

## Assessment of the pottery from the Maudlin to Indian Queens gas pipeline: Archaeological Watching Brief (MIQ01)

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A collection of 742 fragments of pottery and a other finds from an archaeological watching brief carried out on the line of the Maudlin to Indian Queens gas pipeline by Network Archaeology was submitted for identification and assessment. The pottery range in date from the pre-conquest period to the late 19<sup>th</sup> or 20<sup>th</sup> centuries and includes several collections of 6<sup>th</sup> to 11<sup>th</sup>-century pottery, pre-dating the Norman conquest. These are exceptional and represent the first material of this kind from central Cornwall.

### Description

#### Ceramic Building Material

A single fragment of roof tile in Lostwithiel-type ware (LOSTW) was found in context 3123 on plot 2/15. It is not possible to say whether the tile is a flat roof tile or a ridge tile, but there is little evidence for the use of flat roof tiles in the county, slate being the norm. The low frequency of ceramic building material is remarkable.

#### Fired clay

Only four small scraps of fired clay were recovered, from context 5003 on plot 3/36. They are too small to identify the object from which they came and the only features of their fabric which are discernable are fragments of quartz and muscovite.

#### Pottery

The pottery was classified into ware groups using the terminology adopted for Launceston Castle (Brown *et al* forthcoming) with the addition of standard codes for post-medieval and early modern wares not recorded at Launceston (Table 1).

Table 1

CNAME	Full Name	Earliest Date	Latest Date	Sherds
BBAS	Black basalt ware	1740	1900	2
BLR	Bar lug ware - rock-tempered fabric	950	1070	32
BLUE	Refined blue ware	1850	1950	1
BRIS	Bristol stoneware	1780	1950	14
CHPO	Chinese Export Porcelain	1620	1900	3
CONP	Continental Porcelain	1770	1900	1
CREA	Creamware	1765	1830	35

DERBS	Derby Stoneware	1800	1950	1
ENGS	Unspecified English Stoneware	1750	1900	5
ENPO	English porcelain	1700	2000	15
FREC	Frechen stoneware	1530	1680	1
LONS	London Stoneware	1670	1800	5
LOSTW	Lostwithiel-type ware	1450	1750	182
NCBW	19th-century Buff ware	1800	1900	16
NDCAL	North Devon calcareous	1450	1550	6
NDFW	North Devon Fine ware	1650	1900	26
NDFW?	North Devon Fine ware	1650	1900	4
NDGT	North Devon Gravel-Tempered ware	1600	1900	54
NDMCW	North Devon medieval	1230	1550	8
NDSL	Slate-tempered ware	1170	1230	2
NOTS	Nottingham stoneware	1690	1900	1
PEAR	Pearl ware	1770	1900	53
PMGL	Post-Medieval glass	1550	2000	1
PMLOC	Post-medieval local	1550	1750	4
REFR	Refined Red Earthenware	1730	1800	3
SC	South Cornish micaceous ware	1250	1550	1
SCGT	South Cornish Gravel Tempered ware	1650	1950	10
SSOM	South Somerset (Donyatt) ware	1550	1900	1
STCO	Staffordshire combed press-moulded ware	1650	1800	2
STGER	St Germans-type ware	1450	1750	26
STRE	Staffordshire redware	1630	1750	2
STSL	Staffordshire/Bristol slipware	1680	1800	3
SUND	Sunderland coarseware	1800	1900	2
SWCHT	Chert-tempered ware	1070	1250	2
SWMIC	Southwestern Micaceous ware	1250	1500	83
SWSG	Staffordshire White Saltglazed stoneware	1700	1770	6
TPW	Transfer printed ware	1770	1900	71
WHITE	Modern whiteware	1850	1900	60
WSM	Weston-super-Mare type ware	1800	1950	8

### 6<sup>th</sup> to 12<sup>th</sup> centuries

32 sherds of Bar Lug ware or its predecessors with angular rock temper (BLR) were recorded. Some of these were relatively thin-walled and possibly of Sandy Lane 1 style ware, of post-conquest date but the majority were thick-walled sherds from cylindrical bodied jars. No featured sherds were present. The rock is probably in the main serpentine but includes some metamorphic rock and others which may allow the source to be tied down through petrological analysis. A recent study of the pottery from the 6<sup>th</sup> to 11<sup>th</sup>-century

settlement at Gwithian by Carl Thorpe and Henrietta Quinnell suggests that there are subtle differences in finishing technique within this material which may allow featureless body sherds like these to be dated more closely within the 6<sup>th</sup> to 11<sup>th</sup> centuries.

Two sherds of southwestern chert-tempered ware were tentatively identified (SWCHT). This ware is present from the late 11<sup>th</sup> to the mid 13<sup>th</sup> centuries at Launceston Castle but has a slightly earlier start date in Exeter. These sherds are most likely of post-conquest date. This ware includes a sand composed of lower Cretaceous quartz and chert, which does not occur in Cornwall but is found in Somerset and south Devon. The ware is very common on sites in Devon but rare in Cornwall, presumably because the Sandy Lane 1 style pottery supplied local needs.

Two sherds of slate-tempered ware were found (NDSLT). At Launceston castle this ware was found solely in a narrow period, from the late 12<sup>th</sup> to the early 13<sup>th</sup> centuries, but similar fabrics, but wheelthrown rather than handmade, have been found at Bideford in contexts which suggest that they were made there in the later medieval or early post-medieval periods. One of the two sherds from the pipeline is likely to be of the earlier type whilst the other is the rim of a wheelthrown pancheon of post-medieval type. A North Devon source is possible for both but the earlier Launceston castle ware was thought to be possibly locally-produced.

Almost all of the sherds found are definitely from jars, used mainly for cooking and often having soot deposits on the exterior.

### 13<sup>th</sup> to 15<sup>th</sup> centuries

Ninety-eight sherds dating between the mid 13<sup>th</sup> and the mid 16<sup>th</sup> centuries were found. The majority of these were Southwestern micaceous wares, tempered with a mixed sand which includes phyllite, muscovite sheaves, polished rounded quartz grains and rounded haematite pellets (SWMIC). This fabric is first found at Launceston Castle in the second half of the 13<sup>th</sup> century and forms an increasingly large proportion of pottery assemblages throughout the remainder of the medieval period. It is contemporary with North Devon Medieval coarseware (NDMCW) which has a slightly earlier starting date, in the early to mid 13<sup>th</sup> century. The high ratio of SWMIC to NDMCW sherds found on the pipeline route is probably due to the increased distance of the area from the Bideford/Barnstaple area but may also indicate a late date within the medieval period for the majority of these finds. A single sherd was classified as a South Cornish ware (SC) on the basis of its inclusions, which do not include the rounded quartz nor the phyllite found in SWMIC but did include large muscovite sheaves. Again, a 13<sup>th</sup> to 15<sup>th</sup>-century date is likely. Finally, six sherds of North Devon Calcareous (NDCAL) ware were found. This ware first occurs at Launceston Castle in the 15<sup>th</sup> century and continues in use into the 16<sup>th</sup> century, overlapping with the

earliest gravel-tempered wares. The vessels are wheelthrown and thinly-potted, in contrast to both the earlier and later North Devon wares.

The source of the SWMIC fabric is not known although the presence of rare rounded fragments of quartz of lower Cretaceous type alongside the more local phyllite fragments is quite distinctive and suggests that the ware comes from a single source. The only documented pottery of this period in Cornwall was at Lostwithiel (Douch 1969, 45-7) but later wares from Lostwithiel do not contain either the rounded quartz or distinctive haematite pellets and so if the ware was made at Lostwithiel then a different sand source was being exploited.

In this period too most of the sherds come from jars used for cooking.

### Late 15<sup>th</sup> to 18<sup>th</sup> centuries

Three hundred and eighty sherds of pottery dating to the late medieval and post-medieval period were identified. The majority of these were of Lostwithiel-type ware (LOSTW), characterised by large sheaves of muscovite (white mica), rounded fragments of phyllite and some biotite granite. A study by O'Mahoney has suggested that this ware probably originated in the late medieval period but it is likely that most of the sherds found are of post-medieval date. A smaller quantity of pottery is of St Germans-type ware (STGER) and four sherds with fayalite slag temper were noted. A thin-section of a vessel from Mawgan Bridge, Mawgan in Meneage made by the author (1984, Section M96) has a similar slag temper and it is possible that these slag-tempered sherds (coded as PMLOC) were products of the Helford River valley industry located in the parishes of Mawgan and Constantine.

Douch (1969) documents numerous potteries in the Truro area in the post-medieval period, of which that at Truro is both the earliest and the longest lasting. However, in the 18<sup>th</sup> century there were also potteries at Ruan Lanihorne, Veryan, Feock and Kenwyn. It would be unusual if none of their products were present in this collection, in which case their products must have been similar to the micaceous LOSTW fabric.

North Devon wares were also common. These include fifty-four sherds of gravel-tempered ware (NDGT) and twenty-six sherds of fine ware (NDFW), plus four sherds which were too abraded for positive identification (NDFW?). Several of these gravel-tempered sherds contained sheaves of muscovite alongside the biotite granite, slate and fine-grained sedimentary rock fragments which characterise this ware. In some cases the muscovite was clearly present in a composite rock fragment and they appear to be of granitic origin rather than metamorphic. This feature has not been noted in definite North Devon wares and it is possible that some of these vessels were produced in Cornwall and they have been coded here as SCGT.

The remaining wares of this period were either factory products of English origin or imports. The non-local English wares are probably in the main from Staffordshire, although some of the slipwares are likely to be from Bristol. In addition, there are sherds of South Somerset ware (SSOM), London stoneware (LONS), and Nottingham stoneware (NOTS). None of these non-local wares need be dated earlier than the mid 18<sup>th</sup> century and even these sherds are quite scarce (2 sherds of Staffordshire Redware, STRE, and 2 sherds of press-moulded vessels, STCO, and 3 sherds of slip-decorated hollow wares (STSL). This either suggests that there is very little late 17<sup>th</sup>/early 18<sup>th</sup>-century in the collection or, more likely, that non-local wares were uncommon at this period in Cornwall.

The imported sherds consist of a single sherd from a Frechen stoneware bottle, of early to mid 17<sup>th</sup>-century date, and two sherds of Chinese export porcelain. The latter, even if produced in the early to mid 18<sup>th</sup> century, are quite likely to have been discarded in the late 18<sup>th</sup> century or later and cannot be taken on their own as evidence for early to mid 18<sup>th</sup>-century activity. In fact, both vessels appear to be later, in the one case coming from a tea pot with a pink over-glaze enamel and in the other coming from a bowl with over-glaze enamel decoration and painted with gold leaf.

The range of vessel forms present in this period is wider than previously, but is still quite restricted in comparison to many other parts of Britain. For example, small cups are absent. One of the most common forms is the pancheon, a large conical bowl with a thick moulded or flanged rim. Several of the examples here have sooting on the exterior.

### Late 18<sup>th</sup> to 20<sup>th</sup> centuries

Late 18<sup>th</sup>-century and later wares consist in the main of factory-made non-local wares, an unknown proportion of the North Devon wares and some sherds of glazed red earthenware made from a silty, calcareous clay with turned exteriors. Such vessels are found throughout the southwest and the Severn valley in the late 18<sup>th</sup> and 19<sup>th</sup> centuries and represent the uptake of some factory techniques by country potters. The fabric suggests the use of an estuarine clay and the ware is termed Weston-super-Mare-type (WSM) here because of the visual similarity of these wares to those from Weston. The type is absent at Bath from deposits dating to the 1760s-1770s but is present in the foundations of houses built before the end of the 18<sup>th</sup> century. The quantity of Pearl ware (PEAR) or other refined whitewares (WHITE) decorated with sponged decoration is notable. These were produced in bulk in Staffordshire for the American market but are relatively uncommon in England in comparison to transfer-printed wares (TPW). The quantity of Creamware and Pearl ware vessels decorated with slip bands ('industrial slipware') suggests that the late 18<sup>th</sup>/early 19<sup>th</sup>-century is well-represented in the collection. Bristol stoneware is common (BRIS) as well as unattributed stoneware which may also include Bristol products (ENGs). Derbyshire stoneware, by contrast, is only represented by a single vessel (DERBS). A single glazed red earthenware vessel of the type used in the northeast of England (SUND) was present.

These vessels, apparently were traded by ship to the south coast alongside the more highly-prized Sunderland lustrewares (none of which were noted in the collection, however). These SUND vessels were often rectangular dishes for use in cooking.

There is a wider range of vessel forms represented in this period than in earlier ones but again there is a lack of variety in comparison to other parts of Britain. Plates, bowls, cups and dishes form three quarters of the assemblage to which can be added jars (in particular stoneware preserve jars of late 19<sup>th</sup> and early 20<sup>th</sup>-century date), flagons (narrow-necked stoneware handled bottles of the type used for cider and spirits) and tankards. Other forms are represented by two or three examples each, at most. There is, for example, only a single example of a flowerpot, normally present in large quantities in assemblages of this date. The presence of three figurines, of the type won as prizes at fairgrounds

## Discussion

Because of the long-lived pottery traditions used in the county, there is little precise dating of any of the deposits or the date-range of the activity represented on the various plots.

Nevertheless, the Bar Lug ware probably indicates 11<sup>th</sup>-century or earlier activity. In most cases, the finds consist of a single sherd, which is impossible to interpret (except to indicate that pottery was widely used in the area, in sharp contrast with Devon, where it is virtually absent from pre-conquest sites except for Exeter). At plot 16/153, however, a collection of 23 sherds was present, several of which came from archaeological features.

The only other pottery to come from features suggesting settlement were two sherds of SWMIC from plot 16/154, indicating high to late medieval occupation.

In two plots, pottery was associated with trackways. At 8/72 a single sherd of SWMIC, broken into several pieces, was recovered and at 13/213 a sherd of NDGT was recovered.

Pottery was recovered from fourteen plots from linear features, boundary ditches and furrows which have been tentatively identified as being related to ploughing. In most cases only a few sherds were recovered but a 17<sup>th</sup>-century assemblage was recovered from plot 16/153 (various contexts). Elsewhere, the pottery from these features is of late 18<sup>th</sup>/early 19<sup>th</sup>-century or earlier date.

Pottery was recovered from hedges at four plots (16/137, 16/151, 2/27 and 3/30). Most of this pottery is of 19<sup>th</sup> century date, post-dating the material from the agricultural features.

In two plots, deposits associated with mining were recorded and these produced sherds of 19<sup>th</sup>-century or later date (16/151 and 2/27).

The remaining sherds, the majority by a considerable margin, were recovered from topsoil and subsoil. This material covers the entire date-range of the collection, suggesting that

pottery survives quite well in the topsoil, but the highest proportion is of late medieval and early post-medieval date (in particular LOSTW and SWMIC). There is a considerable variation in condition in the sherds. Much of this can be explained by differences in firing and porosity but there may also be evidence here for a change in land use. The latest types to be heavily abraded are North Devon gravel-tempered and finewares whilst none of the WSM vessels is abraded, nor is there any evidence for abrasion or spalling of the later 18<sup>th</sup>-century and later non-local wares. This may suggest that many of these plots were used for agriculture into the 17<sup>th</sup> or 18<sup>th</sup> centuries but had been converted to pasture by the late 18<sup>th</sup> century. Many of the late vessels found (such as the stoneware bottles, and the Pearl ware and whiteware bowls) are types which might have been used in the fields, during harvest time. Thus perhaps they are evidence for the mowing of hay on unploughed fields.

The lack of ceramic building material is worth noting. In part it results from the ready availability of stone and, in particular, roofing slate but there is abundant documentary evidence for the production and use of ridge tiles (termed “crests” and made exclusively by potters throughout south Cornwall, Douch 1969). However, crests were clearly an expensive item, sufficient to be individually listed in accounts, and it may simply be that the sites from which the majority of these finds came were too poor to have ridge tiles on their buildings.

Fired clay is also very rare in the collection and the only pieces which were found come from a feature with no associated medieval or later pottery and could therefore be of pre-medieval date. From the 17<sup>th</sup> century onwards there are documentary references to cloam ovens which to some extent may have precluded the need for wattle and daub although it has to be said that no fragments of such ovens have been recognised in the pottery collection.

## Assessment

The most important material in the collection is undoubtedly the 6<sup>th</sup> to 11<sup>th</sup>-century coarsewares. The number of sites from which it has been recognised and the concentration of finds in plot 16/153 are interesting both for what they tell us of settlement patterns in pre- or early-Norman times and for what they say about pottery use in Cornwall, and the contrast with the neighbouring county of Devon.

The pottery appears visually to be tempered with angular gabbro fragments (although this needs to be confirmed by thin section analysis). The importance of this is that the Lizard peninsula, which is the only source of gabbro in the southwest, was the main centre for pottery manufacture in Cornwall from the Neolithic period onwards, and on this evidence continued to be used until after the Norman conquest. However, some other rocks were noted at x20 magnification and these may allow us to pinpoint the source more closely, and to compare the raw materials used in detail with those used in the Neolithic period and later.

It is recommended that thin sections are made of a sample of the sherds to test the visual identification of the fabric and to make a comparison of the precise details of this fabric with that used in earlier periods. It is also recommended that, prior to this, the material is examined by Carl Thorpe and compared with the Gwithian pottery.

*Table 2*

Task	Unit cost	Cost inc VAT
Examination of the 6 <sup>th</sup> to 11 <sup>th</sup> -century sherds at Cornwall Archaeology Unit (excluding retrieval, packaging and postage to and from Truro)	£165	£165
Thin section analysis of samples from plots 2/22, 3/31, 5/39, 16/152 and 16/153 (4 samples), 17/156 and 17/159	£22.50 plus VAT	£264.37

The remaining pottery is interesting for what it tells us of settlement and land use along the pipeline but is not intrinsically interesting. The material should, nevertheless, be retained for future study. Although a case could be made from the discarding of the late 18<sup>th</sup> and 19<sup>th</sup>-century finds, they do seem to have a potentially interesting sociological interpretation and it may therefore be worth retaining them too for future study.

## Bibliography

- Douch, H. L. (1969) "Cornish Potters and Pewterers." *J Roy Inst Cornwall*, VI(Pt 1), 33-80.
- Vince, A. G. (1984) *The Medieval Ceramic Industry of the Severn Valley*, Unpublished PhD thesis, University of Southampton. Available online at <http://www.postex.demon.co.uk/thesis/>