# The Roman Pottery

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*The pottery was examined in context groups and catalogued following the Standard for Pottery Studies in Archaeology (Barclay et al 2016). The fabrics were recorded and source suggested. Reference was made to the National Fabric Collection (Tomber and Dore 1998). Forms, surface treatment and sherd conditions were described. Quantification was by sherd count, weight and estimated vessel equivalents (EVES). Apart from the plain Dressel 20 sherds, David Williams identified the amphora sherds. Kay Hartley identified and commented on all the mortarium sherds except the Mancetter-Hartshill vessels.*

There are 5131 sherds of coarse pottery (88.9kg, 51.42 EVES) and a total of 5902 sherds 96.3kg, 60.87 EVES, including the samian ware. The quantities of pottery from each phase are shown in Table 1. The quantities recovered from the different phases vary significantly and the dating for the second century phases 2-3b depend on small groups which cannot be used to answer wider questions we might have about pottery supply, function and status even although quite large amounts of pottery of this date has been redeposited in the later groups. Much of the pottery was in poor condition due to adverse burial conditions. Unfortunately this effect is not consistent across the fabric groups so the oxidised wares, colour-coated wares and many of the grey wares have lost their surfaces and been badly eroded whereas the BB1, BB2, Mancetter mortaria, and the Essex grey wares are mostly in much better condition, being harder fired. This makes interpretation of the significance of sherds based on their abraded/eroded condition particularly unreliable.

The coarse pottery assemblage as a whole indicates activity starting in the late Hadrianic period and continuing to the late third century with a peak in the mid- to late second, continuing activity in the first half of the third century but only a small amount of pottery dating to the late third century and later (fig. 1). Flavian-Trajanic types are largely absent and, at the other end of the chronological span, Crambeck ware is rare, there are few developed flanged bowls (both types appearing in the late third century) and a single, unstratified, calcite-gritted jar rim was found . This last type was of pre-Huntcliff type dating to the end of the third or early fourth century.

Stratigraphically the earliest phase dates in or after the mid-second century. The small quantities of pottery from phases 2-3b hamper efforts to date these phases securely while the quantities of redeposited second century pottery in the third century assemblages in phases 3c-3d has affected the data set for the third century assemblages in that the earlier material may dilute the apparent importance of third century wares. Despite these issues, clear patterns emerge, particularly in the first half of the third century, and these include surprising evidence for the supply of wide-mouthed bowls from kilns at Mucking in Essex. Even for the second century assemblages, hitherto unrecognised evidence for local production of pottery in the mid-second century, and perhaps into the late second and early third century, is provided by grey ware seconds and also a locally made, stamped mortarium of mid-second century type identified by Kay Hartley.

## Chronology

There are no coarse ware types which must be pre-Hadrianic excepting one mortarium sherd identified by Kay Hartley as probably from Elginhaugh and thus dating to the Flavian period. Other than this early vessel, none of the Flavian-Trajanic coarse ware types found at Blennerhassett are present (Evans 1991, 121-33). There are no reeded-rim bowls or rusticated jars and the single ring-necked flagon present may be Hadrianic. Flavian-Trajanic samian, however, was present in small quantities and a case for some pre-Hadrianic activity at Maryport has already been made (Potter 1978, 494, Potter 1979, 363, Shotter 1997, 136 and Wilson 1997, 22-3). In this area of the extra-mural settlement there is little evidence in the coarse ware assemblage to suggest pre-Hadrianic activity of any significance.

Although types of Hadrianic-early Antonine date were present, Hadrianic coarse ware forms were not common. In the BB1/GBB1 group, the early second century jars with very upright rim and wavy line burnish on the neck were not identified (Gillam 1976 no. 1) although those given an early to mid-second century date (Gillam 1976 no. 2) were present. Similarly the very straight, upright walled bowls and dishes with flat rims were not present although the early to mid-second century types with acute lattice burnish were present (Gillam 1976 nos 34 and 53 against nos 35-7 and 54-9). In both the jar and bowl/dish group, the later second to third century forms - grooved flat-rim bowl, flat-rim bowls and dishes with chevron or intersecting arcade decoration and jars with more everted or splayed rims – were most numerous. The small BB1 beaker types reflect a similar date profile with more small jars with the later distinctive everted rims than the earlier bead-rim type (Gillam 1976 nos 20 and 25 compared with no. 16). A small number of sherds from the globular neckless jar type (Gillam 1976 no.30-33) all come from examples with short everted rims (Gillam 1976 no. 31 dated mid-second century) rather than the bead-rim type found at Hardknott (Bidwell and Croom 1999 fig,. 37 nos 121-4).

|  |  |  |  |
| --- | --- | --- | --- |
| **Phase** | **Nos** | **Weight g** | **Sum of Rim %** |
| 2 Very Early Roman | 16 | 242.4 | 18 |
| 3 Roman back plot | 1267 | 15743.7 | 1297 |
| 3a 1st building | 112 | 1542.7 | 111 |
| 3b 2nd building | 319 | 5547.4 | 363 |
| 3c abandonment | 1200 | 23920.3 | 1322 |
| 3d stone building | 1141 | 22550.9 | 1172 |
| 3e demolition and robbing | 611 | 10949.2 | 665 |
| 4 Very late Roman C3rd-4th | 456 | 6120.1 | 414 |
| 5 Post-Roman | 611 | 7746.6 | 585 |
| US | 169 | 1933.7 | 140 |
| **Grand Total** | **5902** | **96297** | **6087** |

Table Total pottery from each phase (including samian)

Very small quantities of BB2 jars and bowls/dishes were identified and this is surprising considering the number of Essex grey ware vessels identified

As regards the other wares, the distinctive range of wares and types present at Hardknott is absent at Maryport (Bidwell and Croom 1999, 94-6). Similarly the early second century types made at kilns near Carlisle at Scalesceugh, Brampton and Fisher St have not been identified. Although there are some flagons in oxidised or white-slipped oxidised ware, only one, an FLB ring-necked flagon from phase 3c layer 10596, has to date earlier than the mid-second century (as Gillam 1970 no. 5 dated AD110-50). The remaining flagons are of later type, mid-second to third century (nos. 24-26, 74 and 76). Very few examples of the Muncaster wares described by Welsby, Bidwell at Ravenglass (2015), Bidwell and Croom 1999 at Hardknott and noted by Lockwood and Turner at Ravenglass (Welsby 1985, Bidwell and Croom 2015, Bidwell et al1999 fabrics 1 and 2 and Lockwood and Turner 1979, 118-20) have been identified. Paul Bidwell kindly supplied two samples of the fine and coarse Muncaster fabric which were examined and compared to the fabrics at Maryport. As far as the coarse Muncaster ware is concerned, this ware with its distinctively gritty surface and coarse inclusions was not definitely identified although six sherds in GRC1, GRC2 and 4 and one in an oxidised ware might belong to this source. These are not close matches. Bidwell considers this gritty grey ware to be later in date and says it “seem to have supplied a substantial proportion of the cooking wares at Ravenglass until well into the second half of the second century” (Bidwell and Croom 2015, 73). If the Maryport settlement were supplied by the Muncaster kilns in phases 2-3, it is the gritty and more distinctive fabric which one would expect to find in quantity. “Local” grey ware fabrics GRA1, GRA5, GRA9, GRB1, GRB4, GRB11, GRB16, GRB17 and GRB20 are comparable in some respects to the fine Muncaster fabric sample described by Bidwell at Hardknott as having few visible inclusions. However compared to the Muncaster sample sherd the Maryport fabrics are finer. Lockwood and Turner identified two Muncaster ware vessels at Maryport (1979, 120 and Jarrett 1976 nos. 4 and 8). One of these (no. 8) is distorted and belongs in our group GRA1/GRB4. In fabric GRB4 is not unlike the fabric of the stamped mortarium thought to be local. The other fabrics in the “local” group are much softer and their source is not certain. The forms made in the group of “local” grey wares are predominantly BB1 type jars with everted rim jars and acute lattice burnish, small jars/beakers with bead and short everted rims and acute lattice burnish, flat- and lipped-rim bowls and dishes, an everted-rim flagon and a roughcast sherd and are mostly of early to mid-second century type. Some of the everted-rim jars from this group could have their dating extended into the late second century or even later and one or two later types such as a GRB4 bead-rim bowl/dish, a second bead-rim bowl/dish and a rebated pulley rim flagon, both in GRA5, a GRB20 grooved-rim dish and a GRB4 jar with a more cavetto type rim belong in the late second or early third century. In terms of their distribution within the stratified sequence they are significantly more common in the third century phase 3d which argues against them belonging with the fine Muncaster group. These fabrics are not a very close match to the Muncaster samples and, although some might be fine Muncaster ware, a source nearer Maryport is more likely. The forms are unlike those at Hardknott but are not dissimilar to some of those published by Welsby. The distorted and hard-fired sherds at Maryport in this local group along with the stamped mortarium identified as local by Hartley suggests they may all be produced nearer to Maryport itself.

The oxidised wares were in very poor condition and it was very difficult to determine the fabrics and sources represented. Two typological groups stood out, the flagons, probably originally white slipped, and the Severn Valley type vessels – narrow-necked jars, a handled jug/flagon, two wide-mouthed jars and tankards. The flagons, as noted above, dated from the mid-second to third century. The Severn Valley type narrow-necked jars included second and third century types. The tankard sherds were from fairly upright vessels of second century type (Webster 1976 no.39 second century) while the narrow-necked jars included those with wedge-shaped rims (as Webster 1976 no. 5 dated second to third century) and bifurcated everted rims, some with frilled decoration on the lower bifurcation (Webster 1976 nos 10-13 dated third to fourth century). No Severn Valley type wide-mouthed jars were present.

The source of these Severn Valley type vessels is somewhat difficult to determine particularly given the very abraded condition of the pottery. Narrow-necked jars in a somewhat sandier fabric than Severn Valley ware were made at Wilderspool in these forms (Hartley and Webster 1973, fig. 4, nos 10-15) and, in a finer ware at Walton-le-Dale (Evans forthcoming). Swan and MacBride also suggest the narrow-necked jars of Severn Valley type were made at Carlisle (Swan et al. 2009, 594, fig. 324 no. 425 and fig. 658 nos 530-31, this last being a waster) and Bidwell and Croom identifies vessels at Ravenglass which may be from Carlisle (2015,73). Swan dates the bifid rim jars to the Hadrianic period but Bidwell gives the Ravenglass jars a third century date (2015, 73) as does Evans at Walton-le-Dale (forthcoming). Vessels of this ware group, whether from the Severn Valley or the north west are present in small numbers in phases 3a-b rising in phase 3d. Sherds from an OAA2 narrow-mouthed jar came from phase 2 layer 10679.

Very few fine wares were present at all. Nene Valley colour-coated ware was the most common fine ware. Nearly 1% of the assemblage was made up of black-slip wares from Central Gaul and Trier and only a little less of imported colour-coated roughcast ware and Cologne beakers. The fine wares spanned the second and third centuries with only couple of sherds from roughcast ware which have a date range of cAD80-130.

The earliest mortarium was identified by Kay Hartley as from Elginhaugh and therefore of Flavian date. She identified a second Elginhaugh vessel at the Temples site. One other sherd from a flanged mortarium dated by Kay to cAD110-140 in a micaceous, cream fabric with powdery texture; self-coloured was thought to be perhaps a local product and is significant given the scarcity of white ware mortaria being produced in the North West. In the second century the mortaria were supplied principally by one or more workshops local to Maryport or in an unknown location in the north west; there were a small number of Mancetter-Hartshill mortaria by the mid-second century and one Antonine mortarium from the Colchester kilns. With the possible exceptions mentioned above, locally produced mortaria were in oxidised wares with white slips or a red-brown surface finish. One Rhaetian mortarium was identified by Kay Hartley as likely to be locally made. By the late second century the products of the Mancetter-Hartshill potteries flooded the market and only small numbers came from any other pottery such as the Lower Nene Valley, the samian potteries in Central Gaul and one Rhineland mortarium. Only one sherd from a white Crambeck mortarium (fourth century) was identified, confirming the date range suggested above.

| **Date** | **MWH Elginhaugh** | **Mlocal** | **MNW** | **MWH north** | **MRHAETIAN 1** | **MRHAETIAN2 Wrox** | **MH** | **MCOLCH** | **MLNV** | **RHINELAND WH** | **SAMCG** | **Total** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 79-88 | 15 |  |  |  |  |  |  |  |  |  |  | 15 |
| 100-160 |  |  |  |  |  |  | 6 |  |  |  |  | 6 |
| 100-200 |  | 4 | 3 |  |  |  | 3 |  |  |  |  | 10 |
| 110-140 |  |  |  | 16 |  |  |  |  |  |  |  | 16 |
| 110-165 |  | 2 |  |  |  |  |  |  |  |  |  | 2 |
| 120-140 |  |  | 6 |  |  |  |  |  |  |  |  | 6 |
| 120-160 |  | 25 |  |  |  |  |  |  |  |  |  | 25 |
| 140-170 |  | 26 |  |  |  |  |  | 5 |  |  |  | 31 |
| 140-200 |  | 9 |  |  | 13 | 18 |  |  |  |  |  | 40 |
| 150-200 |  |  |  |  |  |  | 28 |  |  |  |  | 28 |
| 150-210 |  |  |  |  |  |  | 11 |  |  |  |  | 11 |
| 150-250 |  |  |  |  |  |  |  |  |  | 22 |  | 22 |
| 170-200 |  |  |  |  |  |  |  |  |  |  | 10 | 10 |
| 170-220 |  |  |  |  |  |  | 63 |  |  |  |  | 63 |
| 180-220 |  |  |  |  |  |  | 32 |  |  |  |  | 32 |
| 180-230 |  |  |  |  |  |  | 4 |  |  |  |  | 4 |
| 190-240 |  |  |  |  |  |  | 11 |  |  |  |  | 11 |
| 200-230 |  |  |  |  |  |  | 4 |  |  |  |  | 4 |
| 200-250 |  |  |  |  |  |  | 16 |  | 50 |  |  | 66 |
| 200-260 |  |  |  |  |  |  | 31 |  |  |  |  | 31 |
| 200-400 |  |  |  |  |  |  |  |  | 12 |  |  | 12 |
| 220-280 |  |  |  |  |  |  | 10 |  |  |  |  | 10 |
| 230-280 |  |  |  |  |  |  | 8 |  |  |  |  | 8 |
| 230-300 |  |  |  |  |  |  | 22 |  |  |  |  | 22 |
| 230-350 |  |  |  |  |  |  | 7 |  |  |  |  | 7 |
| 260-330 |  |  |  |  |  |  | 1 |  |  |  |  | 1 |
| 270-350 |  |  |  |  |  |  |  |  | 12 |  |  | 12 |
| 280-350 |  |  |  |  |  |  | 31 |  |  |  |  | 31 |
| **Grand Total** | **15** | **66** | **9** | **16** | **13** | **18** | **281** | **5** | **74** | **22** | **10** | **536** |

Table Mortaria by ware group and date range quantified by rim % values

The amphora assemblage comprised Dressel 20 oil amphorae with rim types dated to AD110-150 and AD 150-210, two sherds from at least one third century black sand wine amphora, a South Spanish fish sauce amphora dated 70-200 and body and basal sherds from some Gauloise amphorae, one of which is probably a Verulamium vessel dating to the Flavian to Hadrianic period. The amphora dating is a close match for the samian dating.

Thus overall the assemblage gives a start date in the Hadrianic period, perhaps late in that period, with a rise in ceramic deposition in the mid- to late second century. The number of vessels attributable to the first half of the third century is lower than that in the mid- to late second century. This is partially due to the scarcity of third century samian. After the mid-third century ceramic deposition tails off and only very small numbers of types such as Crambeck ware, calcite-gritted ware, Dales and Dales type wares and Nene Valley mortarium types of the late third and fourth century are present. The developed flanged bowls and BB1 jars with very splayed rims are uncommon or absent suggesting by the late third century pottery debris was no longer accumulating in this plot apart from the small group from the phase 4 ditch 12002.

Figure : Chronological distribution of whole assemblage from the site using rim equivalent values shown as percentage of rim present

## Chronology: stratified groups

### Phase 2 late second century earliest Roman levels

Three sherds were found in a layer, 10617, under road 10542: an extremely abraded GRB6 bead rim of unknown type, a SAMCG scrap dated AD120-200 and a SAMCG form 31R dated AD160-200 giving a *terminus post quem* of cAD160.

Layer 10679 under road 10542 contained a very small scrap of colour-coated ware which compared to Nene Valley colour coated ware fabric rather than any other. This would give a date in the third century on present evidence and even allowing for the arrival of the small amounts of NV ware earlier, a late second century *terminus post quem* would be appropriate. Samian from this layer included a SAMCG and a SAMEG form 31R dated AD150-200 and 150-250 respectively

### Phase 3a mid- to late second century building 12000

A small group with small abraded sherds which came from slot 10936 of building 1200 and fill 11035 of 10970. In building 12000, the primary fill of slot 10935 contained a SAMCG sherd from a form 37 dated AD140-200 and a GRB20 body sherd from a GRB20 jar with acute lattice of Hadrianic-Antonine date. Post-hole 10855 contained a sherd from a SAMCG Dr31R dated cAD150-200. In fill 11035 of feature 10970 a BB1 grooved-rim dish is similar to Gillam 1976 nos 69-70 of mid- to late second century date.

1. BB1 grooved-rim dish with traces of linear burnishing but this has been largely lost due to scorching around the rim and upper body. Gillam 1976 nos 69-70, mid- to late second century. 11035 OR 3724.

Small pit 10859 also dates to this phase and contained much of a burnt BB1 jar of mid-second century type and a grey ware jar copying BB1 type (Gillam 1970 no. 2) and Central Gaulish samian from the top of pit 10883 dates to this phase

1. 25 BB1 sherds from a burnt everted-rim jar of mid-second century date, Gillam 1976 no. 31. Pit 10859 fill 10860 OR 3414 and 3415.

### Phase 3b, mid- to late second falling out of use by the early third century, building 12001

A SAMCG form 31R from the fill of a post pipe in building 21001 (10739) dates to AD150-200 and with a scrap of SAMCG from post-hole 10588 dated AD120-200 and a SAMMV form 37 from layer 10742 dated AD130-60, the samian gives a date range in the second half of the second century for phase 3b. However the coarse ware sherds from building 12001 included six sherds from a plain-rim scroll beaker in Nene Valley colour-coated ware (mostly adjoining but broken in antiquity) from the fill of linear 10715. This type of vessel is documented from the late second to mid-third century by Perrin (1999, 90 nos 118-9 dated late second to mid-third century) but is given a third century date range by Gillam (1970 nos 79-80, AD220-260) and Bidwell (1985, 180 noting Nene Valley colour coated ware is not common in northern Britain until the third century.

Undiagnostic NV sherds were also present in this phase in layer 10770. Earlier types from this layer comprised a GBB1 everted-rim beaker with acute lattice burnish of the mid- or late second century (Gillam 1976 no. 20), the base of a Rhaetian mortarium from layer 10742, possibly the same vessel as no. 33, and a GRB3 sherd from one of the Essex grey ware wide-mouthed jars given a date range of cAD180-250 here (see below), also from 10770. The dating profile from the coarse pottery in this phase gave two peaks in the mid- to late second century and the early third century perhaps suggesting that the use of the building belonged in the earlier of these date ranges and the abandonment and disuse dates to the early third century. If the scroll beaker dating is altered from Gillam’s 1970 date range to Perrin’s 1999 date range the gap would, however, disappear. The very small number of sherds found in the securely stratified contexts precludes secure dating for the end of the use of the building.

1. NV1 plain-rim scroll beaker. This type compares with vessels dated to the late second to early third century in the Nene Valley (Perrin (1999, 90 nos 118-9) but was given a third century date range by Gillam (1970 nos 79-80, AD220-260), See above. 10715/3632.

A number of other context groups were assigned to phase 3b (10813, 10867, 10882, 10925, 10926, 10953 10961 and 11055). The dating evidence for these groups relies principally on the samian (see Monteil this report). The datable coarse wares comprise BB1 bowl/dishes with flat rims and everted-rim beakers, both of mid-second century date, and one small abraded sherd of CRA RE from layer 10687.

Pit 10852 had a BB2 dish with a triangular rim of cAD150-210 in the primary fill and a scrap of Central Gaulish black slip pottery in the late fill (cAD150-2010/40) with an incomplete BB1 everted rim of at least late second century date.

Pottery from ditch fill 10703 included sherds from a BB1 jar with acute lattice burnish, a BB1 flat-rim dish or bowl dating to the mid-second century and a BB2 bowl/dish with triangular rim give a *terminus post quem* of cAD150 for the infilling of ditch 11009, a date not inconsistent with a fragment of a SAMCG cup form 27 dated AD120-60.

1. BB1 flat-rim bowl or dish. The wall angle suggests a mid-second century date range. The burnish pattern has been worn away. 10703 OR3593
2. BB2 bowl or dish with triangular rim. Gillam 1970 no. 310, AD150-210. 10703 OR 3494

### Phase 3c late second to early third century accumulation layer

The pottery assemblage from phase 3c is much larger than that from previous phases and comes from a deposit thought to be an accumulation layer dating from a period when this area did not have a structure but ceramic debris was still accumulating in the “vacant” space. The early to mid-second century pottery types are still present in this group but forms typical of the late second to early third century are more abundant. There are also sherds from two later forms, a multi- reeded hammerhead mortaria from Mancetter Hartshill, dated cAD230-300, and a BB1 developed flanged bowl. The later mortarium and the flanged bowl are very abraded and contrast with the other types from this phase. They are best explained as being the latest additions to these layers.

The flat-rim dish is a good example of the earlier types in this group. Although a complete profile is present, the sherd is burnt and abraded and has been repaired suggesting a long use life. Large sherds and vessels with a large number of sherds present have noticeably later dates, cAD170/80 to 230. The grooved flat-rim bowl has a complete profile and is relative unabraded. Over half of the Mancetter-Hartshill mortarium dating from cAD170-230 is present and the two BB1 and GRB9 jars with obtuse lattice are represented by one fairly large rim and body sherd and 54 sherds respectively. Much of a fine oxidised double handled jar/jug paralleled in the Severn Valley industry is also present as well as narrow-necked jars of this type with both the wedge-shaped everted rim and the bifid rim form, the latter being of third century type. A hard grey ware jar with acute lattice burnish and a short everted rim compares better with the Antonine group.

Thus this is a perplexing group in that it is of mixed date but, given the suggested dating for the earlier phases it can be best explained as ceramic debris derived from abandonment of the earlier mid- to late second century structure together with fresher ceramic material dating to the phase between the timber buildings and the stone building perhaps coming from neighbouring plots. The dating profile gives this phase a date range from the late second up to around AD220/30 when jars with obtuse lattice and the strongly curving rim of nos 20 and 21 began to appear. It is of interest that it is in this phase that the Essex grey wares first appear also.

There is a shortage of early third century samian and the Dressel 20 amphora types are dated by David Williams to 110-150 and 150-210 but with no later third century types apart from two sherds from a third century black sand amphora. Although black sand amphorae are dated from the mid-third century at South Shields, at Carlisle Swan et al have argued for a Severan start date for the importation of these late black sand amphorae there and this would fit with these sherds in phase 3c (2009, 576-7). The mortarium types include mid-second century MOAB/MOWS and Antonine Rhaetian1 sherd, all of which Kay Hartley though were of local manufacture. There were two bead rim mortaria with downbent flanges from Mancetter Hartshill dated c AD170-220 and the first half of the third century (Hartley 2002 fig. 187 nos 80 and 84). The lack of collared and early reeded rim mortarium suggests this accumulation did not continue far beyond the early third century.

The key question is where this pottery is coming from. It could wholly belong to the occupation of the preceding building 12001, it could partly belong to the disuse of building 12001 with additional later material added after that building had gone out of use or it could all be later material accumulating in an empty space within the settlement and we cannot determine which of these options is the case. If the first is correct then the time between phase 3b and phase 3d is short. The building and features of 3b were in use until the early third century and occupation more or less continuous. If the second option is correct then, because there is no stratification within the phase 3c layer, we cannot determine the date at which the 3b building fell into disrepair or was demolished nor do we know how long the plot remained empty and was used for the disposal of ceramic debris although we can say it happened sometime within the late second to early third century. If the last option is correct, and this is implied by the excavator’s interpretation of the layer as an accumulation, then a gap of occupation of the plot is suggested of, perhaps, some 40 years in the late second to early third century.

1. BB1 flat-rim dish, full profile surviving. This vessel has been burnt and has a repair perforation just below the rim, c3mm in diameter. There are traces of inverted chevron burnish and the form compares with Gillam 1976 no 61 dated mid-second century. 10596 OR 2602
2. BB1 flat-rim dish with similar profile and decoration to no 6. Mid-second century. 10596 OR 2666.
3. GRB8 flat rim dish or bowl with inverted chevron burnish and quite a splayed wall suggesting a date in the later second century if this follows the BB1 typological sequence. 10596. OR 2582
4. GRA5 bead-rim dish/bowl. Gillam 1970 nos 225 and 313 dated 200-250 and 190-240. 10738 OR 2782.
5. BB2 bead-rim dish/bowl. Gillam 1970 nos 225 and 313 dated 200-250 and 190-240. 10738 OR 2812
6. BB2 triangular-rim bowl/dish. Gillam 1970 nos 222 and 310, AD150-210. 10596 OR 2607
7. BB1 plain rim dish. This sherd is very abraded but surviving burnish suggests intersecting arcading a date range in the early third century, Gillam 1976 no. 79. 10596 OR 2582
8. BB1 grooved flat-rim bowl with overlapping inverted chevron burnish, late second to early third century. The full profile is represented and this is in fairly unabraded condition although it appears worn, perhaps from use, inside the lower body and base. 10596 OR 2582
9. Four BB1 sherds from a bead and flange rim bowl with the surviving linear burnish indicating intersecting arcade burnish. This vessel is one of the latest from the phase and is relatively abraded compared with other late vessels of third century date from the phase. Although the bead rim is quite low a date of the mid- to late third century would be given even by Gillam (1976 no. 44). This may well be a very late addition. 10596 OR 3231 and 2812
10. GRB11 vessel with turned out rim, two-ribbed handle with ring of clay threaded onto the handle and fixed to the body. This sherd is very abraded/eroded inside. This compares with Gillam 1970 type 174 which is included in Lyons group of miniature cauldrons (1009, 93). Gillam gives a date of 120-60. Lyons interprets the rings as “fixed suspension rings” copying the suspension rings found on larger metal cauldron. The example she discusses was found during the excavation of a Romano-Celtic temple at Scole, Norfolk cauldrons and Lyons notes this vessel copied cauldrons found in the Rhineland and Gallo-Roman areas in the late Iron Age and early Roman period rather than Roman cauldrons. Cool (2006, 48-9) concludes that metal cauldrons were predominantly ritual in character being found in hoards, burials and temples and it may be that the ceramic miniatures have the same function. 10701 OR 2487.
11. BB1 necked jar rim sherd. Gillam 1976 no. 2 mid-second century. 10596 OR 2656
12. BB1 small beaker with everted rim. Gillam 1976 nos 20-1 md to late second century. 10595 OR 2812
13. GRA1 small beaker with beaded rim and acute lattice burnish, similar to the BB1 beakers of the early to mid-second century (Gillam 1970 nos 16 and 19). The fabric is somewhat overfired and a non-adjoining bodysherd is dented. 10596 OR 3435
14. GRB5 very hard grey ware jar with short everted rim and acute lattice burnish. Such grey ware jars are not easy to date but the general form points to a date from the mid- to late second century. Distorted rim. 38 sherds from 10596 OR 2611 and 19 sherds from phase 3 pit 10667 OR 1522.
15. BB1 jar with obtuse lattice and a curving everted rim similar to Gillam 1976 no.8. 38 sherds were recovered. Gillam dates no. 8 to the mid-third century and Bidwell dates the introduction of obtuse lattice to not long before AD223/5 (Bidwell 1985,176) whereas Evans errs on the side of caution and gives an AD200/220 inception date range (2002, 334). Bidwell notes that contexts given a *terminus ante quem* of cAD220 in phase 3 at the east vicus Watercrook did not have any obtuse lattice jars (1985, 176, Potter 1979 fig. 100 no. 95, fig 101, 102 and fig. 103 nos 150- 157. This is the latest jar form present in phase 3c and given that two examples are present one might suggests a date early in the second quarter of the third century. 10596 OR 2607
16. BB1 jar with obtuse lattice and a curving everted rim as no.20 in form and date. One quite large and relatively unabraded sherd. 10596 OR 2582.
17. GRB18 wide-mouthed jar with curving everted rim and single cordon above shoulder. This belongs to the Mucking type K group (Jones and Rodwell 1973) and is found in the eastern section of Hadrian’s Wall from cAD180-250+. Further bodysherds from vessels of the same form were found in this phase with the usual zone of burnished wavy line decoration on the shoulder. These were in fabrics GRB3, GRB19 and GRB13 and at least three vessels were represented. 10596 OR2659
18. GRB19 bodysherds from a closed vessel with a zone of wavy line decoration delimited by horizontal grooves. This is in the same fabric as the Mucking type K jars and is likely to come from one of the narrow-necked jars made alongside these at Mucking. 10596 OR 2678
19. GRB1 a very small rim sherd from an everted-rim flagon with a handle scar just below the rim. This flagon is of York type FE2 (Monaghan 1997) dated around AD160-230. A second white slipped oxidised example of this form came from 10738 in this phase. It was also very abraded. 10596 no. 2678.
20. GRA5 small but unabraded sherd from a pulley mouthed flagon. The entire rim was present. Gillam 1970 no. 167 dated AD180-300.. 10596 OR2565
21. OAB1 pulley-rim flagon. Gillam 1970 no. 16 AD170-240. 10596 OR2649
22. OAA4 narrow-necked jar with undercut rim of Severn Valley type. Probably from kilns in the north west. 10596 OR3231.
23. OAA1 narrow-necked jar with triangular rim with flat outer face. This jar had two handles with came from the neck to the body where the two ribs were separated and formed an upside down M-shape. Handled jars like this are not listed by Webster for the Severn Valley industry nor do I know of any in the north west. However a parallel at the Severn Valley industry kilns at Newlands Hopfields can be cited (Evans et al 2000, fig. 19 no F16) which has the same arrangement at the terminal but only the handle scar survived and the rest of the body of the vessel was not present. The kilns are dated to the second to third century. 10596 OR 2512 and 2562.
24. MOAB1 three (4 with modern break) sherds from the same, well-made mortarium in quite hard, fine-textured, dark red-brown fabric. There are fairly frequent, ill-sorted inclusions, including quartz, black and some red-brown material. The trituration grit is ill-sorted, and while moderate and fairly random in the upper half of the vessel, it is closely packed in the basal area; it consists mostly of red-brown sandstone, with ?haematite, quartz sandstone, different kinds of quartz and black material. There are traces of a reddish self-coloured slip on the flange of the small rim sherd and the lower half of the external surface has been burnished. Somewhat unusual rim-profile.The mortarium has been heavily worn and has half of a large rivet-hole.

The potter’s stamp is likely to be left-facing and is complete. It is composed of simple zig-zag lines and is a trademark, not a name. There are many examples of stamps with such simple motifs in other areas of Britain, but there is nothing from the same die or associated with similar fabric. This stamp could be an imitation of the lower line of certain stamps of Austinus whose products were common in the north-west, and, which have been recorded from Maryport (see below). In these stamps the lower line reads MANV (the A with a dash instead of a bar), for ‘by the hand of’; in incomplete impressions the A can appear as Λ and the lower line interpreted as ΛΛΛ, as in Jarrett 1976 (Maryport, Fig. 13, no.29 where the whole stamp, although recognisable, is incorrectly drawn; other examples of these stamps are published from Birdoswald (Wilmott 1997, fig. 176, no.257); Carlisle (McCarthy 1990, fig. 195, no.3); Mumrills (MacDonald and Curle 1929, fig 94, no.1) and Balmuildy (Miller 1922, Pl.XLb, no.17)).

The fabric of this mortarium is in fact rather unusual and stands out from other fabrics in the north-west; it is highly probable that this mortarium was made locally at Maryport. The rim-profile would best fit a date in the mid-second century. 10596/2545 one rim sherd with stamp; 375g Diam 280 25%. Joins 10610/1272 one body (break modern) and base sherd 90g. 10700/3353 one rim sherd from the same vessel, not joining. 95g 11%

1. MH2 near complete flanged mortarium. The spout form with the bead rim crossing the spout, the lack of stamps and the bead rim with a slightly curving downbent flange gives a date cAD170-220. 10596 OR 2591.
2. MH2 mortarium with low bead in line with straight downbent flange. The same form as at Cramond dated AD 190-260 (Hartley 2003 fig. 51 no.32). 1760 OR 3180
3. MH2 6reeded rim mortarium. This is a very battered and abraded piece. The kind of reeded rim mortaria date from cAD230 to some point in the fourth century and this is one of the latest types from this group. 10596 OR2662.
4. MRhaetian 1 mortarium Hartley type Cii (2012), Antonine. Sherds from this vessel were present in phase 3b 10742 OR 3754, phase 3c 10596 OR 3231, 10695 OR1644 and phase 3e 10515 OR 1010

### Phase 3d cAD223/5 to AD250/60 stone buildings 10544, 10545 and 10546 and spread 17000

The pottery from 3d came predominantly from contexts associated with the use of building 10545 and the layer 10700, a spread west of building 10545. This latter group included some considerably later sherds than those from the other contexts in this phase –five sherds of Crambeck ware including a relatively large sherd from a plain-rim dish, a GBB1 developed flanged bowl, BB1 jars with splayed rims and a shoulder groove above the obtuse lattice burnish, a late multi-reeded MH mortarium and more Nene Valley colour coated vessels than in earlier layers. The chronological spread of pottery associated with the use of the phase 3d structures shows a distinct drop around the mid-third century. Stratigraphically speaking, it post-dates phase 3c so must be later than cAD223/5 when obtuse lattice jars are thought to appear. The group included a significant number of wide-mouthed jars of Mucking type K, a Nene Valley scroll beaker, a BB1 jar with obtuse lattice and a shallow shoulder groove, a feature dated from cAD240, multi-reeded Mancetter-Hartshill mortaria of cAD230-330/350, a BB1 bowl with grooved flat-rim, a Nene Valley curved everted –rim beaker and a grey ware Dales type jar. Sherds from the body and part of the rim of a BB1 jar with obtuse lattice and shoulder groove came from the clay floor 10609 of building 10545. The shoulder groove and obtuse lattice gives a terminus post quem around cAD240. This vessel was incomplete and only a small proportion was present. The vessel types indicated activity from cAD230 to cAD250/60 but ending before Crambeck wares, developed flanged bowls and the late splayed rim BB1 jars appeared in any quantity from around AD270. One very small CRA RE sherd was found in this phase but it came from context 10601, a fragmented area of masonry belonging to building 10545 in the south wall where it had otherwise been robbed out. A very battered white ware incomplete rim sherd from 10682 is of uncertain type in both fabric and form but, if it is a developed flanged bowl then this gully may be of rather later date than the building. A rather elegant double lid-seated jar rim came from 10611. This sherd is not very abraded but the double lid-seated form would generally be dated to the late third century at the earliest (Croom et al, 2008, 230) and appears in shell-tempered and gritty wares at Lincoln in the mid- to late fourth century (Darling and Precious 2014, 85). Comparison may, however, be made with a similar vessel found at Old Penrith (Austen 1991 fig. 63 316 F26) which were given a Flavian-Trajanic date because of other forms in this fabric. These forms included a flanged bowl with grooved rim similar to Gillam 1970 no. 301 also dated AD70-130. This form, however, is well known from Lincolnshire where it has been given a rather longer and later date range from the Hadrianic period to the later second century (Darling and Precious 2014, 139 type B333). The double lid-seated jar form is not known at this time in Lincolnshire. The adjustment of the dating of the associated bowls at Old Penrith permits the dating of this jar form to the Hadrianic to late second century although further parallels and well stratified dated instances are desirable.

There is therefore little to indicate ceramic deposition continued late enough to include Crambeck ware, developed flanged bowls, late NV beaker forms or BB1 jars with very splayed rims in any quantity. Small numbers of late third to fourth century vessels (the CRA RE sherd and types with a date range that could extend into the late third or early fourth century but do not have to) suggests activity of some sort continued into the late third to early fourth century but its nature is not clear and it did not include regular deposition of domestic ceramic debris. Certainly by the mid-fourth century no ceramic material at all was being deposited since calcite-gritted Huntcliff-type jars are not represented at all.

10545 Room 1

1. BB1 grooved, flat-rim bowl with burnished intersecting arcs on walls and intersecting loops on base. 35% of the rim is present and the complete profile. The vessel is burnt inside the lower body and base and slightly burnt outside the base. 10607 burnt clay surface OR1556
2. GRB1 everted-rim jar. A long-lived type from around the mid-second to mid-third century. 10553 OR 1487 cleaning of layer 10552.
3. OAA5 base of cheese-press. 10646 discrete deposit in north west corner OR3117.
4. MH2 very small unabraded fragment from tip of multi-reeded mortarium flange, cAD230-350. 10559 remains of clay floor OR1493
5. NV1 large section of scroll beaker. cAD200-260 10646 surface OR10225

Room 2

1. GRC5 rim of double lid-seated jar. See discussion above. Second century. 10611 layer below accumulation 10610. OR 1364.
2. GRB4 37 sherds from the base and body of a jar with acute lattice burnish of Hadrianic-Antonine date. Slight indentation in one wall sherd. 10611 Layer within central/western part of building 10545. Below 10610. Possible upper fill of an earlier feature site which flagstone surface 10697 in building 10545 had slumped/settled. OR 1364
3. GRB19 wide-mouthed jar with wavy line burnish on the shoulder zone defined by a neck cordon and shoulder groove. 1060 accumulation. OR 1278 and 1276.
4. GRB13 shoulder and bodysherds from same type of wide-mouthed jars as no. 41 with wavy line burnish on the shoulder. This has been burnt orange all over. 10610 OR 1200
5. GRB3? Body and neck sherds from same vessel type as nos 41 and 42. This example has also been burnt and the core is orange while the slip has burnt white. The trace of wavy line burnish remains. 10610 OR 1200.
6. GRB19 the rim and neck of a fourth wide-mouthed jar of the same form as the above vessels. 106100 OR 1200
7. GRB24 carinated bowl with everted rim and shelved carination. This type is extremely common in Lincolnshire and is typical of the Antonine period (Darling and Precious 2014, 136 type B334 most common at Lincoln in the mid- to late second century). The Lincolnshire form may be ancestral to the well-known third century series of biconical bowls in east Yorkshire and this particular example from Maryport is not dissimilar to the earlier third century forms in the biconical series of bowls (Swan 2002 fig 15 no. 205). 10610 OR1278.
8. NV1 short curving rim of beaker of late second to early third century type. This sherd looks burnt. 10610 late accumulation within room OR 1278
9. MH2 5reed mortarium. Catterick type M94, cAD200-260 (Bell and Evans 2002). This vessel joins a rim from phase3e layer 10649. 10610 OR 1272.
10. MLNV mortarium very thin-walled, reeded mortarium. Extremely battered and abraded. Probably dating to the first half of the third century. 10610 OR1272

Building 10546

1. GRB3 wide-mouthed everted rim jar with zone of oblique lines on the shoulder zone. The rim form and the decoration both point to a slightly earlier date than nos 41-44 above. In the Upchurch series Monaghan dates this type to the second century (1987 type A1.13) and those with wavy line burnish and hooked or rolled rims to the second to mid-third century (1987 type 4A2. In Kent Pollard (1988 fig. 50 nos 193-4) gives the everted rim type with vertical line burnish a date range of the mid-second to early third century and the rolled-rim type with wavy line burnish an extended date range of mid or late second to early fourth century. 10524 OR 2528
2. GRC3 Dales type jar rim. 10531 surviving wall masonry OR 1142.
3. GRB10 with dark grey/black slip. This could be part of a pedestal base. Jars with very large pedestal bases are known from Mucking dated to cAD120-250 (Lucy and Evans 2016, type G and Jones and Rodwell 1973 type N). This identification is not certain. 10531 surviving wall masonry OR 1142

Structure 10543

1. MH2 5reed mortarium with thumb impressed spout. AD230-300. 10543 OR1429

Layer 10700

This layer contained a wide chronological range of vessel types dating from the Hadrianic to the late third/early fourth century

1. GBB1 bead-rim beaker with acute lattice burnish. Gillam 1976 no. 16 early to mid-second century. 10700 OR 3369
2. BB1 small jar or beaker with sharply everted rim, similar to Gillam 1976 no. 18, third century, perhaps early to mid-third century. 10700 Or 3381
3. BB1a everted-rim jar beaker. Gillam 1976 no. 20, mid-second century. 10700 3289
4. GBB1 everted-rim beaker, Gillam 1976 no. 20, mid-second century. Wheel-thrown. 10700 OR3278
5. GRA1 everted-rim beaker. Perhaps a grey ware copy of the BB1 beakers 10700 3381
6. GRA8 everted-rim jar with shoulder groove. This vessel is very abraded and appears to have abraded raised areas similar to rustication. Late first to early second century. 10700 OR3267
7. GRB19 body of wide-mouthed jar with wavy line shoulder burnish as nos 41-44. 10700 OR3328
8. GRB3 narrow-necked jar with rolled rim, with internal -lid seating. 10700 OR3342
9. GRB1 narrow necked jar with bifid rim possibly frilled lower bifurcation, and broad six ribbed handle. 10700 OR 3317
10. BB1 flat-rim dish with acute lattice or inverted chevron burnish. Gillam 1976 ns 61-2, mid-second century. 10700 OR3358.
11. GRB7 dish with triangular rim. !0700 3369
12. BB2 bead-rim bowl/dishcAD190-240. 10700 OR 3365
13. GBB1 developed bead and flange bowl. Late third to fourth century 10700 OR3317
14. CRA RE plain-rim dish. Late third to fourth century 10700 OR3328
15. NV1 plain-rim beaker with single groove below rim. Late second to mid-third century. 10700 OR3328
16. Wt 160gms Diam 270mms 21% Micaceous, cream fabric with powdery texture; self-coloured. Badly abraded, slightly abrasive and with some red-brown accretion (this is not traces of red-brown slip because it covers the surface of the break in the rim). The inclusions are frequent, tiny and consist of transparent quartz and red-brown material with rare black material. The little trituration grit surviving is mostly black, red-brown (?haematite) and red-brown sandstone. Probably worn in use, but has suffered some abrasion. Source unknown. Probably AD110-140. 10700 OR 3353
17. MH2 bead rim mortarium with flat downbent flange as Catterick M84, cAD200-260. 10700 OR3273
18. MH2 10reed mortarium with shallow reeds between two more prominent reeds. Catterick M107, cAD280-350 10700 OR 3322 and phase 3 ditch 10733 10729 OR1591
19. MOAB1 A large sherd with full spout surviving from a mortarium which had never been stamped. The trituration grit appears to be identical with that used in no. 29 and the fabric is generally similar, but there was no burnishing. Probably local, Hadrianic to Hadrianic-Antonine. 10700 OR3359
20. MOWS4 incomplete rim and flange of mortarium or flanged bowl. Probably Hadrianic. North west. 10700 OR 3268
21. MRHAETIAN2 mortarium Hartley type Cii AD140-200. Perhaps Wroxeter. 10700 OR3286 Part of this mortarium came from 10610 (OR1283)
22. MLNV Reeded hammerhead with thumb depression spout. Reduced during firing, only oxidized at end. Pinkish tinge in surface clay. Lower Nene Valley. Third or fourth century10700 OR3299.

This layer also contained sherds from a handled GRB11 beaker similar to BB1 handled beakers of the mid- second century (Gillam 1976 nos 25 or 27), the Mucking type wide-mouthed jars, a grooved, flat rim bowl, late second to early third century, BB1 plain-rim and grooved-rim dishes (Gillam 1976 types 71, 73 and 77-9), BB1 jar sherds with obtuse lattice and splayed rim jar sherds, sherds from a Cologne roughcast beaker, sherds from more NV beakers and possibly a flagon. OAA2 and OAB5 narrow-necked jar sherds and one everted rim, and one scrap of red slipped ware RSA1

### Phase 3e late third to early fourth century dereliction and demolition layers

The layers in phase 3e post-dated the use of the building and are associated with their dereliction and robbing. The pottery from phase 3e layers had a similar date range to that from 3d but has more sherds redeposited from earlier phases. Again there was very little evidence for anything more than sparse and casual ceramic deposition after the mid-third century. Forms not hitherto noted or of intrinsic interest are illustrated below.

1. FLB ring-necked flagon. Gillam 1970 no. 9 cAD140-80. 10649 OR3067
2. GRB3 wide-mouthed jar of Mucking type K with diamond rouletting on shoulder zone. Diamond rouletting was a distinct decorative motif used at Mucking and has not been found in association with other kiln centres. It is found on the wide-mouthed jars, the pedestal jars with constricted necks, the rebated-rim bowls, and the conical neck beakers (Birss 1983, Jones and Rodwell 1973 nos 30, 36, 37, 45, 61, 80. 82 and 105). Its presence at Maryport provides strong evidence that this group of grey wares come from the Mucking kilns. 10547 OR1699 and OR 1651 and 10537 OR 1104
3. OAB1 triangular rim flagon. Potter 1979 fig 257 dated to the third century (p171) and also York type FC (Monaghan 1997) , late second to early third century 10526 OR1146
4. Trier black slip rebated rim. A small rim from a Symonds 1992 type 7a vessel. cAD200-275. 10537 OR1101
5. MH2 6reed mortarium cAD260-330. Hartley and Leary forthcoming no. 6. 10515 OR1127
6. MH2 flanged mortarium. Catterick M74, AD150-200. 10649 OR3071
7. MH2 7reed mortarium. Hartley and Leary forthcoming no. 34 and Catterick M96 cAD230-280. 10649 OR 3071
8. MH2 6reed mortarium. Hartley and Leary forthcoming no. 7 and 9 220/30-280/300. 10659 OR 3133
9. MOAB3 Wt. 20g. A fragment with incomplete rim-section in very hard fabric, brick red throughout except for a well-defined black layer, *c*2mms thick, below the inside surface and continuing near the upper side of the flange. There is a thin, buff-cream slip visible overall, except on the bead, where the black layer shows through it very clearly. The inclusions are very moderate and ill-sorted, but only tiny to smallish; they include black and red-brown material, and quartz. The sherd is too fragmentary to show the suite of trituration grit used, but those present are mostly opaque white (non-reactive) with a few, transparent, quartz grits.

The fragmentary stamp is probably left-facing and reads from the bead outward. It has most of the first border, part of the D and the beginning of the lower border. When complete, the stamp appears to read DOELIS, but a horizontal bar links the D and the O and another links the top of the O and the top bar of the E. The S is reversed and the upright stem of the initial D joins the left-hand border. The upper and lower borders are distinctive in being composed of simple, teeth-like, vertical bars projecting towards the letters. Stamps from the same die are known from Blackfriars, Carlisle (McCarthy 1990, p262 and fig. 195, no. 11); Moresby (Birley, E, 1948, p.65, no.4 and fig.5, no.4), and Castle Crag, Borrowdale in Cumbria. The die concerned is one of a series of at least 13 dies which vary from giving literate to barely literate stamps. They were used almost entirely with northern, orange- to red-brown fabrics and their readings range through DOC.F, DOCIF[, DOCCIFE (IFE ligatured), DOELIS, d]OCILI retrograde, to DOCEILS /fe]CIT. The only name which would fit all the variants and contractions is Docilis. Before the extended stamps were found, the less common name Doc(c)ius had been suggested (Hartley and Webster 1973, p.95, Q and p.98), but if all do belong to one ‘firm’ the name intended must be Docilis.

These thirteen dies are variously associated with workshops at Wilderspool (Hartley and Webster 1973), Walton-le-Dale (in prep), Carlisle (Johnson et al 2012) and a probable, but unlocated, fourth workshop in Scotland. Docilis was one of the most important ‘potters’ active in them, along with Austinus, DIS/LDB and the potters who made raetian-type mortaria (Hartley 2012). Some of the same dies are linked with use at more than one workshop while some appear to be linked with one workshop only. The Docilis die concerned can probably be attributed to a Carlisle workshop and the very hard firing is in keeping with this source.

A stamp from one of the thirteen dies listed above, is recorded amongst mortaria made at Wilderspool (Hartley and Webster 1973, fig. 8, Q); stamps from this and from a second die are associated with the workshop at Walton-le-Dale (in prep); stamps from two other dies are associated with the workshop located in Fisher St, Carlisle (Johnson et al. 2012) whilst an old find from Fisher Street is from a third die. The 2002 excavations at 7a, Fisher Street were very limited and just served to locate what is likely to be an extensive and important pottery production area (*ibid*).

These workshops normally served local areas; they overlapped in date and probably varied in importance from one period to another, but the production as a whole, covered the Hadrianic and Antonine periods, lying within the period AD110/120-165. Up to 14 mortaria of Docilis, from two of the above dies, have been found in Antonine Scotland leaving no doubt of the longevity of this ‘firm.’ We do not know how the productions were organized, Docilis and the others may have been managers of some kind with potters in these different workshops using stamps with some version of the name Docilis. This premise assumes, of course, that all of the thirteen dies belonged to one ‘firm’ working under the name Docilis.

Much remains to be understood concerning this string of workshops, their organization and the precise dates when they were important. In 1973 both Peter Webster and myself saw the possibility of links between pottery made at Wilderspool and the West Midland workshop supplying Wroxeter, but we did not comment on them (Hartley and Webster). There was further indication of it at 7a Fisher Street, Carlisle and it was discussed in Johnson et al. 2012, p.112-113. The possibility needs to be remembered, though more proof is desirable. (Because of this putative link with the Wroxeter Docilis dies 1 and 2 (Bushe-Fox 1916, fig. 3, no.47 and Bushe-Fox 1913, fig.16, no.4) the 13 dies mentioned above have in the past been referred to illogically, but for convenience, under the umbrella term ‘Docilis 3’ though they are of course individual dies.). For discussion of other linked workshops see Breeze 2016. 10537 OR1099

1. MOAB3 flanged mortarium. Overfired Unstamped form. Antonine rather than earlier. 10555 OR1206

### Phase 4 early fourth century late Roman ditch and pit

Ditch 12002 contained some of the latest types including Crambeck grey and white ware, late splayed rim BB1 jars, developed flanged bowls and an East Yorkshire type lugged jar sherd all dating from the late third or early fourth century. Most of these were bodysherds and are not illustrated for that reason but they, nonetheless, came from the lowest fill of the ditch – the late splayed-rim BB1 jars, the GRA3 lugged type jar, the developed flanged bowl and the Crambeck white ware mortarium sherd- and the upper fills - Crambeck grey ware. Other possibly re-deposited vessels in this phase included at least three or four more wide-mouthed jars of Mucking type, an African type bowl and a bifurcated rim narrow-necked jar.

Ditch 12002

1. BB1 jar with splayed rim, Gillam 1976 no. 11 late third to fourth century. 10752 OR3087
2. GRA2 narrow-necked jar with bifurcated everted rim. 10511 OR1168
3. OAA4 bodysherd gaming piece. 10761 OR1269
4. MH2 4reed mortarium, abraded. Catterick M107 cAD200-230 (Bell and Evans 2002) 10823 OR3131

Other residual Mancetter-Hartshill mortaria included two mortaria with bead rim and downbent flange of the late second to early third century.

Pit 10535 early third century?

The pottery from this pit included three wide-mouthed jars of Mucking type dating to cAD180-250, a fragment of a Mancetter-Hartshill flanged mortarium dating to cAD100-60 and a battered rim sherd from an African type rebated rim bowl of the early third century. Also present were a grooved flat-rim BB1 bowl of the late second to mid-third century and a third century BB1 jar with obtuse lattice burnish as Gillam 1970 no. 9 dated mid- to late third century. The group is similar in range and date to the pottery from phase 3d. Two Dressel 20 amphora sherds from here had graffiti on them (Tomlin this report).

1. OAB3 African type rebated-rim bowl, York type BA3, cAD200-250 (Monaghan 1997). Monaghan says this form could emerge in late second century at York but comes predominantly from early third century levels. 10523 OR 1138

11078 ditch mid-third century

A SAMCG samian mortarium from the lower fill of this ditch is dated AD170-200 while the coarse wares included two further wide-mouthed jars of Mucking type, a 5reed Mancetter Hartshill mortarium (AD200-230) and a NV1 funnel-necked scale beaker of the mid-third century

1. NV1 scale beaker with funnel neck rim. Perrin 1999, 94. Mid-third century. 11007 OR 3709
2. MH2 Reeded rim mortarium with upright bead and bead roughly broken to make spout. Mancetter-Hartshill. Probably first half of 3rd century. 11007 OR3711

### Phase 3 backplot features

Features in the backplot were not directly connected stratigraphically with the building plot and are assigned to phase 3 group to be examined individually.

#### Ditch 10733 mid- to late third century

The infilling of ditch 10733 is dated to the mid-to late third century by the BB1 jar sherd with both obtuse lattice and shoulder groove which is dated after cAD240 as well as a late multi-reeded mortarium joining a sherd from the phase 3d sub-phase layer 10700 (dated 280-350, no. 69) and a white cored grey ware scrap with rouletting which may be Crambeck grey ware. The rest of the pottery from this phase may come from activity contemporary with the phase 3c buildings as the types include the grooved, flat rim BB1 bowls, the plain and grooved rim BB dishes of the late second to early third century, everted rim BB1 jars with obtuse lattice, the wide-mouthed jars of Mucking type and also a rebated-rim bowl also of Mucking type, a 4reeded Mancetter-Hartshill mortarium (Hartley and Leary forthcoming no. 29 cAD190-240 and a Rhineland mortarium (cAD150-250). The group is a close fit to the types found in phase 3d.

1. BB1 grooved flat-rim bowl with burnished arcading. 10729 OR 1347
2. BB1 grooved flat-rim bowl with burnished arcading. 10729 OR 1347
3. BB1 dish with slightly grooved rim burnished arcading. Gillam 1976 no. 77 late second to early third century. 10729 OR 1347
4. GRB3 with some orange streaking rebated rim bowl with incised zone just below rim. Mucking type F (Jones and Rodwell 1973), cAD180-250. . 10729 OR 1347
5. BB1 grooved-rim dish with burnished arcading. Gillam 1976 no. 72 late second century 10729 OR 1349
6. BB1 plain-rim dish with burnished arcading. Gillam 1976 nos 77-9 late second to early third century. 10729 OR 1349
7. BB2 grooved rim dish. Monaghan 1987b type 5F3.8, cAD180-230 10729 OR 1222
8. BB1 curving everted rim jar with shoulder groove and obtuse lattice burnish. Gillam 1976 no. 8 mid-third century. 10729 OR1225.
9. GRB19 wide-mouthed jar of Mucking type. cAD180-250 10729 OR1223
10. OAA3 tankard? With double grooves around upper and middle body. Webster 1976 type 39/41 perhaps. Second or third century. 10729 OR1217
11. OAB5 everted rim bowl. 10729 OR1229
12. Rhineland wall-sided mortarium, AD150-250. 10729 OR1212.
13. OAA bodysherd from tazze. 10595 OR 2763
14. GRB3 bodysherd with post-firing perforation 10599 OR 2791

#### Group 10932 Gully 10748 early to mid-second century

The small group contained sherds from a grooved cornice rim beaker of cAD70-130 and a BB1 necked jar of the early to mid-second century (Gillam 1976 no. 2)

#### Group 11076 second or third century

The two small sherds from pit 11076 include simple everted rim from an OAA2 wide-mouthed jar of Severn Valley type but this cannot be closely dated beyond the second to third century.

#### Group 12003 ditch mid- to late second century with third century sherds in upper fill

A NV scrap with en barbotine decoration was present in the basal fill 10719 which dates the ditch infilling to the third century but the predominantly Antonine sherds suggests its use may have dated to the mid- to late second century. The latest sherds from single fill and later fill groups from this ditch are sherds from a third century BB1 jar with obtuse lattice and another NV scrap

1. GRB18 with traces of orange wash. Narrow necked jar with everted rim and slightly raised zone of shoulder defined by grooves with extremely faint traces of wavy line burnish. Mucking type grey ware cAD180-250. 10721 OR 2821
2. GRB20 small beaded-rim beaker with acute lattice burnish, of BB1 type Gillam 1976 no. 19, early to mid-second century. 1082 OR 2832

#### Group 12004 ditch mid-to late third century

This group included sherds from a mid-third century BB1 jar with obtuse lattice and a shoulder groove (after cAD240), BB1 splayed rim from jars of the mid- and late third century (Gillam 1976 nos 8- 10), the rim of a NV funnel-necked beaker of the mid- to late third century, several wide-mouthed jars of Mucking type, and a small bodysherd from a Trier black slip indented beaker of cAD200-275.

1. BB1 grooved, flat-rim bowl late second to mid-third century, 10655 OR 1649
2. BB1 splayed rim of late jar type, Gillam 1976 no 8 mid-third century. 10655 OR 1649
3. GRB3 rim of wide-mouthed jar of Mucking type cAD180-250. 10655 OR 1649
4. OAA2 narrow-mouthed jar with undercut rim of second-third century type. 10663 OR1341

#### Pit 10619 mid- to late second century late infilling in early third century

The lowest fill contained two sherds from a mid-second century BB1 jar but a small sherd of Nene Valley colour-coated ware was present in the middle fill as well as a bead-rim dish of cAD190-240 while the late fill had a Dr20 amphora rim dated cAD150-210.

#### Pit 10647 early third century

The pottery in this pit came only from the upper fill and included the late BB1 jars with obtuse lattice, CGBS indented beakers of cAD200-210/40, Dressel 20 amphora of 110-150 and 150-210, a BB2 bead-rim dish of cAD190-240, an early third century BB1 grooved-rim dish (Gillam 1976 no. 73), BB1 jars of the mid-second to early third century (Gillam 1976 nos 3-5) and sherds from an NV1 beaker, probably an early third century beaker with upright plain rim and upper body groove. The samian from this pit included a sherd from an East Gaulish beaker dated AD200-250 as well as quite a lot of earlier material.

#### Pit 10672 mid-second century

30 sherds from 5 coarse ware vessels came from this feature; FLB1 flagon of uncertain type, a GRA4 jar with acute lattice and the base of a small GRA4 jar or beaker, a GRB13 everted rim of a jar and 19 sherds from a GR5 everted-rim jar with acute lattice burnish (same as vessel no.19 ). These jars suggest a date in the mid-second century.

#### Pit/well 10674, infilling in the mid-third century

Fragments of three CGBS/Trier2 black-slip beakers were recovered from the lowest fill of this feature dating to AD200-275 along with one very small fragment from a NV1 indented beaker. A further three sherds probably from the same CGBS/Trier2 beakers are present in fill 10662. These were fresh sherds and, although not complete, may have been deposited during an opening or closing ritual since beakers of this fragility would not normally be associated with drawing water or even drinking it at a well head. Symonds (1992) dates all the indented black-slip beakers to the third century and at Lezoux to as late as cAD240 while the Trier types date as late as AD275. These beakers lack the fused fabric typical of Trier beakers and do have some mica but also have the sandwich layered effect typical of Trier so attribution to the kiln site was uncertain. The rest of the pottery from the later fills spans a similar period with the latest sherd being a BB1 jar with grooved shoulder and obtuse lattice from the penultimate fill 10662 dating from cAD240 or later. This ceramic range suggest use in the earlier half of the third century although, if this were a closure deposit, this only dates the end of the well’s working life.

The fill of the second step of the pit included a third century BB1 jar (Gillam 1976 no. 10) and a grooved, flat-rim bowl (late second to mid-third century). These types point to disuse by the mid-third century

1. CGBS/Trier2 black-slip beaker with long neck and globular body with rounded indentations 10986 OR 3546
2. CGBS/Trier2 black-slip beaker with long neck and long body with oval indentations 10986 OR 3546
3. CGBS/Trier2 black-slip beaker with slit indentations 10986 OR 3546
4. BB1 jar with splayed rim, Gillam 1976 no. 10 late third to fourth century. Although Gillam dates this rather splayed rim to the late third century and later, it may be a little earlier than that since the girth would be greater than the rim diameter. Perhaps a mid-third century date would fit better. 10981 OR 3404
5. BB1 grooved flat rim bowl. Late second to mid-third century 10981 OR 3404

#### 10734 mid- to late third century

The developed flanged bowl from the fill of this feature give a date of cAD270 to fourth century for the final infilling. Other types are of the same type as those found in phase 3d, namely the wide-mouthed Mucking type jars, mid-third century BB1 everted rim jars (Gillam 1976 nos. 8-9), a CGBS beaker sherd (Lezoux micaceous fabric), NV1 beaker fragments including a cornice rim and a fragment from a scroll beaker or Hunt cup of the early to mid-third century and an MH2 7reed mortarium with thumb impressed spout, cAD230-300.

1. GRB3 wide-mouthed jar of Mucking type, cAD180-250. 10731 OR1293
2. BB1 developed flanged bowl, 270-fourth century. 10731 OR 1293
3. MH2 7reed mortarium with thumb spout. Hartley and Leary forthcoming no.33. AD230-300 10731 OR1325

#### Pit 10736 early to mid-third century

A tiny scrap from a NV1 scroll beaker came from fill 10728 giving an early to mid-third century date range. Also present in this fill were sherds from a wide-mouthed jar of Mucking type, a BB1 beaker and plain-rim dish of late second to early third century (Gillam 1976 no. 77) and a BB1 flat-rim bowl/dish (Gillam 1076 nos 37 or 54, early to mid-second century). Sherds from the secondary fill are from an OBA2 indented beaker perhaps copying the third century Nene Valley types, a GRB9 rebated rim from a Mucking type F jar, BB1 jars sherds with obtuse lattice and mid-third century jar rim type (Gillam 1976 no. 9) and a late second to early third century BB1 plain-rim dish. These types compare well with those from phase 3c. There were no pieces firmly dated after the mid-third century. However two vesicular bodysherds from the secondary fill had some quite rhomboidal vesicles suggestive of calcite, raising the possibility of a Pre-Huntcliff or Huntcliff jar and a late third to fourth century date (Swan et al 2009, p 608). Only one diagnostic calcite-gritted sherd came from the site and this was a pre-Huntcliff type jar rim from an unstratified deposit, in marked contrast to the large number of Huntcliff type jars in the Museum collection from the fort.

1. BB1 flat-rim bowl with acute lattice burnish. Early to mid-second century. 10728 OR1266
2. GRB19 wide-mouthed jar of Mucking type. cAD180-250. 10728 OR 1204 and 10729 OR 1347

#### Ditch 10786 early to mid-third century

Only two diagnostic vessel types came from this spread, fragments from a reeded mortarium only broadly datable to cAD230-350 and sherds from two GRB12 and GRB19 wide-mouthed jars of Mucking type dating to cAD180-250 and first appearing in phase 3c

#### 10797 late third or fourth century

A small diverse group including a Crambeck grey ware sherd giving a late third to fourth century date. Other diagnostic 7pieces included a 7reed mortarium, 230-300 and an OAA2 sherd with incised lines around a clear area, possibly a face or head pot.

1. MH2 7reed rim mortarium. cAD230-300. 10798 OR2840
2. OAA2 sherd with incised lines around a clear area. Possibly a face or headpot. 10798 oR2843

#### 10956 mid- to late second century

The latest diagnostic sherd- GRA8 bowl with lower body flange- is of mid- to late second century date. Less well dated sherds of BB1 and grey ware were also present

1. GRA8 bodysherd from bowl with lower body flange as Gillam 1970 no.200 AD140-200

A number of other features contained small ceramic groups of predominantly undiagnostic coarse wares. Pit 10820 contained late second to early third century types such a BB1 grooved- rim dish (Gillam 1976 no. 73 early third century), a mid- to late second century BB1 and a GRB20 jar rim (Gillam 1976 nos 3 or 4) and several grey ware everted-rim jars of the mid- second to first half of the third century (in GRB12, 15 and 20). A single sherd from pit 10874.a flat-rim BB1 dish was of mid second century date (Gillam 1976 nos 60-62). Datable sherds from pit 10991 comprised a grooved flat-rim bowl (late second to mid-third century), a BB1 jar sherd with shoulder groove and obtuse lattice (cAD240 or later), a BB1 plain-rim dish (late second to early third century, Gillam 1976 no. 79). Other than these contexts a number of spreads and layers in the backplot contained predominantly mid- to late second century sherds apart from BB1 jar sherds with obtuse lattice from contexts 10732 and 10847.

### Sherds of intrinsic interest

1. RMS13 (10502)/1427 COL WH 75gms Diam c. 360mms 8% One rim sherd in, fine-textured, cream fabric; self-coloured. The texture is softish and powdery. Inclusions: quartz, iron-slag, occasional red-brown and possibly flint. The sherd is broken too high for trituration grit to be visible, but it would have been composed primarily or solely of flint and quartz (Tomber and Dore 1998, p.133-134, COL WH, Colchester).

The left-facing stamp is from the most commonly used herringbone type die in the second-century workshops at Colchester (Hull 1963, fig. 60, no.30, but one of the drawings in Symonds & Wade 1991, fig. 4.27, no. 137, is clearer in detail; see p.205, S136-138 for details of its distribution).

Mortaria stamped with herringbone type dies were produced at Colchester in far greater abundance than those with name stamps. These mortaria were transported to Antonine Scotland in such numbers that a case might possibly be made out to support the idea that the ‘herringbone’ production was set up specifically for that purpose (only two Colchester name stamps, both Messor are recorded there). Whatever the reason, this fact makes the herringbone mortaria the most important mortarium production at Colchester. For some discussion, see in Symonds and Wade 1991, 205-9 and MacIvor, Thomas and Breeze 1980, 263-264; see also Maxfield forthcoming, ‘Chapter 17, Concluding comments’.

Up to 26 mortaria with this individual stamp are now recorded from Antonine Scotland which provides an optimum production date of AD135/140-170. A much smaller number of the Colchester herringbone mortaria reached north-eastern England along with a few of the Colchester mortaria with name stamps. Colchester mortaria are rarely found in north-west England and even in the western sector of the Antonine Wall they are less common than in the east.

1. RMS 13 10696/1358 220gms 360mms 18% 3 joining rim sherds with half of a rivet-hole. Deep, rounded, incurved rim; bead below flange. Pale brownish-cream fabric; self-coloured, powdery in texture. Inclusions: frequent, barely visible at x20 to very small, quartz and red-brown, few black; some somewhat larger inclusions of same type. Flavian. Probably made at Elginhaugh.

## Assemblage characteristics and spatial distribution of vessel types

Overall the assemblage is characterised by relatively large quantities of imported and traded wares with a high proportion of vessels associated with the serving of food in the Roman way, namely flagons, dishes, bowls and beakers. This is typical of military sites and the number of decorated samian bowls is particularly linked with extra-mural settlements (Monteil this report).

As discussed above, some of the groups are of mixed chronology and therefore are not reliable indicators of character or function, particularly the phase 3c group, while others are rather too small to be reliable, such as phases 2-3b. It was possible to examine groups from phase 3d and the phase 3 backplot group for evidence of functional variation. Within the phase 3d stone building 10545 contrasting vessel types come from rooms 1 and 2. There are more samian bowls and decorated bowls from room 1, and more coarse ware bowls also, whereas there are few from room 2 but more medium and wide-mouthed jars, beakers and mortaria (using EVES) although mortarium bodysherds are present in room 1. A cheese-press fragment was also found in room 1. Although a functional item, softly pressed curd cheeses (Ovid Metamorphoses VIII, 665 lactis massa coacti a mass of curdled milk) would probably be served still in the mould. The “beakers” from room 2 are predominantly made up by a BB1 coarse ware beaker/small jar and the carinated beaker/bowl form in grey ware (no 45.) which was heavily burnt and certainly served a different purpose to the fine ware beakers used as table ware so this apparent anomaly may be disregarded. This suggests a difference in function with room 1 being associated with eating and drinking and room 2 with food preparation. There is also a greater quantity of burnt and sooted sherds in room 2 which might support this. The distribution of pottery fabrics tell the same story with more finewares - samian, colour-coated wares and oxidised wares - in room 1 and more grey wares and mortarium wares in room 2.The same pattern could be observed in the ceramic material from phase 3d in rooms 1 and 2 of this building which suggests the ceramic debris from this phase in building 10545 came from its occupation rather than neighbouring activity.

The amphora vessels were concentrated in the backplot, the abandonment layers of 3c and 3e and the post-Roman layers (Table 3 using EVES). Jars were more common in the backplot and in the phase 4 group and drinking vessels were also less common in these groups. Mortaria and drinking vessels were most numerous in phase 3d.

Fragments from three black-slip beakers in the lowest fill of well 10674 may well relate to an opening or closure rite and vessel types such as the face or head pot fragment and the miniature cauldron sherd hint at other ritual behaviour but these appear to have been deposited here as ceramic refuse after their useful life was over. A fragment of OAA5 cheese-press came from phase 3d building 10545 room 1 context 10646, a discrete deposit in north west corner, so may relate to activities being carried out in this room (see above).

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Vessel/phase** | **2 Very Early Roman** | **3 Back plot** | **3a 1st building** | **3b 2nd building** | **3c abandonment** | **3d stone building** | **3e demolition and robbing** | **4 Very late Roman C3rd-4th** | **5 Post-Roman** | **US** | **Total RE** | **% of total assemblage** |
| **A** |  | 3% |  |  | 2% |  | 2% |  | 4% |  | 97 | 2% |
| **Bowl/dish** | 100% | 41% | 32% | 43% | 34% | 30% | 30% | 26% | 34% | 37% | 2097 | 34% |
| **Drinking vessels** |  | 13% | 1% | 46% | 12% | 21% | 8% | 4% | 12% | 13% | 901 | 15% |
| **Flagon** |  | 1% |  |  | 16% |  | 18% |  | 8% |  | 398 | 7% |
| **Jar** |  | 38% | 68% | 12% | 25% | 34% | 32% | 57% | 32% | 39% | 2041 | 34% |
| **Mortarium** |  | 4% |  |  | 9% | 15% | 9% | 14% | 10% | 11% | 536 | 9% |
| **Other** |  |  |  |  | 1% |  | 1% |  |  |  | 17 | 0% |
| **Total** | 18 | 1297 | 111 | 363 | 1322 | 1172 | 665 | 414 | 585 | 140 | 6087 | 100% |

Table Relative quantities of vessel types by phase, quantified using rim percentage values, total absolute values given (includes samian)

## Sherd conditions

Scorching and sooting are the most common sherd conditions and these were concentrated in the backplot and in the phase 3c and 3d layers/10700. Bunt and sooted sherds were both concentrated particularly is contexts 10596, 10700 and 10729. Both conditions were predominantly jars but a number of BB1 bowls and dishes were also burnt or sooted. The burnt amphora may be blackened during firing rather than usage. Details of the position of sooting and scorching is available in the archive catalogue.

Evidence of repair, modification and re-use and wasted/seconds was not common enough to examine patterns through time or space. However only the amphorae were modified by sawing off or breaking off the handles although two sherds (FLA1 and OAA 4 from phase 3 group 12003 and phase 4 group 12002) were modified to make counters or discs probably for gaming.

Two sherds of Dressel 20 amphora had graffiti on them and are reported on by Tomlin (this report)

| **Conditions/phase** | **sooting** | **Burnt** | **Sawn off handle/modified amphorae** | **Graffiti** | **Repaired** | **Waster** |
| --- | --- | --- | --- | --- | --- | --- |
| **3 Roman back plot** | 36 | 36 |  |  | 2 | 2 |
| **3a 1st building** | 2 | 6 |  |  |  |  |
| **3b 2nd building** | 5 | 8 |  |  | 1 |  |
| **3c abandonment** | 26 | 32 | 2 |  | **1** | **2** |
| **3d stone building** | 26 | 38 | 4 |  |  | 1 |
| **3e demolition and robbing** | 10 | 11 | 1 |  |  |  |
| **4 Very late Roman C3rd-4th** | 7 | 7 |  | 2 |  |  |
| **5 Post-Roman** | 7 | 6 |  |  |  |  |
| **US** | 1 | 3 |  |  |  |  |
| **Grand Total** | 120 | 147 | 7 | 2 | 4 | 5 |

Table Sherd condition (coarse wares only), count by record

|  |  |  |
| --- | --- | --- |
| Vessel | Burnt | Sooted |
| Amphora | 12 |  |
| Bowl | 10 | 16 |
| Bowl/Dish | 26 | 19 |
| Beaker | 4 | 7 |
| Dish | 18 | 4 |
| Jar | 51 | 72 |
| Mortarium | 6 |  |
| Small jar | 1 |  |
| Wide-mouthed jar | 6 | 1 |
| Indeterminate | 13 | 1 |
| Total | 147 | 120 |

Table vessel types and sherd conditions (coarse ware only) by record count

## Trade and exchange

Our consideration of trade and exchange is again hampered by the small number of sherds recovered from the early phases and the mixed nature of some of the later and larger assemblages (see Table 6- Table 7). Re-deposition of earlier pottery makes it difficult to separate out the assemblage into chronological groups but some trends are commented upon. Despite this the assemblage has provided evidence for previously unknown ceramic supply.

In the Hadrianic-early Antonine period there is evidence for local pottery manufacture. This is found in the form of the locally made mortaria identified by Kay Hartley and a small number of distorted and very hard fired grey ware jars with everted rims and acute lattice burnish. One of these mortaria was stamped and Kay Hartley dates this vessel to the mid-second century. The hard fired and distorted grey ware sherds (fabrics GRA1 and GRB4) compare well with a distorted everted-rim jar with acute lattice burnish found at the fort (Greene 1976 fig 11 no. 8) where it was given a Hadrianic date range and compared with Hadrianic-early Antonine jar types (Gillam 1970 nos 115-6). There is one GRB11 rim sherd from a jar similar to a third century BB1 jar (Gillam 1976 no. 9) and other sherds similar to the cavetto rim BB2 jars so these local workshops continue into the later Antonine period The GRA and GRB local fabrics were present from phase 2 (see Table 6- Table 7). A large number of sherds from a jar of this type were present in layer 10611 in phase 3d building 10545 (no. 40). This layer is said to be possibly the upper fill of an earlier feature into which the flagstone surface 10697 in building 10545 had slumped or settled. Together these vessels provide evidence for some local manufacture of coarse ware in the Hadrianic period and perhaps into the early Antonine period and continuing through the second century perhaps as late as the early third century..

In addition to these, a group of BB1 vessels in a previously unrecognised fabric was identified (see archive catalogue for details). This was first identified amongst the sherds excavated during the Temples excavation project. The fabric is handmade and brown-black and is used to make BB1 jars. It differs from other BB1 fabrics in having less quartz and distinctive coarse brown inclusions. These are flat and soft like mudstone. Examples of this ware were shown to David Williams and Paul Bidwell who confirmed these were not Dorset BB1 and were not a known BB1 fabric. Further analysis suggested….

Forms made in this fabric comprised BB1 jars as Gillam type 2-3 of the mid- or late second century, a flat-rim bowl/dish with acute lattice burnish of early to mid-second century type, a flat-rim bowl or dish with traces of curvilinear decoration, perhaps arcading of the later second century, a small beaker as Gillam 1970 no. 20 and jar bodysherds with obtuse lattice burnish of third century date. This date range indicates prolonged manufacture rather than a brief response to supply difficulties. The numbers of sherds identified are very small and, although it may emphasise the insignificant contribution made by this BB1 source, it also highlights the trickle of vessels coming from a wide-range of sources.

Lastly, and in contrast to the previous two groups, a surprising number of Essex/north Kent grey ware vessels were identified, predominantly wide-mouthed jars including one with the distinctive diamond rouletting known from the kilns at Mucking in the Thames Estuary (see Table 6- Table 7). The Thames Estuary industry in Essex and north Kent also manufactured BB2 vessels which were distributed to the northern frontier but this is found predominantly on the eastern side of Hadrian’s Wall rather the western. The earliest occurrence of the north Kent wares in the north identified by Monaghan (1987) are on the Antonine Wall and in Scotland and these include a poppyhead beakers from at Mumrills, Newsteads, Traprain Law, a globular everted rim beaker and sherds from narrow necked jar from Camelon and an indented beaker from Castlecary, a carinated beaker sherd at Traprain Law. Of the forms listed by Monaghan from Scotland, only the indented beaker form from Castlecary is a type made at Mucking and Bidwell includes this in his list of BB2 related vessels (1994, 231). This vessel could, of course, be from other kilns in south Essex and north Kent. None of the vessels found on the Antonine Wall compare with those at Maryport.

On Hadrian’s Wall grey wares comparable to the Maryport Thames Estuary group have been recognised in the north east by Paul Bidwell. Forms include the lid seated jar form Gillam 151, the wide-mouthed jar also found at Maryport, narrow-necked jars and flasks, rebated rim bowl, everted, almond-shaped and hooked-rim jars, bead-rim jars, beakers including poppyhead beakers, as well as some shell-tempered storage jars of a type found in north Kent. The distinct diamond rouletting decoration known at Mucking (see no.75) has been found in the north east at Wallsend (Bidwell and Watson 1989 fig. 4 no. 4 from context dated after c250).

In the north east Bidwell has shown these Thames estuary grey wares occur from the late second to the mid-third century and argue that this continued as late as the last two decades of the third century (Bidwell and Speak 1994, 224). The quantities of BB2 are far greater than the Thames Estuary grey wares but nonetheless a clear rise in the latter can be seen from the late second century, when they first appear at Vindolanda after cAD180 (being absent from the Vindolanda destruction deposit), to peak in the mid-third century (Croom 2003, 244-5, Bidwell and Croom 2002 table 15.13, Bidwell and Speak 1994 table 8.10, Bidwell and MacBride 2010 table10). At Maryport the number of forms identified is much more restricted. The wide-mouthed jars are far and away the most common type with one possible rim from a Gillam 151 jar, sherds from narrow-necked jars, a possible pedestal jar, and one rebated rim bowl. BB2 jars, bowls and dishes are not common at Maryport. These grey wares have not been recognised at other sites in the north west in any quantity. Small numbers of sherds have been found at Ravenglass (Bidwell and Croom 2015, 67) and Carlisle (Swan et al 2009, 643) and more may be recognised as this range of fabrics and forms become better known but the forms are not present in the well-illustrated groups such as Bewcastle, Old Penrith, Ravenglass, Watercrook and Bowness-on-Solway nor amongst the recently studied groups from Brougham cemetery and vicus Austen 1991, Potter 1979, Evans 2004, Leary 2016).

The ware group first occurs at Maryport in phase 3a but not in quantity until phase 3c. The Essex grey wares occur in increasing quantity in phases 3c and 3d rising from 5% to 11% by weight and 5% to 12% by count, a similar pattern to that found in the north-east. If third century group at Maryport is compared with other groups of similar date in the north west, the wide-mouthed jar form does not occur in the numbers found at Maryport. At Carlisle, Ravenglass, Watercrook, Old Penrith, Bewcastle and Birdoswald, for which we have fairly large assemblages published, wide-mouthed jars appear, from the illustrated pottery, to be in short supply. Even at Brougham (Leary forthcoming), where Severn Valley type wares were relatively common, wide-mouthed jars in any ware, only make-up 1% of the total vessel EVES compared with 6% at Maryport as a whole rising to 17% in phase 3d building 10545. At Brougham the majority of the Severn Valley type ware vessels were narrow-necked jars as they are at Maryport.

The number of Essex wide-mouthed jars is perhaps a little high to be explained as the property of an individual and, although small numbers of BB2 vessels are present and a Colchester mortarium was found, there is nothing obvious in the ceramic assemblage to explain why they were brought to the site or to associate them with in terms of trade. Although instances of Essex grey ware have been noted at other sites in Cumbria trade in quantity is not apparent at other contemporary sites in the region.

Apart from these three sources, the pattern of ceramic supply is normal. BB1 and grey ware copies of BB1 provide the bulk of the cooking wares and samian the tablewares. Only the assemblages from 3c and 3d are large enough to consider whether trade patterns altered at all and these groups suggest the numbers of BB1 vessels declined in 3d in favour of local grey wares, Essex grey wares and oxidised wares although BB1 appears to rise again in phase 4 when there are fewer grey wares. A decline in BB1 by the mid-third century was noted at Carlisle and also at Brougham vicus in the late third century phase (Swan et al. 2009, 602 and Leary forthcoming).

The relative quantity of samian by weight (13% excluding amphora) and EVES (16%) is broadly comparable to values found at extra-mural settlement at Carlisle and Greta Bridge by weight (Taylor 1991, table 49 and Casey et al 1998 table 5). The Carlisle groups are much higher by EVES but the contemporary group from Greta Bridge is comparable. At Brougham vicus the relative quantity of samian overall is a little higher than Maryport at 17% using weight (excluding amphora, Ward and Leary in prep). Brougham had more third century samian and this probably accounts for the difference.

Significant amounts of pottery of Severn Valley type is present 11% by weight excluding amphora) and this was made up primarily of narrow-necked jars and some tankards. The fabrics and some particulars of the forms were paralleled by Severn Valley types but various sources in the north west have been suggested (see above). This is far short of the quantities reaching Brougham (20% by weight excluding amphora) but may be accounted for by the Essex grey wares which contribute some 11% by weight (excluding amphora).

Small amounts of fine ware beakers were obtained from Gaul, Cologne, and Trier and rather more from the Nene Valley. The latter source also supplied a painted parchment ware flask and a mortarium. Minor traded coarse wares including a Lincolnshire type carinated bowl, a gritty grey ware Dales type jar probably from Yorkshire, two oxidised ware African type bowls, perhaps from Yorkshire and bodysherds of Derbyshire ware (also found at Birdoswald, Bewcastle and Brampton, Wilmott 1997, 237, Austen 1991, 28-9 and Gillam 1973, 61, Burgh-by-Sands, Evans 2005, 38 and Brougham, Leary forthcoming). These may mark the movement of individuals rather than formal trade or piggy back trade accompanying some other commodity which we have not sourced.

In the second century mortaria appears to have been supplied locally near Maryport or at sources in the north west yet to be identified (Table 1). One vessel from Colchester, one Rhaetian mortarium probably from Wroxeter and two second century mortarium from Mancetter-Hartshill are the only mortaria obtained from further away. At the end of the second century and in the third century mortaria from Mancetter –Hartshill flood the market in the North (Hartley 1991, 173) and Maryport benefited from this trade with the addition of at least three mortaria from the Lower Nene Valley one from the Rhineland and nine samian mortaria.

The amphora assemblage is almost entirely made up of Dressel 20 amphorae containing olive oil. Bodysherds of imported wine Gauloise amphorae were identified by David Williams as well as a possible British Gauloise vessel. To these may be added two sherds from the third century black sand wine amphora from Italy, a South Spanish amphora containing originally fish sauce and one small amphora lid. Supply of wine to the northern frontier is thought to have been largely by barrels.

| **Wares** | **2 Very Early Roman** | **3 Roman back plot** | **3a 1st building** | **3b 2nd building** | **3c abandonment** | **3d stone building** | **3e demolition and robbing** | **4 Very late Roman C3rd-4th** | **5 Post-Roman** | **US** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A | 6.25% | 10.73% | 8.04% | 10.03% | 12.08% | 14.81% | 18.99% | 20.61% | 7.86% | 5.92% |
| BB1 |  | 22.34% | 48.21% | 25.08% | 26.75% | 19.11% | 19.48% | 23.03% | 11.95% | 23.67% |
| BB2 |  | 0.47% |  | 0.94% | 0.75% | 0.26% | 0.82% | 0.66% | 0.98% |  |
| CC |  | 0.16% |  | 0.31% | 0.50% | 0.44% | 0.16% | 0.44% |  | 2.37% |
| CC BS |  | 1.26% |  | 0.31% | 0.08% | 0.79% | 0.33% | 0.22% | 1.64% | 1.18% |
| CC RHC |  | 1.10% |  | 3.76% | 0.33% | 0.18% | 0.49% |  | 0.16% |  |
| CRA RE |  | 0.16% |  | 0.31% |  | 0.61% |  | 0.88% | 0.82% | 0.59% |
| DBY |  |  |  |  |  | 0.09% |  |  |  |  |
| EYCT |  | 0.32% |  |  |  |  |  |  | 0.33% |  |
| GRA | 6.25% | 1.50% | 3.57% | 3.45% | 2.58% | 1.58% | 4.09% | 3.29% | 3.60% | 2.96% |
| GRA local |  | 0.08% |  | 0.63% | 0.42% | 0.96% |  |  | 0.49% |  |
| GRB | 6.25% | 8.13% | 0.89% | 9.40% | 10.08% | 2.19% | 5.40% | 2.85% | 5.89% | 2.37% |
| GRB Essex |  | 12.08% | 0.89% | 3.45% | 4.58% | 12.45% | 9.33% | 10.09% | 8.35% | 8.88% |
| GRB Lincs |  |  |  |  |  | 0.70% | 0.82% |  |  |  |
| GRB local |  | 6.08% | 8.04% | 6.90% | 7.42% | 14.72% | 5.73% | 3.95% | 4.91% | 1.78% |
| GRC |  | 0.16% |  |  | 0.17% | 0.88% |  | 0.44% |  |  |
| GRC Dales type |  |  |  |  |  | 0.09% |  |  |  |  |
| M |  | 1.97% |  | 0.94% | 2.33% | 2.37% | 4.91% | 3.07% | 3.93% | 3.55% |
| NV | 6.25% | 2.29% |  | 2.19% | 0.92% | 2.72% | 1.31% | 1.10% | 1.96% | 3.55% |
| NV PA |  | 0.16% |  |  |  |  |  |  |  |  |
| O |  |  |  |  |  |  |  | 0.44% |  | 0.59% |
| OAA |  | 0.79% |  | 0.31% |  | 0.18% | 0.49% |  | 0.33% |  |
| OAA/SV | 12.50% | 10.42% | 3.57% | 5.02% | 8.67% | 10.60% | 6.38% | 12.06% | 23.24% | 13.61% |
| OAB | 6.25% | 3.87% | 16.96% | 10.34% | 5.25% | 2.45% | 5.89% | 3.73% | 3.11% | 2.37% |
| OAC |  | 0.08% |  | 0.31% | 0.50% | 0.44% |  | 1.32% | 1.64% | 1.78% |
| RSA |  | 0.16% |  |  |  | 0.09% |  |  |  |  |
| VESIC |  | 0.47% |  |  | 0.17% |  | 0.16% |  |  |  |
| WS |  | 0.87% | 2.68% | 1.57% | 1.42% | 0.88% | 3.76% | 0.22% | 0.16% |  |
| WW |  | 0.87% |  |  | 1.50% | 0.44% | 1.31% | 0.44% | 0.82% | 2.37% |
| SAM | 56.25% | 13.50% | 7.14% | 14.73% | 13.50% | 9.99% | 10.15% | 11.18% | 17.84% | 22.49% |
| **Sherd count** | **16** | **1267** | **112** | **319** | **1200** | **1141** | **611** | **456** | **611** | **169** |

Table Relative quantities of ware groups by phase using sherd counts (including samian)

| **Wares (excl amphora)** | **2 Very Early Roman** | **3 Roman back plot** | **3a 1st building** | **3b 2nd building** | **3c abandonment** | **3d stone building** | **3e demolition and robbing** | **4 Very late Roman C3rd-4th** | **5 Post-Roman** | **US** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BB1 |  | 30.16% | 67.49% | 30.74% | 24.17% | 15.49% | 18.18% | 26.68% | 11.49% | 22.59% |
| BB2 |  | 1.23% |  | 2.11% | 0.70% | 0.27% | 1.53% | 0.75% | 2.51% |  |
| CC |  | 0.01% |  | 0.05% | 0.10% | 0.07% | 0.09% | 0.07% |  | 0.37% |
| CC BS |  | 0.55% |  | 0.02% | 0.01% | 0.06% | 0.05% | 0.01% | 0.32% | 0.08% |
| CC RHC |  | 0.18% |  | 0.79% | 0.39% | 0.08% | 0.41% |  | 0.17% |  |
| CRA RE |  | 0.30% |  | 0.30% |  | 0.50% |  | 1.99% | 1.12% | 0.49% |
| DBY |  |  |  |  |  | 0.07% |  |  |  |  |
| EYCT |  | 2.17% |  |  |  |  |  |  | 0.28% |  |
| GRA | 6.44% | 1.69% | 6.00% | 2.07% | 2.86% | 0.93% | 5.13% | 5.96% | 1.92% | 1.37% |
| GRA local |  | 0.14% |  | 0.36% | 0.41% | 1.32% |  |  | 0.20% |  |
| GRB | 6.13% | 8.92% | 0.23% | 5.21% | 7.32% | 1.44% | 5.51% | 4.09% | 9.01% | 5.28% |
| GRB Essex |  | 14.82% | 1.13% | 1.90% | 4.86% | 10.75% | 20.20% | 15.19% | 8.54% | 17.22% |
| GRB Lincs |  |  |  |  |  | 0.67% | 0.74% |  |  |  |
| GRB local |  | 5.48% | 8.33% | 5.05% | 6.69% | 14.72% | 4.69% | 6.43% | 8.51% | 2.13% |
| GRC |  | 0.18% |  |  | 0.24% | 0.65% |  | 0.74% |  |  |
| GRC Dales type |  |  |  |  |  | 0.03% |  |  |  |  |
| M |  | 9.68% |  | 7.49% | 16.28% | 20.93% | 17.13% | 14.29% | 17.95% | 13.36% |
| NV | 0.61% | 1.05% |  | 1.26% | 0.49% | 1.11% | 0.96% | 0.53% | 0.84% | 0.51% |
| NV PA |  | 0.14% |  |  |  |  |  |  |  |  |
| O |  |  |  |  |  |  |  | 0.03% |  | 0.03% |
| OAA |  | 0.91% |  | 0.30% |  | 0.28% | 0.82% |  | 0.10% |  |
| OAA/SV | 22.09% | 7.62% | 1.71% | 3.81% | 9.99% | 19.28% | 6.08% | 8.56% | 11.54% | 8.14% |
| OAB | 2.61% | 2.31% | 4.01% | 9.35% | 2.98% | 1.18% | 4.64% | 9.71% | 1.72% | 2.67% |
| OAC |  | 0.09% |  | 4.76% | 0.16% | 0.27% |  | 0.27% | 2.61% | 3.68% |
| RSA |  | 0.00% |  |  |  | 0.02% |  |  |  |  |
| VESIC |  | 0.88% |  |  | 0.25% |  | 0.17% |  |  |  |
| WS |  | 0.31% | 0.86% | 2.17% | 1.20% | 0.39% | 1.95% | 0.11% | 0.44% |  |
| WW |  | 0.48% |  |  | 1.17% | 0.17% | 0.67% | 0.10% | 0.51% | 0.48% |
| SAM | 62.12% | 10.69% | 10.24% | 22.28% | 19.73% | 9.32% | 11.04% | 4.47% | 20.21% | 21.60% |
| **Total g.** | **130** | **12100** | **772** | **2258** | **10548** | **14097** | **5324** | **3830** | **5270** | **1148** |

Table Relative quantities of ware groups by phase using sherd weight excluding amphora (including samian)

| **Wares** | **2 Very Early Roman** | **3 Roman back plot** | **3a 1st building** | **3b 2nd building** | **3c abandonment** | **3d stone building** | **3e demolition and robbing** | **4 Very late Roman C3rd-4th** | **5 Post-Roman** | **US** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A |  | 2.70% |  |  | 2.04% |  | 1.80% |  | 3.93% |  |
| BB1 |  | 37.78% | 56.76% | 46.01% | 29.05% | 22.87% | 24.51% | 31.16% | 15.38% | 19.29% |
| BB2 |  | 0.62% |  | 6.34% | 1.74% | 1.45% | 1.95% | 2.90% | 4.10% |  |
| CC |  |  |  | 1.38% |  |  |  | 1.21% |  |  |
| CC BS |  |  |  |  |  |  | 1.35% |  | 1.03% |  |
| CC RHC |  | 3.70% |  | 4.68% |  | 0.43% |  |  |  |  |
| CRA RE |  |  |  |  |  | 0.68% |  |  | 1.37% | 3.57% |
| DBY |  |  |  |  |  |  |  |  |  |  |
| EYCT |  |  |  |  |  |  |  |  | 0.34% |  |
| GRA |  |  | 18.92% | 5.51% | 1.89% | 4.10% | 3.46% | 6.76% | 4.62% |  |
| GRA local |  |  |  |  | 8.93% |  |  |  |  |  |
| GRB | 22.22% | 9.95% |  | 2.48% | 5.45% | 1.71% | 5.26% | 4.59% | 2.56% | 1.43% |
| GRB Essex |  | 9.64% |  | 0.83% | 3.03% | 10.67% | 11.88% | 18.36% | 2.22% | 7.86% |
| GRB Lincs |  |  |  |  |  | 4.78% | 2.41% |  |  |  |
| GRB local |  | 10.64% |  |  | 7.49% | 15.36% | 7.37% | 10.63% | 18.63% | 10.71% |
| GRC |  |  |  |  |  | 1.71% |  |  |  |  |
| GRC Dales type |  |  |  |  |  | 0.17% |  |  |  |  |
| M |  | 3.39% |  |  | 8.77% | 14.76% | 8.87% | 14.01% | 10.43% | 10.71% |
| NV |  | 1.00% |  | 3.86% | 1.59% | 5.03% | 2.56% | 2.42% | 3.42% | 7.14% |
| NV PA |  |  |  |  |  |  |  |  |  |  |
| O |  |  |  |  |  |  |  |  |  |  |
| OAA |  | 1.93% |  | 4.13% |  |  |  |  |  |  |
| OAA/SV |  | 4.55% |  |  | 5.60% | 1.28% |  | 1.21% | 3.42% | 5.00% |
| OAB |  | 1.54% | 0.90% |  | 3.25% | 1.28% | 2.11% | 1.21% | 1.71% | 7.14% |
| OAC |  |  |  |  |  |  |  |  | 0.85% |  |
| RSA |  |  |  |  |  |  |  |  |  |  |
| VESIC |  |  |  |  |  |  |  |  |  |  |
| WS |  | 0.46% |  |  | 3.56% |  | 15.19% |  |  |  |
| WW |  |  |  |  |  | 0.51% |  |  | 3.08% |  |
| NP |  |  |  |  |  |  |  |  |  |  |
| SAM | 77.78% | 12.10% | 23.42% | 24.79% | 17.62% | 13.23% | 11.28% | 5.56% | 22.91% | 27.14% |
| **Total rim equivalents** | **0.18** | **12.97** | **1.11** | **3.63** | **13.22** | **11.72** | **6.65** | **4.14** | **5.85** | **1.40** |

Table Relative quantities of ware groups by phase using eves (including samian)

## Appendix 1 Fabrics

#### Amphora

##### Black sand amphora

Part of a thick oval handle in the “black sand fabric” commonly associated with ceramic production around the Bay of Naples region. This handle comes from the “almond-rimmed” amphora form [[**Arthur and Williams,**](http://archaeologydataservice.ac.uk/archives/view/amphora_ahrb_2005/reference_details.cfm?id=42&CFID=2672895&CFTOKEN=5CC36CBF-55C4-4FEF-9CC4A167BDA652A7) 1992; Williams and Keay, 2006]. The elongated body of this type is broadly similar in shape to the earlier Dressel 2-4 form, although the handles in this case are oval or round in section instead of bifid, while the rim is almond-shaped instead of a simple bead rim. It is assumed that, coming from this region of Italy, wine was carried in these vessels. This form is not a common find on Romano-British sites and, additionally, there seems to be a tendency for it to be found on military sites in the north of the province [*ibid*.]. Production seems to be centred on the third and fourth centuries AD, with the South Shields sherds dated AD 250-350 [Williams, 1994]. Phase 3c **10596 / 2580**  
A small featureless bodysherd in the same “black sand” fabric as no. 1 and quite possibly belonging to the same vessel. **Phase 3c 10596 / 2586**

##### **GAL AMP Gauloise flat-bottomed series**

Eight sherds from this amphora type were identified: bodysherds and one base

All these sherds most probably belong to the Gauloise 4 type but only because it is the most common of the Gauloise series found in Roman Britain.

##### SS AMP? Southern Spanish

Light coloured featureless bodysherd, possibly belonging to the range of southern Spanish types that are included within the P&W Classes 16-19 [Peacock and Williams, 1986; Williams and Keay, 2006]. According to *tituli picti* associated with these forms, they pre-dominantly carried fish-based products such as salted-fish or *muria*, *liquamen* and *garum* and they were mostly made around the coastal areas of southern Spain, between Cadiz and Malaga [Martin-Kilcher, 1990; Lagostena in Williams and Keay, 2006]. The date range varies according to the particular form, however, in general they span from the late first century BC to the second century AD. [Peacock and Williams, 1986; Martin-Kilcher, 1990; Lagostena in Williams and Keay, 2006]. **10961 / 2774**

##### Dr20 Dressel 20 amphora

Dressel 20 rims

*c*. AD 110-150 / Antonine [Martin-Kilcher, 1987, Beilage 1, no. 82; Berni Millet,2008, Fig. 9, Form IV]. **10648 / 3184**

*c*. AD 110-150 / Antonine [Martin-Kilcher, 1987, Beilage 1, no. 82; Berni Millet,2008, Fig. 9, Form IV]. **10555 / 1261**

*c*. AD 110-150 / Antonine [Martin-Kilcher, 1987, Beilage 1, no. 76; Berni Millet,2008, Fig. 9, Form IV]. **10596 / 3173**

*c*. AD 150-210 / Antonine [Martin-Kilcher, 1987, Beilage 2, no. 92; Berni Millet,2008, Fig. 9, Form IV]. **10596 / 2559**

*c*. AD 150-210 / Antonine [Martin-Kilcher, 1987, Beilage 1, nos. 79 & 82; Berni Millet,2008, Fig. 9, Form IV]. **10620 / 2721**

*c*. AD 150-210 / Antonine [Martin-Kilcher, 1987, Beilage 2, no. 96; Berni Millet,2008, Fig. 9, Form IV]. **10502 / 1541**

This small section of rim is rather damaged but looks as if it might belong to a second century type *c*. AD 110-210 / Antonine [Martin-Kilcher, 1987, Beilage 1 and 2; Berni Millet,2008, Fig. 9, Form IV]. **10664 / 1569**

##### AMPL Amphora stopper

This small piece of rim could come from an amphora stopper. **10738 / 2706**

##### AMP VER Flagon / amphora

Small section of a thickened rim splayed out over the neck and with internal lid-seating and the start of a distinctive square moulding beneath the rim. It has a fairly coarse iron-rich sandy fabric. The rim form is reminiscent of the Gauloise flat-bottomed series but the very gritty fabric here rules out a Gallic origin. Not 100% sure of this by any means but I wonder if it is possible that this might be from a Gauloise 3/4/5/6 *similis* in Verulamium type fabric? The drawings illustrated by Grew and Seeley [in Williams and Keay, 2006] do look rather similar to the Maryport example with the form dated Flavian to Hadrianic. Other, somewhat similar rim forms of large two-handed Verulamium flagons / amphorae, come from Roman London [Davies *et al*, 1994, Fig 36, nos. 168 and 169]. However, the Maryport vessel is a long way from its possible production site and so I hesitate to be too dogmatic. **10502 / 2586**

#### Black burnished wares

BB1 sherds in this category come close to samples and descriptions of Dorset BB1 (Tomber and Dore 1998 DOR BB1)

BB1a a handmade dark grey to black fabric with moderate medium quartz and sparse coarse to very coarse brown inclusions. Samples of this fabric were shown to Paul Bidwell and David Williams who confirmed this was not from any known BB1 source.

GBB1 a rather grey version of BB1, most likely from Rossington Bridge kilns, Doncaster. Tomber and Dore 1997ROS BB1

BB2 black burnished ware category 2. Tomber and Dore 1998

#### Grey ware

##### GRA fine grey wares

GRA1 medium grey fabric. Hard and smooth with relatively sparse, medium, translucent quartz and rare grey inclusions (soft). This fabric is frequently overfired and nearly vitrified. Four vessels are distorted or bubbled suggesting this may be a local product. The fabric compares very well with a distorted grey ware jar from the 1966 excavations at the fort (Jarrett 1976 fig. 11 no. 8 dated to the Hadrianic period). Vessels made in this fabric include everted-rim jars with acute lattice comparable to the vessel found in 1966, a small jar/beaker with everted rim, a flat-rim dish/bowl and a flagon or flask with an upright grooved rim. *Local*

GRA2 Hard but rather powdery. Very fine, no visible inclusions but probably subvisible since the break is not smooth. Brownish grey. Silver mica on surface. Only one form – a narrow-necked jar with a bifid rim suggesting a third century date range. Source unknown

GRA3 Medium grey, hard with crisp fracture. Sparse medium quartz and otherwise as GRA2. Only bodysherds were present and these were from closed vessels with vertical, oblique and grouped vertical burnished lines similar to those found on lugged jars of East Yorkshire. The fabric is similar to some of the Holme-on-Spalding grey wares but the sherds were insufficiently diagnostic for firm identification

GRA4 dark grey with buff paste, soft and powdery. Sparse brown inclusions. This may be a mixed group. It included bodysherds of a wide-mouthed jar and a BB1 copy jar with acute lattice, burnish.

GRA5 dark grey surface with paler core. Hard and smooth with moderate fine quartz and rare medium rounded grey inclusions. Included an everted rim flagon (Gillam 1970 no. 17 late second to third century, a bead-rim bowl/dish and an everted rim jar. Source unknown but possibly part of local group. *Local*

GRA6 very pale cored soft powdery grey ware with grey surface. Extremely micaceous. Abundant fine quartz. Not unlike Crambeck but too micaceous and the form is a dish with a small chamfer – not made in Crambeck ware. There are mica flakes within break so these should not be post depositional

GRA7 greyish buff with dark grey exterior surface. Hard and smooth with abundant fine, c2mm, angular or subangular quartz and sparse medium rounded brown inclusions. Single sherd.

GRA8 grey, soft powdery fabric with moderate fine quartz inclusions. Often has darker grey surface where surviving. Similar to GRA1 but soft. Mid-second century BB1 jar copy and a DR44 bowl copy of cAD140-200

GRA9 hard, vitrified pale grey fabric with surfaces fired partially orange. Stone hard with smooth fracture. Sparse, coarse, rounded white and soft grey inclusions. Rare hard rounded glistening black inclusions and quartz. Probably waster material. *Local.*

GRA10 hard medium grey ware. Smooth with abundant fie quartz. Possibly an East Yorkshire grey ware fabric like HOSM

CRA RE Crambeck grey ware. Tomber and Dore 1998 CRA RE

##### GRB medium grey wares

GRB1 fairly hard medium to dark grey. Moderate, medium subangular and subrounded quartz, sparse and ill-sorted, fine to coarse rounded iron oxide/ironstone inclusions, *Local*?

GRB2 hard gritty brownish grey ware, Slightly hackly fracture with moderate, medium subangular subrounded quartz and sparse, medium, rounded shiny, hard, black inclusions. Not as coarse or abundant as BB1. Probably variant of GRB9

GRB3 soft dull buff ware with grey surfaces. Powdery feel and finely irregular fracture. Fairly sparse, medium, subangular quartz? Abundant subvisible quartz?. Slightly micaceous. Includes a Mucking type jar. Essex grey ware fabric

GRB4 medium grey, hard and smooth with sparse medium quartz and rare medium black inclusions and very rare soft white inclusions (not reactive). This is very likely to be a part of GRA1 group. *Local*

GRB5 hard medium grey with abundant, ill-sorted fine to medium subangular quartz. Overfired appearance. *Local?*

GRB6 hard medium grey. Abundant medium quartz. Grey ware used to make BB1 copies

GRB7 BB2 copy dark grey, brown margin. Abundant fine to medium quartz. This small group may actually be very eroded BB2.

GRB8 dark grey with brown core. Micaceous surface. Sparse fairly fine subrounded quartz and rare. Medium subangular grey inclusions, rather laminar looking. Very micaceous in break and on surfaces.

GRB9 grey ware with brown margins. Moderate, medium subangular and subrounded quartz. Not as hard as GRB1 or as gritty as GRB2 and coarser than GRB3 and GRB7. Perhaps a BB1 copy. Two vessels in this group are in Essex grey ware forms- a rebated rim jar and a wide-mouthed jar with rolled rim- both may belong at the extreme of one of the Essex grey ware fabrics

GRB10 grey with brown core. Abundant medium subrounded quartz, a coarse sandstone inclusions and fine rounded dark inclusions. Essex grey ware forms

GRB11 grey with pale core. Moderate to sparse, medium to coarse subangular and subrounded quartz and sparse grey/black inclusions. Predominantly BB1 copies with a narrow-necked jar and a miniature cauldron. *Possibly local*

GRB12 grey with darker grey core. Moderate, medium subangular quartz. Unknown source

GRB13 grey with red brown core. Hard, smooth with moderate, medium subangular quartz and sparse medium rounded black and grey inclusions and also rare soft white inclusions. Surface finish like BB2. Essex grey ware fabric

GRB14 cream cored grey ware. Soft with sparse. Medium subangular quartz, subangular grey stone and rounded brown iron oxides. Not Crambeck fabric. Rouletted beaker bodysherds

GRB15 as GRB9 but with sparse soft white inclusions- quite angular and non-reactive. BB1 copies.

GRB16 light to medium grey. With darker grey outside. Quite soft and powdery. Sparse medium subangular quartz and moderate medium rounded black inclusions and sparse rounded medium white inclusions. *Probably local.*

GRB17 grey with rather grey/buff core. A very abraded example has visible medium quartz protruding on surface. Sparse, medium quartz. *Local?*

GRB18 hard, sandy grey ware with light grey core and traces of slip fired orange. Micaceous. Moderate ill-sorted fine to medium subangular quartz and sparse soft round grey inclusions. Similar to GRB13 but not brown cored. Essex grey ware fabric.

GRB19 like BB2. Dark grey with brown margins and grey core. Sparse, medium, subangular quartz and abundant fine quartz ad sparse medium rounded red/brown inclusions. Micaceous. Essex grey ware fabric.

GRB20 soft grey with traces of darker surfaces. Powdery. Sparse, subangular, medium quartz and grey inclusions. Similar to GRB17 and GRA8 but more quartz. The soft condition of this fabric is almost entirely due to adverse burial conditions and it is likely to be a local grey ware

GRB21 light grey with slightly darker core. Hard and smooth with sparse medium angular quartz and rare medium rounded white inclusions and vesicles. Possibly a hard fired version of GRB15.

GRB22 light grey with dark grey external surface. Hard with moderate medium subangular and subrounded quartz, sparse, coarse, light grey soft, clay like inclusions, small rounded dark grey inclusions and some whitish inclusions partially dissolved. Unknown source

GRB23 grey ware with brown margins. Hard with gritty surfaces. Moderate medium quartz and sparse coarse rounded white inclusions. Very micaceous surface. . Unknown source

GRB24 hard brown grey ware with moderate, medium subangular and rounded quartz. The only form is a carinated beaker/bowl - a Lincolnshire form. This vessel was burnt so it is not possible to characterise the original fabric.

##### GRC coarse grey wares

All the GRC fabric groups were very small in number and were unsourced apart from the single sherd in GRC3 which is likely to be a Dales type fabric from Yorkshire.

GRC1 medium grey. Fairly soft with sparse medium to coarse quartz grits, sometimes protruding on surface. Similar to Muncaster gritty grey ware fabric

GRC2 pale grey and gritty. Moderate ill-sorted fine to coarse angular quartz and fine to coarse rounded brown iron rich inclusions and coarse mica inclusions. Local?

GRC3 very small sherd of Dales or Dales type ware. As far as one can see this is hard and grey with moderate medium, subangular quartz and rare, vesicles with remains of soft white inclusions. The vesicles are not platey but rather irregular. This is likely to be a Dales jar from E Yorkshire

GRC4 grey with buff core brown margins and darker grey surfaces. Very gritty surface with protruding rounded quartzes, dark grey inclusions and?granites. Micaceous. Local?

GRC5 medium grey. Hard with sparse medium and coarse angular and subangular quartz and grey inclusions.

#### Oxidised wares

Nearly all the oxidised wares were in extremely poor condition and had lost their surfaces and become soft and powdery. This made firm identification impossible and group may include some sherds which do not truly belong there. However the diagnostic vessel types do suggest possible sources.

##### OAA fine oxidised wares

OAA1 Soft, powdery oxidised ware. Rare, medium, subangular, quartz. Micaceous. Possibly very abraded Severn Valley type ware. Tomber and Dore 1998 SV OX. The forms confirm a Severn Valley type group being narrow-necked jars with bifid and wedge shaped rims and a tankard. One flagon sherd is probably a very abraded FLB1 ware

OAA2 hard orange with grey core. Sparse fine rounded white and black inclusions and ? subvisible quartz. Micaceous. Again this is used to make narrow-necked jars with everted wedge rims and one bead-rim wide-mouthed jar. Severn Valley type

OAA3 Orange with buff core. Soft and powdery. Moderate fine quartz and sparse medium rounded soft white inclusions. Micaceous. Severn Valley type tankard.

OAA4 very hard orange with smooth feel and abundant subvisible inclusions? quartz. Severn Valley type tankard and narrow-necked jar.

OAA5 fairly hard smooth orange fabric with abundant v fine quartz and sparse medium rounded iron oxide inclusions. Cheese-press. Unlikely to be Severn Valley ware.

OBA1 as OAA1 but yellowish buff. Probably also Severn Valley type ware.

OBA2 very hard fired yellowish buff ware, grey inside. Moderate quite fine quartz and sparse limps of gold mica. Folded beaker

OBA3 yellowish buff with grey core. Hard with abundant fine quartz and sparse fine rounded white inclusions, rare coarse subrounded quartz and medium rounded black inclusions. Micaceous. Undiagnostic bodysherds

##### OAB medium oxidised wares

OAB1 soft, oxidised ware with sparse, medium to coarse, angular quartz. Mixed group. This includes flagons which were probably originally white-slipped, a roughcast beaker and a narrow-necked jar, perhaps locally made

OAB2 soft, oxidised ware with moderate, fine to medium, subangular quartz. As OAB1 this includes flagon sherds which may have been white-slipped originally and sherds from a narrow necked jar.

OAB3 slightly gritty oxidised ware with moderate, medium, subangular quartz and sparse medium rounded brown and soft white inclusions. More quartz than OAB2 and coarser than OAB1. Includes a rebated-rim bowl of African type.

OAB4 yellowish buff. Hard, hackly fracture with moderate medium, subangular quartz and sparse medium grey inclusions and rounded red/brown inclusions. This could be an oxidised GRB6 or GBB1. One sherd from an everted-rim jar

OAB5 orange, sandy with abundant medium subangular quartz and iron inclusions. One diagnostic sherd from an everted-rim bowl, similar to types made at Cheshire Plain kilns.

OAB6 hard orange fabric with hackly fracture abundant well-sorted, medium subangular quartz and sparse rounded red/brown. Single bodysherd.

##### OAC coarse oxidised wares

OAC1 fairly hard orange ware with rather gritty feel due to some quartz inclusion protruding from surfaces. Moderate, ill-sorted fine to medium subangular quartz, some overgrown, sparse subangular grey inclusions, granite?, and sparse fine silver micas. Bodysherds only.

OAC2 orange gritty ware. Moderate ill-sorted coarse and medium subangular quartz and sparse grey and white inclusions. The grey inclusions look granitic. This is not Ebor. Rim from African type bowl.

OAC3 similar to DBY. Bodysherds only.

OAC4 gritty orange with reduced external coat. Abundant well sorted medium subangular quartz -3-4mm. Bodysherds only. Unknown

OAC5 orange, soft powdery ware with prominent grits protruding. Moderate medium, subangular quartz and sparse coarse quartz, but on surface has sparse coarse rounded red ?sandstone, quartz and ?white flint and some large mica flakes – gold ? Muncaster ware. At MAR

DBY Derbyshire ware Tomber and Dore 1998 DER CO

#### Fine wares,

CC1 fine orange fabric with dark grey/black coat. Few inclusions. Roughcast beaker

CC2 fine pale orange fabric with grey core and traces of brown slip. Moderate fine quartz. Similar to OAA2 and could be an OAA2 with darker self slip. Probably a British made ware

CC3 orange with grey core and black colour coat. Very fine with dark colour coat. Perhaps a variant of CC1. Roughcast beaker

CC4 pale creamy orange fabric with black colour coat. Roughcast beaker

Cc5 Reddish orange with grey/black colour coat. Hard and fine moderate very fine quartz and rare medium quartz. Probably north west source

CC1, 2 and 4 belong to the roughcast ware group coming from a wide range of sources often impossible to determine without chemical analysis. CC2 is almost certainly made in the north west of England

KOL Cologne colour-coated ware. Tomber and Dore 1998 KOL CC

CG BS Central Gaul black-slip ware. Tomber and Dore 1998 CNG BS. Symonds 1992

Trier BS Trier black-slip ware. Tomber and Dore 1998 MOS BS, Symonds 1992

CG/Trier BS this third black-slip group comprises fabrics with an orange core and grey margins with a speckled effect from the calcareous nature of the clay including some medium sized calcareous inclusions which appear quite friable. The core is hard fired but the margins are less so. Mica is visible in small quantities but not like the very micaceous Lezoux type fabric. The forms include several beakers with round, oval and slit indentations suggesting Trier would be the more likely source. The softer margins may be due to burial conditions.

NV PA Nene Valley painted parchment ware Tomber and Dore 1998 LNV PA

RSA1 fine oxidised ware with traces of red slip. This could be a flake from a fine Rhaetian mortarium or vessel with a Rhaetian type slip

NV CC Nene Valley colour-coated ware Tomber and Dore 1998 LNV CC

#### White wares

FLA1 fine white ware with sparse fine quartz and brown inclusions

FLA2 white ware with moderate medium, subangular quartz and rare brown inclusions

FLA3 white ware with moderate, coarse subangular quartz and sparse rounded brown inclusions.

FLA4 sandy pinkish cream ware with moderate medium/fine quartz and sparse red/brown inclusions. Unknown source. Beakerwith painted decoration

Sources unidentified.

#### White-slipped wares

FLB1 soft, powdery oxidised ware with white slip. Moderate fine, subangular quartz. Source unidentified.

FLB2 as FLB1 but with moderate, medium, subangular quartz. Source unidentified.

#### Calcareously tempered wares

EYCT East Yorkshire calcite gritted ware Tomber and Dore 1998 HUN CG. One pre-Huntclff type jar rim.

Vesic handmade ware with angular and rhomboidal vesicles. Possibly an East Yorkshire calcite-gritted ware but some of the bodysherds suggest a slab- built vessel unlike the construction found on Huntcliff type jars which have pronounced vertical finger grooves inside the vessel. The bodysherds look rather more like Knapton ware and although this is rarely so widely distributed a calcite-gritted jar illustrated jar from Papcastle appears to be of this form (Charlesworth fig. 3 no. 6)

#### Mortaria

MH Mancetter-Hartshill white ware. Tomber and Dore 1998 MAH WH. Fine-textured, cream fabric, varying from softish to very hard, sometimes with pink core; self-coloured or with a self-coloured slip. Inclusions usually moderate, smallish, transparent and translucent white and pinkish quartz with sparse opaque orange-brown and rarely blackish fragments; rarely white clay pellets (or re-fired pottery). The range in fabric is, in fact, quite wide, from that with virtually no inclusions to fabrics with a fair quantity and fabrics with hard, ill-sorted black inclusions. The trituration grit after AD130-140 consisted of hard red-brown and/or hard blackish material (probably re-fired pottery fragments), with only very rare quartz fragments (fabric MH2). Earlier mortaria usually have a mixed trituration grit in which quartz and sandstone are normal components (fabric MH1) and some early second-century mortaria probably have entirely quartz trituration grit.

MCRA WH Crambeck white ware. Tomber and Dore 1998 CRA WH

MOAB soft, powdery orange ware. No surfaces or trituration grits extant. Moderate, medium, subangular quartz. Source unidentified.

MLNV Lower Nene Valley white ware. Tomber and Dore 1998 LNV WH

Colchester Colchester white ware. Tomber and Dore 1998 COL WH

Rhineland Rhineland white ware. Tomber and Dore 1998 RHL WH

M Elginhaugh Pale brownish-cream fabric; self-coloured, powdery in texture. Inclusions: frequent, barely visible at x20 to very small, quartz and red-brown, few black; some somewhat larger inclusions of same type. Flavian. Kay Hartley identified as probably made at Elginhaugh.

MWH a white or cream ware group discussed by Kay Hartley. The fabrics are described in the illustrated catalogue.

MOAB1 hard, fine-textured, dark red-brown fabric. Moderate, fairly well-sorted, medium, subangular quartz and ill-sorted soft white rounded inclusions and sparse, ill-sorted angular black inclusions. The trituration grit is ill-sorted, and while moderate and fairly random in the upper half of the vessel, it is closely packed in the basal area; it consists mostly of red-brown sandstone, with ?haematite, quartz sandstone, different kinds of quartz and black material. There are traces of a reddish self-coloured slip on the flange of the small rim sherd and the lower half of the external surface has been burnished.

MOAB1/MOWS1 quite hard, fine-textured, dark red-brown fabric. There are fairly frequent, ill-sorted inclusions, including quartz, black and some red-brown material. The trituration grit is ill-sorted, and while moderate and fairly random in the upper half of the vessel, it is closely packed in the basal area; it consists mostly of red-brown sandstone, with ?haematite, quartz sandstone, different kinds of quartz and black material. There are traces of a thin, matt self-coloured slip and at least the lower half of the external surface has been burnished. The fabric of this mortarium is in fact rather unusual and stands out from other fabrics in the north-west; it is highly probable that this mortarium was made locally at Maryport.

Some in this group have a cream slip. One flaked off spout fragment from 10659 with cream slip had ill-sorted (some quite large) inclusions inside the spout including red-brown sandstone, quartz and slag etc. Another spout sherd from 10648 has the upper surface of flange deliberately peppered with small grits, a practice more normal with mortaria in cream fabrics produced at certain workshops.

MOAB/MOWS2 softish, quite fine-textured, orange-brown fabric. Sparse, medium, subangular quartz. Trituration grit: 2-3mm quartz, quartz sandstone, rare red-brown. North west

MOAB3 Hard, red-brown fabric, overfired, partially reduced surfaces. The inclusions are similar to MOAB1. Trituration grits are c1.5-2mm quartz. Probably local.

MOAB/MOWS4 self-coloured, orange-brown fabric. Fabric, soft with moderate, medium, subangular quartz and sparse fine black and red-brown inclusions. One vessel has a white slip. Two vessels which may be flanged bowls or mortaria since not enough survives to show any trituration grit. For comments on vessels of similar type at Birrens, see Robertson 1975, p.179, and fig. 63. Hadrianic. North-west England in Hadrianic Wall area.

MOAB5 Orange-brown fabric with traces of cream slip. Moderate, medium, subangular and subrounded quartz. All trituration grit is 2-5mm white quartz. Only one basal sherd. North-west.

Rhaetian 1 Red-brown fabric. Moderate, medium subangular quartz, sparse, medium, rounded grey and brown inclusions and rare, fine, soft white inclusions. The trituration grits are c2mm and are mostly quartz with some rounded, pinkish sandstone (do a full description).

Rhaetian 2 Fine-textured, orange-brown fabric with dark, red-brown raetian slip on flange and internal concavity. Moderate fine quartz inclusions,. A Type Cii, a form which is probably entirely Antonine; it would probably have been burnished on the lower half of the exterior. No trituration grits on our sherds. Probably from Wroxeter (KH)

MGREY this is a red/brown fabric which has been reduced in firing. The surviving trituration grit appears to be mostly quartz. Perhaps a reduced version of MOAB3 Possibly local.

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