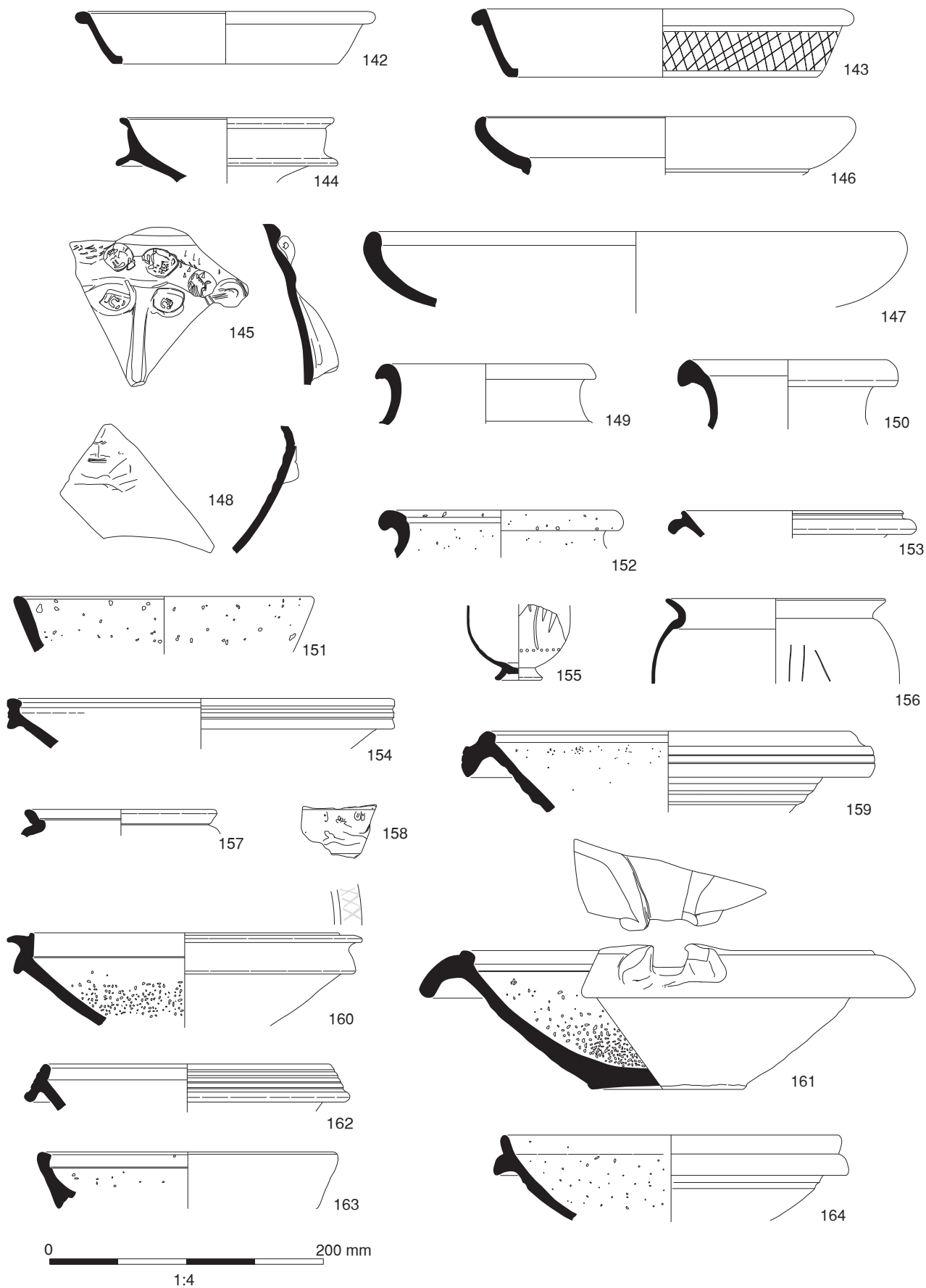


Figure 133: Coarsewares from Period 11D-12

- 32 (a dish from York). African-style vessels appear to date to the early years of the third century in Carlisle.  
KLA C 886, Period 11D-12
- 147 Oxidised ware. (Fig 133), Fabric 12. Dish, African-style. Early third century.  
KLA C 1528, Period 11D-12
- 148 Oxidised ware (Fig 133), Fabric 12. 'Head' pot, applied prominent chin and simply incised mouth. The remainder of the face is missing.  
KLA D 63, Period 11D-12
- 149 Severn Valley ware (Fig 133), Fabric 17. Jar, Webster (1976), type 4, dated to the second-fourth century but appears to be third- or fourth century in Carlisle.  
KLA B 703, Period 11D-12
- 150 Severn Valley ware (Fig 133), Fabric 17. Jar, Webster (1976), type 4. See 149.  
KLA C 1026, Period 11D-12
- 151 Huntcliff ware (Fig 133), Fabric 22. Dish, Gillam (1970), type 332. AD 340-400.  
KLA C 851, Period 11D-12
- 152 Huntcliff ware (Fig 133), Fabric 22. Jar, Gillam (1970), type 163. Second half of fourth century.  
KLA D 47, Period 11D-12
- 153 Crambeck greyware (Fig 133), Fabric 27. Bowl, Corder and Birley (1937), type 1. Fourth century.  
KLA B 289.04, Period 11D-12
- 154 Crambeck Parchment ware (Fig 133), Fabric 28. Bowl, Corder and Birley (1937), type 9. The red-painted decoration has worn off almost completely. Later fourth century.  
KLA C 677.07, Period 11D-12
- 155 Central Gaulish colour-coated ware (Fig 133), Fabric 35. Beaker, Symonds (1992), group 12, form 4, type B. Third century? An uncommon fabric from the northern Lanes.  
KLA C 886, Period 11D-12
- 156 Dales-type (Fig 133), Fabric 51. Jar, sooted. Second half of fourth century?  
KLA C 923, Period 11D-12
- 157 Greyware (Fig 135), Fabric 65. Lid-seated jar, Gillam (1970), form 151. This type is closely associated with Black-burnished ware 2, made in the same area and having a similar distribution (Bidwell 1985). Vindolanda and Housesteads were thought to be the most westerly occurrences of the type (*ibid*), but since then it has been found at Birdoswald (Hird 1997) and now in Carlisle. The type is dated at Vindolanda to the early / mid-third century.  
KLA B 706, Period 11D-12
- 158 Oxidised ware (Fig 133), Fabric 67. A single, very abraded, sherd with moulded decoration in imitation of samian, which Brenda Dickinson suggests is probably locally produced (*pers comm*).  
KLA C 886, Period 11D-12
- 159 Mortarium, Rhineland (Fig 133), Fabric 317. Gose (1950), type 463, first half of fourth century.  
KLA C 923/1000, Period 11D-12
- 160 Mortarium, Crambeck (Fig 133), Fabric 323. Corder and Birley (1937), type 8. The decorative motif, E026 (Evans 1989), is unusual, at Beadlam; for instance, it comprises only 0.7% of the decoration (*op cit*, table 3). Later fourth century.  
KLA B 289.02, Period 11D-12
- 161 Mortarium, Mancetter-Hartshill (Fig 133), Fabric 324. Reconstructed from four non-joining sherds. Annetwell Street type 365 (Hird in prep). AD 150-200.  
KLA B 696/728, Period 11D-12
- 162 Mortarium, Mancetter-Hartshill (Fig 133), Fabric 324. Annetwell Street type 377 (Hird in prep). AD 230-350.  
KLA D 66, Period 11D-12
- 163 Mortarium, Oxford region (Fig 133), Fabric 348. Young (1977), type M14, dated to c AD 180-240.  
KLA B 289.02, Period 11D-12
- 164 Mortarium, possibly local (Fig 133), Fabric 358. Buff slip on both surfaces. Worn away on lower inner surface. Fourth century?  
KLA B 732, Period 11D-12

### Material from poorly phased and post-Roman contexts

For the most part, pottery that did not come from securely stratified Roman deposits (being either from poorly phased deposits, occurring residually in post-Roman contexts, or unstratified) was not selected for illustration. However, 18 sherds are considered of sufficient intrinsic interest to Romano-British pottery studies to warrant inclusion in the illustrated catalogue. The majority comprise types that are either uncommon in stratified Roman levels at the northern

Lanes, or which are entirely unrepresented in Roman deposits at the site.

- 165 Black-burnished ware 1, Fabric 1 (Fig 134). Bowl, scribbled base, sooted. The unusual combination of lattice decoration, usually second-century in date, and grooved rim, usually a third-century feature, means this vessel is likely to date to the end of the second or early years of the third century.  
LAL D 5.01, Period 19A (Post-Roman)
- 166 Black-burnished ware 1, Fabric 1 (Fig 134). Bowl, sooted, Gillam 1976, form 48. A rather uncommon type from the Lanes, which only occurs in post-Roman contexts. Early/mid-fourth century.  
CAG A 14, unstratified
- 167 Greyware (Fig 134), Fabric 11. Jar. This form of jar was produced at Norton, East Yorkshire (Hayes and Whitley (1950), fig 13, 7h (where it is described as a flagon)). Third century? This is the only example from the northern Lanes. See also Piercebridge type 365 (Croom *et al* 2008).  
LAL D 571, Period 14A-B (Post-Roman)
- 168 Oxidised ware (Fig 134), Fabric 12. Bowl, a local product, found complete. Another example of this form from Blackfriar's Street, Carlisle (Taylor 1990, fig 206.1), has a streaky red slip, indicative of a 'raetian' workshop, and therefore probably of later second-century date.  
LAL D 282, not closely phased
- 169 Oxidised ware (Fig 134), Fabric 12. Dish with elaborate handle. The dish could be an African-style vessel. See Hayes (1972) form 32, which is of early/mid-third-century date; the type does not normally have a handle, although similar vessels produced at the Borthwick kilns in York do (V Swan *pers comm*) and the form is Perrin (1990), fig 115, 1233.  
KLA G 311, not closely phased
- 170 Oxidised ware (Fig 134), Fabric 13. Bowl, African-style casserole. Hayes (1972), form 184, Swan (1992), fig 3, 50 (an example from Blackfriar's Street, Carlisle). Early third century. There are no examples of this form in phased Roman contexts.  
LAL D 130, Period 19A (Post-Roman)
- 171 Oxidised ware (Fig 134), Fabric 13. Bowl, African-style casserole. Hayes (1972), form 184. See 170.  
LAL C 35, Period 13 (Post-Roman)
- 172 Oxidised ware (Fig 134), Fabric 13. Bowl, African-style casserole. Hayes (1972), form 184, See 170.  
LAL D 4, Period 19A (Post-Roman)
- 173 Oxidised ware (Fig 134), Fabric 13. Bowl, African-style casserole. Hayes (1972), form 184. See 170.  
KLA B 66.02, Period 14A-B (Post-Roman)
- 174 Oxidised ware (Fig 134), Fabric 13. Bowl, African-style casserole. Hayes (1972), form 184. See 170.  
CAG A 14, unstratified
- 175 Oxidised ware (Fig 134), Fabric 13. Lid, African-style. Hayes (1972), form 22, dated possibly to early/mid-second century, although, in Carlisle, African-style vessels are early third-century in date (Swan 1992).  
KLA B 281.04, Period 13 (Post-Roman)
- 176 Oxidised ware (Fig 134), Fabric 13. Lid, African-style. Early third century.  
KLA B 299, not closely phased (Post-Roman)
- 177 Nene Valley colour-coated ware (Fig 134), Fabric 21. Beaker, Howe *et al* (1980), fig 3, 33. Late second/early third century.  
KLA B 299, not closely phased (Post-Roman)
- 178 Nene Valley colour-coated ware (Fig 134), Fabric 21. Bowl, Gillam (1970), type 230; Howe *et al* (1980), fig 7, 79. Fourth century, probably later fourth century in the north of England. The only example of the type from the northern Lanes.  
LAL D 401, Period 13 (Post-Roman)
- 179 Nene Valley colour-coated ware (Fig 134), Fabric 21. Dish, Gillam (1970), type 335. Howe *et al* (1980), fig 7, 87. Fourth century, perhaps later fourth century in the north of England.  
KLA B 561, Period 15A (Post-Roman)
- 180 Huntcliff ware (Fig 134), Fabric 22. Jar, Gillam (1970), type 163. It is unusual in Carlisle to find the type decorated with a wavy-line. Later fourth century.  
LAL B 172.02, Period 13 (Post-Roman)
- 181 Huntcliff ware (Fig 134), Fabric 22. Dish, an unusual form. Fourth century.  
KLA B 280, Period 13 (Post-Roman)

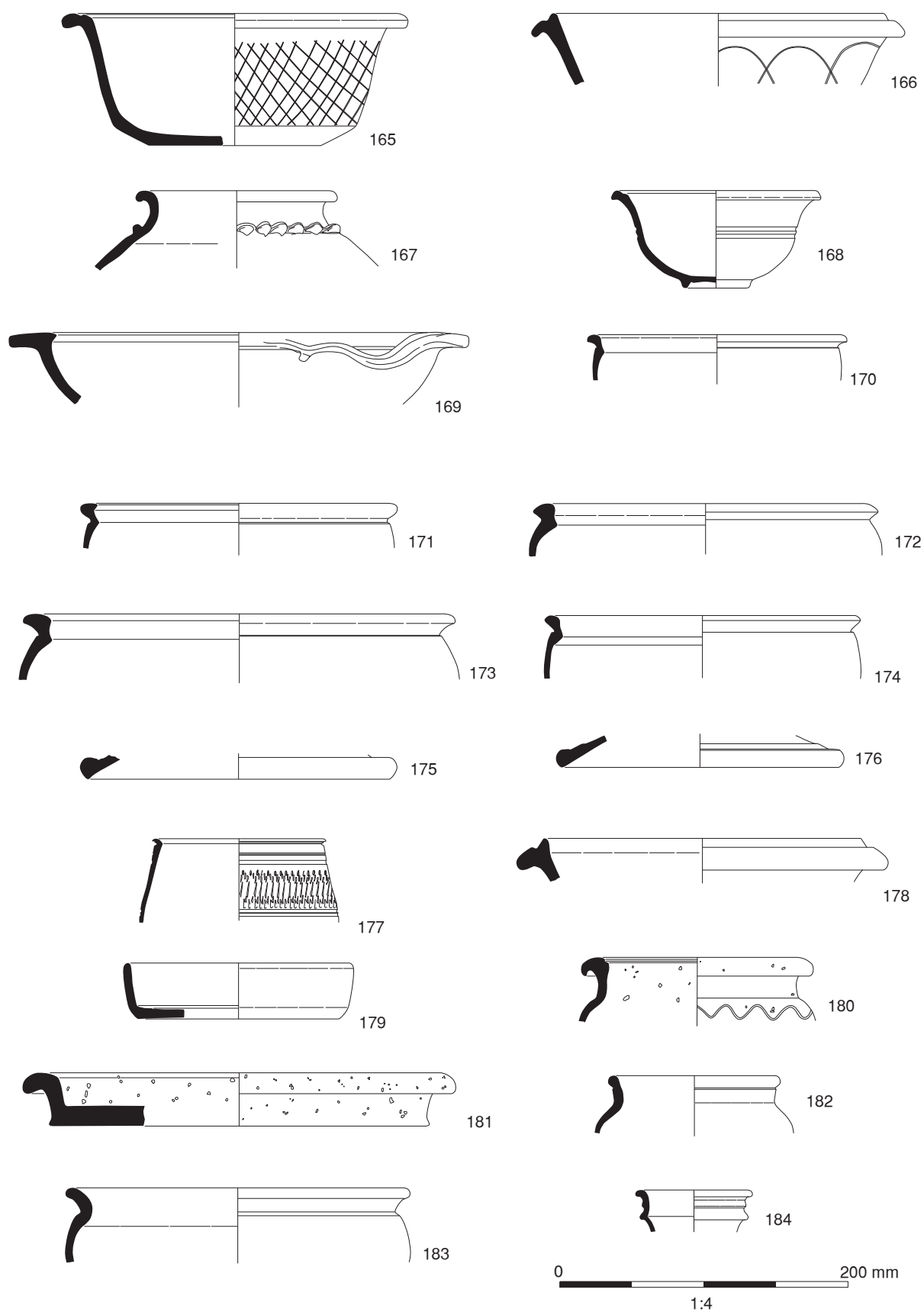


Figure 134: Coarsewares from poorly phased or post-Roman contexts



- 182 Crambeck greyware (Fig 134), Fabric 27. Jar, Corder and Birley (1937), type 3a. Fourth century (perhaps earlier fourth century). The form does not appear in phased Roman contexts. LAL B 142, Period 14A (Post-Roman)
- 183 Crambeck greyware (Fig 134), Fabric 27. Wide-mouthed jar/bowl, Corder and Birley (1937), type 4. A relatively uncommon form, which made up only 4% of the products from the kiln site (Corder 1928). Fourth century. This is the only example of this form from the northern Lanes. CAG A 14, unstratified
- 184 Crambeck greyware (Fig 134), Fabric 27. Jar, Corder and Birley (1937), type 14a. Fourth century. This is the only example of this type from the northern Lanes. CAG A 18, unstratified
- 185 Crambeck Parchment ware (Fig 135), Fabric 28. Mortarium, Corder and Birley (1937), type 7. Decorative motif is E033 (Evans 1989), which made up 2% of the motifs from Beadlam villa. Second half of fourth century. LAL D, unstratified
- 186 Crambeck Parchment ware (Fig 135), Fabric 28. Mortarium, no decoration. Corder and Birley (1937), type 9. Later fourth century. LAL D 411, Period 13 (Post-Roman)
- 187 Mica-dusted ware (Fig 135), Fabric 46, dish. Mica-dusting was a technique used in the later first and early second centuries (Precious and Darling 2014). KLA B, unstratified

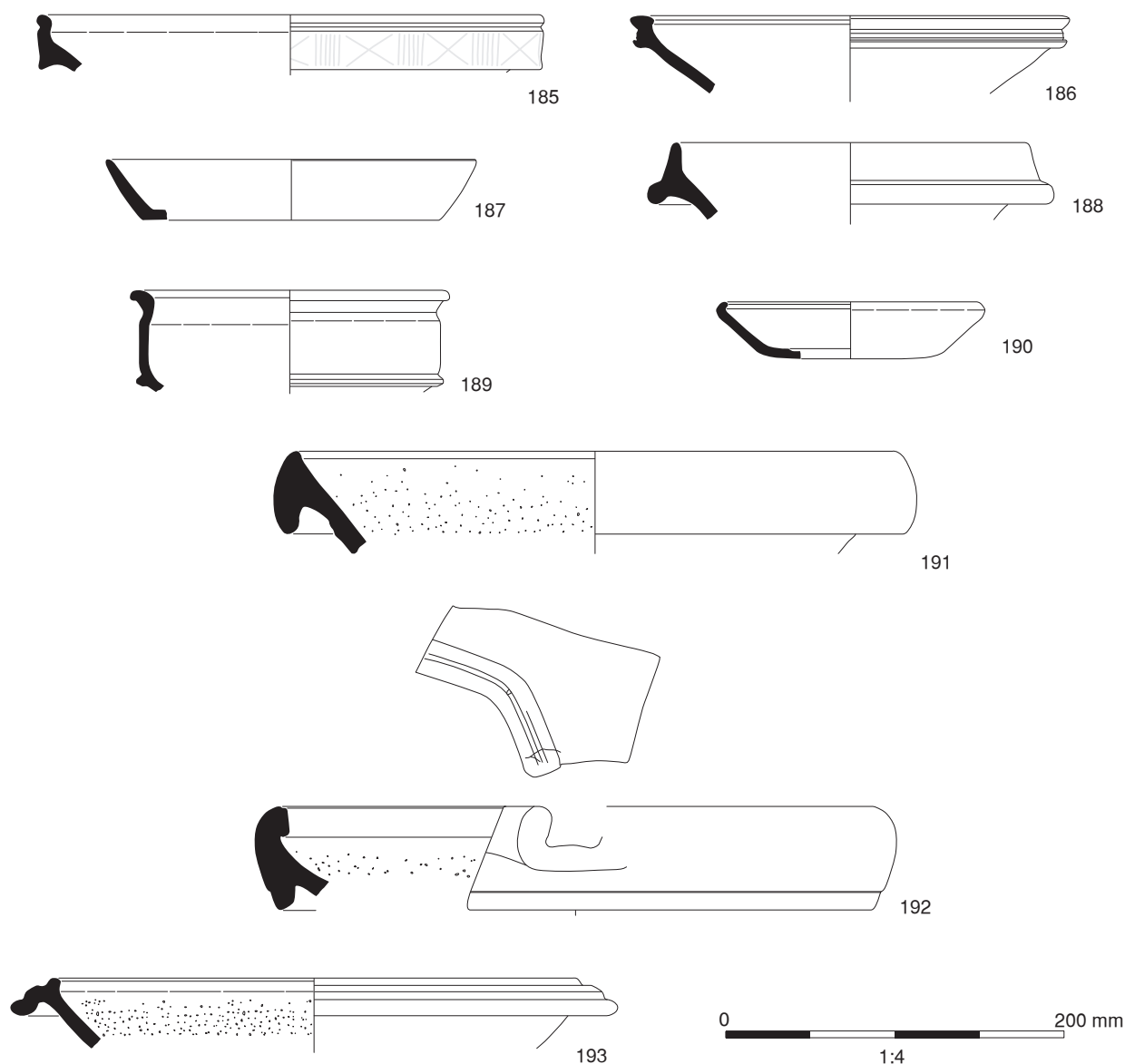


Figure 135: Coarsewares and mortaria from poorly phased or post-Roman contexts

- 188 Oxford red-brown colour-coated ware (Fig 135), Fabric 49. Flanged bowl, imitating form 38. Young (1977), type C51, dated to AD 240-400+. This is the only example of the type from the northern Lanes. Vessels of Oxford manufacture are found sporadically in Carlisle but never in any quantity; see, for instance, an example of the same form from Annetwell Street, type 295 (Hird in prep). LAL D 109, Period 19A (Post-Roman)
- 189 Oxidised ware (Fig 135), Fabric 52. Flanged bowl, red, streaky slipped surfaces. A local product, produced in a 'raetian' workshop. See comments Period 10A, 20. Second half of second century. KLA D, unstratified
- 190 Greyware (Fig 135), Fabric 68. Dish, Gillam (1970), type 337. Made in the vicinity of Doncaster and a well-known type around the Humber Estuary (Buckland *et al* 1980). LAL D 925, not closely phased
- 191 Mortarium, Rhineland (Fig 135), Fabric 317. Similar to Richardson (1986), 1, 83, and dated to the early / mid-third century. LAL C, unstratified
- 192 Mortarium, Rhineland (Fig 135), Fabric 317. Spout incomplete. Similar to Richardson (1986), 1, 69. Early / mid-third century. LAL C, unstratified
- 193 Mortarium, Lower Nene Valley product (Fig 135), Fabric 328. Pinkish slip over rim. Similar to Annetwell Street types 384-386 (Hird in prep). AD 250-400. LAL B 167, Period 13 (Post-Roman)

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## The Fabrics

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### Coarse/finewares

**Fabric 1:** Black Burnished ware category 1 (Williams (1977); Tomber and Dore (1998): DOR Black-burnished ware 1; SOW Black-burnished ware 1). Date range: early / mid-second to fourth century. Most of the Black Burnished ware 1 from the northern Lanes is South-Eastern Black-burnished ware 1 (Holbrook and Bidwell 1991), but there are one or two vessels in the South-Western fabric, including a cooking pot of early / mid-second-century date from Period 10A (Fig 119.18).

From Period 2 onwards, Black-burnished ware 1 is present in all periods except Period 4, and indeed, in

Period 2, all of the four sherds recovered are Black-burnished ware 1. It makes up the largest portion (18%) of assemblages from Periods 7-8A, and consistently forms over 10% of those from Periods 10-11D. The vessels include many second-century types (discussed in detail for the southern Lanes; Hird and Brooks 2010), including cooking pots (Gillam (1976) 1, 2, 4, and 30); beakers (Gillam (1976) 19); bowls (Gillam (1976) type 34); dishes (Gillam (1976) 54, 55, 57, 60, 61, 68, 70, and 75); and lids of the type defined by Wallace and Webster (1989, fig 2, 10-11), seen in Period 8B (Fig 117.12) and Period 9 (Fig 118.14). An unusual bowl of Gillam (1976), type 50 came from well 1016 (fill 955.02/1016.06; Ch 3, p 75).

Later forms from the northern Lanes include cooking pots of Gillam (1976), types 8 and 10, from Period 11D well 226 (fill 232; Fig 128.75, 128.76; Ch 4, p 119), and there is an early third-century cooking pot of Gillam (1976) form 6 from Period 11E soil and rubble layer 112 (LAL C, in the northern part of the site). At least four dishes of Gillam (1970) form 329 came from well 226 (fill 232; Fig 128.79). This dish is usually extremely common on third- and fourth-century Roman sites (eg Hird 1997, 248), but the northern Lanes only produced fragments of a maximum of 11 vessels from phased Roman contexts. Third- and fourth-century bowls, although present, are equally scarce; Gillam (1976) forms 42 and 46 are both present in the well group, and there are two other bowls of form 42, one from surface 844 (KLA C) and another unstratified in (CAG A). Other examples of bowl-form 46 come from Period 11E cobbled surface 129, Period 11D-12 soil 721 (Fig 130.101) and 904, the former within Building 2000, the latter external, and robber trench 239 (fill 238; Period 13), the post-Roman robbing of 2000, and another Period 13 deposit. The latest bowl from the site is an example of Gillam (1976) form 48 (Fig 134.166), regarded as of early / mid-fourth-century date, but was effectively unstratified.

Unusual Black Burnished ware 1 forms include several examples of Gillam (1976) form 67, a flanged dish, from Period 10B (Fig 120.22) and Period 11C (Fig 126.59), and the bowl from Period 11A (Fig 124.47). A flanged bowl from Period 11E (Fig 130.102) is also unusual, and likely to be of late second / early third-century date.

**Fabric 2:** Black Burnished ware 2 (Williams 1977). Date range: mid-second / mid-third century. There is one small and very abraded sherd (5 g) of this fabric from a Period 9 context. Its first certain occurrence is in Period 10A, and, from then on, it is present in every period to the end of the Roman sequence, although by Period 12 it is undoubtedly residual, as the fabric was out of production by the later third century (Tyers 1996).

As in the southern Lanes, cooking pots in this fabric are relatively scarce, with perhaps as few as eight vessels

in total, but unlike that area, there are examples from phased Roman contexts at the northern Lanes: Gillam (1970) form 139 from Period 11A (Fig 124.48) and Gillam (1970) form 137 from Period 11D-12. In general terms, form 137 outnumbers form 139 by approximately 2:1. Unlike the southern Lanes (Hird and Brooks 2010) and Annetwell Street (Hird in prep), there are bowls amongst the northern Lanes assemblage, including one with a rather unusual rim form from Period 10A (Fig 119.19).

Examples of the earlier form of bowl (Gillam 1970, form 222) came from Period 10C (Figs 122.29, 122.30), but only one example of the later form (Gillam 1970, form 225) was noted, in an insecurely phased gully fill (LAL A 41). An Antonine dish of Colchester type 40A (Hull 1963) came from Period 10A-11B (Fig 123.37) and the more common dish, Gillam and Mann (1970) form 22, of which there are around seven examples, occurs first in Period 10C (Fig 122.31), with another example from Period 11A (Fig 124.49). The later form of dish, Gillam (1970) 313, first occurs in Period 11C (Fig 126.62) and there are two examples from Period 11D-12 (Figs 133.142; 133.143). Interestingly, Black Burnished ware 2 is absent from the third-century well group (Period 11D, 226; *Ch 4, p 119*), but it is present in other Period 11D contexts.

**Fabric 3:** Rustic ware; hard mid-grey fabric, with darker grey outer surface and rusticated decoration. Date range: late first/early second century. All the rustic ware from the northern Lanes (except for one sherd in Fabric 5) is in this reduced grey fabric. It is traditionally regarded as a pre-Hadrianic ware, which was not made after c AD 130 (Tyers 1996, 16), and consequently its occurrence in deposits (from its earliest appearance in Period 5A-B through to Period 11E) very clearly illustrates the residual nature of a large element of the assemblage. Even as early as Period 5A-B, it is clear that the rustic ware (a single small (5 g) sherd) is residual, as the group from this period is dated to the early/mid-second century.

**Fabric 4:** Local ware; could well be the product of more than one source; oxidised orange ware with white/cream slip. Usually a fairly sandy fabric. Date range: late first-second century. This first occurs in Period 5A-B and is then present in every period to the end of the Roman sequence. It is used predominantly for flagons and *tazze* but also for the occasional jar, handled jar, and flask. Ring-necked flagons of Gillam (1970) form 4 (dated to AD 90-130) are particularly common in this fabric, and include one from Period 7-8A (Fig 115.8). *Tazze* appear in Period 10A-11B (Figs 123.38, 123.39) and Period 11D (Fig 127.70). There is also a flask, Gillam (1970) type 36, dated to AD 90-160 from Period 9.

**Fabric 5:** source unknown; fine-textured, pinkish-orange fabric, with rusticated decoration. Date range: late first/early second century. One sherd of oxidised rustic ware came from a Period 9 context, where it is undoubtedly residual.

**Fabric 6:** source unknown, could well be the product of more than one kiln; hard white fabric, with no visible inclusions and smooth outer surface. Date range: uncertain. The fabric first occurs in Period 5A-B, and is present as a small element of the assemblage in most subsequent periods. The majority of the vessels in Fabric 6 are flagons, all but one of them ring-necked types, including an example of Gillam (1970) form 9, dated to AD 140-80, from Period 11D (Fig 127.71). There is a lid in this fabric from pit 258 (fill 248, LAL C), and a very fine bowl with incised decoration from Period 10A-11B (Fig 123.40). There are also three *tazze* from Period 10C (external soil KLA B 911, pit 269 (fill 224; *Ch 4, p 93*) and Period 11E (external soil and rubble LAL D 604).

**Fabric 11:** unidentified greywares, products of several sources, many or all of which are likely to be local. Date range: first-fourth century. Greywares form a large element of the phased Roman assemblage at all periods. Many of the locally produced second-century vessels from the northern Lanes have not been illustrated, as similar vessels are more fully discussed in the southern Lanes (Hird and Brooks 2010, 13). Jars/cooking pots of later second- or third-century date form a coherent group from well 226 (*Ch 4, p 119*, Period 11D), including a 'second' (Figs 128.80, 128.81, 128.82, 128.83, 128.84, 128.85, 128.86). There is also a greyware bowl from that feature (Fig 128.87).

A second-century greyware jar and a beaker from Period 7-8A (Figs 115.9, 115.10) were recovered from pit 211 (fill 188), and there is a narrow-necked jar with a graffito from Period 11A (Fig 124.50). Greyware vessels which imitate the form or decorative features of Black-burnished ware 1 include a cooking pot with wavy-line decoration around the neck from Period 11E (Fig 130.104), where it is undoubtedly residual, as it imitates second-century cooking pots, and a bowl from Period 11C (Fig 126.67), the form of which copies late second- or early third-century vessels. A dish from Period 11E soil 163/164 in the north-east of the site (LAL B), has a scribbled base, common on Black-burnished ware 1 dishes (Gillam 1976, 74).

A flanged bowl from Period 11C (Fig 126.65) is paralleled by vessels found in the material from the English Damside waster dump in Carlisle (unpublished, but synthesised in Swan *et al* 2009, 594-5), whilst a jar of so-called Dales-type came from Period 10A-11B (Fig 123.41), and the only example of a greyware vessel likely to be from East Yorkshire,

possibly from Norton, is a possibly third-century jar in the post-Roman and not closely phased group (Fig 134.167).

Unusual vessels in this fabric include a 'head' pot in a group of mainly third-century pottery from Period 11D-12 soil 886 (Fig 133.145; *Ch 4*, p 131), and a single example of a 'triple vase', probably dating to c AD 80-150, from Period 9 (Fig 118.15). A fragment of a 'cheese press' came from depression 980 (fill 964; KLA A), within Building 1309 (*Ch 3*, p 80).

**Fabric 12:** unidentified oxidised wares, products of several sources, many or all of which are likely to be local. Date range: first-fourth century. Oxidised wares are present in all periods, except 2 and 4A, but the amount diminishes through the Roman period, as reduced wares increased in popularity. Many locally produced vessels of second-century date are similar to those discussed in more detail for the southern Lanes (Hird and Brooks 2010).

Two vessels in Fabric 12, both almost certainly local products, were found complete: a jar/beaker from Period 10B (Fig 120.23); and a bowl, from a post-Roman context (Fig 134.168). An interesting group of vessels, which could have been made in York in the early years of the third century, demonstrate African influence (Swan 1992). A dish with a concave wall, very typical of the repertoire, first appears in Period 10C (Fig 122.32), with other examples coming from Periods 11B (Fig 125.57), and 11E (Fig 130.105). It should also be noted that some of these African-style vessels, including the distinctive 'casserole', are in a harder, grittier version of the fabric (Fabric 13). A concave dish in Fabric 13 came from the Period 11D well group 226 (Fig 128.92), along with two lids in Fabric 12 (Figs 128.90, 128.91). A dish with an elaborate handle, again possibly a York product, came from a context that could not be closely phased (Fig 134.169), but which could also belong to the African tradition.

A bowl in Fabric 12, but with a red slip of 'raetian' type, came from Period 11D (Fig 127.73) and is likely to be a local product made in the same workshop as 'raetian' mortaria of later second-century date. An unusual 'head' pot came from Period 11D-12 (Fig 133.148).

**Fabric 13:** hard oxidised fabric, possibly the product of more than one source, at least some of which are likely to be local. Orange fabric, which contains a fair amount of white grit (and some larger inclusions), making the surface pimply. Date range: first-third century. This fabric group first occurs in Period 4C and is then present in all periods to Period 12, albeit in small quantities. Earlier vessels include reeded-rim bowls (see Hird and Brooks 2010, fig 24, 113),

and flagons. Jars, probably of second-century date (eg Hird and Brooks 2010, fig 25, 123), are relatively unusual, with perhaps as few as six from phased Roman contexts. A narrow-necked jar from Period 10B was the only example of its type, as was a bowl with footring, from Period 9. Two examples of *tazze* came from Period 7 (gully KLA B 1273) and effectively unstratified (CAG A).

There are several vessels dating to the first quarter of the third century in this fabric, which, displaying African characteristics, might be York products (Swan 1992). They include the dish from Period 11D well 226 (Fig 128.92), and distinctive African-style 'casseroles', though examples of these were recovered only from post-Roman contexts, or were effectively unstratified, in the northern and eastern parts of the site (Figs 134.170, 134.171, 134.172, 134.173, 134.174). These African-style lids (Figs 134.175, 134.176) were also recovered from KLAB, from a medieval pit, and effectively unstratified.

**Fabric 14:** Rough-cast ware, possibly locally made; fine-textured pink fabric with rough-cast decoration, sometimes with a darker pinkish-brown slip. Date range: late first-second century. This is possibly a local imitation of imported rough-cast beakers, like those in Fabric 15. This fabric first occurs in Period 4B, and is present, as a small element of the assemblage, into Period 12, being residual by Period 11. The vessels represented are all bag-shaped, or dimpled rough-cast beakers with either an everted (Hird and Brooks 2010, fig 15, 75) or a grooved cornice rim (*op cit*, fig 45, 320). In all, less than 20 such beakers came from phased Roman contexts.

**Fabric 15:** Rough-cast ware: (Anderson 1980, North Gaulish Fabric 1); fine, hard, orange fabric with grey core, a purplish-grey slip, and rough-cast decoration. Date range: late first-second century. The ware is present in all phases from Periods 6-12, and is undoubtedly residual from Period 11 onwards. Approximately 20 vessels came from phased Roman contexts, all of them rough-cast beakers with either a grooved cornice rim (Hird and Brooks 2010, fig 43, 303 and fig 44, 309) or an everted rim.

**Fabric 17:** Severn Valley ware (Webster 1976; Tomber and Dore 1998: SV OX 1 or 2): hard orange fabric, with pale grey core and mica visible in surfaces. It may have burnished lattice or line decoration.

Date range: first-fourth century. Although, in general, Severn Valley ware dates from the first to the fourth centuries, its presence only in deposits from Periods 10B-12 appears to indicate a late second-century (or later) date for its use on the site. Well 226 (Period 11D) produced 11 sherds. Only four vessels are represented by rim sherds, all jars, two of Webster (1976) type 4



from Period 11D-12 (Figs 133.149, 133.150), and two of Webster type 9, one from Period 11E (Fig 130.107), the other from Period 12.

**Fabric 18:** imported; soft, creamy buff fabric, rather sandy in texture. Date range: uncertain. This fabric appears only to have been used for small lids, which are usually regarded as 'amphora stoppers'. These are a most uncommon form, with a maximum of eight from the northern Lanes, although it also appears at the South Lanes (Hird and Brooks 2010, fig 45, 321, fig 48, 336). The fabric is only present in Periods 7, 10A, 10B, 11B, and 11D.

**Fabric 19:** source unknown; granular-textured buff fabric, with occasional red inclusions and smooth pinkish-buff surface. Date range: uncertain. This is an uncommon fabric, only occurring in Periods 4C, 5A, and 11A.

**Fabric 20:** probably local; hard, sandy orange fabric with a small amount of mica inclusions and bright orange/red-slipped surfaces. Date range: second century? This fabric first appears in Period 10A and is seen in subsequent periods to the end of the Roman sequence. The vessels, treated with a sometimes blotchy red slip, are all bowls, coming from Periods 11A and 11B. See also Fabrics 24 and 52 (p 343).

**Fabric 21:** Nene Valley Colour-coated ware (Howe *et al* 1980; Tomber and Dore 1998: LNV CC); fairly hard, white or pink fabric, with a colour-coat in colours ranging from dark grey to orange-brown. Date range: third-fourth century. Like Severn Valley ware (Fabric 17), Nene Valley ware only appears to have been a significant element of Carlisle's pottery supply in the third and fourth centuries. It first occurs in a closely defined timeframe during Period 10B, but there is also the base of a barbotine-decorated beaker from Period 10A-11B (Fig 123.42). Two earlier third-century types occur, Gillam (1970) form 80, which came from Period 11D (Fig 127.74), and Gillam (1970) form 88, of which there are two unstratified examples from the eastern part of the site (CAG A), and two more from Period 11B in the north-east of the site (layer KLA A 616), which are probably residual. An example of a folded beaker (Fig 130.108; Howe *et al* 1980, fig 4, 40) came from Period 11E, where it must be residual.

Fragments of 'box' lids of Gillam (1970) type 341 came from Period 11E, and Period 11D-12 (layer 904; Ch 4, p 131). Two distinctively fourth-century Nene Valley types, plain dish Gillam (1970) form 335 (Fig 134.179), and a bowl (Fig 134.178; Howe *et al* 1980, fig 7, 79), appear only in post-Roman contexts.

**Fabric 22:** Huntcliff ware (Tomber and Dore 1998: HUN CG); soapy-textured, calcite-gritted grey or

black fabric, heavily charged with white calcite grit or having voids left by dissolved grit. Hand-made. Date range: fourth-early fifth century. A few intrusive sherds of Huntcliff ware are present in most periods from 6 onwards, but it first becomes a significant element in the assemblage in Period 11E, being present in slightly greater quantities in Period 12. Its greatest concentration is, however, in Period 11D-12 well 678 (Ch 4, p 112), where it makes up 8.5% of the assemblage.

Common fourth-century jar types (Gillam (1970) form 161 (Period 11E, Figs 130.109, 130.110) and form 163 (Period 11E, Fig 130.111)) are well-represented. In phased Roman contexts, the earlier form (Gillam 161) is outnumbered by later jar form 163 by approximately 2:1. An unusually large jar, with a diameter of 300 mm, came from Period 11E. Two examples of an unusual dish (Gillam 1970, form 332) came from Period 12 'dark earth' 78 (Fig 132.135; Ch 4, p 126) and Period 11D-12 soil 851 (Fig 133.151; Ch 4, p 129), and a third dish with an unusual rim form was found in a post-Roman context (Fig 134.181).

**Fabric 24:** probably local; granular-textured pinkish-buff fabric, with occasional quartz-sand inclusions and streaky red-brown painted surfaces. See also Fabrics 20 and 52 (p 343). Date range: second century? This fabric only appears in Periods 10C, 11A, and 11D, and only two bowls were recovered, from pit 738 (fill 718; LAL D; the form is similar to that of 168; Fig 134) and external layer 222 (Period 11A; KLA D), the latter probably associated with the initial construction phase of Building 2000.

**Fabric 25:** local? Very fine-textured, very hard, smooth, orange fabric with no visible inclusions. Date range: uncertain. The fabric first occurs in Period 8A and subsequently in Periods 8B, 10A, 10B, 11A, 11B, and 11D. The only vessels represented are bowls, one a very small fine vessel (Period 8A; Fig 116.11) and one a flanged bowl, residual in a medieval posthole (Period 13; fill 569 of KLA A 567).

**Fabric 26:** fine-textured, hard, orange fabric with brownish outer surface and white barbotine decoration. Date range: uncertain. Only one dish was recovered, from Period 11E.

**Fabric 27:** Crambeck greyware ware (Corder and Birley 1937; Evans 1989; Tomber and Dore 1998: CRARE); very pale grey fabric, with lead-grey surfaces. Date range: fourth century. Although intrusive sherds are present in Periods 10C, 11A, 11B, and 11C, Crambeck greyware only occurs in significant amounts in Period 11E, becoming an important feature of the Period 12 assemblage. Considering the very large amount of pottery produced by the Crambeck kilns in the fourth century, the northern Lanes produced only a relatively

small amount from phased Roman contexts, with only about 40 vessels (with rim sherds) of all forms.

A flanged bowl (Corder and Birley (1937) type 1; see for example, Fig 133.153) is the commonest vessel represented (24 examples), and there are eight examples of a later bowl (Corder and Birley 1937, type 1b; see for example Figs 132.136, 132.137). A Corder and Birley type 4 bowl came from a post-Roman context (Fig 135.183), and a single example of a Corder and Birley type 5a bowl came from Period 12 (Fig 132.138). Jars and dishes are relatively uncommon, with single examples of jar types 3, 3a, and 14a, all from post-Roman contexts. Two examples of a Corder and Birley (1937) type 1a dish and one example of a type 2a dish came from Period 12 contexts, reflecting the ratio of bowls, jars, and dishes at the kiln site, where 60% of the vessels are bowls, 26% are dishes and jars, and all other individual types represent a very small percentage of the production (*ibid*).

**Fabric 28:** Crambeck Parchment ware (Corder and Birley 1937; Evans 1989; Tomber and Dore 1998: CRA PA); hard, yellowish-white fabric usually with red/brown-painted decoration. Date range: later fourth century. Parchment ware appears in Periods 11C and 11D (where it is probably intrusive), only becoming a significant element of the assemblage in Periods 11E, 12, and 11D-12, and thus indicating a later fourth-century date for them. The number of vessels from phased Roman contexts is, however, small, perhaps as few as ten in total. Its greatest concentration is in material from Period 11D-12 well 678 (fill 677), where it makes up almost 5% of the group. All the vessels present on the site are bowls/dishes of Corder and Birley (1937) types 5b (Fig 131.116), 7, 8 (Figs 131.117, 131.118), 9 (Fig 131.119), and 10 (Fig 131.120).

**Fabric 29:** rough-cast ware, import; hard, fine-textured, pinkish-buff fabric with dark grey slip and fine rough-cast decoration. Date range: late first-second century. This appears in Period 6 and is also present in Periods 9-11, although by the latter it is likely to be residual. It is uncommon, with as few as four vessels from phased Roman contexts, all of them rough-cast beakers. Two rim forms are present: a simple everted rim (Hird and Brooks 2010, fig 7, 8) and a more finely modelled rim (*op cit*, fig 10, 24).

**Fabric 30:** Rhineland? Very fine white fabric, with orange/red slip and barbotine decoration. Date range: uncertain. This is an uncommon fabric, only occurring in Periods 10A, 11B, 11D, 11E, and 12. A beaker with barbotine lattice decoration came from the Period 11D well 226 (*Ch 4*, p 119; Fig 129.93).

**Fabric 31:** Rhineland; very fine white fabric, with brown or grey slip and rough-cast or barbotine decoration. Date range: late first-second century. Hird

and Brooks (*op cit*, 340) have noted that this appears to be the commonest of the rough-cast fabrics seen at Carlisle. It occurs first in Period 7 and is then present in all periods to Period 11E, by then probably residual. Most of the vessels in this fabric are beakers with rough-cast decoration (Hird and Brooks 2010 fig 14, 51, *etc*), but there is also a plain beaker with a plain rim from Period 11C.

**Fabric 34:** 'Rhenish' ware: Trier (Greene 1978); very hard orange/grey/orange fabric, with glossy black slip. Date range: later second-mid-third century. This is an uncommon fabric at the site, only occurring in Periods 10A-11B, 11A, 11B, 11E, and 12. The only rim sherd is of a beaker from Period 10A-11B.

**Fabric 35:** 'Rhenish' ware: Central Gaulish colour-coated ware (Greene 1978); very fine-textured, hard pink fabric, with glossy black slip. Date range: later second-mid-third century? This is an uncommon fabric at the site, only occurring in Periods 11D and 12. The only vessel represented by a rim sherd is a beaker (Symonds 1992, fig 20.413) from Period 11D, possibly from Alsace.

**Fabric 36:** source unknown; hard, red/brown fabric, with rather dull black-slipped surfaces. Date range: uncertain. This is uncommon, there being only one sherd from Period 11B.

**Fabric 37:** Parisian ware? (Elsdon 1982); fine-textured mid-grey fabric, with smooth, shiny black surface; externally stamped decoration. Date range: second century. This is again uncommon. There are two undecorated sherds from Period 8B.

**Fabric 38:** Lyon ware (Greene 1978; Tomber and Dore 1998 LYO CC); fine, granular-textured, cream fabric, with beige-brown, metallic slip and sand rough-cast decoration. Date range: first century. This is a first-century ware, appearing on sites founded up to c AD 75 (Young 1980), including Agricolan sites in Scotland (Dore 1981). It has been found at other sites in Carlisle, including Blackfriars Street (Taylor 1990), Castle Street (Taylor 1991), Annetwell Street (Hird in prep, types 250-252), where it occurred in Period 5 contexts, and the southern Lanes (Hird and Brooks 2010, 340). It is, not surprisingly, extremely uncommon on the northern Lanes sites, there being no obvious first-century activity. One sherd comes from Period 8B, where it must be residual.

**Fabric 44:** local ware? Hard, fine-textured pale grey fabric, with very smooth, darker grey, shiny metallic surfaces. Rouletted decoration. Date range: uncertain. This is an uncommon ware, only occurring in Periods 10A, 10B, and 10C. The only vessel type represented is a bowl with rouletted decoration (Hird and Brooks 2010, fig 10, 25) from Period 10B.

**Fabric 45:** source unknown; hard, sandy dark grey fabric, with smooth, shiny inner surface and narrow band of paler grey beneath the surface. Date range: late first/early second century. This is again uncommon, present only in Period 10A, where there is one (probably residual) bowl of Gillam (1970) type 301, dated to AD 80-130 (Hird and Brooks 2010, fig 41, 265).

**Fabric 46:** regional import? Hard, granular-textured, pinkish-buff fabric, with quartz-sand inclusions. Mica-dusted surfaces. Date range: late first/early second century? Again an uncommon fabric, this only occurs in Periods 6 and 11B, being residual in the latter. Two vessels are represented: a flanged bowl (Hird and Brooks 2010, fig 41, 266); and a plain dish from Period 6.

**Fabric 47:** source unknown; fine, hard, mid-grey fabric, with smooth, dark grey outer surface. Barbotine dot decoration. Date range: uncertain. This is also uncommon, occurring only in Period 10A.

**Fabric 49:** Oxford Red and Brown Colour-coated ware (Young 1977; Tomber and Dore 1998: OXF RS); hard, sandy, very micaceous, orange fabric, with red or red/brown slip and occasional red and black inclusions. Date range: second-fourth century. This ware only occurs in post-Roman contexts (Fig 135.188).

**Fabric 50:** mica-dusted; hard, pinkish-orange fabric, with no visible inclusions. Mica-dusted outer surface. Date range: late first/early second century? This is also uncommon, occurring only in Period 11A, where it is almost certainly residual. Mica-dusting was a technique used mainly in the late first/early second century (Merrifield 1983).

**Fabric 51:** Dales-type ware (Loughlin 1977; Tomber and Dore 1998: DAL SH); hard, gritty, dark grey fabric, with pimply surface and quartz-grit inclusions. Date range: later second to later third century. Again, this is uncommon, occurring only in Period 11D-12 (Fig 133.156).

**Fabric 52:** local, probably made in a workshop producing 'raetian' mortaria; smooth, fairly hard, fine-textured, slightly micaceous, orange fabric with streaky red slip. Date range: probably second half of second century. The fabric first appears in Period 8B and then is absent until Periods 10 and 11. The vessels are all bowls or dishes, the commonest being a bowl (Fig 119.20), of which there are about five examples from phased Roman contexts. This bowl form was also produced locally without the slip (Fabric 12; see for example Fig 134.168). A less common bowl came from the eastern part of the site (CAG A 29; not closely phased) and Period 11A (see, for example Fig 135.189). One dish came from Period 10B. See also Fabrics 20, 24, and 53 (p 341).

**Fabric 53:** local? Hard, fine-textured, orange fabric, with smooth red slip over all surfaces, and fine grey core. Date range: probably second half of second century. This is also uncommon, occurring only in Period 10B, where there was a bowl (Fig 120.24) of Wilderspool form, dated to the Hadrianic/Antonine period (Hartley and Webster 1973, fig 6, 54). See also Fabrics 20, 24, and 52 (p 341).

**Fabric 54:** local? Hard, mid-grey fabric, with quartz-sand inclusions and very micaceous surface. May have burnished decoration. Date range: uncertain. The fabric first occurs in Period 8B and then in all subsequent periods to the end of the Roman sequence. The vessels are mostly jars or wide-mouthed bowls, but there is one beaker from Period 11C.

**Fabric 55:** hard, granular-textured, pink fabric, with pink inner surface and polished smooth, mottled, orangey-brown outer surface. Date range: uncertain. This is uncommon, occurring only in Periods 11D and 11E.

**Fabric 56:** African Red Slip Ware (Hayes 1972); hard, orange-red, granular-textured fabric, with smooth, micaceous red-slipped surfaces. Date range: early/mid-second century. Again, this is uncommon: sherds occur in Periods 10B, 10C, 11C, 11D, and 12. There is an example of a Hayes (1972) type 3C dish from Period 10C (Fig 122.34), where it is likely to be residual. This vessel form is already known from other Roman sites in Britain; see Bird (1977), who suggests that the ware may have travelled with craftsmen rather than as a traded commodity.

**Fabric 57:** source unknown; hard, white fabric, with thin beige slip on outer surface and red-painted decoration. Date range: uncertain. This is very uncommon, with only one sherd from a lid, occurring in Period 7.

**Fabric 58:** source unknown; fine, granular-textured, orange fabric, with deeper orange, slipped, micaceous surfaces and rough-cast decoration. Date range: uncertain. This is very uncommon. One sherd came from Period 11B, where it was certainly residual.

**Fabric 59:** Derbyshire Ware (Gillam 1939; Kay 1962; Jones and Webster 1969; Tomber and Dore 1998: DER CO); very hard, grey fabric, with red core and copious large quartz-grit inclusions, giving the surface the appearance of 'goose-flesh petrified'. Date range: third and fourth centuries. Uncommon on the site, it is seen only in Period 11E. The two most commonly occurring jar forms are both present, there being one example each of Kay (1962) type A (Gillam (1970), form 152; Fig 131.121) and type B (Fig 131.122).

**Fabric 60:** rough-cast ware, source unknown; hard, fine-textured, orange/brown fabric, with grey core and quartz sand, rough-cast decoration. Date range: uncertain. This is uncommon, only occurring in Period 11B,



where it is likely to be residual, as rough-casting is a predominantly second-century decorative technique (Hird 2000b, 190).

**Fabric 61:** granular-textured, cream fabric, with smooth, pinkish-buff outer surface. Date range: uncertain. This is fairly uncommon on the site. It occurs only in Periods 10B and 10C.

**Fabric 64:** source unknown; fine, granular-textured, buff fabric, similar to the Verulamium region mortarium fabric. Date range: late first/early second century? This is again uncommon, only occurring in a phased Roman context in Periods 7 and 8A. The only recognisable vessel is a reeded-rim bowl of late first/early second-century date.

**Fabric 65:** (Bidwell 1985, 177-8); fine, granular-textured, grey fabric, with brown layer beneath orangey-grey surface. Date range: uncertain. This is uncommon, occurring only in Period 11D-12, where it must be residual, as the only vessel form in the fabric, Gillam (1970) 151, travelled with Black-burnished ware 2 (Fig 133.157).

**Fabric 66:** Glazed ware, source unknown; fine-textured, grey fabric, with apple-green glaze externally and yellowish-brown streaky glaze on the inner surface. Date range: late first/early second century. This is very uncommon, only one sherd coming from Period 11A (Fig 124.53), where it is residual, as glazing was a late first/early second-century technique (Tyers 1996, 178).

**Fabric 67:** Samian imitation, locally produced; oxidised, fine-textured fabric, with no visible inclusions. Slipped surface and moulded decoration. Date range: uncertain. This is very uncommon, only one sherd coming from Period 11D-12 (Fig 133.158). Much of the other pottery from the same context dates to the third century.

**Fabric 68:** Doncaster area (Rigby 1976); fine-textured, mid-grey fabric, with quartz-sand inclusions and darker grey surfaces. Inner surface is well-burnished. Date range: first century. This is uncommon, the only stratified occurrences being in Periods 4C and 7, the latter a stamped sherd of the potter Reditas (2).

## Amphorae

**Fabric 200:** Gaulish (Peacock and Williams (1986) Class 27); granular-textured, greyish-cream fabric, with occasional red particles, and pinkish-orange wash on outer surface. Date range: first-third century. This first occurs in Period 6 and then in all subsequent periods to the end of the Roman sequence. One rim sherd came from Period 10C.

**Fabric 201:** Amphora? Source unknown; hard buff fabric, with copious grit, giving a pimply feel to surface.

This also has a soapy feel. Date range: uncertain. This is uncommon, found only in Periods 10B and 11A.

**Fabric 202:** South Spanish (Peacock and Williams (1986) Class 18; Camulodunum 186C); smooth, fine-textured pink fabric, with greyish outer surface. Handles may have grey core. Slightly micaceous. Date range: late first-early second century. This first occurs in Period 7 and then in all subsequent periods to the end of the Roman sequence. Only three rim sherds are present, from Periods 9, 11A, and 11E, where they are all likely to be residual (Hird and Brooks 2010, fig 45, 322). The fabric accounts for approximately 7% of the amphorae from phased Roman contexts.

**Fabric 203:** Amphora? Source unknown; hard, dense orange fabric with paler surfaces. Date range: uncertain. This is uncommon, occurring only in Periods 10C, 11C, and 11D.

**Fabric 204:** North African? (Peacock and Williams (1986) Class 11); hard, fine-textured, micaceous pinkish-orange fabric, with paler but very micaceous outer surface. Date range: first-second century. This first occurs in Period 4A and then in Periods 10-12, presumably residually. The only rim sherd is a very fragmentary one from Period 10B (Hird and Brooks 2010, fig 14, 52).

**Fabric 206:** Gaulish? (Peacock and Williams (1986) Class 27?); fine-textured, dull buffish-grey fabric, with slight micaceous glint. Date range: uncertain. This first occurs in Period 6, and then in Periods 10 and 11.

**Fabric 207:** South Spanish (Peacock and Williams (1986) Class 25); rough, sandy, flaky buff-pink fabric, with creamy outer surface. Date range: first-third century. This is the commonest amphora fabric present, accounting for approximately 68% of the stratified amphora sherds from the northern Lanes. It first occurs in Period 4B and is then present in all subsequent periods to the end of the Roman sequence. Rim sherds are relatively uncommon, with perhaps as few as 30 vessels represented. Most are Peacock and Williams (1986) Class 25.18, Class 25.23, or Class 25.28. An example of Peacock and Williams Class 25.36 came from Period 11D well 226 (*Ch 4, p 119*; Fig 129.94). A total of ten stamps from the handles of Peacock and Williams Class 25 amphorae came from the northern Lanes (see *p 357*). There is one possible example of a Peacock and Williams Class 20 vessel, from Period 10A-11B, and two examples of Peacock and Williams Class 15, from Period 11C (metalled surface 1035; *Ch 4, p 117*), and a largely unstratified area in the south of the site (KLA G).

**Fabric 208:** South Spanish (Peacock and Williams (1986) Class 25); hard, sandy orange fabric, with cream

slip. Date range: first-third century. The fabric accounts for approximately 10% of the amphora sherds from phased Roman contexts. It first occurs in Period 9, and then in every subsequent period to the end of the Roman sequence. Rim sherds in this fabric are relatively uncommon, with only one from a phased Roman context, in Period 10C.

**Fabric 209:** Amphora? Source unknown; fairly fine-textured, pinkish-orange fabric, with red-slipped outer surface. Date range: uncertain. This is an uncommon fabric, which only occurs in Periods 10A-11B and 12.

**Fabric 210:** Gaulish? Very hard greyish-white fabric, with black particles and yellowish outer surface. Date range: uncertain. This is an uncommon fabric, only present in Periods 11B and 11E.

**Fabric 211:** 'Carrot' amphora (Peacock and Williams (1986) Class 12; Tomber and Dore 1998: P&W AM 12); Greyish-brown sandy (quartz) fabric. Date range: first century. This uncommon fabric occurs in Periods 10A, 10B, 11A, 11B, and 12. Being a first-century fabric, it is entirely residual in the north Lanes. The only rim sherd came from Period 11A (see Hird and Brooks 2010, fig 46, 325).

**Fabric 212:** source unknown; very hard, sandy brick-red fabric. Sand includes quartz and mica. Date range: uncertain. This is uncommon, occurring only in Periods 11B and 11E.

**Fabric 213:** hard, fine-textured, yellowish-buff fabric, with quartz-sand and larger red inclusions, Source unknown. Date range: uncertain. This is again uncommon. The fabric only occurs in Periods 7, 9, 10A-11B, and 10C.

**Fabric 214:** Amphora? Source unknown; fine, granular-textured, powdery, pink fabric, with creamy outer surface and occasional red-grit inclusions. Date range: uncertain. This uncommon fabric occurs only in Period 12.

**Fabric 215:** South Spanish, Cadiz fabric; hard, slightly rough, sandy, reddish-buff fabric, with rounded pieces of red iron ore inclusions and off-white slip. Date range: first/early second century? This uncommon fabric occurs only in Periods 9 and 10A.

**Fabric 216:** source unknown; hard, white fabric with copious mixed grit inclusions, giving a hackly fracture. Date range: uncertain. Again, this is uncommon, occurring only in Periods 11A, 11B, 11C, and 11E.

**Fabric 217:** Gaulish? Granular-textured, buff fabric, with fairly large (1 mm) inclusions of grey material. Date range: uncertain. This is fairly uncommon at

the Lanes, occurring first in Period 4B, and then in Periods 9, 10A, and 10B.

**Fabric 218:** Southern Spanish? (Peacock and Williams (1986) Class 18?); granular-textured, buff fabric, with few inclusions. Date range: late first/early second century? This is again uncommon, occurring only in Period 8B.

## Mortaria

*K F Hartley and M L Hird*

**Fabric 301:** Carlisle area; this is often a very hard, dense, dark red-brown to pink-brown fabric, with some fine inclusions, mainly quartz, which vary in size and quantity. Usually, it has a cream or buff slip, but occasionally a 'raetian', red-brown slip on the flange and bead. Trituration grits consist of white quartz, red-brown, and occasionally blackish material. Date range: late first-second century.

This is the commonest of the locally produced fabrics, accounting for almost half of the stratified mortarium sherds. It first appears in Period 8A and is then present in all subsequent periods to the end of the Roman sequence. Vessels in this fabric, with a cream slip, are often stamped by the potters Doc(e)ilis and Austinus (*eg pp* 367-86). Many of the forms are the same as those at the southern Lanes; the cream-slipped mortarium (Hird and Brooks 2010, fig 44, 312) is a particularly common form (see, for example, Period 7 (Fig 114.3) and Period 10B (Fig 120.25)). Mortaria with the 'raetian' slip are present in Period 9 (Fig 118.17) and the Period 11D well group (226; *Ch* 4, p 119; Fig 129.95), and are of later second-century date. For other common 'raetian' types from the Lanes, see Hird and Brooks (2010), fig 17, 86 and 87. Sherds, almost certainly from a large vessel originally identified at the southern Lanes (*op cit*, fig 28, 155), were recovered from Periods 10C and 11A surfaces 1009 and 811.01 in the eastern part of the site (KLA B), the latter associated with Building 2000 (*Ch* 4, p 127). Two other very large vessels came from post-Roman contexts and contexts that cannot be closely phased.

**Fabric 302:** Carlisle/Scalesceugh area; hard, fine-textured, buff fabric with a thin orange-brown core, or slightly more orangey below the surface, with a thin grey core; moderate, mainly quartz inclusions; usually a buff slip or surface. Trituration grits consist of transparent and white quartz, red-brown sandstone, and blackish material, possibly iron-rich. A few examples have a softer and more granular fabric. Date range: late first-second century. This is an uncommon fabric, occurring only in Period 10A. There are no rim sherds.

**Fabric 303:** Carlisle/Old Penrith area; fairly fine-textured, orange-brown fabric, with some evenly



distributed, ill-sorted quartz inclusions. Trituration grits consist of quartz, sandstone, and blackish and grey material. Both hardness and texture vary within this group and it certainly contains the products of more than one workshop. Surface treatment varies; cream/buff or self-coloured slip. Date range: late first-second century. This is less common than Fabric 301, occurring first in Period 6 and then subsequently in Periods 7-8A, 9, 11B, and 11C. It is likely to be residual by Period 11. There are no rim sherds present.

**Fabric 304:** Carlisle/Scalesceugh area; hard, fine-textured, orange-brown fabric, sometimes with an orangey core. Trituration grits consist of sandstone, white quartz, and occasional blackish material. Sometimes similar to Fabric 301, but not as hard-fired, and more orangey in colour. Date range: late first-second century. This is uncommon: it occurs only in Period 11A, where, as a local product, it is almost certainly residual. See Swan *et al* (2009) for an account of the development of the local potting industry. There are no rim sherds.

**Fabric 305:** Carlisle/Old Penrith area; hard orange-brown fabric, with fairly frequent transparent and whitish quartz inclusions, and a few blackish inclusions. Trituration grits consist of abundant white quartz with some gold mica, and occasional brown and blackish material, possibly ironstone or iron slag. The tempering sometimes makes the surface slightly pimply. Date range: late first-second century.

This is identical to a mortarium fabric from excavations at Old Penrith (Austen 1991), and was probably made in Cumbria, within about a 25 km radius (15 miles) of Carlisle. It first occurs in Period 4B, and then in Periods 7, 8B, and 9. From Period 4B, there is a vessel paralleled by Austen 512 (1991, fig 75) dated to AD 90-130, and from Period 9, there is an example of Austen 510 (1991, fig 74), accorded the same date.

**Fabric 306:** Carlisle/Scalesceugh area; hard, fine-textured orange-brown fabric, sometimes with grey core; few inclusions. Similar to Fabric 304, but seems to have only white quartz trituration grit. Date range: late first-second century. Less common than Fabric 301, it first occurs in Period 10A-11B, and again in Periods 11C and 11D. There are no rim sherds present.

**Fabric 311:** Northern England, probably Catterick (Tomber and Dore 1998: CTRWS?); slightly micaceous, hard, drab buff to orange-brown fabric, sometimes with a grey core: quartz and iron slag-like inclusions. They are rarely self-coloured and usually have a cream slip, which is unique in being applied only to the inside and top of the flange, while the outside is either self-coloured or may appear to have a brownish slip. The latter may be the result of burnishing, as it would be difficult to have two slips on the same mortarium.

Some were undoubtedly burnished, whilst others are just dull. Trituration grit consists entirely of slag-like material. Date range: mid-second-fourth century. This is uncommon, only occurring in Periods 10A-11B and 11E. There is an example of Annetwell Street type 328 (Hird in prep) from Period 10A-11B (Fig 123.44), dated to AD 250-400, and of Annetwell Street type 323 (*ibid*) from Period 11E (Fig 131.123), possibly dated to AD 160-200.

**Fabric 313:** *Gallia Belgica*, more than one pottery, 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 grits consist mainly of flint, with occasional quartz and rare red-brown material. The considerable variation in colour and in the rim types associated with this fabric suggests that more than one pottery is involved. Date range: late first-second century.

The rim types represented are Gillam (1970) 238 and 255, and Hartley (1977) Group 1. It first occurs in Period 8B and then subsequently to Period 11E. As it is a relatively early fabric, many of its occurrences must be residual. Examples of Gillam (1970) 238 (Hird and Brooks 2010, fig 25, 128), dated to AD 70-100, occur in Period 10B and in several post-Roman contexts, being residual in all cases. The more common type from the northern Lanes, in Periods 8B and 9, was also present at Blackfriars Street (Taylor 1990, fig 192, 84), where it is dated to AD 100-60. An example of Taylor's (1990) fig 192, 86, dated to AD 150-250, comes from Period 11E.

**Fabric 314:** probably Rhineland; hard, very fine-textured cream fabric with ill-sorted, transparent, and pinkish quartz inclusions. Trituration grits consist largely of translucent quartz with occasional feldspar and red-brown material. The surface is notably smooth to the touch. Date range: second-third century. The fabric first appears in Period 10C and is then present in Periods 11D, 11E, and 12. One sherd came from the third-century well group (226) in Period 11D (*Ch* 4, p 119). An example of Gose (1950) type 453, dated to the second-third century, came from Period 11E (Fig 131.124). The Rhineland products from Carlisle sites appear to be of third-century, rather than second-century, date.

**Fabric 316:** South Carlton, Lincoln, and probably other sites in the vicinity (Tomber and Dore 1998: SOC WH); 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, red-brown and blackish, probably iron-rich, material. Often has a brownish slip. Date range: late first-second century.

A relatively uncommon fabric, it appears first in Period 10A and is then in all subsequent periods to Period 11E, although only three rim sherds are present. An example of Hird and Brooks (2010), fig 10.26, dated to AD 90-120, came from Period 10B, and other South Carlton vessels came from Periods 10B and 10C.

**Fabric 317:** the Rhineland; slightly greyish-white fabric, with fairly frequent, fine, transparent, and pinkish quartz inclusions. Trituration grits consist of closely packed, well-sorted, tiny fragments of quartz. Date range: third-fourth century. The fabric first occurs in Period 10A-11B and then again in Periods 11D, 11E, and 12. From Period 11D, there is an example of Taylor (1990), fig 192, 92, dated to c AD 100-50, but the example from the northern Lanes is more likely to be third-century in date. An example of Annetwell Street type 345 (Hird in prep), dated to AD 150-250 (Fig 131.125), came from Period 11E, and there is one of Gose (1950) type 463, with the same date range from Period 11D-12 (Fig 133.159).

**Fabric 318:** Soller, Kreis Duren, Lower Germany; fine-textured, light brown fabric, fired to brownish cream at the surface. Smallish, but ill-sorted, transparent quartz, red-brown and blackish inclusions, with some larger quartz, red-brown and softish cream-coloured inclusions. Trituration grit is all quartz. Date range: second half of second to early third century. This is the least common of the Rhineland fabrics at the northern Lanes. Sherds of this fabric are only present in Periods 10C, 11B, and 11E, with the only rim sherd from Period 11E (Fig 131.126).

**Fabric 320:** Verulamium region (Tomber and Dore 1998 VER WH); 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. It may have a self-coloured or buff slip. Workshops at Little Munden (Bricket Wood), Brockley Hill, Radlett, and Verulamium made this product (Tyers 1996, 132), but, unless the specific workshop is known, the term 'Verulamium region' is used. Date range: late first/early second century. This fabric first occurs in Period 6 and is then present in Periods 9-11. As it is a mainly first-century ware, all the occurrences are likely to be residual, including the only rim sherd from Period 9, which is similar to Annetwell Street type 354 (Hird in prep), dated to AD 90-130.

**Fabric 322:** Crambeck (Corder and Birley 1937; Evans 1989); fairly close-textured and slightly sandy, off-white fabric, sometimes pink, or with pink, grey, or occasionally a black core; abundant quartz, mica, and red-brown inclusions, usually visible at x10

magnification. Trituration grit consists of abundant fragments of black slag. There are many variations in the texture but it is always sandier than Fabric 323. Date range: fourth century. This fabric only occurs in Periods 11E and 12, and, at the northern Lanes, is less common than Crambeck Fabric 323. The only vessel appearing is Corder and Birley (1937) type 6 (Fig 132.139) of fourth-century date, of which there are at most three examples from phased Roman contexts.

**Fabric 323:** Crambeck (Corder and Birley 1937; Evans 1989); very fine-textured, cream fabric. Trituration grit consists entirely of fairly finely fragmented black iron slag, usually packed close together in the lower half of the mortarium. May have a buff-brown slip; often decorated with motifs in red-brown slip. Date range: fourth century. As was the case with Crambeck Fabric 322, this only occurs in Periods 11E and 12. It is commoner than Fabric 322, and the forms present include Corder and Birley (1937) types 5b, 7, and 8. Examples of type 5b came from a post-Roman context and there are examples of types 7 (Fig 131.127; Fig 132.140) and 8 (Figs 131.128; Fig 133.160) from Periods 11E, 12, and 11D-12. All these vessels date to the later fourth century.

**Fabric 324:** Mancetter-Hartshill (Tomber and Dore 1998 MAH WH); 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 smallish quartz, sparse red-brown and occasionally opaque white inclusions, and a fabric with a fair amount of ill-sorted black slag-like inclusions. Trituration grits consist of hard, red-brown or blackish, refired pottery fragments, with only very rare quartz fragments in mortaria later than AD 140. Mortaria earlier than AD 130 usually have mixed trituration grits, in which quartz and sandstone are normal components. Date range: second-fourth century.

This fabric first occurs in Period 10B (also Period 10A-11B) and is then present in all subsequent periods to the end of the Roman sequence. It accounts for 15% of the stratified mortaria from the northern Lanes. From Period 10A-11B, there is an example (Fig 123.45) of Annetwell Street type 365 (Hird in prep), dated to AD 150-200. Mancetter-Hartshill vessels (Figs 129.96, 129.97, 129.98, 129.99) also came from Period 11D well group 226 (*Ch 4, p 119*). Mancetter-Hartshill appears to have been a more important source of supply to the Lanes sites in the third and possibly the fourth centuries, when the local industry waned (Swan *et al* 2009). It is noteworthy that the ten stamped second-century Mancetter-Hartshill vessels are all residual, the earliest of them from a Period 11B context, and the remainder from Periods 11E, 12, 11D-12, or post-Roman contexts.

**Fabric 328:** Castor-Stibbington area (lower Nene Valley; Tomber and Dore 1998: LNV WH); 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 grits consist entirely of ironstone. May be self-coloured or may have a brownish slip. This is the most common mortarium fabric produced in the lower Nene Valley. Date range: third-fourth century.

This is a most uncommon fabric at the northern Lanes, occurring only in the Period 11D well 226 (*Ch 4, p 119*; Fig 129.100) and in Period 11E. The vessel from the well dates to the third century and is paralleled by Annetwell Street type 383 (represented there by only one unstratified example; Hird in prep). One example similar to Annetwell Street types 384-386 came from a post-Roman context (Fig 135.193) and dates to the period AD 250-400.

**Fabric 339:** Technical College Kiln, Lincoln (Tomber and Dore 1998: LTC WH); cream fabric, often fired to brownish-orange on parts of the surface near the spout. Frequent quartz and rare and larger red-brown inclusions. Trituration grits include red-brown sandstone. Date range: c AD 110 – fourth century.

The fabric first occurs in Period 6 and then in Periods 9, 10A, and 10B. Vessels stamped by the potter Vitalis came from Period 10B (stamp 61) and Period 6 (Fig 113.1; stamp 55), and there is one mortarium stamped by Atepacius (stamp 56) from Period 10B. The vessels from Period 10B are residual, as both potters date to the period AD 90-120.

**Fabric 348:** Oxford Region (Young 1977; Tomber and Dore 1998: OX WH); hard, sandy fabric, with visible black or red sand inclusions, sometimes with a thin wash. Trituration grit is rounded, translucent, white or pink quartz. Date range: second-fourth century. This is uncommon at the northern Lanes, the fabric only occurring in Period 11D-12 (Fig 133.163), where there is a single vessel of Young (1977) type M.14, dated to c AD 180-240, which is obviously residual by this time. Similarly, there was only one mortarium from the Oxford region at the southern Lanes, in a post-Roman context. See also Fabric 353 (*below*).

**Fabric 350:** North-west England, not necessarily Carlisle; granular-textured, pale brown fabric, with orangey-brown slip and frequent inclusions of quartz, red-brown, and black material. Trituration grit is also mixed, with quartz, and red-brown and black particles. Date range: late first-second century. This fabric first occurs in Period 8A, and is present in Periods 8B, 10A, 10C, 11A, and 11B. It is not nearly as common as Fabric 301 (*p 345*), accounting for only 5% of the phased Roman mortarium sherds, but is, nonetheless, the product

of at least two of the same potters (Doc(e)ilis (Stamps 12, 50) and Austinus (stamp 68)), alongside another, currently unidentifiable potter (stamps 22, 70).

**Fabric 352:** Northern England, probably Carlisle area; hard, cream or creamy-pink fabric, with quartz sand and some red inclusions. Mixed quartz, red and grey trituration grits. See also Fabric 350. Date range: late first-second century. This first occurs in Period 10A and then in all subsequent periods to the end of the Roman sequence. Again less common than Fabric 301 (*p 345*), accounting for about 8% of the phased Roman mortarium sherds, it is another local fabric produced by the potters Doc(e)ilis and Austinus, among others, with at least six stamped vessels by Doceilis (stamps 9, 20, 24, 54) and one by Austinus (stamp 29). For other typical examples of vessels in this fabric, see Hird and Brooks (2010), fig 46.326, fig 47.332, and fig 48.337.

**Fabric 353:** Oxford colour-coated ware (Tomber and Dore 1998: OXF RS); 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. Date range: fourth century? This is a very uncommon fabric, one sherd only, in Period 11E. See also Fabric 348 (*above*).

**Fabric 355:** Carlisle or Gloucester; fine-textured, micaceous orange-brown fabric; grey core, thinning below the bead. A few, ill-sorted quartz and opaque, red-brown, slag-like inclusions. Traces of a matt self-coloured slip. No trituration grit survives on this example, but there are traces of grit, mainly quartz, on the flange. Date range: late first century. This is a very uncommon fabric, with only two joining flange fragments of a mortarium of the same form as Hird and Brooks (2010), fig 39.231, coming from Period 11D. This is a first-century form and so is residual at this date.

**Fabric 356:** source unknown; hard, mid-grey fabric with quartz-sand inclusions. Somewhat darker grey surface. Quartz trituration grit. Date range: uncertain. This is very uncommon; only two sherds came from Period 9.

**Fabric 357:** source unknown; hard, granular-textured, pinkish-white fabric, with brown slip over outer and inner surfaces. Trituration grit includes sparse, small, black particles. Date range: uncertain. This is very uncommon, only one sherd coming from Period 11E.

**Fabric 358:** source possibly local; hard, granular-textured, cream fabric, with pinkish inner core. Quartz sand and larger quartz and red-brown inclusions. Trituration grits include small brown and grey

particles. Surfaces have yellowish brown slip. Date range: fourth century? This is very uncommon: there is only one vessel, from Period 11D-12 (Fig 133.164).

**Fabric 359:** Aldborough (Tomber and Dore 1998: ALD WH); hard, irregular-tempered off-white fabric with a cream to buff slip. Abundant quartz, with common rounded iron-rich grains and sparse clay pellets. Trituration grits abundant, small, and tightly packed, including quartz sandstone, sub-rounded quartz, and rounded red to dark-coloured grains. Date range: second century. Again very uncommon at the northern Lanes, this has a single vessel stamped by ?Viator from Period 10B (Stamp 58), dated to AD 100-40.

The Graffiti

R S O Tomlin

Graffiti have been ordered in the following sequence:

(1) amphorae inscribed before firing (cf Collingwood and Wright 1994, RIB II.6, 2493);

(2) amphorae inscribed after firing (cf *op cit*, RIB II.6, 2494);

(3) coarseware inscribed after firing (cf Collingwood and Wright 1995b, RIB II.8, 2503).

Graffiti on samian ware are listed in *Appendix 1*. Graffiti in (1) relate to the process of manufacture, and graffiti in (2) and (3) relate to ownership.

Within each section, graffiti are ordered firstly by period and secondly by site. Successive graffiti indicating a change of ownership are identified as (i) and (ii), and contemporary graffiti of the same owner as (a) and (b). Personal names have been conventionally restored in the nominative case, although it is more likely that the genitive case was actually used, '(Property) of So-and-so'. Some graffiti have already been published in *Britannia* and/or RIB II (Collingwood and Wright 1994; 1995a; 1995b), but those readings are now superseded.

Amphorae inscribed before firing

These sherds all come from the bodies of South Spanish oil amphorae. Since the graffiti were made at the time of manufacture, they may be taken to relate

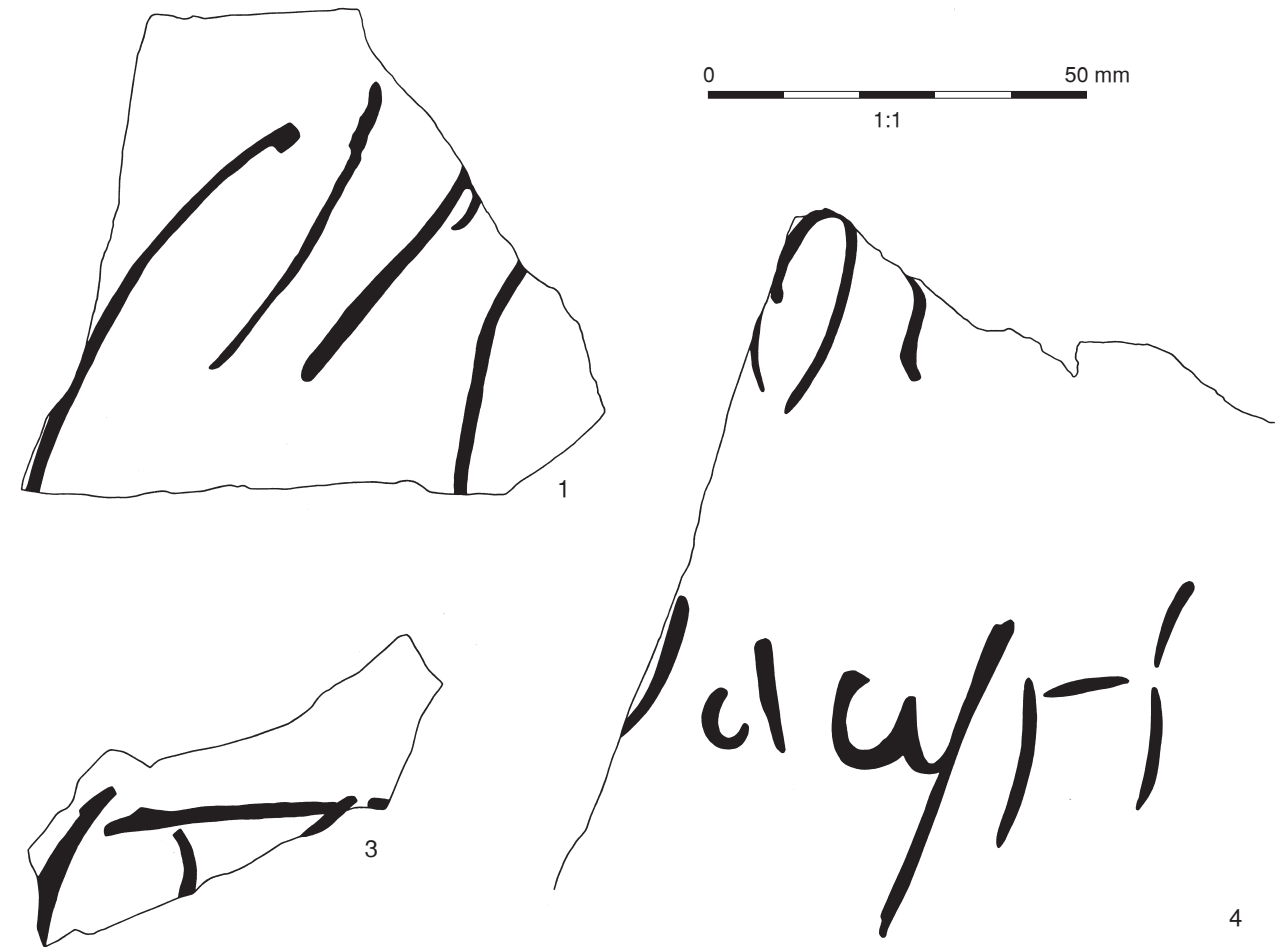


Figure 136: Graffiti on stratified South Spanish amphorae, inscribed before firing

to it: the date; the name of the potter; or that of the firm for which he worked.

- 1 South Spanish, Fabric 208 (Peacock and Williams (1986) Class 25). The upper portion of three cursive letters about 25 mm or more in height, of which one stroke and part of four others remain (Fig 136):  
Possibly [...]ETO[...]  
The first letter might also be C. After the cross-bar of T, two curving strokes apparently meet, suggesting the top of O.  
LAL D 836, Period 11A

- 2 South Spanish, Fabric 207 (Peacock and Williams (1986) Class 25). Part of two or three large letters. Too little survives for decipherment.  
LAL D 604, Period 11E
- 3 South Spanish, Fabric 208 (Peacock and Williams (1986) Class 25). Upper portions of three cursive letters about 25-30 mm high, deeply incised (Fig 136):  
[...]cto[...]  
The fragment is too slight for restoration, but note RIB II.6, 2493.77 (Collingwood and Wright 1994), the Dressel 20 potter's signature



Figure 137: Graffiti on unstratified South Spanish amphorae, inscribed before firing



[*V*ictoris (as the transcription should read), '(product) of Victor'. Another possibility is a date incorporating 'October'.  
KLA C 923, Period 11D-12

- 4 South Spanish, Fabric 207 (Peacock and Williams (1986) Class 25). The ends of two lines of cursive letters, now rather worn (Fig 136):  
[...]

[...]**IDI**IKS

Possibly [. . .]2-3 | [. . .] *pr*id(i)e k(a)lendis *S(eptembris)*'... 31 August'. In line 1, the letters are too damaged and incomplete to be legible, but they do not look like part of a consular date (whether an ablative name-ending, ET, or COS). Line 2 is a possible day-date, assuming that [...]*pr*ide is by synizesis for *pridie*. At first sight, there is a horizontal stroke above II, suggesting a numeral and thus another date, but the apparent 'cross-bar' does not have the 'W' section of all the other letters, and seems to be the result of a natural flaw.  
LAL C 28.01, Period 13 (Post-Roman)

- 5 South Spanish, Fabric 207 (Peacock and Williams (1986) Class 25). In cursive letters, about 25 mm high, by a practised hand (Fig 137):

[...]**NICOMA**[...]

[. . .] *Nicoma*[*chi* . . .]

' . . . (product) of Nicomachus . . . '

The genitive case is the most likely restoration, as being the potter's signature. A consular date (in the ablative) can be excluded, since the graffiti is no later than the mid-second century: the style of cursive resembles that of wooden stylus writing tablets from the period AD 75-125 (*pers obs*). The name *Nicomachus*, which is of Greek etymology, would suggest a slave or freedman at this date; only in the late Roman period is it borne by various consuls. It seems to be otherwise unrecorded as a Dressel 20 potter's signature.  
KLA G 250, Roman, not closely phased

- 6 South Spanish, Fabric 207 (Peacock and Williams (1986) Class 25 = Dressel 20). In cursive letters by a practised hand (Fig 137):  
**GALL**...[]

**VINO** [...]**I**

**VIIRII** [...]**I**

Probably *Gal[licano et Vetere co(n)s(ulibus)] I VI No[nas ...] I Vere[cundi.... ?]* 'In the consulship of Gallicanus and Vetus, on the sixth day before the Nones of [...], (product) of Verecundus', AD 150, either 2 March, 2 July, or 2 October. The second day of the month is expressed as VI NONAS only in these four months, when the *Nones* falls on the seventh (not the fifth)

day. The initial letters are of exaggerated size. This reading supersedes the original reading (Hassall and Tomlin 1980, 409, no 15 = RIB II.6, 2493.15; Collingwood and Wright 1994) where line 1 was tentatively read as GR; in fact, the enlarged loop of the initial G is finished with a small hooked tail, the bold diagonal stroke is part of an enlarged A, and L is made with a short horizontal stroke. Similar graffiti recording the date of manufacture are sometimes found on the base of Dressel 20 vessels, but they are always fragmentary and their purpose is not fully understood: see Rodriguez-Almeida 1984, 256-7). They usually contain three successive elements: (1) a consular date in the mid-second century; (2) the day and month; (3) a personal name in the genitive case.

KLA B, unstratified

- 7 South Spanish, Fabric 208 (Peacock and Williams (1986) Class 25). In cursive letters incised at right-angles to the horizontal axis of the amphora (Fig 137):

[...]**JETRVS**[...]

[...]

Possibly [*Imp(eratore) Hadrinno 111] et Rus[tico co(n)s(ulibus) I [...]*

AD 119. This reading and expansion is possible but not certain. Only the upper curve survives of E, and other letters (C, F, G, or even S) cannot be entirely excluded, but they look less likely; furthermore, the end of a horizontal stroke which follows is either part of E, or of T, which would itself suggest a previous E. The next letter is damaged: it looks like R, but the beginning of the loop is uncertain, and so is the downstroke, which apparently cuts the edge of the sherd (otherwise, the loop would be the first stroke of V, followed by I). V depends upon reading R; the S is certain. E is of exaggerated size, so is probably an initial letter, but the cognomen Etruscus is uncommon and does not occur in a consular date. (The only consul to bear it, as a subsidiary cognomen, is Decius Caesar in AD 251 (Samuel 1972, 272)). Therefore, *et Rus[tico]* is much more likely. The cognomen Rusticus is common, but the only possible ordinary consul posterior is P Dasumius Rusticus, Hadrian's colleague in AD 119 (*op cit*, 270). (Another Rusticus was the ordinary consul posterior in AD 139, but his name, C Bruttius Praesens L Fulvius Rusticus, was abbreviated to Praesens).

KLA C, unstratified

### Amphorae inscribed after firing

These sherds, from the rim, handles, or body, all come from South Spanish oil amphorae. Since the graffiti

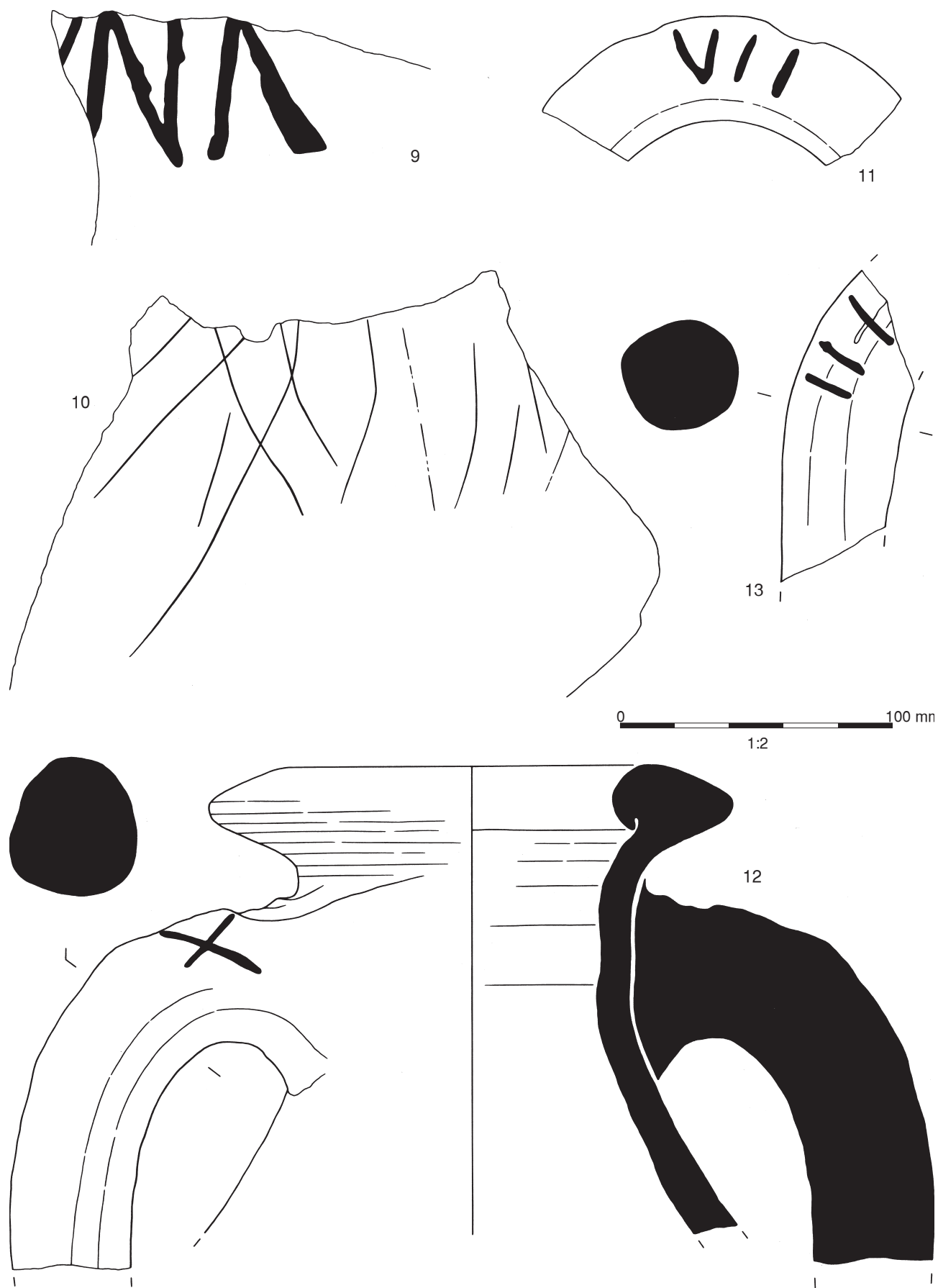


Figure 138: Graffiti on South Spanish amphorae from Periods 10A-11B, inscribed after firing

were made after manufacture, they may be taken to relate to the subsequent use made of the amphorae, either when they still contained oil, or when they were reused as containers for other commodities. Graffiti will therefore be the names of owners, notes of capacity, or marks of identification.

8 South Spanish, Fabric 207 (Peacock and Williams (1986) Class 25). Body sherd, with two intersecting strokes, possibly an 'X' or mark of identification, but the horizontal stroke is much slighter than the vertical, which it underlies, and it seems to be different in quality. So the two strokes are not necessarily connected, and the vertical stroke, if it is a 'letter' at all, might be part of a larger graffito otherwise lost.  
KLA C 1835, Period 8B

9 South Spanish, Fabric 207 (Peacock and Williams (1986) Class 25). On the vessel shoulder, in broadly-incised capitals about 50 mm high (Fig 138):  
[...]**VNA**  
Possibly [*Fort*]*una(ti)*, '(Property) of Fortunatus'. Only the top-right corner survives of V, but the stroke is diagonal, which excludes I and N.  
LAL C 329, Period 10A

10 South Spanish, Fabric 207 (Peacock and Williams (1986) Class 25). Three body sherds, not conjoining. The two smaller sherds carry scratches, probably casual, but on one of these there are two short curving scratches in parallel, which might be part of a graffito inscribed before firing. The largest body sherd comes from the shoulder of the vessel, and carries a series of more or less diagonal scratches, shallowly incised and now badly worn (Fig 138):  
[...]**VANI**...[...]  
This graffito could be interpreted as the end of a personal name, [...]*vani*, followed by the beginning of a second personal name in smaller letters at a lower alignment; one possible reading is IM[ ...]. The scratches are too ambiguous for any firm conclusions, but if there were indeed two names and the first ended in [...]*vani* then it was probably [*Syllvani*, '(Property) of Sylvanus'.  
LAL D 937, Period 10C

11 South Spanish, Fabric 207 (Peacock and Williams (1986) Class 25). Rim sherd, comprising one-quarter of the rim (Fig 138). Deeply incised:  
**VII**  
'Seven (*modii*)'. The numerals VII and VIII are frequent as measures of capacity scratched on Dressel 20 amphorae. See RIB II.6, 33 (Collingwood and Wright 1994); and for

similar graffiti incised on the rim, RIB II.6, 2494.38 (*op cit*), 40, 41, 51, and 55.  
LAL D 823, Period 11A

12 South Spanish, Fabric 207 (Peacock and Williams (1986) Class 25). Four conjoining sherds, comprising three-quarters of the rim and half of one handle (Fig 138). Incised at the top of the handle, to one side:  
**X**  
This is probably a mark of identification, but it is possible that a numeral (most likely VI or VII) was incised on the missing quarter of the rim; X would then be a numeral, '...and ten (*sextarii*)'. Compare with 14.  
LAL D 834, Period 11A

13 South Spanish, Fabric 207 (Peacock and Williams (1986) Class 25). Part of a handle (Fig 138). Roughly incised on one side:  
[...]**.II** or (reading upwards) **II**. [ ... ]  
Probably a numeral. The third digit is too badly damaged for identification, but might be I.  
LAL D 760, Period 11B

14 South Spanish, Fabric 208 (Peacock and Williams (1986) Class 25). Three conjoining sherds, preserving the whole rim and most of one handle (Fig 139). The two graffiti should probably be taken together.  
(a) Scratched on the rim:  
**A AMVI**  
Presumably <**M**> **MVI**, *m(odii)* VI, 'Six *modii*'.  
(b) At the top of the handle:  
**XI**  
Presumably XI (*sextarii*), '... and 11 *sextarii*'. The sequence of strokes, in so far as it is apparent, suggests that (a) was written this way up. The rim is the usual place for a note of capacity; this zig-zag graffito, terminating in a diminutive but certain 'VI', is obviously not a personal name. It would seem that M was first scratched in two halves as A A, then scratched a second time, correctly. There is a D-shaped depression in the second L, but this is not a letter; it seems to be a natural flaw, like two others on the top of the rim directly opposite. For this type of rim graffito compare RIB II.6, 2494.43 and perhaps 99 (Collingwood and Wright 1994). Sometimes, at least, a second graffito on the handle recorded the number of *sextarii* in addition to the *modii* recorded on the rim; for this see RIB II.6, 34 (*op cit*).  
LAL D 760, Period 11B

15 South Spanish, Fabric 207 (Peacock and Williams (1986) Class 25). Deeply incised on the shoulder (Fig 139):



Figure 139: Graffiti on South Spanish amphorae from Period 11B and unstratified, inscribed after firing

### VIT[ ... ]

Probably Vit[alis].

The name *Vitalis* is very common in Britain and Gaul, but the T is not entirely certain: the incomplete 'cross-bar' does not quite touch the down-stroke, and is not quite at right-angles to it. The cross-bar of a T is, however, a much more likely reading than the suprascript bar of a numeral (the VII or VIII frequently incised on Dressel 20 amphorae as a measure of capacity), since it does not extend over the VI as well; and, judging by the examples in RIB II.6, 2494 (Collingwood and Wright 1994), these informal numerals were not usually given a suprascript bar.

LAL D 213, Period 17C (Post-Roman)

- 16 South Spanish, Fabric 207 (Peacock and Williams (1986) Class 25). Body sherd inscribed twice in crude capitals (Fig 139):

#### (i) MAN[ ... ]

The third letter might be M, but this is less likely. *Man[suetus]* is a possible restoration, but not the only one.

#### (ii) Possibly AEA[ ... ]

E has certainly been incised over the second half of M in much thicker strokes. Over L has been incised a zig-zag, now damaged, which resembles modern Z; it might be L. This would suggest that the first half of M was now understood as A, and possibly recut to that effect, which would yield the imperial nomen *Ael[lius]*. Reading and drawing supersede those in RIB II.6, 2494.153 (Collingwood and Wright 1994). The first 'letter' in the drawing there, a vertical stroke which the transcription disregards, is only slight surface damage.

KLA C, unstratified

- 17 South Spanish, Fabric 207 (Peacock and Williams (1986) Class 25). Lower half of a handle, incised midway across the back (Fig 139):

#### [... ]AN

Probably *[C]an(didus)* or *[I]an(uarius)*.

The graffito is not a numeral but a personal name abbreviated either to the three initials of a Roman citizen's *tria nomina* or, more likely, to the first syllable of a cognomen. In the latter case, either *Candidus* or *Ianuarius* is probable: both cognomina are common, and IAN occurs on another amphora (RIB II.6, 2494.128 (Collingwood and Wright 1994)); for other instances of CAN and IAN as abbreviated personal names, see RIB II.8, 2503.217 and 276 respectively (Collingwood and Wright 1995b), and compare samian graffito 14 (Appendix 1). CAG A 29, unstratified

### Coarseware inscribed after firing

Like those on samian ware, these graffiti were all made after the vessel had been sold and while it was in use, and thus served to distinguish it from others, in particular by naming its owner.

- 18 Fabric 12. Base sherd, scratched underneath within the footring (Fig 140):

#### [... ]MA[...]

Probably Ma[. (...)]

Only the upper left-hand corner survives of the letter after M: the tip of a diagonal downstroke appropriate to A (but M or N would also be possible). There would have been space for only one letter before and after MA, so the graffito is likely to have been a personal name abbreviated to three letters, for example MA[R] (see RIB II.7, 2501.322-5 (Collingwood and Wright 1995a); II.8, 2503.322-4; Collingwood and Wright 1995b) or MA[T] (*op cit*, 2501.353-9; 2503.330-2).

KLA C 1935, Period 6

- 19 Black-burnished ware 1, Fabric 1, jar. Base sherd, inscribed underneath with two graffiti in cursive letters (Fig 140):

#### (i) [... ]NVI

*[Inge]nui*

'(Property) of Ingenuus'.

#### (ii) TIIR[ ... ]

*Ter[. . .]*

'Ter[. . .]us' or '(Property) of Ter[. . .]us'.

The size, style, and alignment of the letters change between NVI and TIIR, and T is notably enlarged, as if it were the initial letter of a name. These are the names of successive owners, the first in the genitive case, the second in the nominative or genitive case. Ingenuus is the only common name in -nuus, and was popular in Britain. The other name was probably Terentius, Tertius, or Tertullus. Much the commonest of these is Tertius, which is already attested at Carlisle (Hassall and Tomlin 1988, 496, no 32, with no 30; 1990, 378) and at Stanwix (RIB II.7, 2501.540 (Collingwood and Wright 1995a)). This graffito was previously read as part of a single word. Originally, it was read as [... ]AVITIR[...], perhaps [... ]*su]aviter* (Hassall and Tomlin 1980, 409, no 16), but the underside of a jar is an unlikely place to find an acclamation, especially one which is unattested. Furthermore, the incomplete first letter can hardly be A: there is a trace of another stroke, which looks like the middle stroke of N. This is missing from the drawing (made from a rubbing) which accompanies RIB II.8, 2503.200 (Collingwood and Wright 1995b), where the reading [... ]AVITIVS [... ] is offered. After re-examination, it is also clear that the final letter has been misrepresented: the sinuous



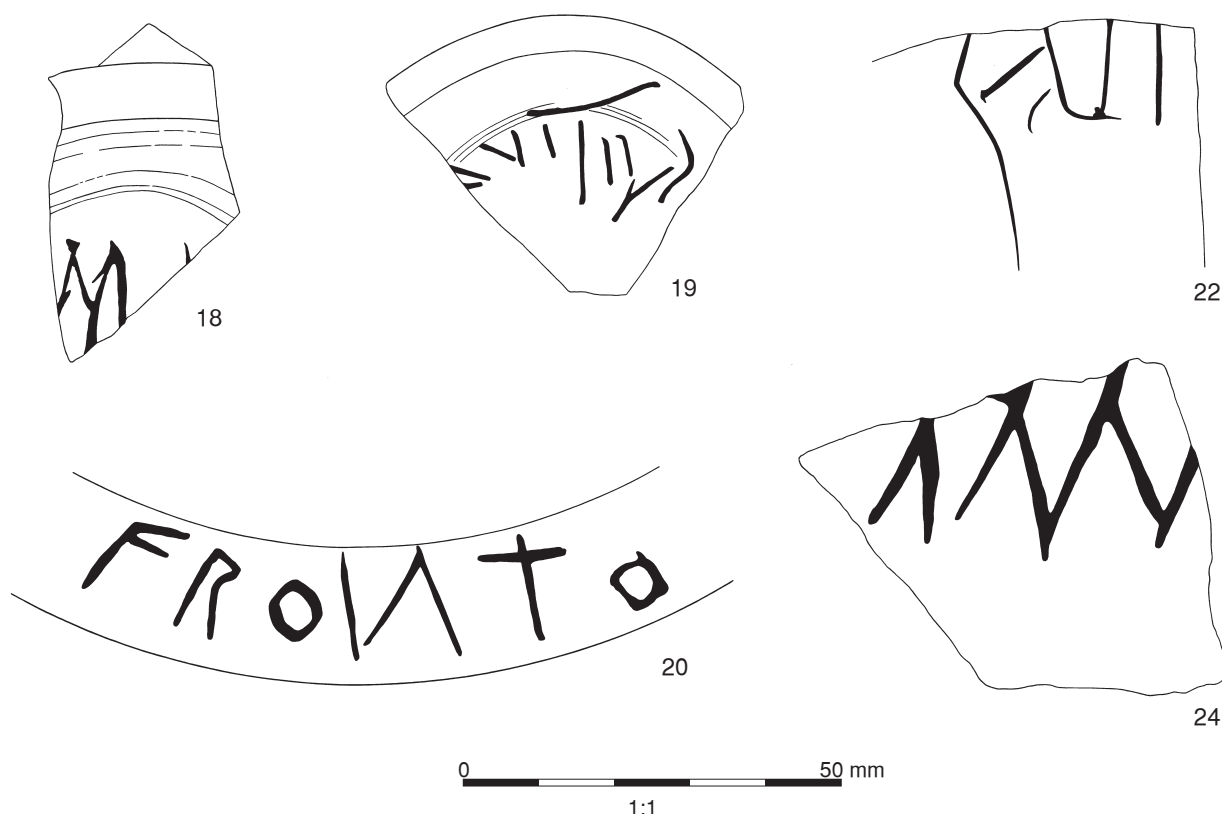


Figure 140: Graffiti on coarseware, inscribed after firing

- curve must be the beginning of L or the second stroke of R; and because of the vertical stroke below it, it belongs in fact to R. This vertical stroke springs from another stroke at a narrow angle to it, producing an apparent 'V' (the drawing in RIB is not quite accurate here); this angled stroke would seem to be a preliminary downstroke, or possibly a continuation of II. The present reading and interpretation therefore supersede those of Hassall and Tomlin (1980, 409, no 16), and RIB II.8, 2503.200 (Collingwood and Wright 1995b).  
KLA B 129, Period 10A
- 20 Black-burnished ware 1, Fabric 1, jar with lattice decoration. The rim bears two successive graffiti (Fig 140):  
(i) facing outwards:  
**VI**  
Either the numeral 'six', or an abbreviated personal name, such as *Vi(ta)lis*.  
(ii) facing inwards, incised more crudely and different aligned:  
**FRONTO**  
N is reversed, since it is VI now read in reverse. The cognomen Fronto is common.  
LAL C 307, Period 10B
21. Black-burnished ware 1, Fabric 1, jar. Incised on the shoulder:  
**X[ ... ?]**  
The numeral 'ten (or more?)', or a mark of identification. The latter is more likely.  
KLA D 226, Period 11A
- 22 Fabric 11, small jar (Fig 124.50). Two sherds preserve half the rim, 88 mm in diameter. A detached wall sherd carries the beginning of a graffito carefully incised in well-formed cursive letters (Fig 140):  
**LAI[ ... ]**  
Probably *Lae[tus]*.  
The very top of one I is lost, so T cannot be formally excluded, but the letters are too close together for this to be likely; moreover, the sequence LATI[ ...] I is itself unlikely, and LAIT[ ...] I is impossible. Nomen followed by cognomen, for example *Lae[lius ...]*, cannot be quite excluded, but the graffito is likely to have been a cognomen on its own, in which case, although there are other possibilities, the most likely cognomen is Laetus.  
LAL C 204, Period 11A
- 23 Black-burnished ware 1, Fabric 1, jar with lattice decoration. Incised on top of rim:  
**X**  
The numeral 'ten', or a mark of identification. The latter is more likely.  
LAL D 551, Period 11E

- 24 Fabric 11. Wall sherd, crudely incised (Fig 140):  
[...]**IANV**[...] *or* [...]**IAM**[...]  
KLA B 973, not closely phased

- 10 SNR (*op cit*, 1641, fig 17, 21-22). Complete  
stamp, Fabric 207. *c* AD 140-80.  
LAL D, unstratified

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## Amphora Stamps

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*R S O Tomlin*

The stamps are all on the handles of South Spanish amphorae (Peacock and Williams 1986, Class 25).

- 1 VIRGIN (Callender 1965, 1792). Complete stamp, Fabric 207. *c* AD 120-60. This stamp or a variation from the same source has already been recorded from Carlisle (May and Hope 1917, pl XVII, 12).  
KLA C 948, Period 10A-11B
- 2 C.IA[. (Callender 1965, 333). G Iulius(?) Albinus. Incomplete stamp, Fabric 208. AD 120-70?  
KLA B 13, Period 10B
- 3 CLICF (possibly a variation of *op cit*, 378a). C.LI(cini)? Complete stamp, Fabric 207. No dating indicated.  
KLA B 906, Period 10C
- 4 JATR[ (possibly *op cit*, 1422, fig 14, 12-15). Q Antonius Ruga. Incomplete stamp, Fabric 207. *c* AD 40-90. Residual, as is much of the pottery from this period, which included a substantial first-century element.  
LAL D 899.02, Period 10C
- 5 JNDPR(?) (possibly *op cit*, 1484d, fig 15, 23). Incomplete, rather abraded stamp, Fabric 207. *c* AD 130-80. Residual.  
LAL C 143, Period 11B
- 6 S.FE (*op cit*, 1617, fig 17, 9-10). Complete stamp, Fabric 207. *c* AD 120-60? Residual.  
LAL C 128, Period 11D
- 7 MM[ (possibly *op cit*, 1139, fig 11, 32). MMemmius Celer. Incomplete, abraded stamp, Fabric 207. Dated to AD 140-80? Residual.  
KLA B 675, Period 11C
- 8 QIMS[ (*op cit*, 1464). Incomplete stamp, Fabric 207. AD 130-80? Residual.  
KLA A 768, Period 11E
- 9 NR(?) (possibly *op cit*, 1234). Incomplete(?), damaged stamp, Fabric 207. No dating indicated.  
KLA B 690.02, Period 14A (Post-Roman)

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## The Mortaria

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*Kay Hartley*

Only the stamped mortaria have been examined in detail (see *Chapter 1*), the databases, created in the 1990s, remaining the principal source of information. The information extrapolated from the stamped sherds can, however, contribute to an understanding of the conditions of deposition, and the general availability of mortaria in Carlisle.

### Abrasion and wear

The degree of abrasion and weathering on sherds, and the extent to which they were scattered between discrete deposits, can be important indicators of taphonomic process. Though examination of these factors was confined to stamped mortaria, it is highly likely that many of the unstamped fragments are from the same vessels (Table 9). The results are of special interest for two reasons: the number of large, frequently joining, sherds; and the lack of abrasion as a result of weathering. Considered together, these suggest that the mortaria had not been subject to repeated redeposition, a suggestion which seems to contradict the high level of residuality which characterises the majority of the other finds groups examined (*p* 306).

Five of the mortaria, all attributed to Carlisle workshops, were heavily overfired, sometimes sintered, and must qualify as 'seconds', sold on, despite their imperfections, or dumped as too poor to be used. As might be expected, these are from the local manufactories, as it would be unusual for imperfect vessels to be transported for sale over long distances. Three, however, showed notable abrasion after fracture; 8 (*pp* 370-1) is the only mortarium which had accretion on the outside and inside of the stamp.

The heavy use to which the mortaria had been put, before breakage brought their working lives to an end, is particularly striking. In all, an indication of the wear could be obtained from 43 vessels, of which 38 were heavily worn, and only five had light to moderate wear. Presumably, this indicates that mortaria were regarded by their users as valuable enough to extend their lives as long as possible. Whether this reflects the inability of their owners to replace the vessels at an earlier stage for financial reasons, or that, at times, there were periods in which they were in short supply, is not immediately obvious.

Site	No vessels	Abraded	Heavily overfired	Moderate wear	Heavy wear	Too little survives
KLA A	7	-	1	-	2	5
KLA B	7	-	-	2	4	1
KLA C	16	1	1	-	7	9
KLA D	6	-	1	-	3	3
KLA G	1	-	-	-	1	0
<i>Sub-total</i>	<i>37</i>	<i>1</i>	<i>3</i>	<i>2</i>	<i>17</i>	<i>18</i>
LAL A	2	-	-	1	-	1
LAL B	2	-	1	-	1	1
LAL C	13	2	-	1	7	5
LAL D	18	-	1	1	8	7
<i>Sub-total</i>	<i>35</i>	<i>2</i>	<i>2</i>	<i>3</i>	<i>16</i>	<i>14</i>
<b>Total (KLA and LAL)</b>	<b>72</b>	<b>3</b>	<b>5</b>	<b>5</b>	<b>33</b>	<b>32</b>

Table 9: Wear and abrasion on mortaria from KLA A-G and LAL A-D

### Mortaria supply through time

Changes can be seen through time in both sources of supply and, presumably, local preferences. From the Flavian (AD 69-96) to the mid-late Antonine period (c AD 170/80), a large proportion, probably the majority, of the mortaria in use in Carlisle were stamped. Stamped sherds from at least 72 vessels were recovered from the northern Lanes; this is a far larger sample than from any other excavation in Carlisle, being, in fact, 33% of the total number of stamped mortaria from Roman Carlisle (217 vessels, excluding kiln material). Because stamping was so common in the first and second centuries, and the sample is so large, it probably accurately reflects mortarium use at the northern Lanes from c AD 70 to c AD 170.

Major potteries in the Verulamium region and in the Oise-Somme region of northern France (Tomber and Dore 1998, 154-5, 75-6; Hartley and Tomber 2006, 95, chs 3 and 13, 23-4; Hartley 1998, 200-5) were demonstrably the main suppliers of mortaria to Carlisle, and more generally to the north of England, during the Flavian period, and on into the early second century. Neither group of potteries is represented among the stamps, and so few other sherds were recorded that it can be reasonably assumed that supplies to the Lanes from these two giant producers, the products of which were ubiquitous, were on a markedly small scale, especially as both continued in production into the second century. This must suggest that either there was only minimal mortarium usage during the Flavian period at the northern Lanes, or that occupation only began very late in the period.

From c AD 90 to AD 120, the most important supplier to the northern Lanes was, rather surprisingly, the workshop at the Technical College site in Lincoln (Tomber and Dore 1998, 160, pls 131a and 131b). This supplied a maximum of nine stamped mortaria, an

impressive number for a workshop whose production was minuscule compared to the giant producers. The use of this source is of particular interest, involving, as it did, a cross-country route. It also helps explain the presence of more mortaria from Lincoln than would be expected at places like Doncaster (Hartley 1986).

During the early second century, there were only very limited sources of pottery supply in the North West, and they all appear to have been linked, like Brampton (Bellhouse 1971), and perhaps the work of Attius and other minor potters, to forts on the Stanegate frontier. There are indications of production in Carlisle during the Flavian period, seen, for instance at Castle Street (Taylor 1991, fig 309.307; Johnson *et al* 2012). The first establishment of large-scale pottery production at Carlisle was, however, probably linked to the building of Hadrian's Wall. The new workshop appears to have been closely linked to extant workshops further south, at Walton-le-Dale and Wilderspool, whose major potters were Austinus, Docilis 3, and DIS/LDB (Evans *et al* in prep). These three potters appear to have dominated the region, and although there were also several minor potters active at Wilderspool and Walton-le-Dale (Table 10), they are only represented at Carlisle by one recorded stamp (McCarthy 1990, fig 195.18).

Known kilns and/or kiln-waste provide proof of production by these three potters at the three linked kiln sites in northern England: Wilderspool; Walton-le-Dale; and Fisher Street, in Carlisle. The mortaria on each site clearly demonstrate the links between them, with indications that the same potters were clearly involved in production, probably at all three sites. There are also die-links between the stamps used on the different sites. In addition, there is now every likelihood of one, or perhaps two, more workshops in Scotland, during the Antonine occupation at Newstead and/or Inveresk (Maxfield forthcoming).

Potters	DIS/ LDB	BRICO	BRCO	C.C.M	Decanio	Decmitius?	OVID?	fig 8, I	fig 8, J	fig 8, M	fig 8, O	fig 8, K	fig 8, L	Nanieco*	Totals
Wilderspool - kiln-waste	6-7	2	4	2	1	7	2	4	2	2	0	1	1	1-2	35-7
Walton-le-Dale - kiln-waste	20	0	0	0	1	1	0	0	0	0	1	0	0	0	25
Fisher Street, Carlisle - kiln-waste	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wilderspool other sites	1	0	0	0	0	0	0	0	1	1	0	0	0	0	3
Walton-le-Dale other sites	2	0	0	0	0	1	0	0	0	0	0	0	0	0	3
Carlisle, Northern Lanes	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Carlisle, other sites	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Ambleside	3	0	0	0	0	0	0	0	0	0	1	0	0	0	4
Bewcastle	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Birdoswald	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Birdoswald Turret	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bowness-on-Solway	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cardurnock	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Castle Crag, Borrowdale	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Castlesteads	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Caerhun	0	0	0	0	0	0	0	0	0	0	0	1?	0	0	1?
Chester	0	0	0	1	0	0	1	0	0	0	0	1	0	0	3
Chesters .	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Corbridge	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
Dinorwic, Gwynedd	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
Hardknott	1	0	0	0	0	0	0	0	0	0	1	0	0	0	2
Kirkham	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Lancaster	4	0	0	0	c8	1	0	0	0	0	1	0	0	0	15?
Manchester	3-4	0	0	0	0	4	0	0	0	0	0	0	0	0	7-8
Maryport	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 10: Distribution (DIS/LDB) plus minor potters working at Wilderspool, Walton-le-Dale, and Carlisle

Potters	DIS/ LDB	BRICO	BRCO	C.C.M	Decanio	Decmitius?	OVID?	fig 8, I	fig 8, J	fig 8, M	fig 8, O	fig 8, K	fig 8, L	Nanieco*	Totals
Melandra Castle	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Moresby	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Northwich	1	0	0	1	0	0	0	0	0	0	0	0	0	0	2
Old Penrith	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ravenglass	0	0	0	0	0	0	0	0	0	0	1-2	0	0	0	1-2
Ribchester	6	0	0	0	4	0	0	0	0	1	1	0	0	0	13
Segontium	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Stanwix	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Wallsend	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Watercrook	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
Wattle Syke, West Yorks.	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Wroxeter	0	0	0	1	0	0	0	0	0	0	0	1	0	0	2
Vindolanda	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
York	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Balmuildy	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Barburgh Mill, Dumfriesshire	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bar Hill	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
Camelon	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Carzield	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Newstead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Inveresk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Muselburgh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Totals</b>	<b>34-5</b>	<b>1</b>	<b>0</b>	<b>4</b>	<b>c 14</b>	<b>6</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>6-7</b>	<b>c 4</b>	<b>0</b>	<b>0</b>	<b>77-9</b>

Table 10: Distribution (DIS/LDB) plus minor potters working at Wilderspool, Walton-le-Dale, and Carlisle (cont'd)



The pottery assemblages from the three English kiln-sites are, of course, arbitrary, their contents dependent on the extent of excavation, survival, and even the selection and retention of material. Thus, they do not necessarily accurately reflect the duration or extent of production on any individual site or the relative importance of potters, but they do provide some clues. The initial report on the Wilderspool workshop assemblage (Hartley and Webster 1973) allowed some consideration and speculation on the history and importance of the potters and the pottery; inevitably, increasing knowledge has confirmed some of these, while others have been made out of date. Analysis had raised the possibility of a second workshop, at Carlisle, on the basis of differences in pottery fabric and texture, but the discovery of a third workshop, used by the same potters, at Walton-le-Dale (Evans *et al* in prep), only 30 Roman miles (*c* 45 km) north of Wilderspool, was completely unexpected.

The Wilderspool workshop produced mortaria in at least two different fabrics, one of them fine-textured enough to be close to that used for the finewares produced there (Hartley 1981a). Inevitably, some of the vessels originally attributed to Wilderspool will turn out to have been made at Walton, which is on similar geology, and some reassessment is now necessary, along with further study of the date and development of all three production centres. There can be little doubt that all three were set up to service military requirements in the relevant areas, although their products would, of course, also find their way to civilian sites. Wilderspool was probably the earliest to be established, but it is

no longer possible to think of the three sites as sequential, as a greater or lesser degree of overlap in production can be established from the fact that all three potters were producing during the Hadrianic period, and the work of Docilis 3 and Austinus continued up to *c* AD 165. In addition, there were unstamped mortaria, likely to post-date these two potters, made at Wilderspool (Hartley and Webster 1973, fig 12.121-124; Hinchliffe and Williams 1992, figs 33.274, 26.125). Some minor potters active at Wilderspool and Walton may have started and finished earlier, as they are not present at Carlisle (Table 10). There is, however, a herringbone stamp similar to that found in Walton-le-Dale (Gibbons *et al* in prep) but from a different die, on a mortarium whose fabric points to a source in Carlisle (McCarthy 1990, fig 195.18).

The numbers of their stamps recorded, and their distribution, seem to make it obvious that the three main potters, Docilis 3 (Table 11), Austinus (Table 12), and DIS/LDB (Table 10), were the most important potters making mortaria in north-western England between *c* AD 120 and AD 165, and also that Docilis 3 (Table 13) and Austinus (Table 14) were undoubtedly the most important potters at Carlisle, which has to date produced a total of 52 mortaria of Docilis, and 30 of Austinus, compared with only 135 of all other potters, including those with graffiti as stamps, and all unidentified stamps of all periods (excluding kiln waste). They were clearly not just itinerant individual potters working for themselves, as they were involved in production at all three sites, possibly at the same time, and, in the case of Docilis and Austinus, they were also involved in production for the army in Scotland during the

Dies	A	B	C	D	E	F	G	H	I	J	K	L	M	?die	Totals
Wilderspool - kiln-waste	1	0	0	0	0	0	0	0	0	0	0	0	0		1
Walton-le-Dale - kiln-waste	4	0	0	0	0	0	0	0	0	0	0	1	0		5
Fisher Street, Carlisle - kiln-waste	0	up to 11	0	2	0	0	0	0	0	0	0	0	0		up to 13
Carlisle, Northern Lanes	0	4	1	10	2	0	1	0	0	0	0	5	1	1	25
Carlisle, other sites	0	5	1	8	1	1	2	0	1	1	4	1	0		25
Ambleside	2	0	1	0	0	1	0	0	0	0	0	0	0		4
Bewcastle, Shopford Bridge	0	0	0	0	0	0	0	0	0	0	0	0	1		1
Birdoswald	0	2	0	0	0	0	0	0	0	0	0	0	0		2
Birdoswald Turret	0	0	0	0	0	1	0	0	0	0	0	0	0		1

Table 11: Stamped mortaria of Docilis 3 from all sites, listed according to die

Dies	A	B	C	D	E	F	G	H	I	J	K	L	M	?die	Totals
Bowness-on-Solway	0	1	0	0	0	0	0	0	0	0	0	0	0		1
Cardurnock	0	3	2	2	0	0	0	0	0	0	0	0	0		7
Castle Crag, Borrowdale	0	0	0	0	0	0	0	0	1	0	0	0	0		1
Castlesteads	1	0	0	0	0	0	0	0	0	0	0	0	0		1
Chester	0	0	0	1	0	0	0	0	0	0	0	0	0		1
Chesters Museum	0	0	0	1	0	0	0	0	0	0	0	0	0		1
Corbridge	0	0	0	2	0	0	0	0	0	0	0	0	0		2
Hardknott	0	0	0	2	0	0	0	0	0	0	0	1	0		3
Lancaster	3	0	0	0	0	0	0	0	0	0	0	0	0		3
Maryport	0	2	0	0	0	0	0	0	0	0	0	0	0		2
Moresby	0	0	0	0	0	0	0	0	1	0	0	0	0		1
Old Penrith	0	0	0	1	0	0	0	0	0	0	0	0	0		1
Ravenglass	0	1	0	0	0	0	0	1	0	0	0	0	0		2
Stanwix	0	0	0	1	0	0	0	0	0	0	0	0	0		1
Watercrook	0	0	0	1	0	0	0	0	0	0	0	0	0		1
Vindolanda	0	1	0	2	1	0	0	0	0	0	0	0	0		4
York	0	0	1	0	0	0	0	0	0	0	0	0	0		1
Balmuildy	0	0	0	1	0	0	0	0	0	0	0	0	0		1
Barburgh Mill, Dumfriesshire	0	0	0	1	0	0	0	0	0	0	0	0	0		1
Camelon	0	0	0	3	0	0	0	0	0	0	0	0	0		3
Carzield	0	0	0	1	0	0	0	0	0	0	0	0	0		1
Newstead	0	0	0	1	1	0	0	0	0	0	0	0	0		2
Inveresk	0	0	0	3	0	0	0	0	0	0	0	0	0		3
Musselburgh	0	0	0	3	0	0	0	0	0	0	0	0	0		3
<b>Totals from occupation sites only</b>	<b>6</b>	<b>19</b>	<b>6</b>	<b>44</b>	<b>5</b>	<b>3</b>	<b>3</b>	<b>1</b>	<b>3</b>	<b>1</b>	<b>4</b>	<b>7</b>	<b>2</b>	<b>1</b>	<b>105</b>

Table 11: Stamped mortaria of Docilis 3 from all sites, listed according to die (cont'd)

Dies	A	Bi&ii	C	D	E	F	G	H	I	J	K	unknown	Totals
Wilderspool - kiln waste	0	0	0	0	0	0	0	0	0	0	2	0	0
Walton-le-Dale - kiln waste	0	0	0	0	0	0	0	0	1	2	7	0	3
Fisher Street, Carlisle - kiln waste	0	0	0	1	0	0	0	0	0	0	0	0	1
Wilderspool, other sites	0	0	0	0	0	0	0	0	0	0	1	0	1
Walton-le-Dale, other sites	0	0	0	0	0	0	0	0	0	0	1	0	1
Carlisle Northern Lanes	0	4	0	5	1	1	2	0	0	0	0	0	13
Carlisle, other sites	5	2	2	6	0	0	0	0	0	0	0	1	16
Ambleside	1	0	0	0	0	0	0	0	0	0	0	0	1
Birdoswald	1	2	0	0	0	0	0	0	0	0	0	0	3
Cardurnock	1	0	1	0	0	0	0	0	0	0	0	0	2
Chesters	0	0	0	1	0	0	0	0	0	0	0	0	1
Corbridge	1	2	0	2	0	0	0	0	0	0	0	0	5

Table 12: Stamped mortaria of Austinus from all sites, listed according to die

Dies	A	Bi&ii	C	D	E	F	G	H	I	J	K	unknown	Totals
Hardknott	0	0	0	0	0	0	0	0	0	0	2	0	2
Kinderton, Cheshire	0	0	0	0	0	0	0	0	0	1	0	0	1
Lancaster	0	0	0	1	0	0	0	0	1	0	5	0	7
Low Borrow Bridge, Cumbria	0	0	0	1	0	0	0	0	0	0	0	0	1
Maryport	0	1	0	0	0	0	0	0	0	0	0	1	2
Melandra Castle	0	0	0	0	0	0	0	0	0	0	1	0	1
Ribchester	0	0	0	0	0	0	0	1	0	0	4	0	5
Stanwix	0	0	0	1	0	0	0	0	0	0	0	1	2
Wallsend	0	0	0	0	0	0	0	0	0	1	0	0	1
Watercrook	0	0	0	0	0	0	0	0	1	1	3	0	5
Vindolanda	0	0	2	0	0	0	0	0	0	0	0	0	2
Balmuildy	1-2	0	0	1	0	0	0	0	0	0	0	0	2-3
Bar Hill	0	1	0	0	0	0	0	0	0	0	0	0	1
Birrens	0	1	0	0	0	0	0	0	0	0	0	0	1
Camelon	0	3	0	1	0	0	0	0	0	0	0	0	4
Carzield	0	1	0	1	0	0	0	0	0	0	0	0	2
Cramond	0	0	0	1	0	0	0	0	0	0	0	0	1
Durisdeer	0	1	0	0	0	0	0	0	0	0	0	0	1
Milton	1	0	0	0	0	0	0	0	0	0	0	0	1
Mumrills	0	1	0	0	0	0	0	0	0	0	0	0	1
Newstead	1	1	0	0	0	0	0	0	0	0	0	0	2
Rough Castle	0	1	0	0	0	0	0	0	0	0	0	0	1
Strageath	0	1	0	0	0	0	0	0	0	0	0	0	1
<b>Totals are from occupation sites only</b>	<b>12-13</b>	<b>22</b>	<b>5</b>	<b>21</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>17</b>	<b>3</b>	<b>90-1</b>

Table 12: Stamped mortaria of Austinus from all sites, listed according to die (cont'd)

Antonine occupation. Obviously, this must imply that they had others working in their name, and it is likely that the three stamps represent thriving enterprises.

Some kind of link between the Wilderspool workshop and a workshop supplying Wroxeter has long been suspected (Hartley and Webster 1973), but it was then not felt wise to emphasise it on the evidence to hand. Such a link would mean that the Docilis who initiated production in the North was, in fact, the Docilis known as Docilis 1, who was a leading potter in the workshop which served Wroxeter during the late first and the first half of the second centuries (*ibid*). The Fisher Street mortaria supplied extra evidence for this suggestion (Johnson *et al* 2012, 112-13), suggesting that the potter using Die B had been sent direct from Wroxeter to Carlisle, rather than being sent from Walton-le-Dale, as might otherwise have been expected. It is worth adding that stamps found at Wilderspool (Hartley and Webster 1973, fig 8.N) have now been attributed to Austinus.

It is still, however, the case that little certain can be learned about the organisation of these workshops,

and more evidence will be necessary to confirm the putative link with Wroxeter. Nonetheless, the evidence to date shows the supreme importance of the enterprise for mortarium production in north-western England and in Scotland. These are not the only examples of multiple workshops. The Antonine potter Sarrius was, for instance, involved in four production sites simultaneously, with a notional headquarters in the Midlands, at the Mancetter-Hartshill potteries (Buckland *et al* 2001). Anaus, probably the most important mortarium maker in north-east England (Proctor 2012, 105-7), is another example of such a large enterprise, although, to date, none of his kilns have been located. For further details of Docilis 3 (not Docius *etc*) and Austinus, see Johnson *et al* (2012), and Maxfield (forthcoming).

Although there are numerous stamps of DIS/LDB distributed to the south of Carlisle, he is only represented at Carlisle by two, and his work has never appeared in Scotland (Table 10). At least one of the four mortaria attributed to him at Stanwix is probably from Walton-le-Dale, but his mortaria at Carlisle, and many of those from Hadrian's Wall,

				Dies														
Site	Context	Period	Join/same	A	B	C	D	E	F	G	H	I	J	K	L	M	Unknown	Totals
KLA A	992	10A	unstratified	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
KLA A	-	11A		0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
KLA B	750	11A		0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
KLA B	811	10C (11A)		0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
KLA B	842, 911, 920, 931	10A		0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
KLA B	1184	10A-11B		0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
KLAC	1073	10A-11B		0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
KLAC	1073	10A-11B		0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
KLAC	1080	10A-11B		0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
KLAC	1671	11A		0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
KLAD	461	9	Post-Roman (14A)	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
KLAD	461	9		0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
KLAD	13	Post-Roman (not closely phased)		0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
LALA	42	Post-Roman (not closely phased)		0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
LALB	222	10B	joins LAL D 419	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
LALB	127	Post-Roman (13)		0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
LALC	133	11B	joins LAL D + [389]	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
LALC	162	11B		0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
LALC	209.04	11A		0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
LALC	209.05	11A		0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
LALC	11	Post-Roman (not closely phased)	Post-Roman (14A-B)	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
LALC	14	Post-Roman (14A-B)		0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
LALD	749	11C		0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
LALD	894 joins in 926, 974,1068,1003	10B/10C	10B	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
LALD	988	10B		0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Total				0	4	1	10	2	0	1	0	0	0	0	5	1	1	27

Table 13: Stamped mortaria of Docilis 3 in the northern Lanes, according to die

Site	Context	Period	Join/same	Dies											Totals
				A	B	C	D	E	F	G	H	I	J	K	
KLA A	276/299	Post-Roman (15A)		0	1	0	0	0	0	0	0	0	0	0	1
KLA B	13	10B		0	1	0	0	0	0	0	0	0	0	0	1
KLA C	945	10A-11B		0	0	0	0	0	0	1	0	0	0	0	1
KLA C	1408	11B		0	0	0	0	0	1	0	0	0	0	0	1
KLAC	-	unstratified		0	0	0	1	0	0	0	0	0	0	0	1
KLA C	-	unstratified		0	0	0	1	0	0	0	0	0	0	0	1
LAL C	24	Post-Roman (13)		0	0	0	1	0	0	0	0	0	0	0	1
LAL C	123/124/ 157/293/ 311	10B (11B, 11C)		0	0	0	1	0	0	0	0	0	0	0	1
LAL C	209.04	11A	joins LAL C 7 Post-Roman (13)	0	0	0	1	0	0	0	0	0	0	0	1
LAL C	45	Post-Roman (13)		0	0	0	0	1	0	0	0	0	0	0	1
LAL D	-	unstratified		0	1	0	0	0	0	0	0	0	0	0	1
LAL D	749	11C		0	1	0	0	0	0	0	0	0	0	0	1
LAL D	821	11A/11C	same KLA C 1050 (11C)	0	0	0	0	1	0	0	0	0	0	0	1
<b>Total</b>				<b>0</b>	<b>4</b>	<b>0</b>	<b>5</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>13</b>

Table 14: Stamped mortaria of Austinus in the northern Lanes, according to die

would fit better with production at Carlisle than elsewhere. It can only be assumed that his period of production at Carlisle was, for whatever reason, limited. Another important factor with regard to the Carlisle workshop is the appearance of the potter who stamped EMM[...] retrograde, who must surely be equated with the potter in Scotland who stamped EM[...] with another die (Maxfield forthcoming). It is also worth remembering that unstamped raetian mortaria were produced at Wilderspool, Walton, and almost certainly at Fisher Street, and undoubtedly elsewhere in Carlisle (Hartley and Webster 1973; Hartley 2012). Some of these appear to have continued to be produced after AD 165, and at least up to the end of the second century (Hartley and Webster 1973, fig 12, nos 121-4; Hinchliffe and Williams 1992, figs 33.274, 26.125; Hartley 2012).

If the setting-up of the Docilis workshop at Carlisle fits well with the building of Hadrian's Wall, the only obvious political event which would coincide with the end of its production is the abandonment of Scotland in the AD 160s and the concomitant reorganisation of Hadrian's Wall (Breeze and Dobson 2000). Indeed, the practice of stamping mortaria ceased in the area about this time, presumably when this workshop was given up.

The most interesting mortarium from the northern Lanes is perhaps 66 (p 385), which has a graffito in the form of a herringbone-type stamp. Its interest lies in the similarity of its form to mortaria made by Verecundus 2 at Soller, Kreis Düren, in Lower Germany, although it is in a fabric which suggests manufacture at Carlisle. In addition, it dates from the mid- to late Antonine period, the point at which stamping mortaria had ceased, or was about to do so. Although the production of stamped mortaria ceased at Carlisle with potters like Docilis and Austinus, some production of unstamped mortaria must have continued there (Johnson *et al* 2012, 111, nos 27-30). It is also certain that some production of raetian mortaria continued (Hartley 2012, 92, fig 9), but local production was now on a small scale and probably ceased before c AD 200.

Whatever the reason, there was a major reorganisation of mortarium supplies to Carlisle at some point within the period AD 160-80 and the mortaria from the northern Lanes (Fig 141), both stamped and unstamped, illustrate this very well. The change went beyond Carlisle, however, and is seen throughout northern England, with local potters ceasing to work, and possibly moving elsewhere. The Mancetter-Hartshill potteries, in Warwickshire, took over most of the market from



AD 160/70 (Tyers 1996, 123) and, as a result, throughout the third century, the north of England was flooded with Mancetter-Hartshill mortaria; evidence shows that the northern Lanes was no exception. The Mancetter-Hartshill potters Maurius, Iunius, Sennius, and RBIVSII were among the latest potters to stamp mortaria at those potteries and, at Carlisle, their presence marks the beginning of the change in suppliers. Sarrius and probably the Maurem stamp were somewhat earlier, but overlapped with the rest; they were potentially the earliest of the Mancetter-Hartshill potters supplying Carlisle when local production ceased. The cessation of stamping in the Warwickshire potteries coincided with changes in organisation which involved bigger, stronger, kilns, and the development of more streamlined rim profiles and spout forms, which must have been easier and quicker to produce (Hartley 1973).

The unstamped mortarium forms of the late second and early third centuries are not too difficult to date, but once the potteries had streamlined their products and achieved a fair amount of uniformity, close dating becomes almost impossible. Dated deposits at Birdoswald (notably Analytical Groups 9 and 13; Wilmott 1997, 243-4 and 247-8) illustrate the next big change in suppliers of mortaria to the North, as the Mancetter-Hartshill potteries gave way to the next major supplier, the Crambeck potteries in East Yorkshire (Tyers 1996), which rapidly became dominant. The change seems to have taken place in the early years of the fourth century, although it might be suggested that it began in the late third century. The reason for this change is not clear, but

it could have been part of a systematic reorientation of sources of supply, concentrating on northern suppliers. In Carlisle, at least, there seems to have been a shortage of mortaria in the first three-quarters of the century. At the northern Lanes, KLA A has one Crambeck mortarium, dating to AD 370-400, whilst LAL B, LAL C, and LAL D, and the site dug by Clack and Gosling in 1976, all have Crambeck mortaria present, including those dated to AD 370-400 (Hull 1932; Bidwell 2005).

## Discussion

In chronological terms, the four successive dominant suppliers to the northern Lanes and, as far as can be determined, to Carlisle in general, were the Lincoln Technical College workshop, the workshops at Carlisle, the Mancetter-Hartshill potteries, and, in the fourth century, the Crambeck potteries of East Yorkshire. A few other sources are represented by small numbers of vessels. At a relatively early date (AD 70-130), a few unstamped vessels came from the Noyonnais potteries (Oise/Somme), and a second small group from the same potteries appeared in the period *c* AD 140-80 (Gillam 1970, type 255). Small numbers of mortaria made in Lower Germany came in between the mid-late Antonine period and perhaps the first half of the third century. Lower Nene Valley mortaria, dating to the third to fourth centuries, are represented by only four sherds from LAL D (in the north-west of the site) and one from KLAB (in the east). One body sherd attributable to the Oxford potteries was found on KLAB, and there is a possibility that the occasional vessel from the Cantley kilns at Doncaster (Buckland *et al* 1980) was reaching the northern Lanes.

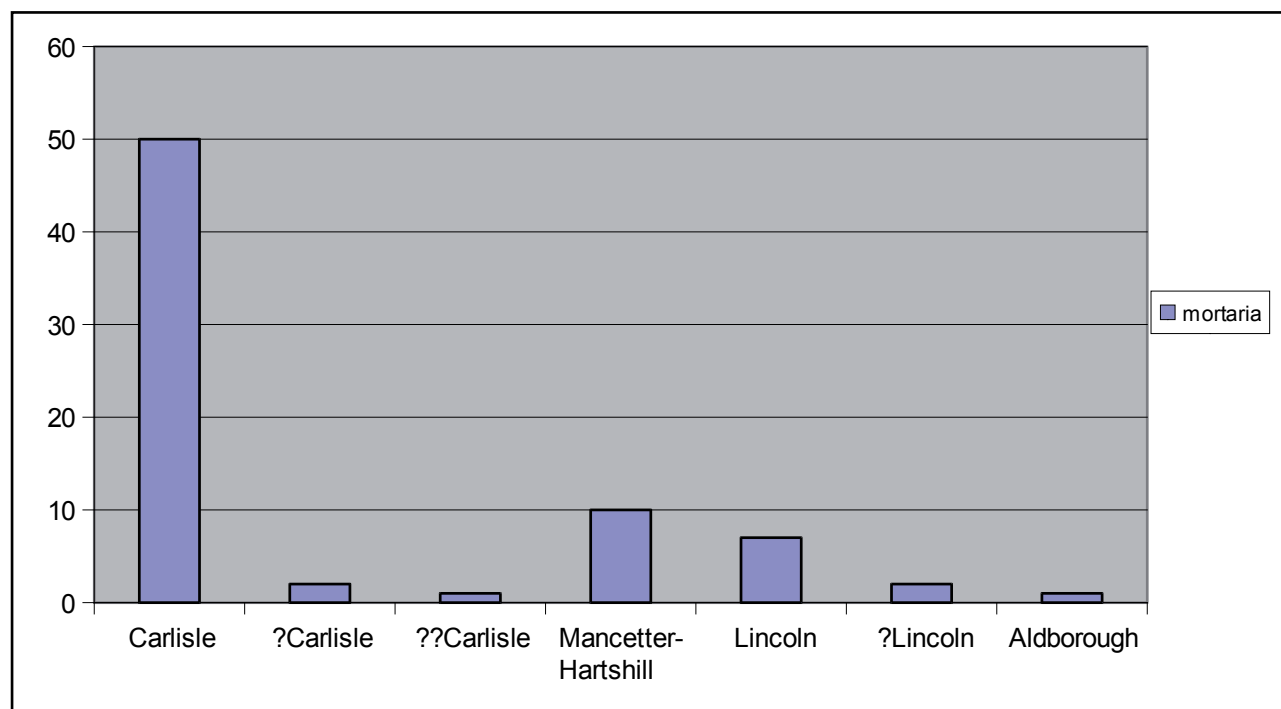


Figure 141: Sources of stamped mortaria

## Catalogue of stamped mortaria

Unless otherwise stated, there is only one sherd in each catalogue entry. The complete rim-section survives unless otherwise stated, *ie* flange fragment, or incomplete rim-section. If the state of wear is not commented upon, too little of the body has survived for the wear to be ascertained. Stamps reported on individually can be regarded as on individual mortaria. Where the stamps on both sides of the mortarium actually survive, this is stated. The letters are used to differentiate the dies of Docilis 3, Austinus, *etc.* Die A, Die B, *etc.*, are for recording purposes only. To avoid repetition of details, for the potters Docilis 3 and Austinus, and the workshops in which they were involved, see Tables 11-14.

### KLA A

- 1 Fabric 352. Incomplete rim-section (25 g). The broken impression shows part of the end and lower borders of a stamp from Die E of Docilis 3 (Fig 142), the full reading of which is DOCC, followed by three short, thick, parallel bars, which may represent an E. No stamps from Die E were found in the limited excavation on his kiln site at Fisher Street, Carlisle (Johnson *et al* 2012), and only five are recorded from all sites, three of them from Carlisle (northern Lanes (two examples); and Scotch Street (*pers obs*)). The particular interest of this sherd, and that of 54 (p 380), as well as a stamp from Newstead, lies in the use of an iron-free clay, which is unusual in the North West. The Vindolanda example (*pers obs*) is in a much more common red-brown fabric (the fifth example, from Carlisle, is on a restored

vessel and the fabric is not visible (*pers obs*). The overall activity of Docilis 3 was in c AD 120-65, and the Newstead example is likely to be later than AD 140 (Gillam 1952). KLA A 992, Period 10A

- 2 Fabric 324. Two joining sherds with stamp (85 g), and four separate, joining, sherds from the same heavily worn vessel (170 g), plus one body sherd which may be from it (25 g). The stamp is that of Sarrius (Fig 142), from the same die as one from the Birdoswald Alley (Richmond *et al* 1930, 188, fig 13, no 2A), described as being an illegible stamp. This lightly impressed stamp appears in two versions, SARIVS and SARINS, the A with a diagonal dash instead of a cross-bar and both Ss reversed. The change from V to retrograde N in the second version appears to be gradual, suggesting that it is the result of tinkering with the die when cleaning or trimming. The extra stroke begins almost as a shadow, but is quite deep in what may be its latest period of use; the intended interpretation is never in doubt: SARIVS, reading from left to right. This example is the second version with the retrograde N. This die was only used in the Mancetter-Hartshill potteries, where this mortarium was made.

Sarrius was the most prolific potter stamping mortaria in the second century; he was also the most exceptional, being involved in at least four workshops. In addition to his headquarters at Mancetter-Hartshill, he was involved in at least three subsidiary



Figure 142: Stamped mortaria from KLA A, in the east of the site

workshops: at Rossington Bridge, near Doncaster (Buckland *et al* 2001, 45-7); Bearsden on the Antonine Wall (see Hartley 2016); and at an unlocated site in north-east England. His Midland workshops continued in production throughout the life of his minor workshops, but the signs are that production at the Rossington and Bearsden workshops could be later than AD 150/5.

In England (excluding his workshop south-west of Mancetter), mortaria stamped with the same die are now known from sites such as Aldborough, North Yorkshire (six-seven; Snape *et al* 2002, 86-7, nos 1-6); Alcester (Booth 1994, fig 61.12); Birdoswald (two; Richmond *et al* 1930, 187, no 2, and fig 13, no 2A); Carlisle (McCarthy 1990, 262, no 14); Corbridge (two-three; Hartley 2013); Leicester (two-three; Clay and Pollard 1994, 66, fig 48, no 1, fig 56, no 111); Ribchester (Edwards and Webster 1988, 79-80 and fig 22, no 354). In Scotland, they are known from Bar Hill; Camelon (two); Carzield (Hartley 1981b); Croy Hill (Hartley 1976); Strageath (two; Frere and Wilkes 1989, 240-1, nos 10-11); and Wilderness Plantation (Wilkes 1974, fig 6, no 12).

The date of Sarrius's activity has been determined using four criteria: the abundance of his work at forts on the Antonine Wall; its absence from Pennine forts unoccupied c AD 120-60; his rim-forms; and his probable association with Iunius at one of his Mancetter kilns. A stamp at Verulamium is from a deposit dated to c AD 155-60 (Frere 1972, no 35), and one from a Period 1a deposit at Birdoswald suggests that he was at work before AD 140 (Richmond *et al* 1930, 187, no 2). Thus the evidence points to his overall activity lying within the period AD 135-70 and possibly ending before AD 170. (For further details of his work see Buckland *et al* 2001; Hartley 2016). Diam: >220 mm, calculated from 5% of rim; Diam base: 110 mm  
KLA A 809, Period 11B

- 3 Fabric 324. Two joining rim fragments from an extremely large and heavy mortarium (535 g). Two stamps reading RBIVSII (S reversed) are impressed across the rim, 70 mm apart (Fig 142). The potter's name is uncertain, but the final 'II' probably represent FE for *fecit*. He was, however, a Mancetter-Hartshill potter, although only one of his mortaria has yet been recorded from the potteries. He was one of the small number of potters working there who produced mortaria in two distinct fabrics, the

normal Warwickshire fabric, and a red-brown version, the source of which is unknown, but its distribution indicates north-eastern England. His mortaria are now known from the following sites: in the Mancetter-Hartshill cream fabric: Bothwellhaugh; Carlisle (two examples); Corbridge (three examples); Hartshill (kiln site); Hibaldstow; and the Yorkshire Museum (provenance uncertain); and, in the red-brown fabric: Bainbridge; Catterick; Housesteads (Hartley 2009, 532-3).

The stamp from Bothwellhaugh points to activity during the Antonine occupation of Scotland. The three mortaria in red-brown fabric are all wall-sided and related forms, which did not begin at Mancetter-Hartshill until sometime in the decade AD 140-50 and remain rare. The fact that all three of his mortaria in red-brown fabric are of this type fits best with production within the period AD 150-70, rather than earlier. His overall dates must lie within the period AD 140-70. This vessel is exceptional in that it is the largest Mancetter-Hartshill mortarium known to the author, and although the rim-profile is typical for the potteries, its size is comparable to the gigantic mortaria made in Lower Germany, in the workshop of Verecundus 2 (Haupt 1984, Taf 176-182); it is tempting to believe that it was either produced to order, or it was inspired by these imports. Diam: 640 mm, calculated from c 11% of rim KLA A 558, KLA B 720, Period 11D-12 and residually in Period 14B (Post-Roman)

- 4 Fabric 301, heavily overfired. Fragment from a small rounded flange (15 g). The stamp is too fragmentary to be identified, but is from a Carlisle workshop. AD 110-65.  
KLA A 432, Period 14B (Post-Roman)
- 5 Fabric 301. Rim fragment (155 g). The damaged, left-facing stamp of Austinus is from Die B (Fig 142). No complete examples survive, but collation of stamps from the same die permits the reading AVSTN[ ]/MAN[ ] (lower A with diagonal bar; upper A may be blind). The upper line gives his name in an abbreviated form of the genitive case, while the lower line gives 'Man(u)' in the ablative case, so that the stamp means 'by the hand of Austinus'. *Manu* was used more commonly on *terra sigillata*, and instances of its use on mortaria are very rare indeed, Austinus being by far the most important potter using it. This comes from his workshop in Carlisle. The optimum date for his work is AD 120-65. Diam: 310 mm, calculated from 12% of rim KLA A 276/299, Period 15A (Post-Roman)

6 Fabric 324. Flange fragment (40 g). None of the three overlapping stamps is clear, but there is enough to identify them, when complete, as reading MAVRIIM (Fig 142). There are up to three other dies with the same reading, and if the potter followed the common practice of dropping the final JVS, one would expect his name to be Mauremus, with the II extrapolated from dies C and E. This simple contraction of the nominative form was a common, but not universal, practice. The importance of this potter's precise name lies in the fact that there are three other dies which give the complete reading MAVRI, which one would expect to be either the genitive of Maurus or an abbreviation of Maurius, as well as six other related die-types for which the readings are incomplete, but which, when completed, are probably 'MAVRI' or even perhaps 'MAVRIIM'. As a result, it remains unclear whether there is one potter, probably called Maurius rather than Maurus, and a second potter called Mauremus, or whether all the dies belonged to a single potter, called Mauremus, who sometimes shortened his name in dies to MAVRI.

MAVRI is an unlikely abbreviation for MAVREMVS, but might be possible, given his use of verticals for E; some stamps of Minomelus, for instance, read 'MINOM', leaving out a substantial part of his name (*pers obs*). Another possibility is that the second M in MAVRIIM could represent 'manu', 'by the hand of', preceded by the genitive form of Maurius, 'MAVRII'. However, only one British mortarium potter, Austinus of Walton-le-Dale and Carlisle, is known to have used *manu* in this way, and none is recorded using M alone. There is also no example of this happening in the Mancetter-Hartshill potteries, and in every other respect MAVRIIM's mortaria are normal for these potteries.

Up to 18 mortaria of the potter who stamped MAVRI were associated with one kiln at Mancetter (Hemsley 1959, 8-11 and fig 6). This total includes some from what appeared to have been its stokehole, which was excavated in 1964 (W 2, *ie* Kiln 2, *pers obs*). It was made clear by this later excavation that the kiln drawn in the 1959 report was the one associated with the published stamps of MAVRI and others (*pers obs*). There were several other stamps associated with the kiln excavated by Hemsley (1959), which are not counted here because only the first two letters MA[...] are known. No stamps from dies giving MAVRIIM were recorded from the kiln or its stokehole.

The other major potter associated with the MAVRI mortaria at this kiln was Sennius, 17 of whose mortaria are recorded from the Wroxeter gutter, dated to AD 150-70 (Atkinson 1942, 279-80). There is good reason to place Maurius and Sennius amongst those who were the latest to stamp mortaria at these potteries; a date of AD 150-75/80 is indicated for them both.

Thus, the stamps MAVRIIM and MAVRI could have belonged to a single potter, or to two, in which case they would have to be treated separately. With very few exceptions, the mortaria stamped MAVRIIM have a wide, shallow flange, in contrast to the mortaria stamped MAVRI, which all have narrower, deeper flanges; this fragment is likely to be from a wide flange. There are also potentially valuable differences in spout-types in the few examples available to study. It is probable that the mortaria stamped MAVRIIM pre-date those stamped MAVRI, either because they are the work of a slightly earlier potter, or because they are the early work of a single potter, who used dies giving both readings at different times in his working life. Mortaria stamped MAVRI are amongst the latest mortaria to be stamped in these potteries.

Five mortaria stamped MAVRIIM (with the die used for the northern Lanes stamp) were found in a kiln at Mancetter excavated in 1964 (W 1, *ie* Kiln 1, unpublished; *pers obs*), which was primarily associated with Sarrius, a marginally earlier potter (*c* AD 135-65). These MAVRIIM mortaria are the only recorded exceptions to the normal MAVRIIM profiles. The two kilns were sufficiently isolated to assume that the stamped mortaria associated with them would have been fired in them, rather than being within material brought in to fill them after they fell into disuse. A date within the period AD 140-70 would certainly cover MAVRIIM's work. KLA A 330, Period 15B (Post-Roman)

7 Fabric 301 (trituration also includes quartz sandstone). Two joining rim sherds (270 g) and one non-joining lower wall and base sherd (35 g) from the same or a similar vessel, all very heavily worn. The stamp is from Die C of Docilis 3 (Figs 142, 143); [D]OCCA or [D]OCVI are the most obvious possible readings, but there is little doubt that they represent the same potter. Many of the dies attributed to Docilis 3 are semi-legible at best (*pers obs*). His mortaria, stamped with the same die, have now been recorded from Ambleside; Cardurnock (two



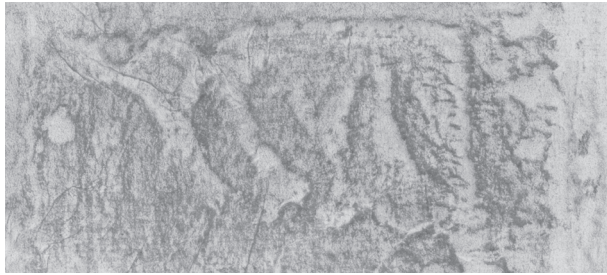


Figure 143: Die C of Docilis 3

examples); Carlisle (three examples, including Annetwell Street 1352, 1312; and 14 below); and York (published erroneously as an amphora stamp in CIL VII, 1331, 41; Hübner 1873). The die had upper and lower borders which

were rarely impressed and then only partially. Carlisle workshop. Optimum date AD 120-65. Diam: 280 mm, calculated from 22% of rim KLA A, unstratified

#### KLA B

- 8 Fabric 339. One sherd, making up more than a quarter of a very heavily worn vessel (460 g). Burnt, and with a significant amount of accretion on the outside, and with a little inside the stamp obscuring parts of the letters. No other example of this right-facing stamp has been recorded. The most likely reading is MAIV (A with diagonal dash) followed by something which looks like an elongated O or a D set at a diagonal angle to the rest (Fig 144).

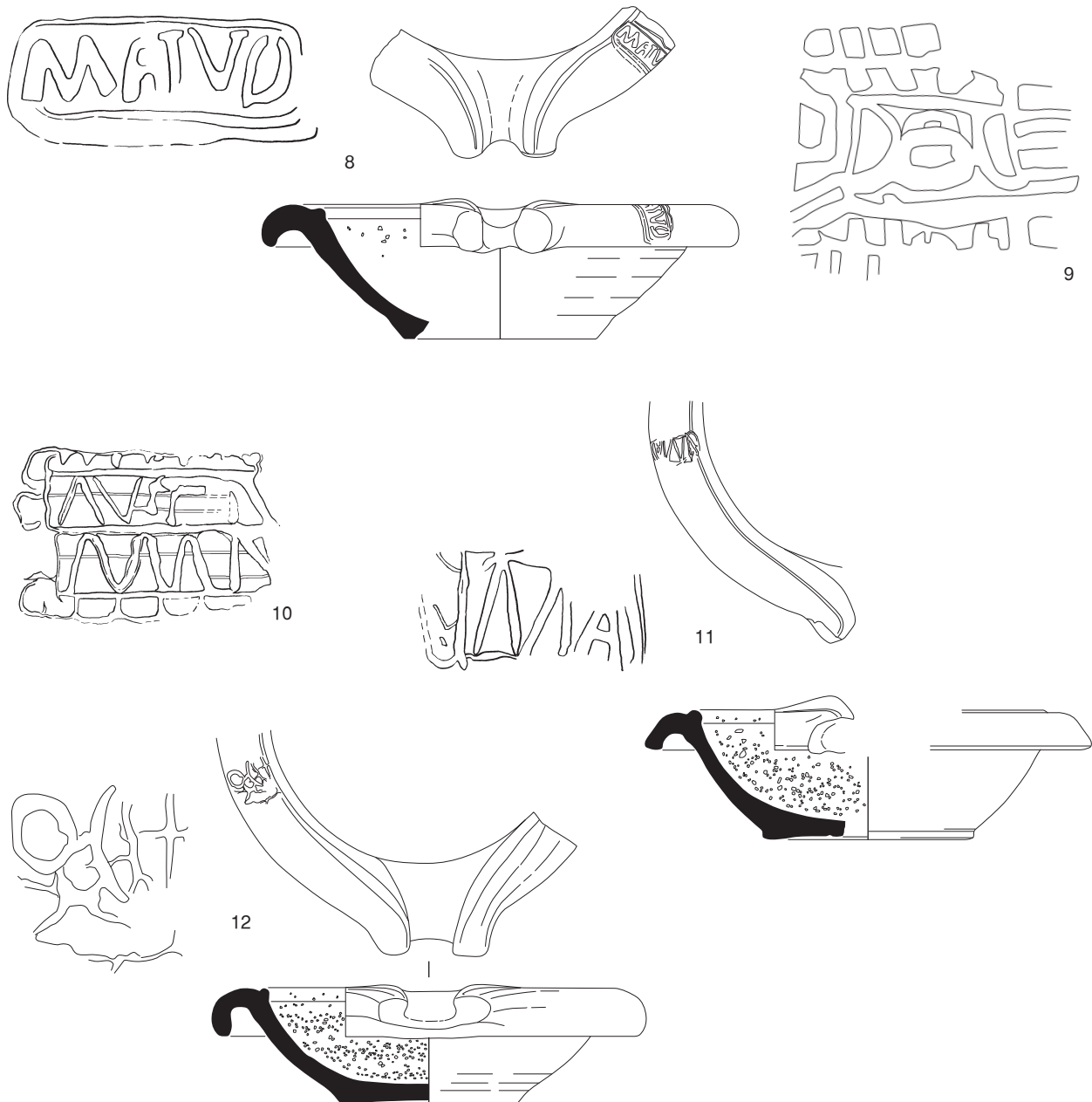


Figure 144: Stamped mortaria from KLA B, in the south-east of the site



Given what seems reasonably certain, the most likely reading for the whole would be MAIVSF, but other examples are needed to clarify this. The fabric points with reasonable confidence to production on the Technical College kiln site at Lincoln (Darling 1984; Tyers 1996, 122). A date of *c* AD 90-120 would fit the rim-profile and source. There is no reason to equate this potter with one called Maius, who worked at Little Chester and/or Hartshill (Brassington 1967, fig 8, no 69) at a somewhat later date.

Diam: 260 mm, calculated from *c* 27% of rim  
KLA B 1130, Period 10A

- 9 Fabric 352, with buff slip, fired to brownish-buff near the spout. Two joining sherds (345 g). Well-worn, with a patch of blackening on the flange in a similar place to those on 12 and 13, but smaller in size. The left-facing stamp is from Die D of Docilis 3. It reads literally as DOCE, though this could represent DOCFE, with FE ligatured, or even DOCIFE, with IFE ligatured (Fig 144). Stamps from the same die were present on the kiln site at Fisher Street, Carlisle (Johnson *et al* 2012, fig 10, nos 21-22). *c* AD 120-65. Stamp 20 could possibly be part of the same mortarium, but has been treated separately.

Diam: 320 mm, calculated from *c* 25% of rim  
KLA B 1184, Period 10A

- 10 Fabric 301. Very worn fragment (375 g). A left-facing stamp from Die Bii of Austinus survives (Fig 144), reading AVSTN[.]/MAN[.] (Fig 145; see also 5). Workshop at Carlisle. Optimum date AD 120-65.

Diam: 260 mm, calculated from 31% of rim  
KLA B 13, Period 10B

- 11 Fabric 324, variant. Rim fragment (400 g). Only moderately worn, the buff slip survives on the inside. The left-facing stamp reads MA,



Figure 145: Die Bii of Austinus

followed by the first leg of a V (Fig 144); it is from a die which gives MAVRI when complete (same die as Hemsley 1959, fig 6, no 1), which points to an abbreviated form of Maurius, or the genitive form of Maurus (see 6). The rim is small and fairly narrow, as expected with this die, and the end of the spout is typical of the latest rim-profiles associated with stamping in the Mancetter-Hartshill potteries. AD 150-70/80.

Diam: 260 mm, calculated from *c* 25% of rim  
KLA B 95, Period 10C

- 12 Fabric 350 variant, similar to 50 (*pxxx*). Seven joining sherds, making up almost the entire rim and about half of the rest of the vessel (985 g). Heavily worn. This has a similar patch of blackening on the flange to 13. The incompletely impressed left-facing stamp is from Die L of Docilis 3, reading DOCC[.] (Fig 144). Made at Carlisle. *c* AD 120-65.

Diam: 270 mm, calculated from 76% of rim  
KLA B 842/911/920/931, Period 10C and residually in Period 11A

- 13 Fabric 302. Only slightly worn, with a blackened patch on the flange (343 g). The left-facing stamp is from Die D of Docilis 3; stamps from the same die were present on the kiln site at Fisher Street, Carlisle (Johnson *et al* 2012, fig 10, nos 21-22). His overall activity was Hadrianic-Antonine, with an optimum date of AD 120-65.

Diam: 330 mm, calculated from 14% of rim  
KLA B 750, Period 11A

- 14 Fabric 301. Rim fragment (100 g). The fragmentary left-facing stamp has parts of two letters, probably DO[...]; it is probably from Die C of Docilis 3. AD 120-65.

Diam: 320 mm, calculated from *c* 5% of rim  
KLA B 811, Period 11A

#### KLA C

- 15 Fabric 301. Incomplete rim fragment (85 g) with broken stamp of Austinus, AVST[.]/IN[.] from Die G (see 65, for a more complete example). Heavily worn (Fig 146). Carlisle workshop. AD 120-65.

KLA C 945, Period 10A-11B

- 16 Fabric 301. Two joining sherds (415 g), heavily worn. The right-facing stamp, reading DOCIE, is from Die B of Docilis 3 (Figs 146, 147). Stamps from the same die were present on the kiln site at Fisher Street, Carlisle (Johnson *et al* 2012, fig 10; nos 2 and 6 are the most complete impressions). *c* AD 120-65. Part of a possible

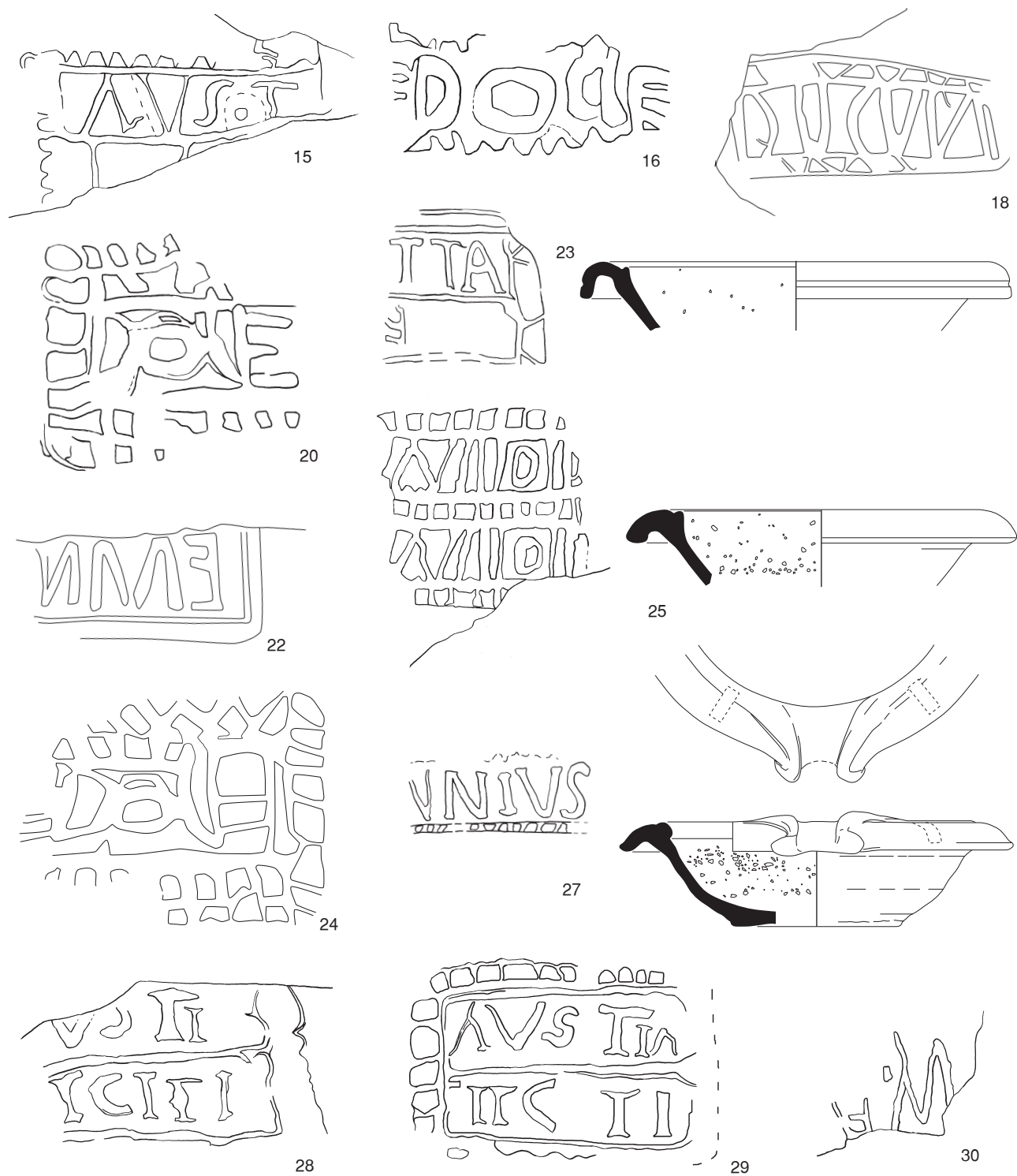


Figure 146: Stamped mortaria from KLA C, in the south of the site



Figure 147: Die B of Docilis 3

*graffito ante cocturam* is visible at the fracture. Diam: 330 mm, calculated from 19% of rim KLA C 1073, Period 10A-11B

- 17 Fabric 301, overfired. Incomplete rim profile (55 g). Part of the border of a left-facing stamp survives, too fragmentary to be identified. The fabric points to production in a workshop at Carlisle. AD 120-65. KLA C 1073, Period 10A-11B

- 18 Fabric 339. Flange fragment. The stamp is the first virtually complete impression for examples from this die-type, but more than one reading is possible: DIICVM, VM ligatured, or DIICAN retrograde, with the dash for the A misplaced, which could be accidental, but it could allow the stamp to be interpreted as DIICAMV or even DIICVMANV retrograde with AMV or MANV ligatured (Fig 146). The final S is understood, as in many stamps. There is no reason to equate the potter with Decanius of Wroxeter (Ellis 2000, 303, fig 4.99, nos 9-15). Other mortaria stamped with the same die have been noted from Corbridge (Birley and Gillam 1948), Lincoln (two examples), Winterton (Stead 1976), and York (Monaghan 1997, fig 372, no 3386). The fabric and distribution point to production at Lincoln. Optimum date AD 90-120.  
KLA C 1073, Period 10A-11B
- 19 Fabric 339, with brownish-yellow slip. Rim fragment (175 g). The left-facing stamp is so abraded that no trace of the letters is left, but enough of the letter panel survives to be able to say that the only known Lincoln potter who had so large a letter panel was stamped [I] BISO[.], and that the rim-profile and fabric would fit his work; he was active within the period AD 100-30/40. However, not quite enough of this stamp survives to permit a completely confident identification. For details of the potter, see Boyer *et al* (2009, 44-5) and McCarthy (1990, 260, no 8 and fig 188, no 40). The fabric fits with production at the Technical College kiln site in Lincoln, where a stamp of [.]BISO[.] was found, but this was not published in Baker 1936. The rim profile of this example would best fit a date of *c* AD 100-20, but a date in the last decade of the first century is not impossible.  
Diam: 360 mm, calculated from *c* 9% of rim  
KLA C 1073, Period 10A-11B
- 20 Fabric 352, with brownish-buff slip. Two joining sherds (150 g). The stamp is from Die D of Docilis 3 (Fig 146). A blackened patch on the distal end of the flange, which continues along the edge of the sherds, is most likely to have occurred during firing. Stamps from the same die were present on the kiln site at Fisher Street, Carlisle (Johnson *et al* 2012, fig 10, nos 21-22). *c* AD 120-65. These sherds could well be part of 9.  
Diam: 310 mm, calculated from 18% of rim  
KLA C 1073, Period 10A-11B
- 21 Fabric 301. Two joining sherds (475 g), well-worn. There is a possible graffito in the form of Λ on the outside of the body, made before the vessel was dipped into the cream slip. The fragmentary stamp shows the lower border of a stamp from Die B of Docilis 3 (probably right-facing). Stamps from the same die were present on the kiln site at Fisher Street, Carlisle (Johnson *et al* 2012, fig 10; nos 2 and 6 are the most complete impressions). *c* AD 120-65.  
Diam: 260 mm, calculated from 45% of rim  
KLA C 1080, Period 10A-11B
- 22 Fabric 350 variant. Two joining sherds and one other (155 g). Well-worn, and sooted on the spout before fracture. The left-facing, retrograde stamp reads EM[.], with part of a second M following (Fig 146). It is from the same die as 70 and a stamp from Annetwell Street (1021, SF10; Hartley in prep). The latter shows the second M more clearly, but no following letters, giving a name beginning Emm(...), perhaps Emmius or Emminus. The discovery, at Carlisle, of three different mortaria stamped with this hitherto unknown die points to a local origin, and the fabric is similar to one used by Docilis 3. Although no other stamps beginning EMM[.] are known from sites in England, up to 48 mortaria of a potter whose name begins with EM[.] are recorded from Newstead, and sites to the north in Scotland, with the largest concentrations at Inveresk/Musselburgh (15; Maxfield forthcoming) and Newstead (nine; Hartley 1976). These are all from a different die, and their distribution clearly points to a potter working at Newstead and/or Inveresk/Musselburgh. His mortaria, like those of Docilis 3 and Austinus in Scotland, are very much in the style of mortaria known to have been made at Carlisle and at Walton-le-Dale.
- Since there is no die link, and the distribution of the EM[.] and the EMM[.] stamps is so different, they have to be assessed separately, but if the suggestion that Docilis 3 and Austinus were producing in Scotland proves to be correct, as seems likely (*ibid*), then it will be almost certain that the EMM[.] and EM[.] stamps at Carlisle are from another die belonging to the potter, of the same name, who worked in Scotland. If this proves to be the case, then the small number of his mortaria at Carlisle would best fit with activity at Carlisle in the late Hadrianic period, cut short by his move to Scotland.  
Diam: 270 mm, calculated from 15% of the rim  
KLA C 1080, Period 10A-11B
- 23 Fabric 363. Rim fragment (85 g), very worn, some slight cracking underneath the flange. There is a left-facing, retrograde, two-line stamp impressed



very close to the spout. The upper line reads ATT[.] with an *ansa* outside the letter panel (Fig 146). On the lower line, only the bottom of the letter panel and part of the down-stroke of the letter E are visible; the rest may have been damaged by smoothing out the clay after completing the spout.

No complete impressions of this potter's stamp are known, but the reading can be restored by collation of his stamps to ATTIVS/FEC retrograde, for *Attius fecit* (Attius made it). Other stamps from the same die are recorded from Carlisle (71; Swan *et al* 2009, 588, no 5 and fig 298), and Milecastle 79 (Richmond and Gillam 1952, 33, no 21, misread as MATT). A two-line stamp from Newstead, which has only part of the upper line surviving [ATTIV.], could be by the same potter, but is from a different die (Curle 1911, fig 35, no 1). The three mortaria from Carlisle, and that from Milecastle 79, all have similar rim-profiles; this very distinctive form, with distal bead, was favoured in the Verulamium region, at the Technical College Lincoln in the early second century (Tyers 1996, 122), and also at Brampton in Norfolk (*pers obs*). It is worth noting that there was a potter at Brampton (unpublished) who stamped ATIVFEC, *ie* ATIUS FEC, but a die-link would be needed, with an example of that die being used on a northern fabric, before one could assume that he had moved to the North, although it is a possibility.

The rough attempt at concentric scoring on the inside surface of 71, and the second example from Carlisle (Swan *et al* 2009), best fit a date in the Trajanic to early Hadrianic period. If the Newstead evidence is also taken into consideration, his optimum date would be AD 110-40. He clearly worked in the North West, and Carlisle is the most likely location. It is worth noting that the mortarium from the fort (Swan *et al* 2009) is technically a waster: the fabric is sintered and the form distorted, but it is still a possible 'second'.

Diam: 280 mm

KLA C 1080, Period 10A-11B

- 24 Fabric 352, with cream slip fired to brownish-buff in places. Rim fragment (230 g). This is probably the left-facing stamp from Die D of Docilis 3 (Fig 146); the stamp reads DOCE, E with vertical stroke extending above the topmost cross-bar; this could stand for IFE ligatured. Stamps from the same die were found on the kiln site at Fisher Street, Carlisle (Johnson *et al* 2012, fig 10, nos 21-22). *c* AD 120-65. There is an accidental smear (70 mm long) of distinctly red-brown slip on the

flange. This slip was presumably being used on other pottery produced in the workshop, perhaps raetian mortaria.

Diam: 380 mm, calculated from 18% of rim

KLA C 1671, Period 11A

- 25 Fabric 301. Well-worn rim fragment (185 g). The right-facing stamp appears as a two-line, illiterate stamp (Fig 146). A similar stamp is recorded from Annetwell Street, Carlisle (Hartley in prep). A stamp from Cardurnock (Birley 1947, fig 14, no 8) seems to be the same, but is from a single line die; further examples are needed to clarify the die. Despite the small number known, the restricted distribution and the fabric can reasonably be taken to indicate local production, probably at Carlisle. *c* AD 130-70.

Diam: 260 mm, calculated from *c* 18% of rim

KLA C 1018, Period 11C

- 26 Fabric 302. Rim fragment (80 g). Part of the upper line of a two-line stamp, reading [.] VSTIN, from Die F of Austinus, similar to Die D in layout, but much smaller (Fig 148). Carlisle workshop. AD 120-65.

Diam: 300 mm, calculated from *c* 9% of rim

KLA C 1408, Period 11C

- 27 Fabric 324. Three joining sherds making up almost the entire rim, very heavily worn. Two stamps survive, which are partial impressions from the single known die of Sennius (Fig 146), who worked in the Mancetter-Hartshill potteries (Hemsley 1959). It is likely that he shared a kiln with Maurius (see 6 and 11). Seventeen of his mortaria are recorded from the Wroxeter gutter, dated to AD 150-70 (Atkinson 1942, 279-80). There is good reason to place him amongst the latest potters to stamp mortaria at Mancetter-Hartshill. A date of AD 150-70/80 is indicated. The edge of a *graffito post cocturam* is preserved on the body.

Diam: 280 mm, calculated from 88% of rim

KLA C 923/1051, Period 11D-12

- 28 Fabric 301. Rim fragment (65 g). There is a broken two-line stamp, of Die D of Austinus,

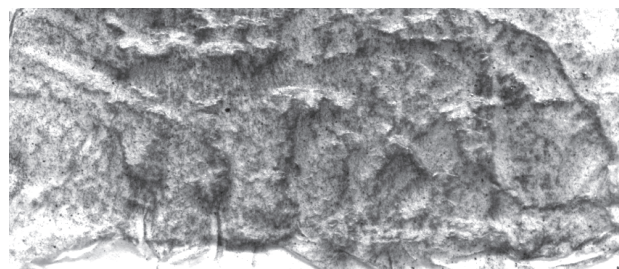


Figure 148: Die F of Austinus

reading [.]VSTIN/[.]ICITI(?), for *Austinus fecit* (Fig 146). A stamp from the same die was present on the kiln site at Fisher Street, Carlisle (Johnson *et al* 2012, fig 10, no 5). Carlisle workshop, AD 120-65.  
 Diam: 300 mm, calculated from 7% of rim  
 KLA C, unstratified

- 29 Fabric 352 variant. Rim fragment (195 g). A right-facing, two-line stamp, Die D of *Austinus*, reading ΛVSTIN/IIICIT[I?] for *Austinus fecit* (Fig 146); the F is always poorly



Figure 149: Die D of *Austinus*

formed or impressed (see McCarthy 1990, 260, fig 195, nos 5-7, where a misprint gives the reading as AVSTIB/IIICIT; Fig 149). A stamp from the same die was present on the kiln site at Fisher Street, Carlisle (Johnson *et al* 2012, fig 10, no 5). Carlisle workshop, AD 120-65.  
 Diam: 290 mm, calculated from 18% of rim  
 KLA C, unstratified

- 30 Fabric ?339, with cream slip fired to brownish-orange near the spout. Incomplete rim-profile (60 g). The fragmentary stamp cannot yet be identified (Fig 146). Possibly Lincoln, optimum date AD 90-120.  
 KLA C, unstratified

KLA D

- 31 Fabric 301. Incomplete rim-section (90 g), very heavily worn. The broken stamp is probably right-facing; for a complete example see Smith 1978 (fig 20, no 74b; Tarraby Lane). Although it is easy to recognise (Fig 150), the stamp is impossible to interpret meaningfully. Other stamps from the same die are known from Carlisle (three; Tarraby Lane; St John's Church); and High House Milecastle (50) on Hadrian's Wall (Hartley 1978). Two of the

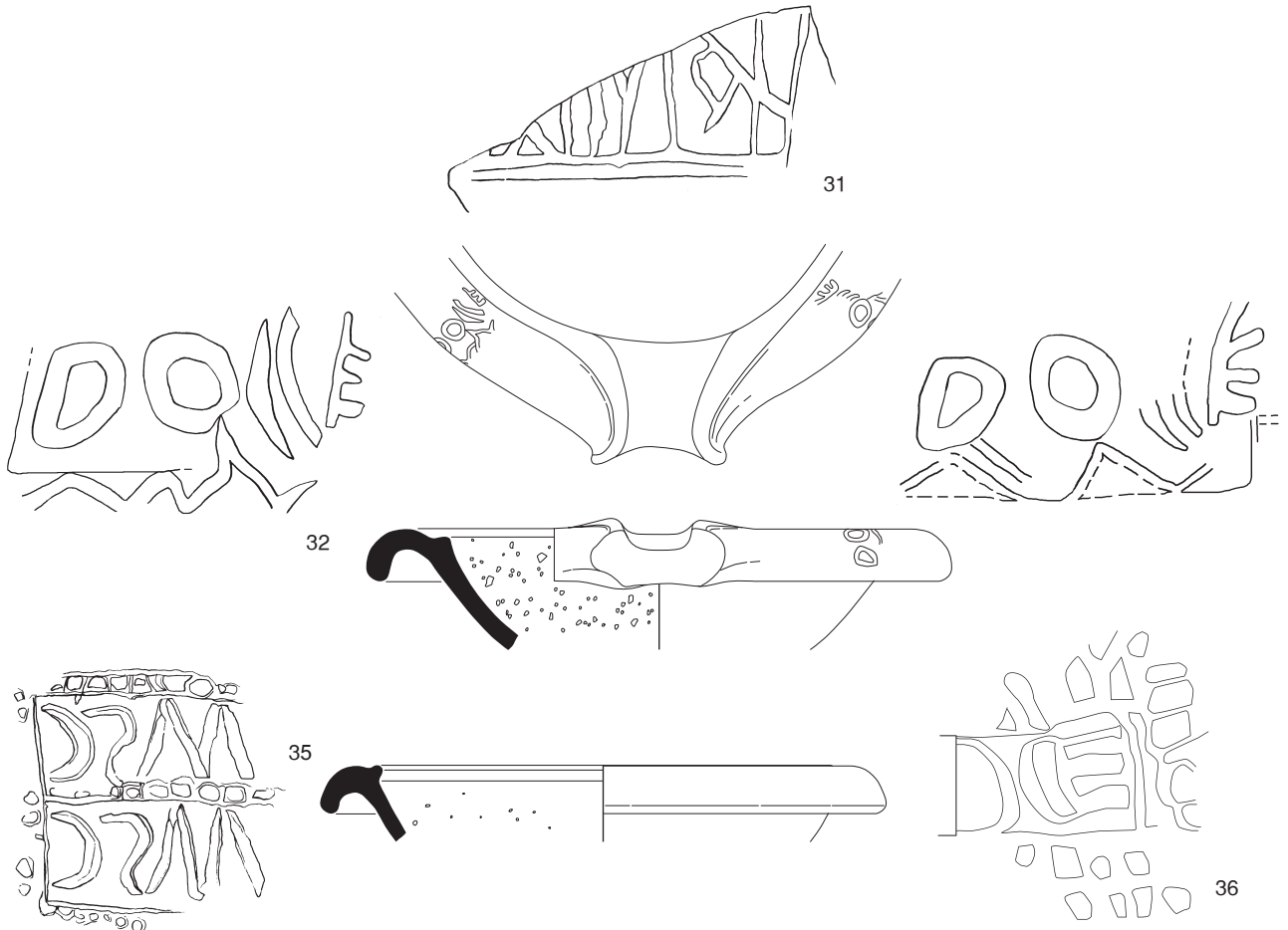


Figure 150: Stamped mortaria from KLA D, in the centre of the site



three Carlisle mortaria have rim-profiles with distal beads like those used by Attius, and some other potters in the area. The fabric, rim-profile, and distribution best fit with production at Carlisle within the period AD 110-40.

KLA D 461, Period 9

- 32 Fabric 304, a possible, less hard-fired, variant. Eleven joining sherds and four others which may be from the same well-worn vessel, but do not join (1200 g). At least three-quarters of the rim survives, with both left- and right-facing stamps. These are from Die L of Docilis 3, and read literally DOCCE (Fig 151), with the vertical stroke of the E extending above the top cross-bar; this may well be for IFE ligatured (Fig 150). Carlisle workshop, c AD 120-65.

Diam: 300 mm, calculated from 87% of rim  
KLA D 461, Period 9

- 33 Fabric 304 variant. Rim fragment (205 g), heavily worn. The broken stamp is from Die L of Docilis 3 and can be assumed to be right-facing. Made at Carlisle, c AD 120-65.

Diam: 270 mm, calculated from 24% of rim  
KLA D 461, Period 9

- 34 Fabric 302, with traces of matt, red-brown slip. Rim fragment (100 g). Two of the edges of the letter panel are clear, but the letters were probably smeared when the die was applied, so that identification is virtually impossible. Despite this, the profile, fabric, and what is visible of the stamp, fits best with production in the North West, probably at Carlisle. AD 120-65.

Diam: 260 mm, calculated from 12% of rim  
KLA D 341, Period 11A

- 35 Fabric 368, overfired. Two joining sherds (210 g). There are two right-facing stamps impressed close together, the second



Figure 151: Die L of Docilis 3

impression partially overlapping the first (Fig 150). The stamps read MASC retrograde (with blind or dotted A), and because the end border is visible after the C, it is clear that MASC is being used as an abbreviated form of his full name, which is likely to be Mascellio. Four die-types are attributed to him, and a fifth, which may be his, gives the name 'Mascelio' in full. There is also a Mancetter potter of the same name, but there is no compelling reason to link them; in the absence of a die-link, their work has to be considered separately. The evidence from distribution, plus that from the distribution of stamps from individual dies, shows that he began his activity in the Bainesse/Catterick area, and that he moved northwards, where he was probably involved in production in the Corbridge or Carlisle area, and then quite possibly in Scotland (Breeze 2016). For details of Mascellio's activity, and a distribution map, see Hartley 2002 (446, MS5; 449, fig 206); this includes all of his mortaria except two found later, from Healam Bridge (Die C) and South Shields (Die D; *pers obs*).

His overall activity was probably within the period AD 120-65. The distribution of stamps from Die D suggests that it was only in use after he had left the Catterick area, as no stamps from it have been recorded south of Corbridge and Carlisle. His mortaria in Scotland also show that the die was in use in the latter part of his lifetime, and that it may have been his latest one, since all seven of his mortaria there were stamped with this die (Breeze 2016). Two mortaria are now known from Carlisle (Taylor 1991, fig 303, no 6). The location of his activity after leaving the Catterick area is uncertain, but Carlisle is a possibility; the fabric of this mortarium could fit, and the other potters for whom evidence of production in Scotland is strongest are Austinus and Docilis 3, and their workshop was undoubtedly in Carlisle.

Diam: 300 mm, calculated from 17% of rim  
KLA D 93, Period 11C

- 36 Fabric 301. Flange fragment (45 g). The stamp is from Die D of Docilis 3 (Fig 150). Stamps from the same die were present on the kiln site at Fisher Street, Carlisle (Johnson *et al* 2012, fig 10, nos 21-22). c AD 120-65.

Diam: 270 mm, calculated from 9% of rim  
KLA D 13, Period 14A (Post-Roman)

#### KLA G

- 37 Fabric 324. Rim fragment (460 g), very heavily worn (Fig 152). The stamp, RBIVSII

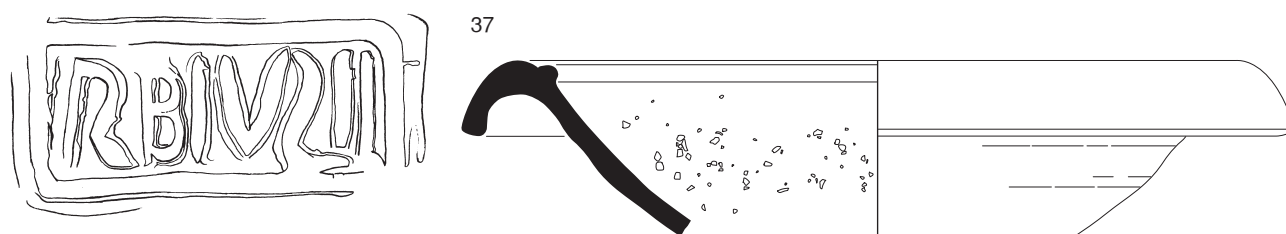


Figure 152: Stamped mortaria from KLA G, in the south of the site

(S retrograde), is from the same die as 3. The stamp is covered with red-brown paint, a practice used occasionally by a few potters working in the Mancetter-Hartshill potteries in the Antonine period (*pers obs*). AD 140-70. Diam: 400 mm, calculated from c 12% of rim KLA G 250, Roman, not closely phased

#### LAL A

- 38 Fabric 301. Rim fragment (275 g). The broken, right-facing stamp, DOCE, is from Die D of Docilis 3 (Fig 153). Stamps from the same die were present on the kiln site at Fisher Street, Carlisle (Johnson *et al* 2012, fig 10, nos 21-22). c AD 120-65.

Diam: 310 mm, calculated from c 21% of rim LAL A 42, not closely phased

- 39 Fabric 324. Rim fragment (560 g), some wear. The left-facing stamp survives, reading IVNVS, with S reversed and NI ligatured being understood (Fig 153), from one of the 24 dies of Iunius. Iunius worked in the Mancetter-Hartshill potteries (Tomber and Dore 1998, 188-9). Many of his stamps were found along with those of Bruscius in a kiln at Hartshill (H63 Kiln 34), and with Sarrius in a kiln at his workshop in the parish of Mancetter, in the area immediately south-west of *Manduessedum* (W64 Kiln 1; both unpublished; *pers obs*). The evidence suggests that he was probably using these two kilns in common with the other potters.

Up to 130 mortaria of his have been recorded, excluding those found at the potteries. They also appear on those Pennine forts like Bainbridge and Brough-on-Noe, which are believed to have been unoccupied c AD 120-60 (Bidwell and Hodgson 2009, 93, 108). He belonged to the latest generation of potters at Mancetter-Hartshill to stamp their mortaria, and clearly overlapped with slightly earlier potters like Sarrius and Bruscius (Darling and Precious 2014).

Junius is the only one of the latest generation of stamping potters to have any stamps recorded from the Antonine occupation of Scotland (at Castlecary and Duntocher). As he was one of the most prolific of the potters stamping mortaria in the Mancetter-Hartshill potteries (*ibid*), these facts suggest that his career began too late for him to be more than marginally involved with the main supply of Mancetter-Hartshill mortaria to Scotland. He was also one of the small number of potters who had begun to produce the new, near hammerhead, rim-profiles, which were to become popular after the practice of stamping ceased (*ibid*). Indeed, some of his rim-profiles and types of spout would fit with the possibility of his continuing in production after the practice of stamping had ceased. The evidence as a whole points to activity within the period AD 145-75, with optimum importance in c AD 150-70.

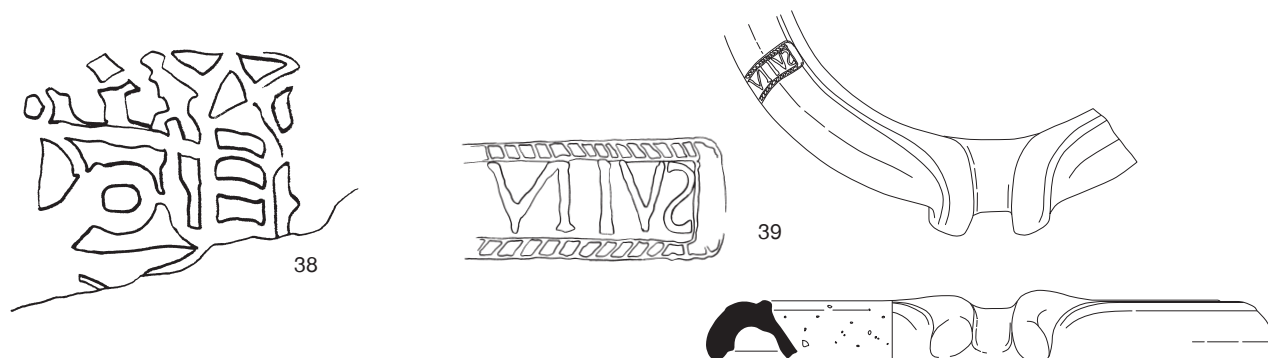


Figure 153: Stamped mortaria from LAL A, in the north-east of the site

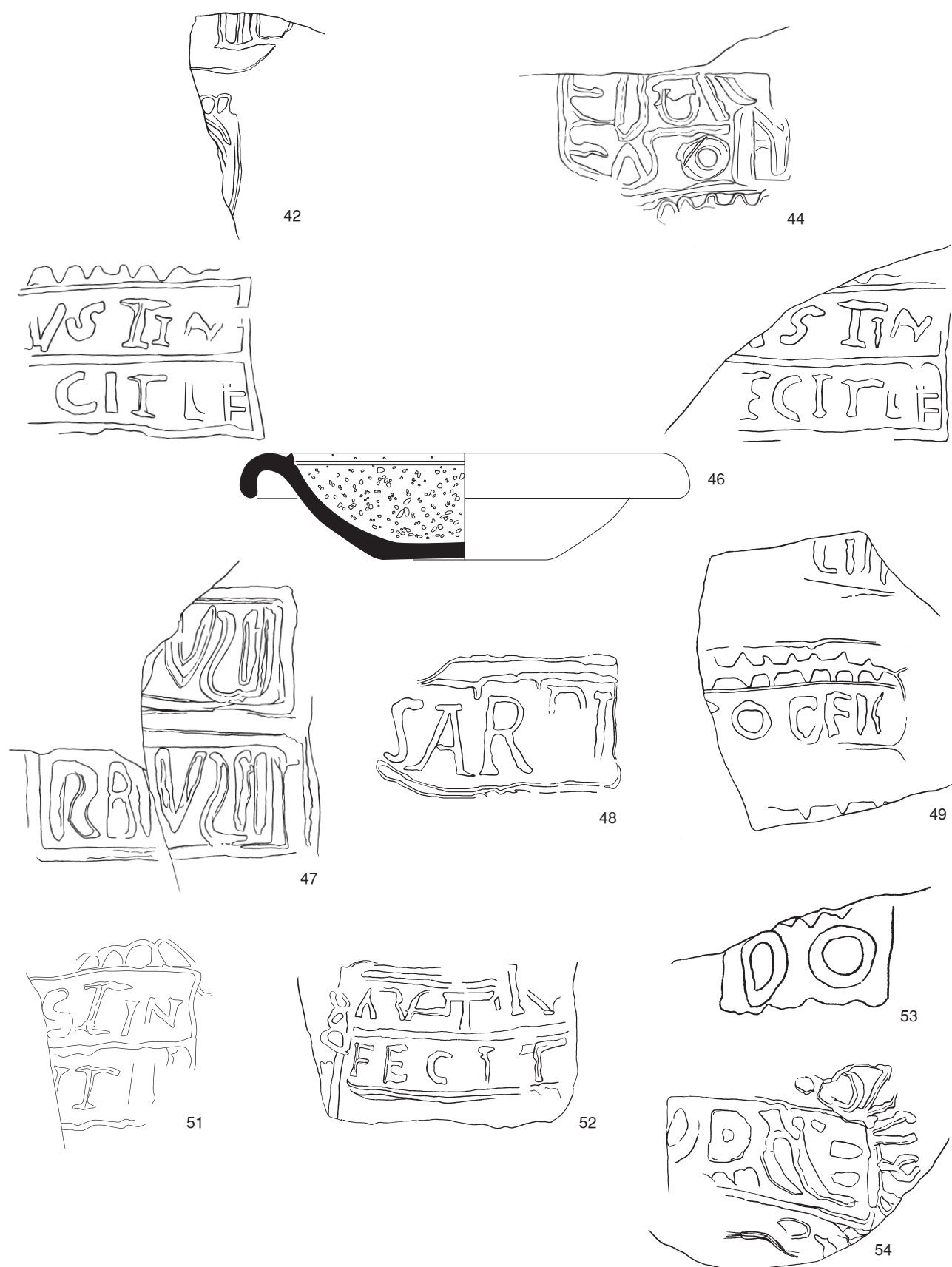


Figure 154: Stamped mortaria from LAL C, in the north of the site

Diam: 300 mm, calculated from c 52% of rim  
LAL A 59, not closely phased

#### LAL B

- 40 Fabric 301. Joining fragments (130 g). The fabric is sintered and the sherd may be slightly distorted; it is technically a waster, but providing the vessel was whole and usable, it could have been sold as a second. The two sherds have joining parts of a single stamp from Die D of Docilis 3. Stamps from this die were present on the kiln site at Fisher Street, Carlisle (Johnson *et al* 2012, fig 10, nos 21-22). c AD 120-60.

Diam: 280 mm, calculated from 16% of rim  
LAL B 222, Period 10B, and residually in LAL D 419, Period 13 (Post-Roman)

- 41 Fabric 302, with grey core. Rim fragment (150 g), heavily worn. The fragmentary stamp is from Die D of Docilis 3. Stamps from this die were present on the kiln site at Fisher Street, Carlisle (Johnson *et al* 2012, fig 10, nos 21-22). The rim-profile is unusual for this potter. c AD 120-65. Diam: 310 mm, calculated from 12% of rim  
LAL B 127, Period 13 (Post-Roman)

#### LAL C

- 42 Fabric 350 variant. Incomplete rim-section (80 g), worn. There are two right-facing stamps impressed close together (Fig 154); both are slightly too fragmentary for easy identification. The fabric is entirely consistent with production in the North West and would fit well with production at Carlisle within the period AD 110-65.  
LAL C 384, Period 6

- 43 Fabric 301. Eleven joining sherds, and another group of three sherds, and three small fragments (1305 g), from a single vessel, heavily worn in the lower half. The poorly impressed, right-facing stamp is from Die D of Austinus and reads [..]STI[.]/[..]CIT[.]. A stamp from the same die was present on the kiln site at Fisher Street, Carlisle (Johnson *et al* 2012, fig 10, no 5). Carlisle workshop, AD 120-65.

Diam: 330 mm, calculated from 70% of rim  
LAL C 123/124/157/293/311, Period 10B and residually in Periods 11B and 11C

- 44 Fabric 301. Three joining sherds, and one other, probably from the same vessel (630 g), heavily worn. A stamp from Die G of Docilis 3 (Figs 154, 155). Carlisle workshop, c AD 120-65. Diam: 300 mm, calculated from c 32% of rim  
LAL C 209.01/209.05/216, Period 11A



Figure 155: Die G of Docilis 3

- 45 Fabric 301. Rim fragment (100 g). A poorly impressed and somewhat abraded stamp from Die L of Docilis 3, the same die as 12 and 32. Carlisle workshop, c AD 120-65.

Diameter: 260 mm, calculated from c 16% of rim  
LAL C 209.04, Period 11A

- 46 Fabric 352. Seven joining sherds (1500 g), some wear. The left-facing and right-facing stamps both survive; both are partial impressions from Die D of Austinus (Fig 154). When complete, these stamps read AVST, followed by IN in small letters on the upper line, and [F]IICIT, followed by I and perhaps E on the lower line. No complete and clear impression is recorded for the beginning and end of the lower line. A stamp from the same die was present on the kiln site at Fisher Street, Carlisle (Johnson *et al* 2012, fig 10, no 5). AD 120-65.

Diam: 290 mm, calculated from c 79% of rim  
LAL C 209.04, Period 11A, and residually in LAL C 7, Period 13 (Post-Roman)

- 47 Fabric 324. Two joining sherds (220 g). Two stamps impressed close together, reading RBIVSII (Fig 154), from same die as 3 and 37. See 3 for details. Mancetter-Hartshill potteries, AD 140-70.

Diam: 430 mm, calculated from c 15% of rim  
LAL C 124, LAL C 14, Period 11B and residual in Period 14 (Post-Roman)

- 48 Fabric 324. Three joining sherds (455 g), heavily worn. The poorly applied left-facing stamp reads SAR-RI (Fig 154) and is from one of the seven die-types known for Sarrius. See 2 for further details of this potter. This mortarium is from his main workshops in the Mancetter-Hartshill potteries. AD 135-70.

Diam: 260 mm, calculated from c 48% of rim  
LAL C 126/154; Period 11B



- 49 Fabric 301. Incomplete rim-section (70 g), abraded. There are at least three stamps from Die M of Docilis 3 impressed close together (Fig 154). Carlisle workshop, AD 120-65.  
LAL C 133, Period 11B

- 50 Fabric 350 variant. Nine joining sherds plus one other from the same vessel (550 g), very heavily worn. Fragmentary stamps survive on each side of the vessel, and the right-facing stamp joins the fragmentary stamp from the north-west of the site (LAL D). The stamps, which are somewhat smeared, are from Die D of Docilis 3. Stamps from Die D were present on the kiln site at Fisher Street, Carlisle (Johnson *et al* 2012, fig 10, nos 21-22), but it is worth noting that the mortarium is unusual for this potter in fabric, form, and spout-form (the latter is near to the spout of 59). *c* AD 120-65.

Diam: 250 mm, calculated from *c* 39% of rim  
LAL C 162, Period 11B and LAL D, unstratified

- 51 Fabric 301. Rim fragment (260 g). The lower part of the inside surface of the sherd suggests heavy wear in the lower half of the vessel. The right-facing, broken, two-line stamp is from Die D of Austinus, reading [...] ST, followed by poorly impressed IN in small letters and in the lower line [...] IT; the whole impression is rather smeared (Fig 154). A stamp from the same die was present on the kiln site at Fisher Street, Carlisle (Johnson *et al* 2012, fig 10, no 5). Carlisle workshop, AD 120-65.  
Diam: 320 mm, calculated from 16% of rim  
LAL C 24, Period 13 (Post-Roman)

- 52 Fabric 303/304. Rim fragment (105 g). The stamp is from Die E of Austinus (Fig 156), giving AVSTIN/FECIT in small letters (Fig 154); no other examples are recorded. Carlisle workshop, *c* AD 120-65.  
Diam: 290 mm, calculated from *c* 14% of rim  
LAL C 45, Period 13 (Post-Roman)

- 53 Fabric 301, with cream slip. Rim fragment, well-worn. A stamp from Die B of Docilis 3 (Fig 154). Stamps from the same die were present on the kiln site at Fisher Street, Carlisle, where he worked (Johnson *et al* 2012, fig 10; nos 2 and 6 are the most complete impressions). *c* AD 120-65.  
Diam: 260 mm  
LAL C 14, Period 14A-B (Post-Roman)

- 54 Fabric 352. Rim fragment (100 g). An almost complete impression of a stamp from Die E of



Figure 156: Die E of Austinus



Figure 157: Die E of Docilis 3

Docilis 3 (Figs 154, 157). Carlisle workshop, *c* AD 120-65.

Diam: 350 mm, calculated from *c* 7% of rim  
LAL C 11, unstratified

#### LAL D

- 55 Fabric 339, with yellowish-brown slip. Seven sherds making up the whole of the rim, and half of the body and base of the vessel (1475 g). Very heavily worn. Left-facing and right-facing stamps survive (Fig 158); the more complete right-facing one reads VITAI[...] retrograde, A with dash instead of crossbar, and I standing for L. These are stamps from the second die of Vitalis 1 of Lincoln. For distribution, see 61. *c* AD 90-120. Wenham considered that a Vitalis mortarium (stamped with this second die) from Blossom Street, York, was Trajanic (1965, 552, no 1).  
Diam: 300 mm, calculated from 100% of inner rim, and 64% of outer rim  
LAL D 1094, Period 6
- 56 Fabric 339 variant, with cream slip fired to orangy-brown in places, and to dark brown on one part of the flange. Five joining sherds giving almost half of the rim (545 g), very heavily worn. The right-facing and left-facing stamps are both present (Fig 158), both partial impressions with some damage. The better



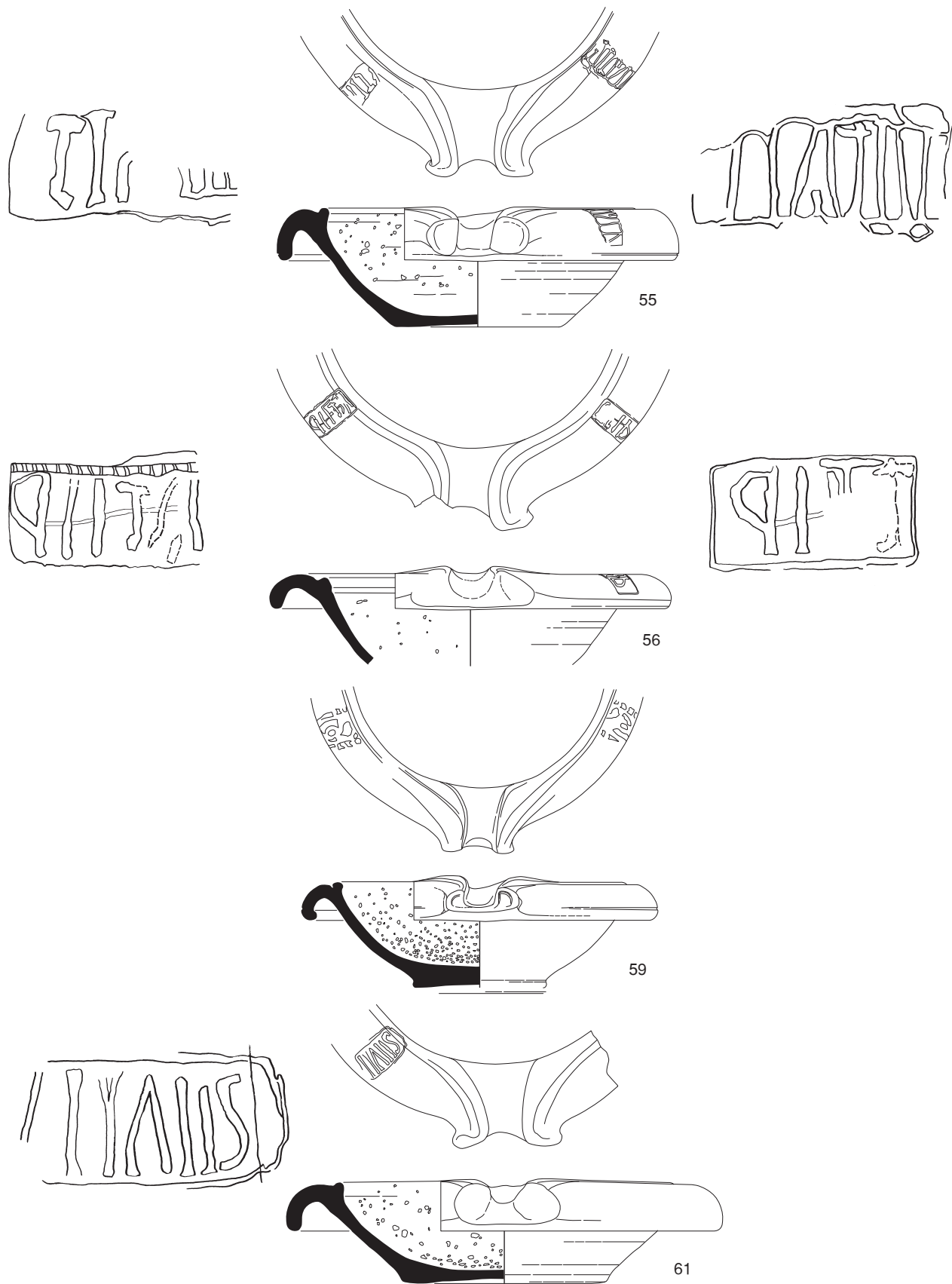


Figure 158: Stamped mortaria from Period 10B, from LAL D, in the north-west of the site

preserved, left-facing stamp reads ATIIP[....], retrograde, II being calculated from dies C and E, the A with a dash instead of a crossbar; there are tiny, and faint, vertical bars above the letters and adjoining the letter panel.

A stamp found at Castleford (Rush *et al* 2000, fig 98, no 44) is from a similar die, but the bars above the letters are diagonal instead of vertical. These are stamps of Atepacius, whose mortaria are now recorded from Carlisle; Castleford (two; *ibid*, and no 55); Lancaster (Johnson 1906, 54, no 1, read as Ateraci; not seen, but attributed to Atepacius); Lincoln (three); Ribchester (Hartley 2000, 194); Roxby; Southwell, Nottinghamshire; Winterton (Stead 1976, fig 58, no 29); York. These mortaria can be confidently attributed to production at Lincoln.

One of this potter's Lincoln mortaria, stamped with a different die, is recorded as from the Technical College kiln site there, but it was not mentioned in the brief report published (Baker 1936). Another was found more recently in the immediate vicinity of the kiln site, and a third has been recorded from elsewhere in Lincoln (Temperance Place; *pers obs*). The Technical College workshop was active in the late first and early second centuries (Darling and Precious 2014). *c* AD 90-120, probably in the latter part of this period.

Diam: 260 mm, calculated from *c* 52% of rim LALD 854/1011, Period 10B and residually in Period 11A

- 57 Fabric 304, variant, as 33. Fourteen joining sherds, making up almost all of the flange and much of the rim, and other non-joining body and base sherds (1060 g), very heavily worn. The stamps surviving on both sides of the vessel are from Die L of Docilis 3. Made at Carlisle, *c* AD 120-65.

Diam: 32 mm, calculated from *c* 92% of rim LALD 894/926/974/1068/1003/, Period 10B and residually in Period 10C

- 58 Fabric 359. Three joining sherds (250 g), worn. The left-facing stamp is from the same die as examples found at Aldborough, in North Yorkshire, among large quantities of coarse pottery, including distorted vessels and kiln debris, which were exposed during a watching brief (Jones 1971, 53-4; Hartley 1971, see fig 18, no 6). There is, to date, evidence for a total of 11 mortaria with this stamp from Aldborough (extra examples are in Snape *et al* 2002, 89, nos 14-16 and 87-90). A clear example of this semi-literate stamp was found at Faverdale

(Proctor 2012, fig 61, no 6). It has now been recorded from: Aldborough (11; Jones 1971); Carlisle (two; see Taylor 1991, fig 303, no 13); Castleford (Rush *et al* 2000, fig 98, no 54); Faverdale, Darlington (Proctor 2012, 100 and fig 61, no 6); a site north of Thirsk, North Yorkshire; Yorkshire Museum (two; provenance uncertain; *pers obs*).

Most of this potter's mortaria are in Fabric 359, but he also used the greyish-white fabric described by Tomber and Dore (1998, 193). It is from one of three dies which were clearly related; various interpretations are possible, NIATOR, VATOR, NATOR. Jones also has the border of a stamp (1971, no 11), again probably used at Aldborough, which, when complete, reads AVTIOR. There are two more dies which were probably used in Yorkshire, having exactly the same problems, plus two others which actually give 'VIATOR'. Clearly, these are potters on the margins of literacy, but it seems very likely that the name intended for all was 'Viator'.

The production at Aldborough can reasonably be dated to *c* AD 100-40. Stamps reading 'VIATOR' were also produced at sites in East Anglia and the Lower Nene Valley during the same period, and there is a possibility that the productions are all linked, though more evidence would be needed before accepting it as certain (Proctor 2012, 101, fig 16.10, M19 summarises the data).

Diam: 340 mm, calculated from 20% of rim LALD 972, Period 10B, and residually in LALD 1011, Period 10C

- 59 Approximates to Fabric 302. Seven joining sherds, making up the whole of the rim and almost all of the body (1065 g), well-worn. The stamps are from Die D of Docilis 3 (Fig 158). Stamps from Die D were present on the kiln site at Fisher Street, Carlisle (Johnson *et al* 2012, fig 10, nos 21-22). His overall activity was Hadrianic-Antonine, *c* AD 120-65. The rim-profile is very unusual for this potter, in having a distal bead similar to those favoured by Attius (Swan *et al* 2009, fig 298, no 5, and see 23).

Diam: 250 mm, calculated from *c* 100% of rim LALD 988, Period 10B

- 60 Fabric 339. Incomplete rim-section (100 g; including large lead rivet), moderate wear. The left-facing stamp is fragmentary; the surviving strokes and the size of the stamp would best fit a potter who stamped [.]BISO[.], but too little survives for a definite attribution. See 19 for

further details of this potter.  
LAL D 1062, Period 10B

- 61 Fabric 339, with patches of yellowish slip, which is fired to brown in the spout (Tomber and Dore 1998, 160). Single sherd, comprising almost half of the vessel (1070 g), very heavily worn. There is a little blackening on part of the rim near the spout, probably caused during firing. The left-facing stamp, which is incompletely impressed reads [.] ITAIIS (Fig 158) and is from one of the two dies of Vitalis 1, whose kiln was found when making extensions to the Technical College on Cathedral Street in Lincoln (Baker 1936, 187; Collingwood 1937, 234). Other mortaria of this potter have been recorded from many sites in the North, including Aldborough, Yorkshire; Carlisle (Annetwell Street); Corbridge (Birley and Gillam 1948); Winterton (two; Stead 1976, fig 58, no 30); and York (two; Wenham 1965). The rim-profiles produced by Vitalis indicate manufacture within the period AD 90-120.  
Diam: 300 mm, calculated from *c* 43% of rim  
LAL D 1084, Period 10B

- 62 Fabric 301. Large rim fragment (435 g). The stamps are fragmentary and are poor impressions from a die which was much too large ever to be fully impressed (Fig 159). Collation of his stamps permits the reading of the full stamp as ·D·I·S/L·D·B in large, well-formed letters, within an elaborate criss-cross border; a good restoration of this stamp appears in Smith (1978, 44, fig 20, no 75b). Its meaning is obscure. The left-facing impression has ·D[ ] from the upper line, and the right-facing one has part of the D on the upper line, with part of L-[ ] on the lower line. Despite the fact that all impressions are partial, it is an easy stamp to recognise.

Mortaria with this stamp have now been recorded on numerous occupation sites in the North West, including Ambleside (two or three); Bewcastle (Austen 1991, 30, no 126); Birdoswald (three; Wilmott 1997, 254-255, no 261); Carlisle (Tarraby Lane (Smith 1978, 46, no 75)); Lancaster (three or four; Hird and Howard-Davis in prep); Manchester (Deansgate, three or four); Ribchester (five; Hartley 2000, 194, nos 8, 9, and 22); Stanwix (four); Wattle Syke, near Wetherby, West Yorkshire (Martin *et al* 2013, 158-9); on kiln sites at Walton-le-Dale (18; Evans *et al* in prep); and at Wilderspool (seven or eight mortaria; Hartley and Webster 1973, 93 and fig 8.F).

DIS/LDB was the third major stamping potter working alongside Docilis 3 and Austinus, but his distribution differs markedly from theirs (Tables 10, 11, 12). There are only two examples recorded from Carlisle, and his work has never been recorded in Scotland. The area excavated at Fisher Street, Carlisle, was too small for his absence to be of any significance, but the inference from his poor showing on Carlisle sites in general is that any activity at Carlisle was for a very limited period. There are, however, enough stamps from sites on Hadrian's Wall to be consistent with some production, and some of the mortaria are in a very hard fabric, which was much more likely to have been made at Carlisle than at Walton or Wilderspool. From the evidence, one can say that DIS/LDB was certainly at work in the Hadrianic period and was probably not active later; on present evidence, the optimum date for his activity is *c* AD 110/20-40. The fabric of this example would fit best with production at Carlisle.  
Diam: 240 mm, calculated from *c* 44% of rim  
LAL D 895, Period 10C

- 63 Fabric 301, variant with fairly frequent, ill-sorted quartz and very few black inclusions. Four joining sherds (665 g), worn. The fragmentary, left-facing stamp is very clear: [..]IIK[.] (Fig 159), and is readily identifiable, but its interpretation and even its reading will not be clear until further stamps are found. Other mortaria stamped with the same die are recorded from Birdoswald (Wilmott 1997, fig 176, no 260) and Kirkby Thore (unpublished; *pers obs*). All three mortaria are of the type made by Attivs, with the distinctive distal bead. The stamp has some similarity to stamps from two other dies recorded from Birdoswald (*op cit*, fig 167, no 267) and Carlisle (two; Swan *et al* 2009, fig 299, no 17; and Annetwell Street (Hird in prep)), but further stamps are needed to show whether they could be by the same potter. Carlisle is the most likely source, and a date within the period AD 110-40 is reasonably certain.  
Diam: 270 mm, calculated from *c* 39% of rim  
LAL D 937/667/669/862, Period 10C and residually in Periods 11A and 11E

- 64 Fabric 339. Flange fragment (25 g). Made in Lincoln, probably at the Technical College kiln site. The stamp is too fragmentary for identification, although, again, it would fit with stamps of [.] BISO[.]. Without a join, it is not possible to know if it is from the same mortarium as 60, and so it is considered separately. AD 90-130.  
LAL D 1068, Period 10C

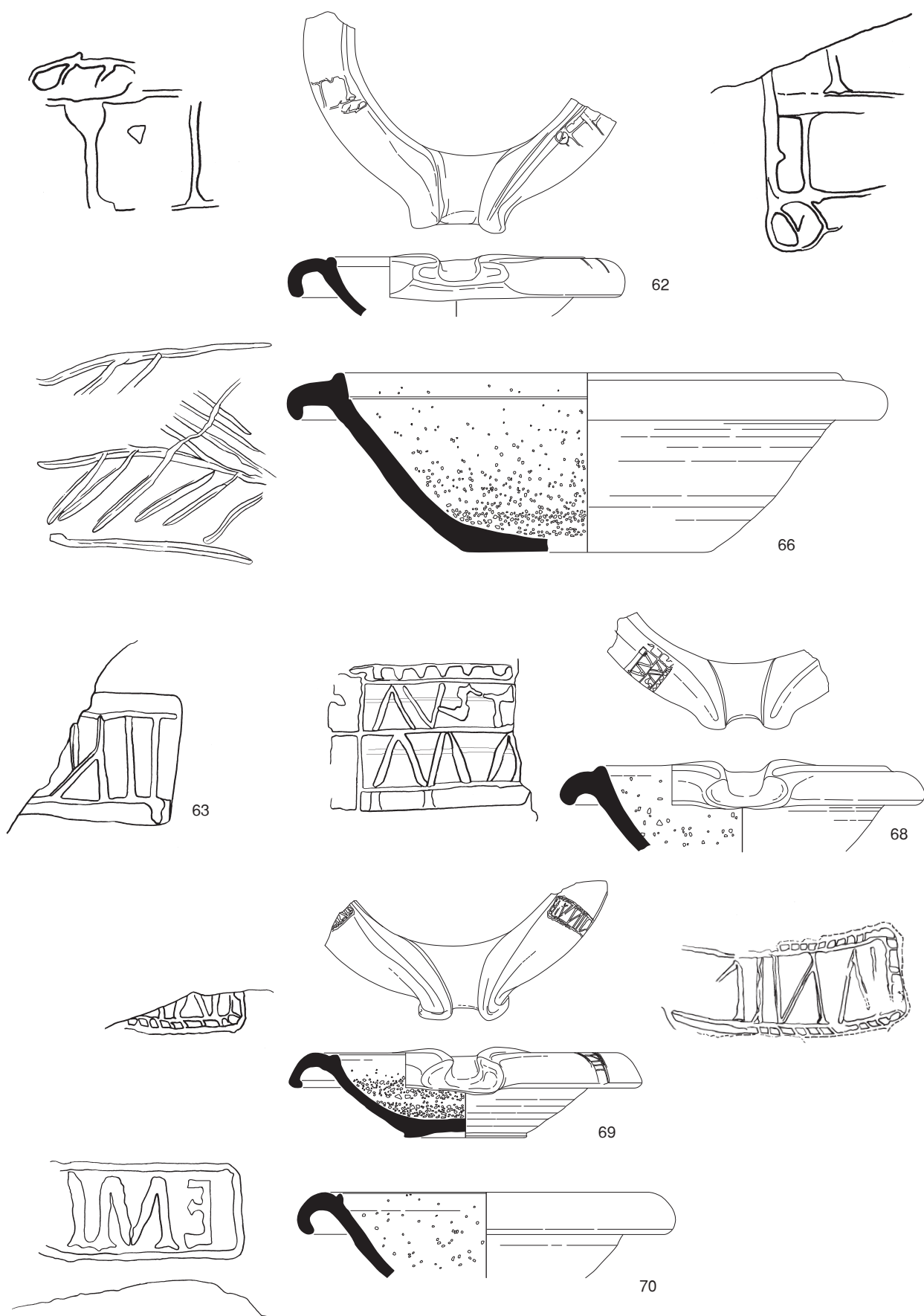


Figure 159: Stamped mortaria from Periods 10C-11E, from LAL D, in the north-west of the site





Figure 160: Die G of Austinus

65 Fabric 301. Two joining rim fragments (300 g). One fragment has two right-facing stamps from Die G of Austinus (Fig 160), one impression partially overlapping the second; the stamps read AVST[ ]/INVS, the S reversed in the lower line. The fragmentary left-facing stamp shows the upper line of a stamp from the same die. Carlisle workshop, AD 120-65. Diameter: 330 mm, calculated from 22% of rim LAL D 821, Period 11A, and residually in KLA C 1050, Period 11C

66 Fabric 301 variant. Rim fragment (880 g), very heavily worn. The graffito on the flange is in the form of a herringbone or leaf stamp, and is clearly in lieu of a left-facing stamp (Fig 159). Another graffito of the same general type was found at the southern Lanes (Hird and Hartley 2010, fig 36, 222), but there is no reason to suppose that these mortaria were made by the same potter. The fabric strongly indicates production at Carlisle.

This vessel is of particular interest because of its unusual rim-profile, which is closely paralleled in mortaria made in a pottery at Soller, Kreis Düren, in Lower Germany, which dates from AD 150/60 into the early third century (Tyers 1996, 131). It can also be very closely matched in a mortarium from St Magnus Wharf (Miller *et al* 1986, 111, no 1.75). It is very unusual to find mortaria with this rim-profile being made in Britain.

The addition of the herringbone-type graffito suggests that it was made either during the period when mortaria in the Carlisle area were still being stamped, or soon enough afterwards for the practice to be within

memory. Herringbone-type dies were in normal use in the period AD 130/40-70+ (Tyers 1996). The optimum date for this mortarium is *c* AD 160-200.

Diam: 430 mm, calculated from *c* 25% of rim LAL D 666/759, Period 11B and residually in Period 11D

67 Fabric 301, almost sintered in the firing. Two joining sherds (105 g), with deep fissures under the flange. It might be considered a 'second', but one cannot assume that it was not used. The stamp, reading DOC[...], is from Die B of Docilis 3. Stamps from the same die were present on the kiln site at Fisher Street, Carlisle (Johnson *et al* 2012, fig 10; nos 2 and 6 are the most complete impressions). *c* AD 120-65.

Diam: 260 mm, calculated from *c* 21% of rim LAL D 749, Period 11C

68 Fabric 350. Two joining sherds (445 g), heavily worn. The left-facing stamp is from Die B of Austinus, AVST[...]/MAN[...] (Fig 159), with diagonal dash instead of cross-bars. Carlisle workshop, AD 120-65. There are two parallel slashes under the flange, *post cocturam*.

Diam: 260 mm, calculated from *c* 33% of rim LAL D 749, Period 11C

69 Fabric 324. Six joining sherds, making up about half of the vessel (575 g), heavily worn. The right-facing and part of the left-facing stamps survive (Fig 159). The more complete right-facing one reads IVNIV[...], with reversed N; no complete example of this stamp has been recorded. For further details of the work of Iunius, see 39. He was one of the latest potters to stamp mortaria in the Mancetter-Hartshill potteries (*p* 366), and the optimum date for his production is AD 150-70+.

Diam: 250 mm, calculated from *c* 33% of rim LAL D 575, Period 11E

70 Fabric 350 variant. Rim fragment (245 g), very heavily worn. The retrograde stamp, probably left-facing, reads EM[...], with the down-stroke of the following M (Fig 159). See also 22, which is from the same die. Carlisle workshop, Hadrianic, probably second half of the period.

Diam: 270 mm, calculated from *c* 20% of rim LAL D 708, Period 11E

71 Fabric 363. Rim fragment (195 g), worn. The partially impressed, right-facing stamp is retrograde (Fig 161); it reads [...]TIVS/[...]EC in two lines, for ATTIVS FEC. It is from the



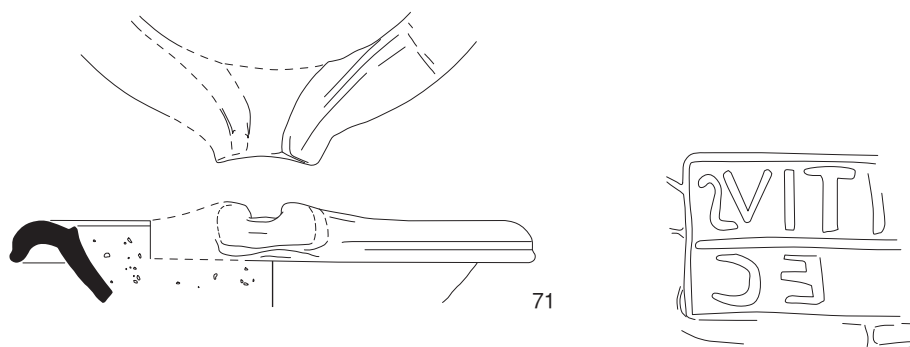


Figure 161: Stamped mortarium from a post-Roman context in LAL D, in the north-west of the site

same die as **23**, but on a different mortarium of a generally similar form. The rough attempt at concentric scoring points to a date in the early second century. Carlisle is the most likely source; the optimum date is AD 110-40. Diam: 280 mm, calculated from 16% of rim LAL D 213, Period 17C (post-Roman)

**72** Fabric 301 variant. Two joining sherds (230 g), well-worn. The broken stamp preserves the lower line of a stamp from Die B of Austinus [.....]/MAN[.], A with diagonal dash. Carlisle workshop, AD 120-65. Diam: 310 mm, calculated from 23% of rim LAL D, unstratified