

Assessment of the Roman and Medieval Pottery from the Victoria Works, Long Street, Dursley (STGCM 2003.19)

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Summary

A large collection of medieval pottery, together with a few sherds of Roman date and of post-medieval or early modern date, was recovered from excavations carried out by BARAS at the Victoria Works, Dursley, Gloucestershire and submitted for identification and assessment. Pottery of later 17th-century and later date was not submitted. Although the site lies close to several sites from which medieval pottery sequences have been established (such as Gloucester, Cirencester, Bristol and Acton Court), a number of wares were present which have not previously been recognised. This makes it difficult to establish the date of the Dursley pottery with precision and this in turn makes it difficult to interpret the pottery collection reliably. The collection does, however, include numerous examples of types which have been found in stratified assemblages elsewhere and these suggest that there was activity on the site during the late 11th to 12th centuries but that the main period of pottery deposition took place in the mid 13th to mid 14th centuries (i.e. Period 3) with a second period of intense deposition in the mid to late 16th century (Period 4). Later phases on the site also produced medieval pottery, probably disturbed from earlier deposits on the site.

Description

In the absence of a county-wide medieval pottery fabric series the pottery was recorded context by context using the ware classification of the Gloucester City Medieval Pottery Type Fabric Series (abbreviated to Gloucester TF throughout, {Vince 1983 #53} and {Vince 1983 #53}) with additions where the types found are not represented at Gloucester. The data were recorded in an Access database, a copy of which is deposited with this assessment report in Excel spreadsheet format. In that database mnemonic codes are used which differ from the Gloucester fabric numbers and these are cited in capital letters where appropriate.

Forms were recorded using the Medieval Pottery Research Group dictionary ({MPRG 1998 #44893}). Notes on the condition, traces of use, typology and decoration of the pottery were made in the database.

Prehistoric?

Three sherds recovered from medieval deposits (two pits and one occupation spread) are possibly of prehistoric date (PREH?). They include two with Palaeozoic limestone inclusions and one with a grey sandstone and shelly limestone temper. If the sherds are not of prehistoric date then they indicate a previously unrecorded use of these two fabrics in the Severn Valley.

Roman pottery

Seven sherds of Roman date were recovered from the excavations (RPOT). All come from Area F and come from the subsoil, garden soil, a layer of dumped soil and two medieval pits. The sherds consist of five sherds of Severn Valley ware (Gloucester TF11), one sherd of a micaceous sandy ware (Gloucester TF5) and one sherd of Oxfordshire colour-coated ware (Gloucester TF9). Although Severn Valley ware was first made in the later 1st century the other two fabrics are of mid Roman date, i.e. later 2nd to mid 4th centuries and as a collection this is the probable date of the pottery. The sherds include one very abraded and two abraded examples whilst the remainder were in reasonably fresh condition.

Anglo-Saxon pottery

Dursley lies in a part of Gloucestershire where pottery of pre-conquest date is rare. Sherds of chaff-tempered ware have been found at a number of sites in the county, mostly to the east of the Jurassic scarp but including sherds from Frocester Court and Frocester church. To the south and west there is no known locally-made pottery in the 5th to 9th centuries. It is possible that Dursley lay in this aceramic area.

In the late Saxon period new types of pottery were introduced into the Severn valley, but again Dursley may lie in an area where their introduction was late (or non-existent). To the north, pottery was produced in Gloucester in the later 10th and early 11th centuries (Gloucester TF41a) and was traded to surrounding villages, the closest of which to Dursley is Frampton-on-Severn. To the south, there is no evidence for the use of pottery in the Bristol area until the early 11th century (BPT 1 and BPT 2 fabrics) whilst a slightly earlier date is likely for the earliest late Saxon pottery used at Bath (Bath B and Bath A fabrics). No examples of any of these wares were present, nor were there any sherds from vessels whose fabric or form suggested that they might be previously unknown late Saxon types. Thus, either the Dursley settlement was not using pottery in the late 10th/mid 11th centuries or the settlement was not occupied at this time.

In the middle of the 11th century pottery production in the town of Gloucester ceased and the inhabitants instead used pottery of two types. Gloucester TF41b (GLOS41B) was probably produced at Haresfield, 8 miles as the crow flies north of Dursley, and was certainly in production before the Norman conquest since sherds have been found in rubbish pits in Gloucester sealed below the early Norman castle. There are few distinguishing features to these early vessels, however, which are typically globular-bodied, sagging based jars with short everted rims. Examples of this type occur at Dursley, but since the form is long-lived it is not possible to say for certain that they are of pre-conquest date. Straight-sided, club-rimmed vessels, however appear to be an early Norman introduction and fell out of fashion in the first half of the 12th century. This type is certainly present at Dursley, indicating at least some activity on the site in the later 11th to early 12th centuries.

The other type found at Gloucester in pre-Conquest contexts is a widely-distributed type, Bath Fabric A (Gloucester TF48, BATHA). The main product of this industry too was the globular, sagging based, everted rimmed jar and here too the form appears to have a long life. Examples of this type too are found at Dursley. Unglazed spouted pitchers decorated on the shoulder with stamps were probably produced in this ware before the conquest, but continue to be made into the 12th century. One example of this type was found at Dursley. Here too, there is a hint of pre-Conquest activity and definite evidence for activity in the later 11th to early 12th centuries.

Medieval pottery

Late 11th to mid 13th centuries

The majority of the datable medieval pottery from the Dursley excavations is of types which have a long period of use, starting in the later 11th/12th centuries and extending to the middle of the 13th centuries. In several cases there are minor typological differences in the vessels produced during the period but for featureless body sherds only a broad date of manufacture can be given.

In addition, there is a large quantity of pottery from Dursley which is of types which have not previously been recognised, most of which are probably of local manufacture. These require further work before they can be separated into ware groups and date ranges and sources assigned. They have temporarily been assigned alphabetical codes, from MEDLOC A onwards.

Gloucester TF41B

One hundred and six sherds of Gloucester TF41B were identified at Dursley. They represent at most 100 vessels and weigh 1215gm. The fabric is identifiable through the abundant angular gravel, composed of fragments of oolitic limestone and individual ooliths. The groundmass is micaceous but fine-textured. Unlike MEDLOC B (see below), the fabric contains little or no red ironstone, nor any shell or fine-grained sandstone fragments.

Typically, the vessels have a dark core, oxidized light brown to red margins and black surfaces. These surfaces were apparently intentionally created by fuming the vessels in a bonfire and are not good evidence for the use of the vessels in cooking. Most of the vessels were, however, used for cooking and deposited on the exterior and interior which reflect this use.

A number of rim sherds were found. Most are of the simple everted, rounded type found in the mid 11th century but which was probably produced throughout the 12th century. A single club rimmed vessel was recovered (context 4382). Everted rims with a flat-topped thickened top were a later 12th and early 13th-century introduction and five examples of this type

occur. One vessel has the distinctive inturned rim found on early 13th-century Malvern Chase vessels and is probably a copy of this type (also context 4382).

A single internally-glazed jar sherd was recovered (context 4467). Glazing is known on this ware in the early 13th century.

A single sherd came from a "west country vessel". These vessels look like the top third of a jar and have a flat base which has a distinctive acute base angle (context 4441). It has been postulated that they might be the bases of beehives and most substantial fragments have a single circular hole in the wall which would allow bees to enter and exit the hive.

Bath Fabric A

Twelve sherds of Bath Fabric A were identified. They could come from 12 separate vessels although no attempt to compare sherds from different contexts was made. The fabric is characterised by the presence of polished rounded quartz grains from the lower Cretaceous greensand. Analysis of examples from Acton Court suggests that there are fabric differences within this group, some containing flint, others greensand chert and others fragments of chalk and/or calcareous algae. The Dursley sherds have not been examined at this level of detail however. The groundmass contains abundant angular quartz and some muscovite up to 0.2mm across.

The source or, more likely, sources, for this ware must lie along the outcrop of lower Cretaceous clays (the Gault) which runs northeast to southwest through Wiltshire. The closest outcrop of these deposits to Dursley is 20 miles to the southeast whilst Potterne, whose placename suggests pre-conquest pottery production, is 25 miles to the southeast.

The majority of the vessels come from globular jars, with one everted rounded rim present. A single example of a spouted pitcher was identified, however, as a result of the stamping on the shoulder (context 4460).

Malvern Chase wares

Six sherds of unglazed Malvern Chase ware (Gloucester TF40, HERB1) were identified. Five of these were rim sherds from jars, which suggests that body sherds may well have been missed. Three of these rims are from handmade vessels with rim forms typical of the early 13th century (contexts 4558 and 4650). One comes from a wheelthrown vessel with an inturned rim, typical of the later 13th and early 14th centuries (context 4650) whilst two body sherds from a different wheelthrown jar came from the same context.

This ware was produced in the Malvern Chase, centred on Hanley Castle, to the north of Upton on Severn and is commonly found in small quantities on sites in the Severn Valley as far south as Bristol and Chepstow. It is rarely found

on sites on the Jurassic ridge, however, and this probably explains the low frequency of the ware at Dursley.

Seventeen sherds of Malvern Chase glazed ware (Gloucester TF52, HERB4) were recorded. In addition to being glazed, this fabric is also distinguished from the unglazed ware by the lower quantity of Malvernian rock inclusions present and by the presence of subangular and rounded quartz sand.

Eight of these sherds come from jars, probably lid-seated tall shouldered vessels of later 15th and early 16th-century date. Three infolded rim sherds were present, including two joining sherds from different contexts (contexts 4260 and 4666). Three sherds from pancheons were found. These too are likely to be of late 15th or early 16th-century date. Other forms present include jugs (2 sherds) and the rim of a pipkin (context 4184). The latter has a copper-mottled external glaze and a thumbled, applied strip around the neck. This form is likely to be 15th rather than 16th century.

Eight sherds of Malvern Chase pink ware (Gloucester TF52, HERB5) were recorded. This ware is untempered, although large angular Malvernian rock fragments do occur as accidental inclusions. Pancheons are the main form present (4 sherds), followed by jars (2 sherds) and a jug. One of the pancheon fragments has a brown slip under the plain lead glaze. This ware was present in a mid 1530s deposit at Acton Court and was produced throughout the remainder of the 16th century. By the mid 17th century production had ceased completely. The brown-slipped vessel is likely to be one of the latest products (context 4184).

Worcester sandy ware

A single rim from an unglazed, handmade sand-tempered jar was found (context 4650). The sand grains are rounded and have a moderately high sphericity and dull surfaces, both of which indicate the presence of Triassic sands. The rim form suggests an origin at Worcester in the 12th century (Gloucester TF42, HERC1).

Minety ware

Minety ware is the most common ware found at Dursley in the medieval period (Gloucester TF44, MINETY). Five hundred and thirty seven sherds were identified, representing no more than 449 vessels and weighing 9477 gm.

The fabric contains abundant rounded limestone sand, including oolitic limestone and ooliths and echinoid shell and spine fragments. Some of the fragments have a light brown limonite stain. The groundmass is light-coloured and smooth-textured.

Waste from the production of this ware has been found at Minety, in north Wiltshire, 15 miles east of Dursley. This waste is all of late medieval date and it is probable that the industry was more extensive (i.e. perhaps neighbouring

villages within a diameter of 3-4 miles), exploiting the medieval forest of Braydon for fuel.

The earliest form found in Minety ware is the tripod pitcher, which occurs in early 12th-century deposits in Gloucester. These early vessels have tubular spouts, complex handles formed from two twisted rods of clay with a third wrapped around them and elaborate decoration consisting of applied, triangular-sectioned strips and combing, including the use of combing. Only one sherd of this distinctive type was present at Dursley (context 4668). It is possible that a few of the other tripod pitcher sherds are also from these early tripod pitchers but most are certainly later.

Only one tripod pitcher spout was present, a pulled spout (context 4650). Similarly, there is only one fragment of handle, a wide, u-sectioned handle with an applied strip down the back decorated with two columns of diagonal slashes. The rim/handle join was secured with stabbed incisions on both the inside and outside of the rim (Context 4558). Seventeen decorated body sherds were present, all decorated with combing. Two designs can be recognised: horizontal lines of wavy combing with straight vertical combed lines over the top; and cross-hatched combed lines. A single round-sectioned foot was present (context 4750).

The most common form found is the handmade jar. These vessels have a globular body, sagging base and a moulded rim, some of which appear to have been formed using a template which cuts into the shoulder (although this could probably be achieved quite easily using a knife and a turntable). These vessels have a plain lead glaze on the inside of the base and on the inside of the rim, with only dribbles of glaze on the body. The body is usually decorated with combed lines and in some cases the Dursley examples are complete enough to indicate the layout of the decoration. The most common designs consists of slightly slanting vertical combed lines running from the shoulder to the girth, horizontal lines of wavy combing on the shoulder and crosshatched combing.

Evidence from Gloucester suggests that this form is of late 12th and, especially, 13th-century date, contemporary with the majority of the tripod pitcher sherds.

Later medieval Minety wares were thrown on the wheel. One hundred and ninety-nine sherds of wheelthrown vessels were identified (there are in addition many sherds which cannot be reliably assigned to either hand or wheel manufacture). Most of these sherds come from jars with similar but thinner and more refined forms to those of the handmade vessels.

Only three of these wheelthrown jar sherds were decorated, with horizontal wavy combed lines (context 4441), vertical combed lines (context 4668) and diagonal combed lines (context 4692).

The transition from handmade to wheelthrown jars is not closely dated at Gloucester, since it corresponds to a period in which Minety wares are uncommon. The wheelthrown

vessels there occur mainly in later 14th to early 16th-century-century deposits.

Twenty-three sherds of wheelthrown jugs were recorded. Most were undecorated, externally glazed body sherds but examples with vertical combed line decoration (contexts 4670 and 4672), a thumbed cordon around the girth (context 4606), and with thumb impressions at intervals around the base (contexts 4430, 4441, and 4672) were found. A strap handle, inserted through the rim and decorated with two vertical lines of knife-cut stab marks, was found (context 4666).

Wheelthrown jugs are also mainly a late medieval form at Gloucester but were probably being produced in the later 13th and early 14th centuries as well.

Six sherds from wheelthrown bowls were recorded. One of these is the rim of a vessel with straight sides and a flat top (context 4650). The vessel has sooting on the exterior and is unglazed. Two of the remaining sherds have no sooting and an internal glaze.

Three sherds from pancheons were recorded. These vessels are probably of late medieval or early post-medieval date (i.e. late 15th to 16th century). Two of the sherds are glazed inside and out.

A possible sherd from a cistern was identified (context 4430). The vessel is of the wide-mouthed jar form, similar to those produced in Malvern Chase in the late 15th and 16th century.

Sherds from Minety ware ridge tiles were included with the pottery and are a later 13th-century and later product.

Ham Green ware

Ham Green ware is handmade and produced from a coal-measures whiteware clay tempered with a calcareous sand. Typically, the fabric contains unburnt carbon and is dark grey.

Six sherds of Ham Green glazed ware were present (Gloucester TF53, HG). Copper is probably present in the glaze in four examples. Continuous horizontal grooves are present on the bodies of three vessels. These features suggest that the vessels are Ham Green B jugs, of later 12th to mid 13th-century date.

Newbury B ware

A single sherd of Newbury B ware was identified (NBYB). This ware contains a rounded quartz and angular flint temper with numerous rounded voids, which probably containing fragments of calcareous algae. The distribution of the vessels indicates a source in the Kennet Valley but they are found over a wide area, from the mid 12th to the 14th or 15th centuries.

The sherd comes from bowl or frying pan with an inturned rim, a common form in Berkshire but rare in the Severn Valley (context 4566).

Unsourced glazed ware

A body sherd from a handmade glazed vessel, probably a tripod pitcher, was found (Gloucester TF50, MEDX). The sherd, from context 4650, contains angular fragments of flint and rounded, polished quartz grains, both of which indicate a source to the southeast of Dursley. The vessel is likely to be of later 12th or early 13th-century date.

Worcester glazed ware

Twenty-five sherds of Worcester glazed ware were recorded (WORCS). This ware is tempered with a subangular quartz sand, similar to but finer than the Worcester sandy ware.

One sherd from a handmade, glazed jar was present (context 4570). Such vessels are found in Gloucester but are rare in comparison to the wheelthrown glazed jugs although they appear to be of similar, early to mid 13th-century date.

The remaining sherds are from wheelthrown jugs. Two rim sherds were present, both of the devolved collar rim form (contexts 4668 and 4672), and two handles (contexts 4558 and 4672), both strap handles with a sub-rectangular cross-section. Most of the sherds are featureless body sherds with a copper-stained external glaze. Three sherds have widely-spaced horizontal groove decoration (contexts 4557, and 4669). Two sherds have roller-stamped decoration (contexts 4704 and 4649) and two have traces of white slip dribbles on the interior, evidence for the presence of a wash of white slip around the inside of the rim in imitation of contemporary French whitewares.

Worcester jugs appear to have been made from the early 13th century through to some point in the 14th century. However, it is rare to find any sherds outside of Worcester later than c.1250.

Gloucester TF110

A single sherd from a jar of Gloucester TF110 was recovered (context 4570). The fabric contains fragments of a sandstone with calcareous cement and has been shown through distribution analysis to have been produced in the middle Wye valley, and is common on sites between Monmouth and Ledbury.

Hereford Fabric A7B

Forty sherds of Hereford Fabric A7B were recorded. They come from no more than 37 vessels and weigh 662 gm. The ware contains abundant quartz and muscovite silt up to 0.1mm across with no larger inclusions. It was produced at centres in Herefordshire (and possibly Gwent) from the mid

13th to the mid 14th century, with the possibility of production continuing on a smaller scale into the late medieval period.

Apart from a single fragment of glazed ridge tile, the sherds all come from jugs. In most cases the overall form of the body was impossible to determine, but in one case the sherd appears to come from a 'triple decker' jug, a highly-decorated type with two carinations (context 4571). Another sherd comes from a vessel with a globular body and cylindrical neck (context 4581).

A vessel with a devolved collar rim and bridge spout comes from context 4626. Another bridge-spouted vessel had the added clay of the spout delineated with a roller-stamped band (context 4556). The other rim sherd comes from a vessel with an everted rounded rim and pulled spout (context 4441). This vessel might be later 13th or 14th century in date. Three handles were recorded. One was a rod handle from a vessel with a possible biconical body (and therefore perhaps of later 13th or 14th-century date, context 4661), and two were from strap handles one of which had a vertical line of diagonal knife slashes down the back (context 4650) whilst the other had a similar line between two vertical grooves (context 4581). The latter form is typical of 14th-century Bristol products. Five base sherds were found. Three come from vessels with continuous thumb impressions around the sagging base (contexts 3177, 4626, and 4650), one comes from a vessel with a raised footring (context 4558) and the fifth comes from a vessel with a flat base.

Six decorated body sherds were recorded. Four have applied strips which were tempered with hammerscale, causing them to blister and turn dark purple after firing (contexts 4435, 4489, 4558, and 4650), and one has applied white slip lines, applied as a thin smear of slip (context 4650). One sherd has both types of applied strip present (context 4570).

Southeast Wiltshire ware

A single sherd from a Southeast Wiltshire tripod pitcher was identified, from context 4261. The vessel has a copper-mottled glaze, indicative of a late 12th-century or later date, and may have been produced on a wheel. It is decorated with cross-hatched combed lines. It is likely that this vessel was produced at Laverstock prior to the inception of production of the highly-decorated fineware in the mid 13th century.

Mid 13th to mid 14th centuries

Many of the industries which supplied Dursley with pottery in the later 12th and early 13th centuries continued to do so in the later 13th century and later, sometimes with a change in typology and sometimes with changes in the manufacturing methods (in particular the adoption of the potter's wheel in the Malvern Chase and Minety industries). A few new types are found, however. All of these are regional imports, coming from production centres 20

miles or more distant from Dursley. However, even allowing for the continuity of earlier traditions, there is still very little pottery of this period from the site.

Gloucester TF99

A single sherd of Gloucester TF99 was present. This ware is found in small quantities in later 13th and 14th-century deposits in the city and no source has been found. The fabric is light-firing with quartz and calcareous inclusions but does not seem to be a Coal Measures clay. The sherd is a featureless jug body sherd with an external copper-mottled glaze and comes from context 4544.

Bristol ware

Fourteen sherds of medieval Bristol ware were recovered from the site (Gloucester TF92, BR). This fabric is sand-tempered and light-firing, being made from Coal Measures whiteware clays, similar to those used at Ham Green. Pottery was clearly being produced at several sites in the suburbs of Bristol and it is not yet clear whether differences in appearance and fabric can help distinguish the various production sites.

Nine sherds come from jugs, all of which have a copper-mottled glaze. One rim is present, from a vessel with a devolved collar rim, a bridge spout and ring and dot stamped decoration (context 4304). A single plain strap handle, 35mm wide, was present. This handle was thrown on the wheel, in the manner of southwestern French jugs, and applied to the body with two thumb impressions (context 4651). Three of the body sherds were decorated. One has widely-spaced horizontal grooves (context 4650) and two come from vessels with applied curvilinear decoration, in self-coloured and red-firing clays (contexts 4556 and 4650).

Two sherds come from small dishes or condiments with internal glaze (plain in one case, copper-mottled in the other). Both have flat bases (contexts 4430 and 4259). Three sherds from a pipkin with a globular body, short everted rim and pulled spout were recovered. The vessel had a copper-mottled glaze inside and out (context 4650).

The Bristol industry seems to have started in the mid 13th century and continues to the 15th century. However, several of the sherds present at Dursley are typical of the earliest phase of the industry whilst only the plain strap handle might be a later medieval product.

Nash Hill wares

Eleven sherds of probable Nash Hill wares were recovered. The Nash Hill production centre is on the outskirts of Lacock, Wiltshire, 19 miles to the southeast of Dursley. The fabric of Nash Hill products is characterised by the presence of well-rounded quartz grains, often coated in red haematite. These are probably derived from a lower Cretaceous sandstone.

Floor tiles made in the same centre have been dated to the later 13th century but it is likely that the pottery industry predated the tile production, and probably continued later (although this is as yet unproven). All the sherds come from jugs. One rim sherd was found, from a vessel with a bridge spout and a flat-topped, thickened rim (context 4558). One sherd comes from near the base of a baluster jug with thumbing around the base (context 4650). Four of the body sherds are decorated: One has horizontal combed lines (context 4650); one comes from a vessel with complex decoration consisting of hammerscale-tempered applied strips and pellets combined with combing (context 4650); one has applied white-firing strips (context 4650) and one comes from the corrugated neck of a vessel with copper-mottled glaze over a white slip inside and out (context 4353).

Most of these sherds are probably of late-13th to 14th-century date and share many similarities with the Laverstock products of southeast Wiltshire. It may be significant that the floor tiles produced at Nash Hill are of the Wessex School and that these tilers may have moved from Laverstock to Nash Hill.

Laverstock ware

Three sherds of Laverstock ware were found at Dursley. All probably come from the same vessel. They have a distinctive fabric which contains tabular ironstone fragments, pellets of white clay and polished rounded quartz grains. This is not the fabric of most Laverstock products, which have a fine, sandy fabric, but is the fabric of the Clarendon Palace floor tiles, produced in the 1250s on the royal palace site, within a mile or so of Laverstock.

The vessel has combed line decoration and a copper-mottled glaze. Two of the sherds, from context 4672, are coated with an iron-rich deposit and have been burnt after breakage. The remaining sherd comes from context 4650.

Locally-produced wares

A large proportion of the collection consists of sherds of fabrics which have not been recognised previously, either in Gloucestershire or elsewhere. In most cases they are likely to be of "local" origin, although exactly where they were produced cannot yet be stated, although it would undoubtedly be possible to narrow down the potential source of more, if not all, of these wares following further study.

At present, these wares have been assigned letter codes and a prefix MEDLOC. Most of these wares contain a mixture of limestone, shell and sandstone inclusions and should certainly be capable of being provenanced. The vessels include a range of forms (Table 1) although most come from handmade jars.

Late 14th to 15th centuries

There is no pottery present on the Dursley site which must date to the later 14th or 15th century although some of the wares which occur in the earlier and later periods were in production during this period. At the very least there was a lull in deposition but it is quite possible that there was a period of abandonment.

Late medieval/transitional pottery

Early to mid 16th centuries

Coarse Border ware

A single sherd from a Coarse Border ware lobed cup was recorded from context 3176 (CBW). Coarse Border ware was produced at sites on the Surrey/Hampshire border and forms the majority of the pottery used in London in the later 14th to early 16th centuries. The vessel had a plain lead glaze on the inside and a copper-mottled glaze on the exterior. Such vessels were produced from the late 14th to the early 16th centuries and at present there appears to be no means of dating examples within this bracket.

Tudor Green ware

Three sherds of Tudor Green ware were recorded (Gloucester TF65, TUDG). They come from at most two vessels. Two of the sherds come from a carinated vessel (context 4587) and all three have a copper-mottled glaze inside and out.

Tudor Green ware was also produced at sites on the Surrey/Hampshire border. The earliest products are lobed cups, found in the early 15th century in London, but production continued into the 16th century although by the end of the century thin-walled vessels were being produced in the slightly coarser Border ware fabric. The carination on the Dursley vessel probably indicates an early 16th-century date.

Sandy Minety ware

Twelve sherds of sandy Minety ware were recorded (Gloucester TF44V, SANDY MINETY). This ware is uncommon and appears to be transitional between the Minety industry and the Ashton Keynes industry, based in the neighbouring village. The fabric has the light-coloured, calcareous body of Minety ware with the fine quartz sand temper of Ashton Keynes ware. The vessels have a plain lead glaze.

The sherds probably come from three vessels. One of these, a large pancheon, is represented by large fresh sherds recovered from contexts 4304, 4324 and 4325. Sherds from a flanged bowl were recovered from contexts 4581 and 4586 and a sherd from a jar with a flat base was recovered from context 4568.

It is likely that this ware was produced for a short period of time in the early to mid 16th century.

Cistercian ware

Ten sherds of Cistercian ware were recorded. All come from small, brown- or purple-glazed cups, mostly in a fabric with no sign of any inclusions over 0.1mm. One sherd comes from a vessel with a globular body and flaring rim (context 4648) and one from a vessel with a globular body and a cylindrical neck (context 4229). Three of the sherds have glaze only on the external surface and these might come from small jugs or costrels rather than cups.

Cistercian ware was introduced to the Severn Valley in the mid 16th century, and is present by the 1530s. The vessel with the cylindrical neck is likely to be of this date. However, it continued to be made into the later 16th or very early 17th century, overlapping with the blackware cups which can be seen typologically as successors to this tradition.

Martincamp ware

A single sherd from a white earthenware flask, Hurst's Type I, was found. These vessels are known generically as Martincamp ware, after the production site in the Paris basin where grey stoneware and red earthenware flasks were produced. There is, however, less clear evidence for the source of the white earthenware, which is found in mid 16th-century assemblages in England. The Dursley sherd comes from context 4476.

Italo-Netherlandish Maiolica

The rim of a maiolica plate was recorded from context 4581 (Gloucester TF62, SNTG/CITG). The decoration and simple profile are paralleled both in central Italy and at Antwerp, where Italian potters started the first northwest European maiolica industry in the very early 16th century. The decoration is floral and is executed in light and dark blue paint. Vessels of this type were present at Acton Court in the mid 16th century but the presence of an example at a seemingly low status settlement at Dursley is remarkable.

Post-medieval pottery

The transition from medieval to post-medieval pottery in the Dursley area seems to have been quite sharp and took place around the middle of the 16th century. Industries which had been in existence for several hundred years either ceased (as at Minety) or adopted different fabrics and forms (as at Malvern Chase). Meanwhile a range of new wares were introduced. In some cases (as at Ashton Keynes and Border ware) they can be seen as a continuation of an earlier industry whilst others appear in areas with no previous history of pottery production. For the purposes of this assessment, a terminal date of c.1650 is used although for these local wares there is no break at this point. However, it does mark the start

of large-scale slipware production at Bristol and in Staffordshire which eventually lead to the centralisation of production at large urban factories.

Late 16th to early 17th centuries

One hundred and twenty-one sherds of pottery of later 16th to mid 17th-century date were recorded from Dursley. The majority of these were produced at Ashton Keynes, 17 miles east of Dursley, with a handful of sherds from other regional production centres, such as the south Somerset industry (at least 35 miles south of Dursley), Stroat (11 miles west of Dursley, but on the west bank of the Severn), the Welsh Borderland (where the nearest known sources are at least 20 miles to the west of Dursley, and again on the west bank of the Severn), and the Surrey/Hampshire border. A few sherds of tin-glazed ware might come from Bristol or London whilst two sherds of Frechen stoneware, from the middle Rhineland, are also present.

Ashton Keynes ware

One hundred sherds of Ashton Keynes ware were recorded, representing no more than 92 vessels and weighing 2175 gm (Gloucester TF80, AK). Ashton Keynes ware is tempered with a fine quartz sand, with rare ironstone and calcareous inclusions often several mm across. The groundmass is fine-textured and red-firing. Most vessels were glazed with a plain lead glaze.

The majority of the material found (45 sherds) come from bowls, most of which are straight-sided, cylindrical vessels with an internal glaze. Other relatively common forms present are jars (9 sherds), pancheons (9 sherds), pipkins (8 sherds), and chamber pots (8 sherds including disputable examples). Single examples of costrels, chafing dishes, cups, dripping dishes, flanged bowls, lids, ridge tiles, and tankards were identified. In addition, a number of sherds could not be assigned to a precise form.

At Gloucester, it seems that the flanged bowl form is early, perhaps of mid 16th century date, whereas there is no evidence for any chronological progression in the remaining forms until the later 18th century, when flowerpots were produced. Thus, without other evidence, deposits containing Ashton Keynes ware can only be dated to the later 16th to mid 18th centuries. However, associated wares suggest that most of the sherds catalogued here are of later 16th and early 17th century date.

South Somerset ware

Six sherds of South Somerset ware were identified at Dursley (Gloucester TF57, SSOM). This ware is similar in appearance to Ashton Keynes ware although it is slightly finer in texture and contained muscovite laths absent from Ashton Keynes ware. There is little difference in fabric between the products of the Donyatt area (just west of

Ilminster) and those of Wanstrow, which is closer (between Shepton Mallet and Frome) but the forms of the vessels at Dursley suggests that they are Donyatt products, perhaps shipped by boat along the north Somerset coast to Bristol and thence carried overland to Dursley.

Sherds of a jug with a white slip band, decorated with scratched vertical lines were recovered from context 4587. This form appears to be amongst the earliest South Somerset ware products known, probably of later 16th-century date. Another jug sherd was recognised in context 3170.

The other South Somerset vessel from the site is a sherd from a dark green-glazed cup from context 4229. This type too is of 16th-century date.

Stroat ware

Four sherds of Stroat ware were identified at Dursley, weighing in total 109 gm (Gloucester TF97, STROAT). Stroat ware was produced in the late 16th and early 17th centuries at Stroat, on the Chepstow to Gloucester road and was presumably distributed by boat, since it occurs with some frequency at sites in the Severn Valley, on both sides of the river. The fabric contains sparse quartzose grits (including Carboniferous sandstone fragments) in a fine-textured groundmass.

The four vessels found are: a bowl or pancheon with a knife-trimmed base (context 4276), a chafing dish (context 4430), a colander with an internal white slip (context 4496) and a hemispherical bowl (context 4581).

Welsh Borderland wares

Three sherds of post-medieval Welsh borderland wares were found at Dursley (Gloucester TF54, HERA7D). This ware contains no visible inclusions over 0.1mm across and was produced at numerous small centres in Gwent, Herefordshire and Gloucestershire west of the Severn in the later 16th and 17th centuries.

Two sherds come from small cups, similar to Cistercian ware vessels (contexts 4205 and 4581) and one comes from a black-glazed jug with a cylindrical neck and cordon at the neck (context 4586). The jug form suggests that it is copying mid to late 16th-century stoneware forms.

Border ware

Two sherds of Border ware were recorded at Dursley, both from context 4332 and both from mugs. The first sherd is from a vessel with a rounded rim, with a groove just below the rim, and a rod handle. This appears to be a copy of mid 16th-century and later Rhenish stonewares (such as Cologne and Frechen stoneware). The groove below the rim may have been to enable a metal lid to be attached, as is the case with the stoneware vessels. The second sherd is from a

mug with crushed quartz fragments pressed into the body of the pot. This form is discussed in some detail by Jeremy Haslam in his report on the Cove kiln, Hampshire, where they are dated to the second quarter of the 17th century ({Haslam #45643}).

Tin-glazed wares

Four sherds of tin-glazed ware were recovered (excluding the Italo-Netherlandish vessel previously described). The fabric of these vessels contains abundant subangular quartz sand in a calcareous groundmass and visually it is not possible to distinguish the products of the various late 16th to mid 18th-century low countries production sites from English sources, such as London, Norwich and Brislington.

One sherd comes from a charger, with a lead-glazed underside and tin-glazed upper surface. The vessel has blue painted decoration (context 4229). This form was produced in London from the late 16th century and in Brislington from the mid 17th century. By the 1660s, however, such vessels were glazed with tin-opacified glaze on both surface. A similar sherd came from context 4430 except that it also has painting in thin purple lines on the interior. A counter from context 4298 was cut from a tin-glazed bowl with blue decoration. The fourth vessel was a chamberpot, with no decoration and tin glaze on both inside and out. The latter form was produced from the mid 17th-century onwards but without a rim it is not possible to date more precisely than mid 17th to mid 18th century.

Frechen stoneware

Two sherds of Frechen stoneware were present. Both come from drinking jugs, also termed mugs, with a globular body, moulded footing and cylindrical neck, with a cordon at the neck angle. The two sherds, both from context 4324, could date from the mid 16th to the mid 17th century and have no typological features which would allow a closer date.

Post-medieval regional import?

A sherd of a redware vessel with an external white slip and copper-green glaze was recovered from context 4571 (PMEDX). The vessel may have been a costrel. White-slipped, green-glazed red earthenwares were produced in the low countries and at various sites in eastern England but this particular example is not immediately recognisable.

Later 17th-century and later

Seven sherds of late 17th-century or later date were present in the collection sent for assessment. They are either intrusive in earlier deposits or are evidence that those deposits require re-phasing.

They consist of: a sherd of Cranham ware and a sherd of Staffordshire/Bristol Mottled ware from contexts 4360 and 4536, both of which were phased to Phase 3; sherds of Staffordshire/Bristol press-moulded combed slipware and mottled ware from context 3170; sherds of Staffordshire/Bristol press-moulded, embossed slipware and light-bodied wheelthrown slipware from context 4332 (both this context and 3170 are phased to Phase 5); and a sherd of a Staffordshire/Bristol press-moulded combed slipware plate from context 4430 (Phase 6).

Assessment

Area B

Period 5

Seventeen sherds were submitted from four contexts in Area B, all of which were phased as Period 5 (late 17th and 18th centuries). The sherds, therefore are likely to be residual.

Pit 3179 (context 3177) produced a single sherd of mid-13th- to 14th-century date.

Most of the sherds are associated with the construction of the stone building (contexts 3170, 3176 and 3185) and these include a collection of fresh mid 16th-century sherds together with sherds of Staffordshire/Bristol press-moulded combed slipware and mottled ware.

Area F

Period 1

A single sherd of Roman pottery was recovered from the subsoil, context 4699. It is of Oxfordshire colour-coated ware and is likely to be of later 2nd to 4th-century date.

Period 2

Eight hundred and four sherds were recovered from deposits assigned to Period 2 (Table 00).

Context 4603, a layer of dumped material, produced a sherd of Roman pottery and a sherd of locally-made ware (MEDLOC A) and no close date can yet be assigned.

A layer of redeposited natural, 4651, produced four sherds which could form a mid 13th-century assemblage with a single sherd of mid 16th- to early 17th-century date. The latter is presumably intrusive.

The remaining pottery from this Period either comes from garden soil or from the backfills of various features:

The garden soil produced 88 sherds, from five contexts. All but 6 of these sherds are earlier than the mid 14th century and include one sherd of Roman date. The majority could date to the mid/late 13th century. The six later sherds are all of mid/late 16th-century date.

Beamslot 4243 produced ten sherds in total, of which one is possibly prehistoric and the remainder potentially of late 11th to 12th-century date, including 4 locally-made wares.

The remaining features include one stone-lined feature, 4551, which produced one locally-made sherd which cannot yet be closely dated, and a series of pits. One of the pits, 4657, produced sherds which might be of early 13th century date, but the assemblage is quite small and all the others bar one contain predominantly types of early 13th-century or later date together with sherds of mid to late 13th-century type. The exception is pit 4490 which produced an assemblage of mid/late 16th-century character (albeit only 4 sherds, but each of which is of a mid/late 16th-century type).

It seems, therefore, that the Period 2 pits and the associated garden soil are related to a single short-lived phase of occupation in the mid/late 13th century with the exception of the beam slot, 4243, which could be considerably earlier and pit 4490, which is of mid/late 16th-century date. A small collection of mid/late 16th-century pottery was also present in the garden soil assemblages.

Period 2 to 3

Two garden soil assemblages were assigned to Period 2 to 3. Context 4382 produced a mixture of 13th-century and mid/late 16th-century pottery whilst context 4472 produced sherds of Roman and early 13th-century or later date. Both are comparable with the assemblages recovered from the Period 2 garden soils.

Period 2 to 4

One garden soil assemblage, context 4205, was assigned to Period 2 to 4. It produced 15 sherds, of which six are of probable 13th-century date and the remaining nine are of mid/late 16th-century date.

Period 3

Seventy-nine sherds of pottery were recovered from deposits assigned to Period 3. With the exception of context 4354 and context 4537, both which produced only small assemblages locally-made pottery, not yet closely datable, the deposits associated with the furnaces contained an identical range of wares to the mid/late 13th-century material from the Period 2 pits and garden soils. There is no apparent difference in the frequency of wheelthrown to handmade Minety wares, nor of the proportion of wares introduced in the mid/late 13th-century to earlier ones which might indicate a difference in date between the assemblages.

Given that the Period 3 features physically overlies those of Period 2, and the much smaller quantity of pottery involved, it is likely that most of the pottery from the Period 3 deposits is actually disturbed material of Period 2 date. It is perhaps remarkable that none of the sherds from Period 3 deposits were burnt or had iron-rich concretions on them whereas sherds from four Period 2 deposits had these characteristics: 4441, 4570; 4668; and 4672. The affected sherds include a Laverstock ware jug sherd, a Minety ware wheelthrown jar and Minety ware tripod pitcher sherds.

Deposits associated with the Period 3 building, 4536, 4537, 4360, 4594, 4595, and 4648, produced 18 sherds of which 6 are of 13th-century character, 5 are locally-produced medieval wares and six are of mid/late 16th-century date or later (Table 00). There is thus, no pottery from these deposits which is contemporary with the supposed date of the building.

Period 4

One hundred and five sherds were recovered from Period 4 deposits. Of these, the majority are of precisely the same types as were found in Period 2 deposits and are clearly residual. This leaves 44 sherds of potentially contemporary pottery, all of which could have been current in the mid to late 16th century. This assemblage includes joining sherds of Sandy Minety ware pancheon from different deposits. This, and the fact that the types present could all have been current together for a short period in the mid 16th century suggests that this pottery may be associated with a single phase of activity (Table 00).

Period 5

One hundred and forty-two sherds of pottery were submitted for assessment from Period 5 deposits. Period 5 is dated by the excavators to the later 17th and 18th century and thus all of the submitted pottery ought to be residual. It includes 65 sherds of 13th-century character and 77 of mid/late 16th-century and later date (Table 00). The latter include the first occurrences on the site of several types: South Somerset ware, tin-glazed ware, Border ware, Post-medieval Welsh Borderland wares, Staffordshire/Bristol embossed press-moulded ware and Staffordshire/Bristol wheelthrown, light-bodied slipwares. As a group, these sherds could be of mid 17th-century date, i.e. 1660s-1670s, and are probably associated with the construction of the Period 5 building. It is, however, impossible to distinguish between Ashton Keynes ware of mid/late 16th-century date and that of the succeeding century without a closer examination of the pottery. Nevertheless, it seems that there is a small mid/late 17th-century assemblage from Period 5 which is of some interest.

Period 6

Twenty sherds of pottery from deposits assigned to Period 6 were submitted for identification. They come from two contexts, 4184 (the fill of pipe trench 4183) and 4430 (the

makeup for cobbled surface 4227). Both contexts are likely to have consisted in the main of redeposited material disturbed from earlier deposits on the site and as might be expected all the sherds present are of types found in earlier Periods. All of the submitted pottery from Period 6 is therefore residual and of 13th-century, mid/late 16th-century and mid/late 17th-century date.

Interpretation

The earliest possible activity on the site recognisable in the pottery collection is of later prehistoric date. The sherds show no signs of extreme weathering and this may indicate the existed of Bronze Age or Iron Age settlement nearby. However, the pottery requires further study to be certain.

There is a collection of pottery of later Roman date from the excavation which can be associated with a nearby Roman settlement. The first activity on the site itself appears to date to the later 11th to mid 12th centuries although only one assemblage, from the backfill of a period 2 beamslot, is likely to consist solely of pottery of this date.

It is perhaps unlikely that there is continuous occupation on the site from the late 11th/early 12th centuries through to the early 13th century, mainly because of the paucity of 12th-century types in the collection and the lack of 12th-century assemblages. Occupation may have re-started at some date in the first half of the 13th century, at a time when most of the pottery used was made by hand but there is little deposition on the site until after the introduction of a range of mid/late 13th-century wheelthrown wares (Period 2). Pottery residual from this Period 2 occupation is found throughout the remainder of the sequence but when re-assembled it forms a very large and informative group which would repay further study and publication.

No contemporary pottery was associated with the Period 3 furnaces whilst the Period 3 building levels contain a mixture of earlier and later pottery. The date of the Period 3 activity is therefore floating, as far as the ceramic evidence is concerned.

Period 4 seems to represent a short-lived phase of activity in the mid to late 16th century and it is likely that a few features assigned to Period 2 at present are actually contemporary with Period 4, as is some of the pottery found in the Period 2, 2-3 and 2-4 garden soils. This Period 4 activity includes sherds of imported maiolica and an imported white earthenware flask, both of which are notable. Here too, because of the lack of immediately preceding or succeeding activity on the site it is possible to reconstruct the Period 4 assemblage which also forms a large and potentially informative group.

The Period 5 pottery consists mainly of residual material, but a small assemblage of mid to late 17th-century date can be isolated.

Thus, in total, four discrete phases of activity can be recognised in the collection, each of which is potentially valuable for reconstructing the history of pottery production and use in this part of Gloucestershire, where little work has previously been undertaken.

Retention

The collection should be retained in its entirety since all is apparently stratified and capable of interpretation.

Publication

The collection certainly requires academic publication. Such a publication could make use of a large amount of the work done for this assessment but a number of loose ends have had to be left and would require tying up:

- a) potential re-phasing of a few deposits. This would involve a small amount of time from AVAC in order to update our records and to liaise with BARAS staff (Task 1).
- b) further study of certain wares, in particular the locally-produced wares, which might lead to a better understanding of the sequence. This should involve scientific study of the fabrics followed by a redefinition of the wares present and a revised and fuller text (Task 2).
- c) the provision of references to other published work throughout the report (Task 3).
- d) correlation with the results of any other finds studies (Task 4).

Illustration

Given the potential splendid chronological control on the collection, it is worth publishing a large number of the vessels found, even where examples have previously been published elsewhere (Task 5).

BARAS staff will undertake this illustration but time should be budgeted to allow Alan Vince to check these drawings at the pencil drawing stage (Task 6) and then to assist in page layout (Task 7) and cross-reference to the text (Task 8) and to provide captions (Task 9).

Photography

Several of the sherds from the site are quite large and fresh although none could be reconstructed to form whole or even substantial parts of vessels. If publication on the web or on CD is envisaged then a selection of colour photographs would make a useful addition to the publication and could either be produced at Lincoln or in Bristol (Task 10).

Fabric Analysis

Over 250 sherds of fabrics not previously recognised were found in the collection. These were assigned temporary codes based on examination at x20 magnification but before publication it is necessary to examine a sample of these sherds using thin section and chemical analysis followed by a re-examination of the rest of the collection and probably reclassification.

Thin section analysis would be carried out by Alan Vince, using thin sections prepared at the Department of Earth Sciences, University of Manchester, and stained using Dickson's method. A detailed petrological report would be prepared which would then be summarised for inclusion as an appendix to the published report and its conclusions integrated into the main text and database. There are at least 10 different fabric groups present which require study. Although in some cases even one thin section is sufficient to characterise the fabric, best practice is to take between five and ten sections of each fabric. Since some of the fabric groups do not contain five samples, and since the size and condition of some sherds will preclude sampling, the estimate is based on a maximum of 50 sections (Task 11).

Chemical analysis would be carried out at Royal Holloway College, London, in the Department of Geology and under the supervision of Dr J N Walsh. Sampling of the vessels would take place in Lincoln. The digital data would be archived with the site archive and would be studied by Alan Vince and compared with a database of over 2000 analyses undertaken for AVAC using a variety of multivariate statistical techniques. Chemical analysis compares one group of samples with another to determine whether or not they might have come from the same statistical population. Therefore, for each group examined one needs to have sufficient samples to determine a mean and standard deviation for the element concentrations. The minimum recommended number of samples per group is six with a preference for 10. Chemical sampling can be carried out on a smaller sample than thin sectioning and so it should be possible to take samples from sherds too small for thin sectioning. To characterise each of the 10 groups would therefore take up to 100 samples and should take no fewer than 50 (Task 12).

Costing and timescale

The various tasks which have been recommended for further action are described above and their estimated cost at 2004/5 rates is given here Table 6.

The most time-consuming part of the recommended addition work is the fabric analysis. A batch of thin sections takes up to 4 weeks for production and then several days for study and report writing. Similarly, chemical analysis usually takes 2 to 3 weeks but the report cannot be completed before the related thin sections have been examined. This analysis clearly has to precede

Tables

Table 1 Identified forms found in locally-produced wares

cname	JAR	PANC	JUG/ JAR	BOWL/ JAR	JAR /BOWL	JAR/ JUG	RIDGE	JUG	JUG?	PANC/ CURF	RIDGE?	Grand Total
MEDLOC A	14											14
MEDLOC B	138				1		2	1		2	1	145
MEDLOC C	2		1									3
MEDLOC D	37	1										38
MEDLOC E	13							2				15
MEDLOC F								1				1
MEDLOC G	3	1	2	1		2		37	1			47
MEDLOC H								3				3
MEDLOC I	4											4
MEDLOC J	1											1
MEDLOC K								3				3
Grand Total	212	2	3	1	1	2	2	47	1	2	1	274

Table 2 summary of pottery by sherd and maximum vessel count from Period 2 deposits

cname	Sum of nosh	Sum of NOV	ML16th century
AK		2	yes
BATHA		9	
BR		9	
GLOS110		1	
GLOS41B		62	
HERA7B		32	
HERA7D		1	yes
HERB1		6	
HERB5		1	yes
HERC1		1	
HG		2	
LAVERSTOCK		3	
MEDLOC A		7	
MEDLOC B		108	
MEDLOC C		1	

MEDLOC D	32	25	
MEDLOC E	1	1	
MEDLOC G	43	30	
MEDLOC H	2	1	
MEDLOC I	4	1	
MEDLOC J	1	1	
MEDLOC K	3	3	
MEDX	1	1	
NBYB	1	1	
NH	9	6	
PREH?	2	2	
RPOT	5	5	
SNTG/CITG	1	1	yes
STROAT	1	1	yes
TUDG	1	1	yes
WORCS	24	20	
CSTN	2	2	yes
SANDY MINETY	1	1	yes
MINETY	425	351	some?
Grand Total	804	683	

Table 3 Pottery later than the mid/late 13th-century from Period 3 deposits

Context	CSTN	AK	CRANHAM	STMO	Grand Total
4360		3	1		4
4536				1	1
4648	1				1
Grand Total	1	3	1	1	6

Table 4 Contemporary pottery in Period 4 deposits

Context	STROAT	MARTI	FREC	CSTN	HERB5	SANDY MINETY	AK	Grand Total
4276	1				1		9	11
4304						1		1
4324			2			1		3
4325				1		7	1	9
4406							2	2
4437							3	3
4476		1		1				2
4559					1		8	9
4571							1	1

4590					1				1
4642					2				2
Grand Total	1	1	2	2	5	9		24	44

Table 5 16th-century and later pottery from Period 5 deposits

Context	AK	SSOM	CSTN	TGW	SANDY MINETY	BORDG	STROAT	HERA7D	MINETY	STEM	STSL	Grand Total
4229	14	1	2	1								18
4259	2								1			3
4298	12			1								13
4332	6					2				1	1	10
4351	4											4
4374	1											1
4496	1						1					2
4568	9		1		1							11
4586	7			1	1			1				10
4587		4										4
4606	1											1
Grand Total	57	5	3	3	2	2	1	1	1	1	1	77

Table 6 Costing of Recommended Tasks

Task	Description	Unit Cost	Units	VAT	Total
1	Rephasing etc. Liaison with BARAS	£180	1	£31.50	£180
2	Revision of Local wares text	£180	2	£63.00	£360
3	References	£180	1	£31.50	£180
4	Correlation with other finds studies	£180	0.5	£15.75	£90
5	Selection and extraction of sherds for illustration	£180	1	£31.50	£180
6	Checking pencil drawings	£180	1	£31.50	£180
7	Provision of publication order and rough layout	£180	1	£31.50	£180
8	Cross reference drawings to text	£180	1	£31.50	£180
9	Provide caption list	£180	0.5	£15.75	£90
10	Provision of digital images showing fabrics, decoration types etc	£180	2	£63.00	£360
11	Production and analysis of thin sections, plus report	£23	50	£196.88	£1,125
12	Production and analysis of chemical analyses	£24	100	£411.25	£2,350
	Total			£954.63	£5,455.00

