

Resistance is futile? Ceramic technology and social change in later Iron Age and early Roman Britain. Silchester ware as a case-study

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ONLINE SUPPLEMENTARY MATERIAL

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ONLINE APPENDIX 1: CHARACTERISING THE CHAINES OPERATOIRES OF SILCHESTER WARE AND ITS MIDDLE IRON AGE ANTECEDENTS

CHARACTERISING TECHNIQUES: MIDDLE IRON AGE FLINT-TEMPERED WARES

Silchester ware is characterised by a distinctive coarsely flint-tempered fabric and a limited range of generally large jar and lid forms. It is associated with LIA and early Roman contexts up to the end of the first century AD, but has a lineage that stretches much further back in the local chronology. In particular, flint-tempered wares are known in huge numbers from Hampshire sites during the Middle Iron Age (henceforth ‘MIA’). At Danebury, flint-tempered fabrics predominated during ceramic phases 6 and 7,¹ suggesting that wares allied to the later Silchester ware were common from as early as c.400/300 BC. Recent comparison of the Silchester Insula IX pottery with nearby assemblages has highlighted the likelihood of Silchester ware being the first century BC/AD expression of a long-lived potting tradition,² While the coarse, handmade and heavily-tempered character of LIA and early Roman Silchester ware designates it a curiosity alongside contemporary wheelmade late La Tène ‘Belgic’ coarsewares and incipient Romano-British types, it is important to see Silchester ware as the potential continuation of a far older tradition. Characterisation of Silchester ware will therefore start by examining these MIA antecedents. Technological analysis will also consider the functional characteristics and distribution of the pottery, as such integral aspects of the industry cannot be ignored when considering the potential significance of technological change and/or continuity.

REPertoire AND FUNCTION

MIA flint-tempered wares – common on sites throughout central-southern England - are made in three broad vessel classes (fig.B1). Numerous types have, of course, been identified within these classes (Danebury having the crucial regional typology³), but leaving aside the finer details, the forms fall into three categories: jars and bowls with ovoid or shouldered bodies and upright or everted rims; jars and bowls with ovoid or shouldered bodies and beaded rims; and ‘saucepan pots’, with flat bottoms, straight or near-straight sides, and simple rounded, or slightly beaded, rims. These categories encompass almost all of the types found at Danebury, the exceptions being certain rare ‘miscellaneous’ types, and the wide-mouthed dish type DA, uncommon in this area of south-central England and closely associated with Cunliffe’s ‘Glauconitic sandy’ wares, thought to be of a Wiltshire origin⁴. On purely typological grounds, then, the vessels of the MIA flint-tempered ware repertoire encompassed more or less the full range of basic household ceramics that will have been in use during this period⁵.

From a functional standpoint it is important to consider vessel size. Woodward’s studies of Early and Middle Iron Age vessel capacities – which focused on the pottery of this region⁶ – established that vessel size was evidently more important to function and use than typological

¹ Cunliffe 1984, 248.

² Timby & Bird 2018, 209-210

³ Cunliffe 1984, 259–308.

⁴ *Ibid.* 245-246.

⁵ Cunliffe 1984, 248.

⁶ Woodward 1997; see also Woodward 1995; Woodward & Blinkhorn 1997.

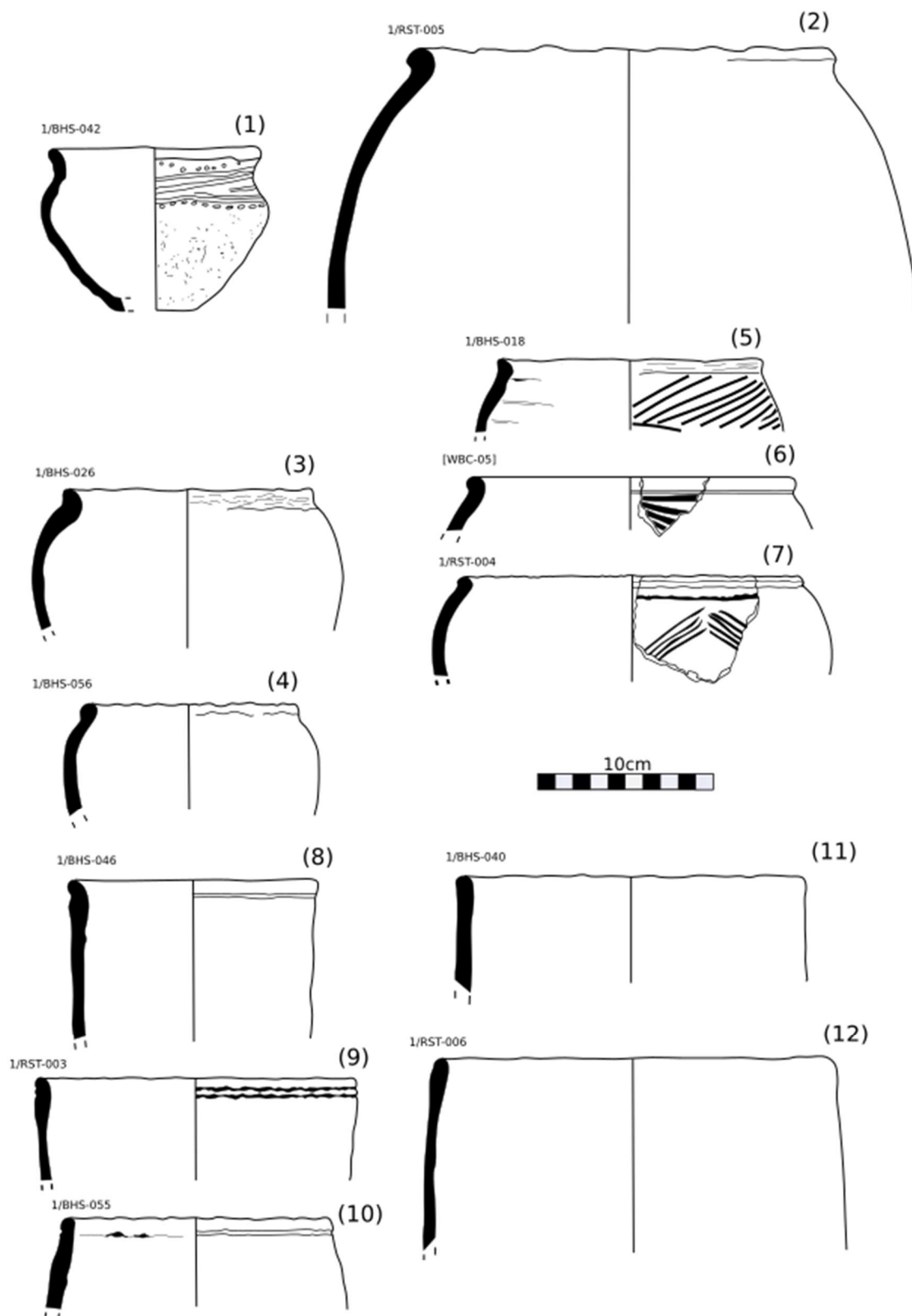


FIG. B1. MIA flint-tempered ware forms. 1 Everted-rim bowl. 2-7 Bead-rim jars and bowls. 8-12 Saucepan pots. No.1 after Rees 1995 fig.25 no.47 (© Trust for Wessex Archaeology). Nos. 2-12 by the author.

distinctions. This assertion has since also been backed up by residue analysis⁷. In essence: vessels of similar shapes were made in wide varieties of sizes, with these different sizes being the key feature that afforded different forms of practical use in terms of the storage, processing, preparation, cooking, and/or serving of food, drink, and other forms of produce. Vessel type was therefore largely unspecialised in the Iron Age: an exception being a broad split between the generally smaller saucepan pots; and the jars and bowls, which also included the larger size-ranges.

Woodward did, however, find evidence suggesting that fabric may have been specialised to some degree. The shell-gritted saucepan pots from Maiden Castle are of a more restricted, better-defined size-range than those in flint-tempered fabrics from Danebury and Winnall Down⁸. There is therefore potentially a functional component to the Berkshire/Hampshire flint-tempered fabrics, although both the studies of vessel size and of their adsorbed residues suggested that this was more likely a result of regional patterns of vessel employment⁹. Analysis of rim diameters (Woodward's standard measure of vessel size) of flint-tempered wares from Berkshire and northern Hampshire – as well as the sandy wares that represent the majority of the remaining fabrics from these sites – suggests that regionalisation may be key in explaining variation. The data in figure B2 show that there is little reason to believe that the fabrics represent distinct functional categories. As expected, saucepan pots in both fabrics exclusively occupy the smaller size categories, while jars and bowls are far more thinly spread and occupy far wider ranges of sizes. This suggests that fabric, like type, was not a specialised feature of MIA potting in this area: a given fabric will have been used to produce all the main vessel types in sizes that afforded all the main intended functions of domestic ceramics. Flint-tempered fabrics were no exception.

DISTRIBUTION

Flint-tempered pottery of this kind is abundant on MIA sites in central-southern England. Although definitive proof is difficult to come by, it is reasonably believed that this pottery will have been locally (rather than centrally) produced and distributed¹⁰. The ceramic sequences at Danebury¹¹, Winklebury¹², Brighton Hill South¹³, Winnall Down¹⁴, and numerous lesser-known sites, all demonstrate the ubiquity of flint-tempered fabrics at this time. Importantly, though, the area of the Hampshire Downs straddling the border of the modern counties of Berkshire and Hampshire (and which would go on to form the nucleus of the Silchester ware distribution) appears to have been a boundary of one form or another between two ceramic traditions. While there are few quantified assemblages from this region with which to comment on this pattern in detail (and on all sites there is a mixture of fabrics),

⁷ Copley *et al.* 2005a, b.

⁸ Woodward 1997, 31–33.

⁹ *Ibid.*; Copley *et al.* 2005a, 491–493.

¹⁰ Cunliffe 1984, 244–245; Morris 1995, 243.

¹¹ Cunliffe 1984, pp. 244–249.

¹² Smith 1977, 83–106.

¹³ Rees 1995.

¹⁴ Hawkes 1985, 69–72.

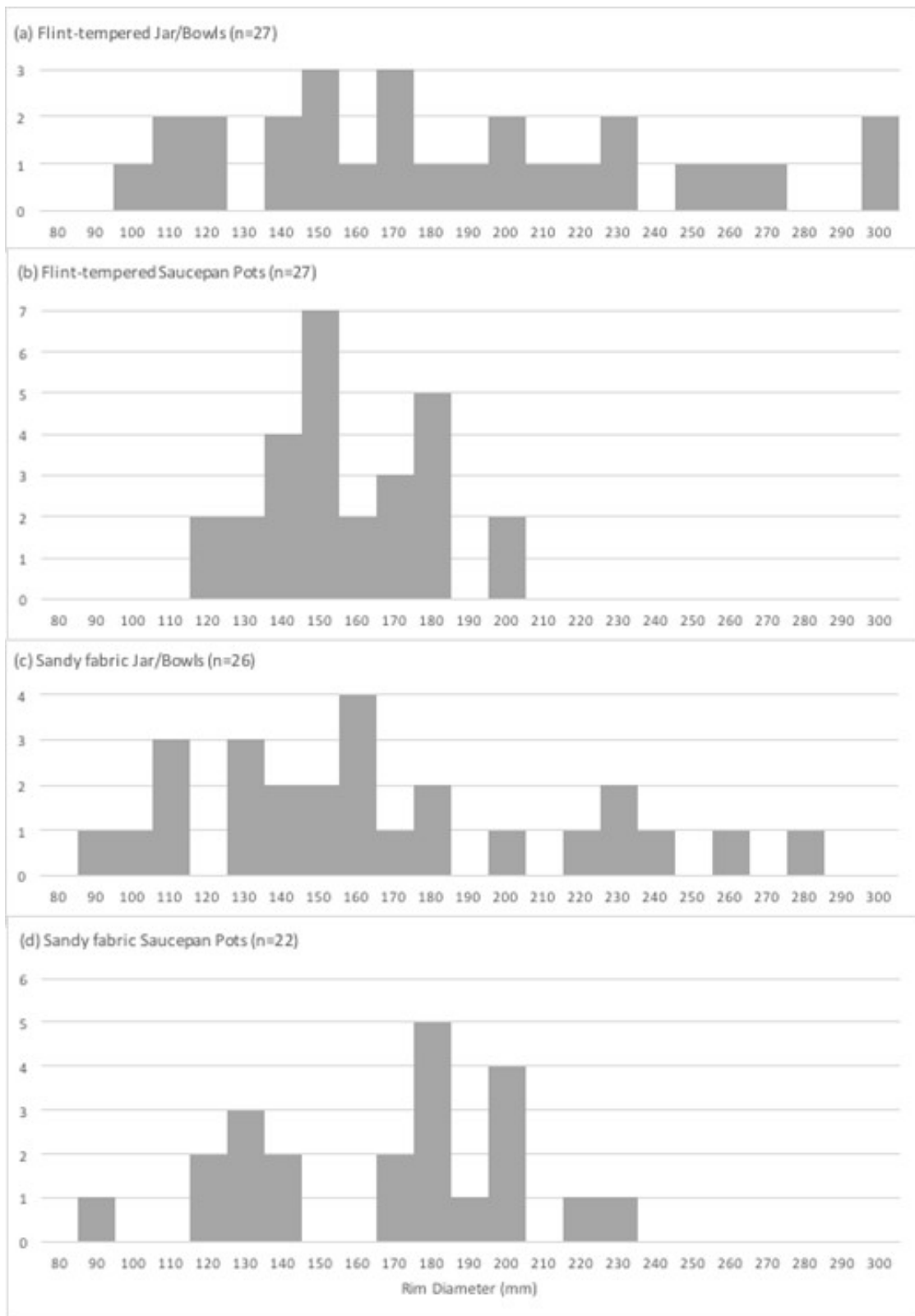


FIG.B2. Rim diameter distributions for MIA vessel types in sandy and flint-tempered fabrics.

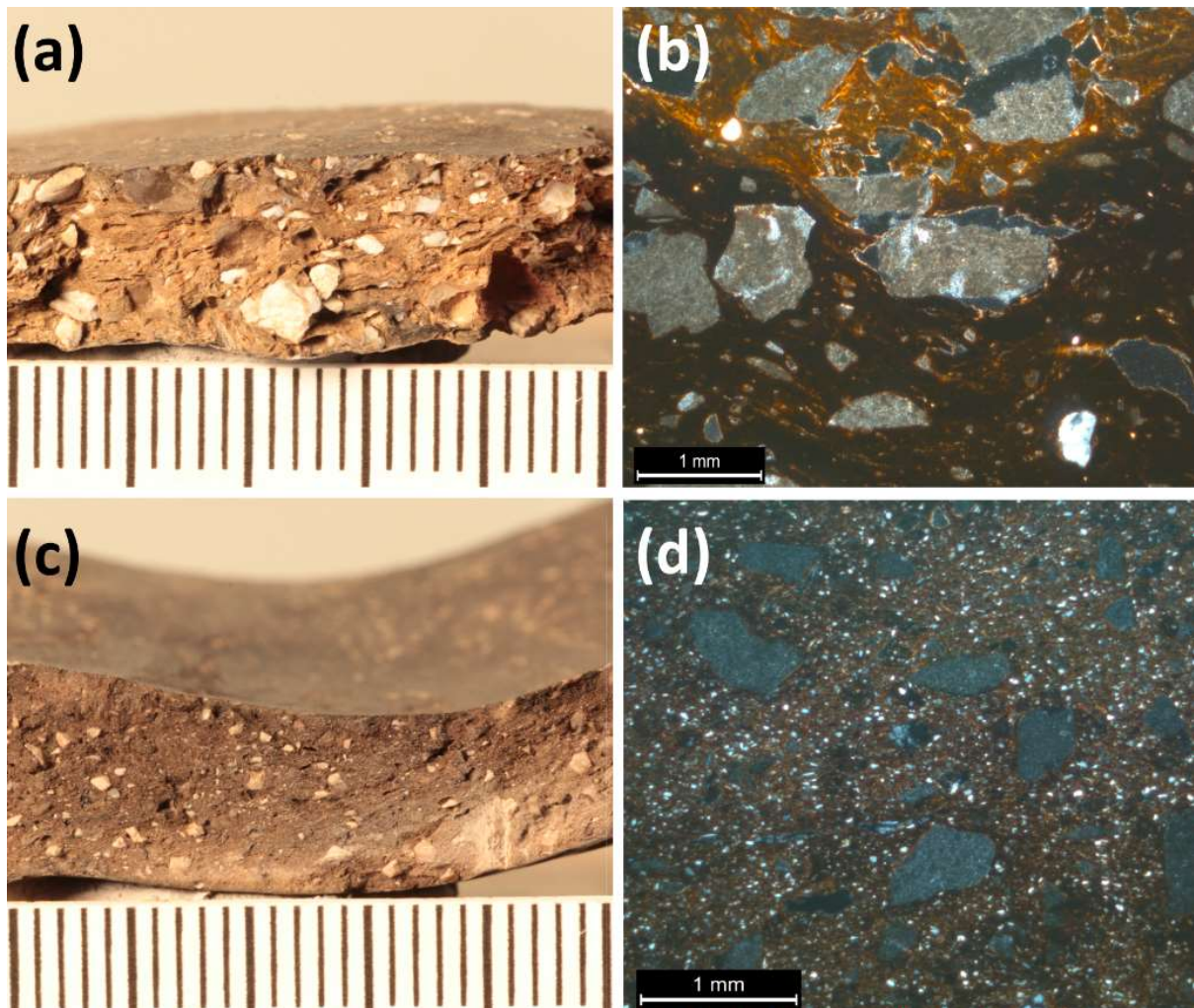


FIG. B3. MIA flint-tempered/Silchester ware fabrics. F1a in (a) hand-specimen and (b) photomicrograph; F1b in (a) hand-specimen and (b) photomicrograph.

it can nevertheless be found that at a cluster of sites in the region of modern Basingstoke¹⁵ flint-tempered fabrics of the typical Danebury/Winnall Down types are characteristic, while at sites further to the north towards the Thames Valley sandy fabrics are the rule¹⁶.

There are several potential explanations for the apparent boundary between the use of these two kinds of fabric. The most obvious is geological: the northern part of the Hampshire Downs marks the northern extent of the chalk, where it abruptly descends beneath the tertiary clays and sands of the Thames Valley and their associated quaternary deposits. There may therefore have been a distinction between the raw materials available for potting in each locality. However, typological differences between vessels produced in flint-tempered and sandy fabrics suggest that this does not present a complete explanation. While saucepan pots, everted- and beaded-rim jars and bowls were all made in both fabric classes, everted-rim

¹⁵ Including the hillfort at Winklebury (Smith 1977) and the important site at Brighton Hill South (Fasham & Keevil 1995), as well as some lesser-known settlements such as Oakridge (Oliver 1992) and the Viabes sites (Millett & Russell 1984; Gibson 2004).

¹⁶ Including the sites at Grazeley Road, Three Mile Cross (Ford *et al.* 2013), Riseley Farm, Swallowfield (Lobb & Morris 1993), and Bath Road, Slough (Howell & Durden 2003).

forms are more typical of sandy wares while these are less common in flint-tempered wares, wherein beaded rims appear to have been the rule. While the data in figure B2 suggest that the repertoires of each fabric group were functionally comparable, this subtle distinction between the commonality of different vessel/rim types serves to distinguish the repertoires on stylistic grounds, as well as on the ground of the appearance of the fabric, and in the procurement and preparation of raw materials for potting.

TECHNIQUES: RAW MATERIALS, PROCESSING, AND TEMPERING

With the aid of petrographic analysis, two fabrics were defined amongst the flint-tempered wares. The first (F1a) is a dense, hard, coarse ware with a hackly fracture and common-to-abundant calcined flint inclusions up to 10mm in length. The clay is distinctively devoid of inclusions aside from this flint; rare examples of very fine rounded quartz, iron oxide pellets, organic matter, and/or rounded sedimentary rock fragments are the only accessory inclusions (fig.B3a & B3b). The second fabric (F1b) is identical to F1a aside from in the occurrence of a fine fraction of common-to-abundant silt-sized quartz (fig.B3c & B3d).

The distinction between the two fabrics may be significant of different sources for the raw clay used for potting in each case, although the absence of an actual geological distinction between the fabrics – and their overall similarity in all but points of extreme detail – suggests that similar clay deposits are likely to have been utilised. In both cases the base-clay is very fine-grained. Additionally – and very importantly, given the association of these fabrics with areas of calcareous geology – there is very little calcareous matter present in any of the sherds thin-sectioned. This may suggest an association with the clay-with-flints deposits that outcrop sporadically on the northern part of the Hampshire Downs near the northern border of the chalk. The clay-with-flints is characterised as being a very fine clay, poor in calcareous matter due to a geological history of association with the Lambeth Group¹⁷. Given this evidence in conjunction with the archaeological provenance of the fabrics, the clay-with-flints seems to be the most likely candidate for the origin of these fabrics.

The vast majority of the observed flint inclusions were calcined, rendering them bright white in the hand-specimen and similar shades when viewed in thin-section under reflected light. This signifies that these inclusions were a deliberate addition to the clay in order to prepare it for potting, rather than an incidental opening material that was found in the raw clay. Any flint (or other inclusions down to a very fine size-grade, for that matter) will have had to have been filtered out by processes such as sieving or levigation in order to render the clay as inclusion-free as it is found in the ceramics. The calcined flint will then have had to have been crushed and (re?)incorporated to the clay, as well as being thoroughly mixed in order to ensure even distribution of the inclusions. This all implies a relatively complex process of refinement followed by several stages of raw material preparation and combination.

TECHNIQUES: FORMING

Figure B4 presents the forming techniques identified through combined radiography and hand-specimen analysis. All percentage statistics quoted refer to the proportions of the total sample of MIA vessels that were found to have been produced at least in part by each technique.

¹⁷ Mathers & Smith 2000, 20.

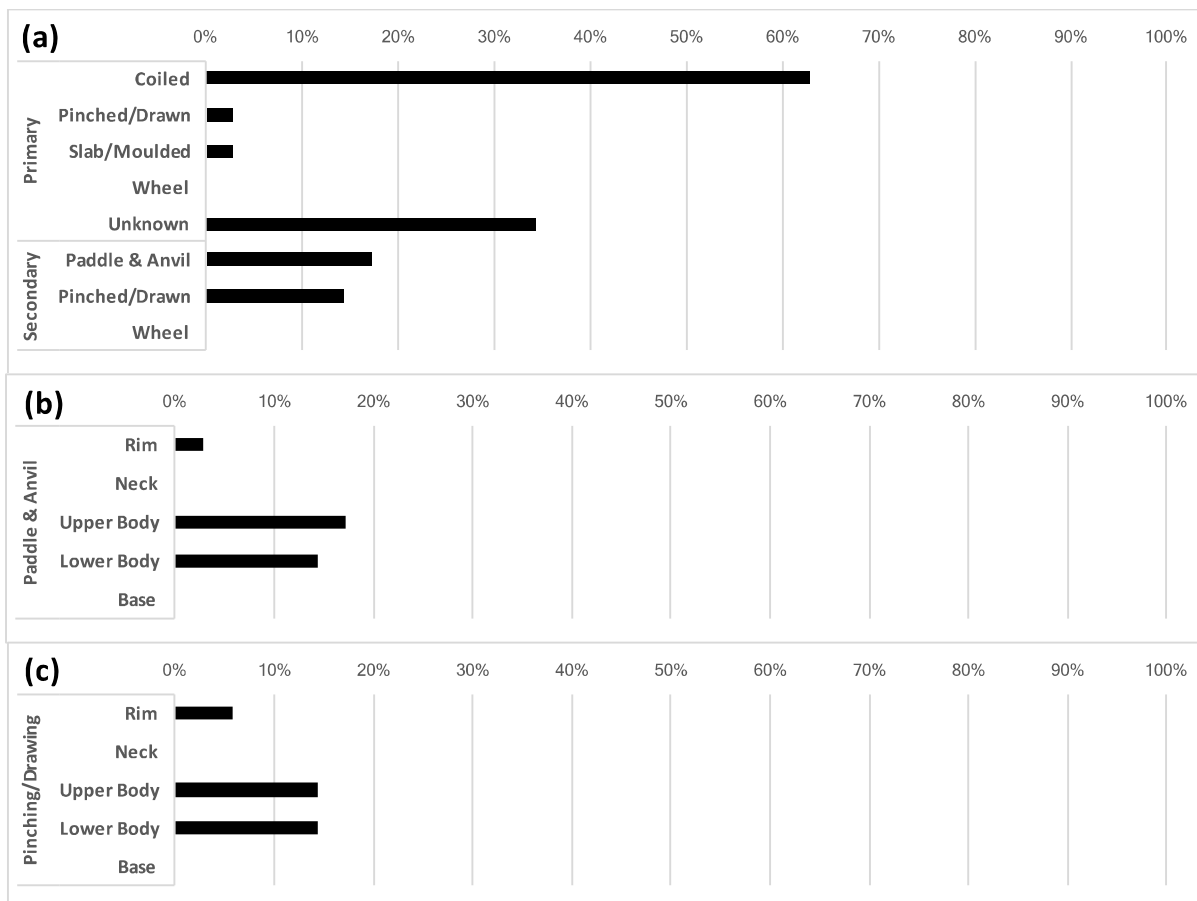


FIG. B4. Forming techniques identified in MIA flint-tempered ware vessels. (a) Basic occurrence of techniques as proportions of vessels in sample. Detail of vessel parts identified as having been formed by paddle-and-anvil and pinching/drawing presented in (b) and (c) respectively.

A key observation in relation to these data is the frequency with which coiling was observed as a primary forming technique, being identified either confidently or tentatively in 22 (63%) of the 35 vessels analysed. This strongly suggests that most – if not all – of the MIA vessels were started as coil-built roughouts. Other techniques noted as potentially representing primary formation processes are very tentative in their identification, and in all cases were found only in a specific part of the vessels in question.

Secondary formation processes are somewhat better represented. Paddle-and-anvil and pinching/drawing were both identified fairly commonly, each being found in between 10 and 20% of the vessels. Importantly, both techniques were evidently used to craft similar parts of the vessels on which they were found: most commonly, the bodies (figs.B4b & B4c). In particular, pinching/drawing commonly presented itself as vertical ‘stripes’ of alternating thick and thin zones visible in the walls of vessels when viewed in radiograph (fig.B5). This pattern is likely to signify a rhythmic pinching and/or smoothing motion used progressively to bind the layers of clay coils together, smoothing out the vessel wall surfaces so as to render the coils outwardly invisible whilst also contributing to the final shape of the vessel. The technique seems better described as a form of pinching than of drawing, being comprised of many small manipulations of the clay arranged in distinctive vertical patterns. Paddle-and-anvil, meanwhile, presented itself as discontinuous zones of thinned clay represented by broad, rounded dark patches at irregular intervals on the vessel body (fig.B6).

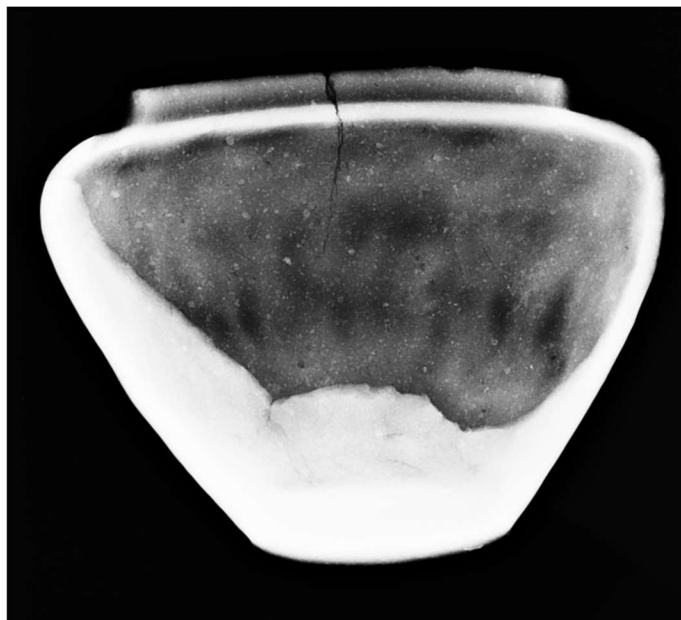


FIG. B5. radiograph of MIA flint-tempered ware vessel with 'vertical stripe' pattern of alternating thicker and thinner zones on the lower body.

Both techniques were identified on saucepans and jars/bowls, although when rim diameters are considered there seems to be a size aspect to their occurrence. Of 17 vessels with a rim diameter of 150mm or less, four displayed evidence of pinching whilst only one showed paddle-and-anvil work. Meanwhile, of the 16 vessels with a rim diameter greater than 150mm, paddle-and-anvil was noted four times whilst pinching was only noted once. It therefore seems that, while the majority of vessels will have been coil-built regardless of their eventual shape or type, different techniques had developed to facilitate the production of smaller (pinching) and larger (paddle-and-anvil) vessels.

A technique that could be described as rim-folding was identified 11 times. This technique is not referred to in previous works on radiography or forming analysis, but its identification here seems unequivocal, in many cases even on the evidence of hand-specimen observation alone. The process seems to have involved thinning or drawing up a flap of clay from the top of the vessel wall, this then being folded back on itself and stuck down against one of the surfaces of the pot wall to form a rounded rim. This was found in the form of clear seams around the interior or exterior of the rim of the pot, as well as a distinctive 'texture' to the

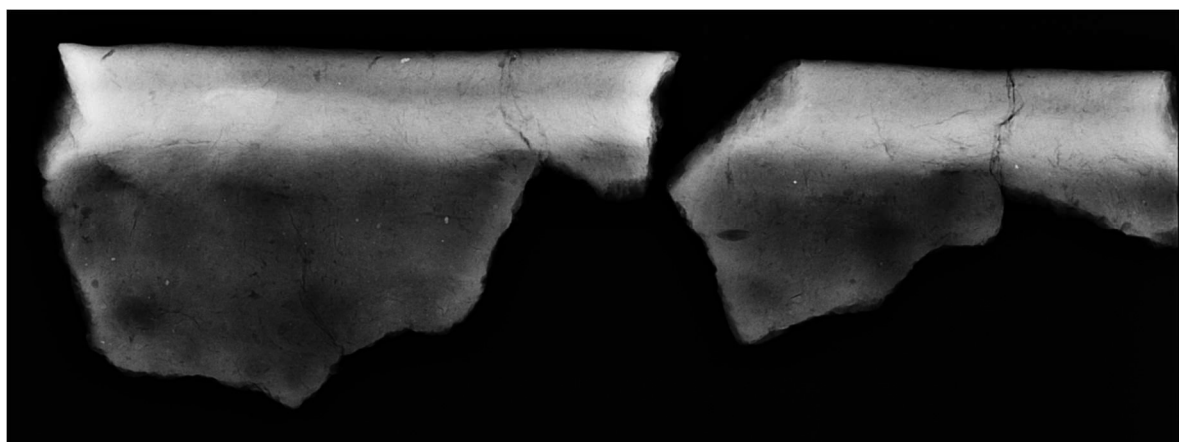


FIG. B6. Radiograph of MIA flint-tempered ware vessel showing broad dark (thin) patches on the upper body. These are concavities in the vessel wall, probably representative of paddle-strikes.

clay when seen in the break, wherein elongated inclusions or other features can be seen to fold back on themselves as they approach the rim. The effect will have been to round off the rims of the vessels in question, and indeed it is most commonly associated with saucepan pots and beaded rims, which – compared to everted-rim types – are defined by their rounded rim shapes. This is therefore also a good example of a technique developed for a specific specialised purpose: in this case, the production of a specific type of rim.

TECHNIQUES: SURFACE TREATMENT, DECORATION, AND FIRING

Most of the MIA vessels in the sample were finished with surface treatments of some kind. Burnishing was found on 23 vessels (66%), while surfaces appeared to have been wiped smooth in two additional vessels (6%). Burnishing was always applied to the exterior of the vessel walls; in around half (11 vessels; 48%) of the burnished examples the finish had also been applied to the interior surfaces. Overall there is little evidence that the application of a burnish was functionally specialised. Burnishing the exterior surface alone (and not the interior) will have created a smooth surface that may have been both easier to clean and more waterproof than unsmoothed earthenware. However, there is no evidence for an association between burnishing and a particular vessel type or size-range, burnished surfaces being found on saucepan pots (13 examples), bead-rim (7 examples) and everted-rim (3 examples) vessels, and on vessels with rim diameters ranging between 110 to 260mm. It is therefore likely that burnishing was seen as a decorative feature, or a general-purpose method for waterproofing pots or making them easier to clean, rather than a specialised marker of an intended function.

Decoration was also popular, being found on 15 vessels (43%). Burnished motifs were the most common, these probably involving the use of a blunt tool to smooth out linear patterns. The most common motifs include simple diagonal lines or horizontal bands applied directly beneath the rim, these being easily paralleled in Cunliffe's St Catherine's Hill-Worthy Down style¹⁸. Less common motifs include lattices and diamonds filled with vertical lines, these being better paralleled in the Southcote-Blewburton Hill style.

The firing of the MIA vessels is predominantly reducing, but often uneven: patches of oxidation are often evident, although many vessels appeared to have been well-fired to even dark greys, dark browns, or blacks. While certainly bonfire-fired, the even colouration of these vessels may suggest that some effort was gone to by the potters to achieve a consistent, dark colour. For example, Rice¹⁹ refers to the process of 'smudging', whereby pots are covered in carbonaceous matter such as sawdust immediately after firing in order to thoroughly blacken their surfaces; a similar procedure may have been used for many of the flint-tempered wares.

¹⁸ Cunliffe 2005, Appendix A.

¹⁹ Rice 1987, 158.

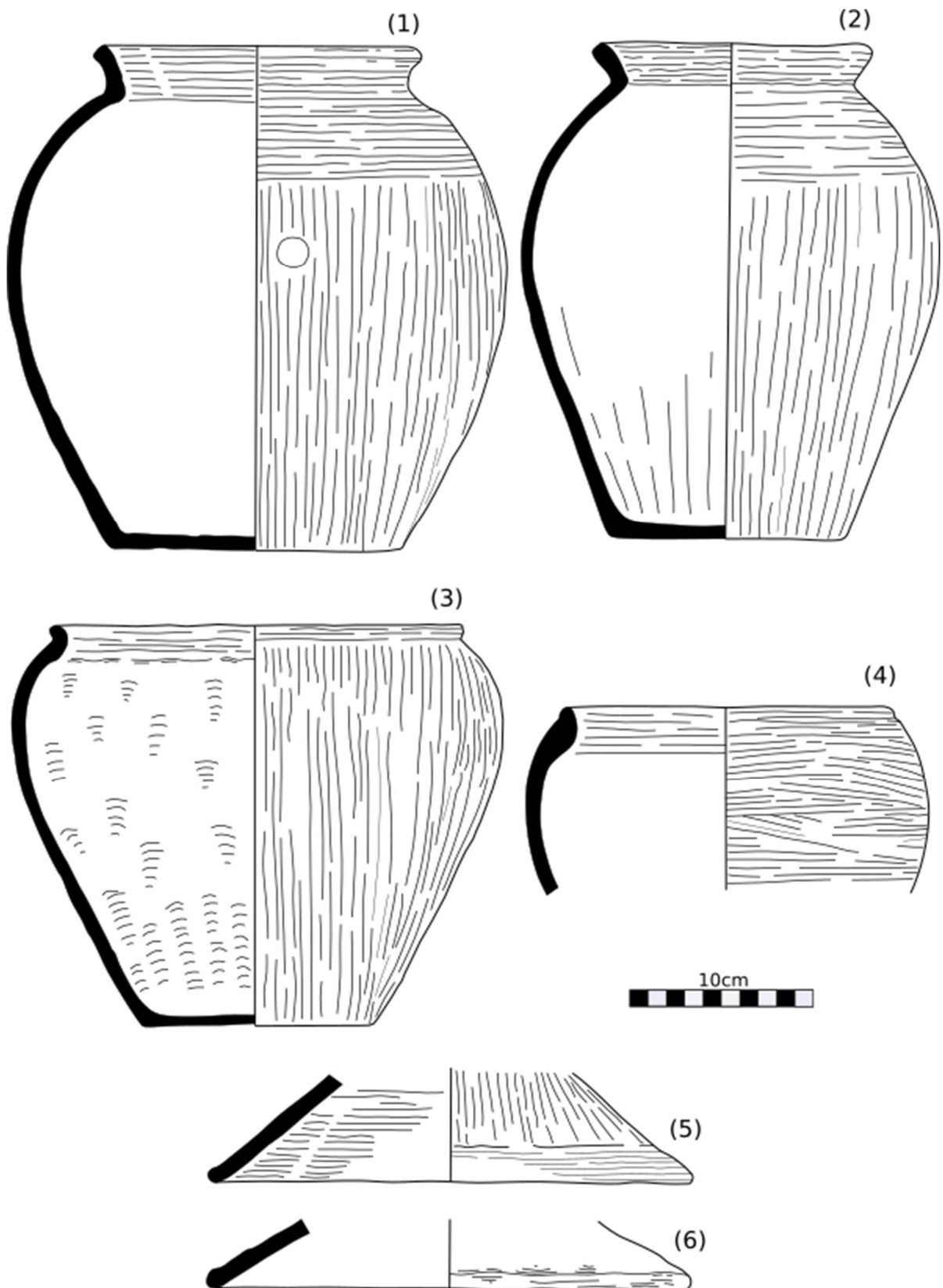


FIG. B7. Silchester ware vessels. 1-2 Everted-rim 'X1' jars. 3-4 Bead-rim jars. 5-6 Lids. All images after Timby 2000, nos. 496, 497, 478. 484, 507, 508 respectively (all drawings © Society for the Promotion of Roman Studies).

CHARACTERISING TECHNIQUES: SILCHESTER WARE

REPertoire AND FUNCTION

The forms of LIA/early Roman Silchester ware are almost all derived from the MIA repertoire, with seemingly no influence from the novel technological or stylistic ideas that were in circulation at this time. Typological differences are essentially limited to the cessation of production of saucepan pots, and an increase in the number of everted-rim forms – principally a new type of large jar with an ovoid body and prominent everted or flared rim (fig.B7 nos.1 & 2: henceforth referred to as type X1). Lids were also added to the repertoire. Bead-rim jars remain a key component of the output throughout the lifespan of Silchester ware, and it is these which most clearly demonstrate the close lineage with the MIA flint-tempered wares.

Overall, the vessels produced in Silchester ware give the impression of being a more specialised component of the ceramic repertoire during the LIA. As the range of ceramic containers and their functional classes expanded in the first century BC with the introduction of late La Tène ('Belgic') and Gallo-Roman types, the few vessel types in which Silchester ware is found give the impression of being a distinct subcategory of ceramic, rather than the relatively complete service that the MIA wares encompassed. Timby and Bird have suggested that Silchester wares, being often large and very robust, may have been valued as storage containers, or as vessels used in brewing or fermenting; but that many were also likely used/reused as cookpots on the basis of finds of carbonised residues on some jars.²⁰ While patterns are currently unclear, it seems fair to say that the role of Silchester ware within the LIA ceramic repertoire at large was different, and potentially more specialised, than was the role of MIA flint-tempered wares within the overall range of MIA ceramic types produced, of which they encompassed a far larger proportion.

DISTRIBUTION

In the first century BC, the representation of flint-tempered wares of all kinds drops off at sites throughout Hampshire and Berkshire. At Winnall Down near Winchester, flint-tempered wares are almost non-existent in LIA contexts.²¹ At Danebury, they continue to be represented but are greatly subordinate to other wares throughout CPs 8 and 9.²² Similarly, in the earliest known contexts at Silchester (c.20/10 BC) flint-tempered wares are only known in relatively small amounts, the characteristic wares being those in Late La Tène forms and grog-tempered or sandy fabrics.²³ A key exception is the cluster of sites around modern Basingstoke, where flint-tempered pottery seems to have continuously dominated throughout the first centuries BC and AD; the best example is the quantified ceramic sequence from Brighton Hill South.²⁴

²⁰ Timby & Bird 2018, 167.

²¹ Hawkes 1985, 69–72.

²² Cunliffe 1984, 248–249.

²³ Timby 2000, 239–240; Timby & Bird 2018, 202–206

²⁴ Rees 1995.

This situation appears to have persisted for several decades. By the time of the Roman conquest, Silchester ware had become the most common ceramic type at sites ranging up towards the Thames Valley where the river flows through modern Reading. This sequence of increasing popularity is evident in numerous assemblages in this area, most prominently at Silchester itself²⁵ as well as at Ufton Nervet²⁶ and Aldermaston Wharf²⁷. These sites mostly fall into the zone between the two notional clusters of sites associated with flint-tempered and sandy wares, respectively, in the MIA; but sites in the area previously associated with sandy fabrics have also commonly produced Silchester ware dating to the post-conquest period. Such sites include Riseley Farm, Swallowfield²⁸; Thames Valley Park, Reading²⁹; and even as far north as Slough, albeit in small numbers³⁰.

TECHNIQUES: RAW MATERIALS, PROCESSING, AND TEMPERING

No clear distinction has been able to be made between the MIA flint-tempered fabrics and the samples of LIA Silchester ware that were thin-sectioned. Both presented very fine-grained, clean, occasionally silty, base-clays, tempered with crushed and exclusively calcined flint. On a purely qualitative level there may be a distinction in that Silchester ware fabrics tend to be coarser, with larger pieces of flint temper and these often protruding from vessel surfaces, though this is apparently the sole distinction.

In essence, then, it appears that not only was the production of Silchester ware inspired by MIA pottery types, but on the basis of a shared fabric the two are likely to have been directly related to one-another, Silchester ware emerging as the LIA/early Roman version of a traditional ceramic type. On a technical level, this means that very similar – if not identical – systems of raw material procurement and preparation were used by the Silchester ware potters as those used in the MIA. The fact that there is a continuous association with the Basingstoke-region sites throughout this period is also likely to be significant, as these sites are proximal to the clay-with-flints outcrops that have been suggested as the origins for these fabrics above. If there is a single source for Silchester ware, it seems likely to lie in this area.

TECHNIQUES: FORMING

There is no evidence to suggest that primary forming changed significantly between the MIA and LIA/early Roman period. Figure B8 shows the representation of forming techniques. As in the MIA, coiling is the predominant primary technique, being found in 19 of the 32 vessels analysed (59%). While the remainder of the vessels could not be reliably assigned a primary forming technique, it is significant that there is positive evidence for coiling in over half of the sample. As in the MIA, it seems that most, if not all, Silchester ware vessels will have started as a coil-built preform which was then modified with various secondary techniques.

²⁵ Timby 2000, 239–240; Timby & Bird 2018.

²⁶ Thompson & Manning 1974.

²⁷ Cowell *et al.* 1980, 25–33.

²⁸ Morris 1993.

²⁹ Mephram 1997.

³⁰ Timby 2003.

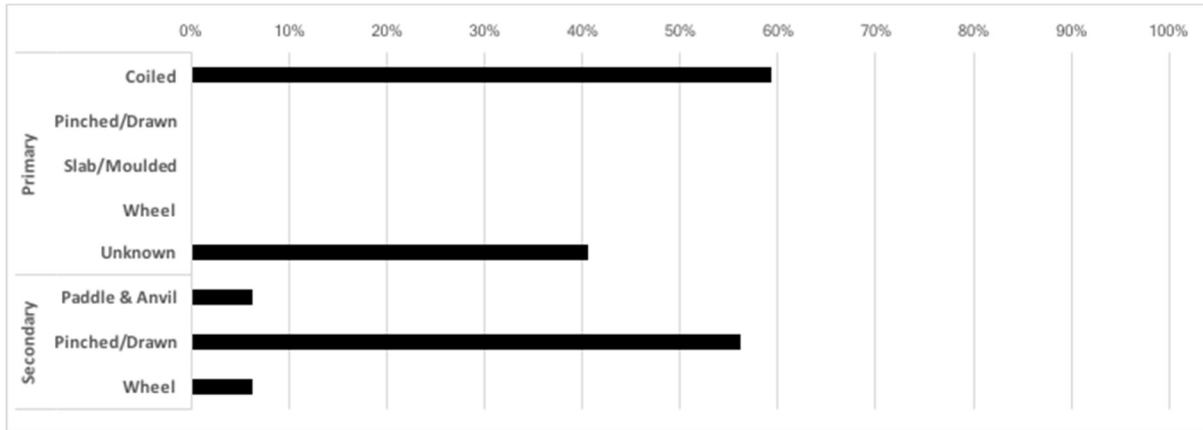


FIG. B8. Forming techniques identified in Silchester ware vessels.

The profile of secondary techniques differs from that known in the MIA. In particular, pinching/drawing was identified in more than half of the vessels. While this technique has been identified on all of the different vessel areas (i.e. the base, body, neck (if present), and rim) at least once, it was most commonly found in association with the vessel body and neck. The former echoes the use of this technique in crafting MIA vessels (see above), and indeed 79% of the extant lower bodies of vessels that were examined showed evidence for the same kind of pinching technique identified on MIA vessels, which again resulted in vertical ‘stripes’ of alternating thick and thin clay. This technique was noted on all of the main vessel types including X1-type jars and other everted-rim forms, and bead-rim jars. It was also found on vessels with rim diameters ranging between 90 and 510mm. Unlike in the MIA, it therefore seems that pinching was a general-purpose technique for the production of vessels of all types and sizes, in essence being totally unspecialised. As a result, evidence for the paddle-and-anvil technique has dropped off in the production of Silchester ware, being identified in only two vessels, and tentatively in those cases. Perhaps unsurprisingly, a variant of the pinching technique was also identified in the case of six of the eight extant vessel necks analysed, all of these being from everted-rim forms and including four X1 jars. This therefore appears to represent the repurposing of a pre-existing technique in the production of a novel vessel type with distinct morphological features.

Rim-folding was noted in a similar proportion of rims to that identified in the MIA sample, although the rim-types being crafted using this technique have changed. Beaded (four examples), everted (four examples) and large storage jar (one example) rims were all crafted using folding, the everted forms marking a departure from the traditional method and evidencing a similar lack of technical specialisation to that seen with pinching.

Importantly, two vessels showed evidence for wheel-use among the Silchester ware sample. One, a Thompson C1-1 bead-rim jar, appears to have been competently shaped with the aid of a turntable or wheel (fig.B9). The other is an X1 jar, which exhibits broad horizontal striations around the rim that are strongly suggestive of the finishing of this area of the pot using a coarse cloth whilst the vessel was turning (fig.B10). Such an operation may only have required the vessel to have been turned while resting on a mat rather than on any more



FIG. B9. Silchester ware vessel 1/BHS-043, a C1-1 bead-rim jar. The vessel has a thin, smooth body and evenly-crafted rim, strongly suggesting that the vessel was made using a wheel by a very competent potter. (a) Exterior view. (b) Interior view.

complex apparatus. This, along with the suggestion of the use of a cloth in manipulating the coarse, gritty clay body as it turned, is highly significant (see below).

TECHNIQUES: SURFACE TREATMENT, DECORATION, AND FIRING

Surface treatment is common on Silchester ware vessels, though not as common as it had been in the MIA. 15 (47%) of the vessels in the sample had treated surfaces, with burnishing again being the most common (11 vessels: 34%) and wiping making up the remainder (5 vessels: 16%). Again there is no evidence to suggest that surface treatments were specialised to particular functional roles, burnishing in particular being found on examples of all three main vessel types (bead-rim, everted-rim, and X1 jars) and on vessels with rim diameters ranging between 110-330mm. This implies that the significance of burnishing was mainly decorative, used as a waterproofing measure, and/or helped in making pots easier to clean. Nevertheless, the downturn in the proportion of vessels with treated surfaces suggests a reduction in the labour input into the decorative and/or functional features of these pots.

Decoration, meanwhile, is rare on Silchester ware. The very occasional decorated examples are adorned with simple techniques and motifs, such as individual burnished lines and rows of finger impressions beneath the rim. This again evidences a lack of emphasis on the decorative qualities of Silchester ware, and the removal of complex motifs (such as those represented by St Catherine's Hill-Worthy Down-type and Southcote-Blewburton Hill-type decoration in the MIA sample) from the repertoire may also suggest changes to the ways that potters expressed their personal or local styles. This may instead have found expression in other ways during the LIA and later.



FIG. B10. Detail view of Silchester ware vessel 1/SIX-015, an X1 jar. Note striations around the exterior of the rim, suggesting that this part of the vessel was finished whilst it was under the influence of rotary motion.

Firing patterns are predominantly reduced, although the occurrence of consistent blackened fabrics – evidencing concerted effort to produce a specific colour effect – has declined in this period. This again suggests that there was a lack of effort to produce vessels with high-quality and potentially time-consuming aesthetic features. Most vessels are the uneven greys, browns, and blacks with patches of reddish-browns and oranges that would be expected from a relatively unsophisticated bonfire firing. It stands to reason that if a specific procedure was being undertaken to produce carbon-blackened surfaces in the MIA, this was less commonly practiced in the LIA and early Roman periods.

ONLINE APPENDIX 2 – RADIOGRAPHIC ANALYSIS

Online Appendix 2 presents the radiographic data in abbreviated version of its raw form. Radiograph interpretations are tabulated below, following which the radiographs themselves are provided for consultation.

Key to site name abbreviations in vessel IDs

BFD – Park Farm, Binfield (Booth 1995)

BHS – Brighton Hill South (Rees 1995)

KFM – Kennel Farm, Basingstoke (Chapman & Hylton 2006)

RFM – Riseley Farm, Swallowfield (Morris 1993)

RST – Ructstall’s Hill, Basingstoke (Richardson 1978)

SCT – Denton’s Pit, Southcote, nr. Reading (Piggott & Seaby 1937)

SIX – Silchester, Insula IX (Timby & Bird 2018)

TVP – Thames Valley Park, Reading (Mephram 1997)

UFT – Ufton Nervet (Manning 1974)

VBF – Viables Farm, Basingstoke (Millett & Russell 1984; Gibson 2004)

RADIOGRAPHIC DATA: SUMMARY TABLE

Context				Vessel	Forming				Conclusion	
ID	Published Date	Period	Citation	Vessel Class	Wall	Voids/fissures	Inclusions	Other features	Primary forming	Secondary forming
1/BFD-001	CP1	MIA	Roberts 1995 Fig.52 No.13	Bead-rim jar/bowl	Image distorted in some areas by fragmentation. Areas unaffected are 'patchy' in radiograph and thus uneven in thickness in both the horizontal and vertical axes. Thickest at the rim; the body does not appear to differ substantially in thickness between the shoulder and the join with the base.	Common & elongated. Voids are typically fine and thus difficult to see: they may predominantly orient horizontally or slightly diagonally. Two fissures (on the shoulder and rim) may represent seams. The uppermost may either result from a folded flap of clay stuck down to form the rim (this can be seen visually in the break), or may be a coil join. The lower is more ambiguous (it may be an internal crack), but if correctly identified is likely to be a coil join.	Sparse and rounded.		Coiled, at least in part.	Smoothed out and shaped by hand. Rim folded.
1/BFD-004	CP2	LIA	Roberts 1995 Fig.53 No.23	Bead-rim jar/bowl	Little of the wall survives. That which adjoins the rim is slightly uneven in the horizontal axis.	Sparse, but elongated. Those voids which exist are predominantly horizontal. No fissures.	Rare.	Based on visual inspection, the rim is likely to have been folded over. This may have resulted in the horizontal void orientations visible in radiograph; alternatively, the rim may have been made from a coil.	?Coiled.	Smoothed out and shaped by hand. Rim folded.
1/BFD-009	CP2	LIA	Roberts 1995 Fig.52 No.9	Everted-rim jar/bowl	Well preserved. Definite vertical variation in thickness. The neck is somewhat thinner than the body, while the rim is thickened.	Common & elongated. Patterns are not apparent for much of the vessel: orientation may be 'random', or may be horizontal in some areas. Not convincing either way.	Sparse and rounded.		Uncertain.	Probably smoothed out and shaped simply by hand.
1/BFD-014	CP2	LIA	Roberts 1995 Fig.52 No.21	Everted-rim jar/bowl	Well preserved. Patchy in radiograph and thus has variation in vertical and horizontal axes. Two distinct darker patches immediately beneath the rim are suggestive of digital impressions.	Common; some elongated. No fissures. Most convincing orientations are at the neck/rim, which appear vertical.	Rare.		Uncertain.	Neck pinched/drawn into shape.
1/BHS-003	LIA/ER	LIA	Fasham & Keevil 1995 Fig.25 No.56	Everted-rim jar/bowl	Little preserved. What directly adjoins the rim is patchy and uneven in thickness.	Moderate & elongated. Most orient horizontally. This includes within the rim, wherein fine elongated voids can be seen even in the overexposure of this thicker area. Body likely to have been coiled; rim also folded into shape (clearly visible in hand-specimen).	Sparse and rounded.	A coil seam may also be faintly in evidence on the interior surface of the hand-specimen.	Coiled, at least in part.	Smoothed out and shaped by hand. Rim folded.
1/BHS-009	LIA/ER	LIA	Fasham & Keevil 1995 Fig.27 No.85	Everted-rim jar/bowl	Well preserved. Highly uneven owing to multiple clear digital impressions throughout the upper body up to the rim.	Common & elongated. Predominantly oriented vertically and clustering around the edges of the digital impressions. These continue to be oriented vertically on the rim. The force applied in pinching is likely to have obliterated any evidence of primary forming; the vessel is too large to have been a 'pinch pot'.	Rare.		Uncertain.	Upper body & rim pinched into shape.

1/BHS-010	LIA/ER	LIA	n/a	Everted-rim jar/bowl	Well preserved. A pair of broad bands running horizontally around the middle of the sherd are somewhat thinner than the rest. These may represent paddle-work, but the identification is tentative.	Moderate; some elongated. Those that are elongated show no convincing pattern of orientation and may be described as 'random', tending towards the horizontal. A potential coil seam may be visible on the upper part of the sherd (the join between body and neck).	Sparse and rounded.		?Coiled.	?Paddle-and-anvil
1/BHS-013	LIA/ER	LIA	Fasham & Keevil 1995 Fig.26 No.62	Everted-rim jar/bowl	Well preserved. Becomes thicker towards the rim. Rim is distinctly thicker than the body, with the sharp contrast between lighter/darker areas corresponding to a seam visible on interior surface of hand specimen. This may result either from coiling or - more likely - folding of the rim.	Common & elongated. Near the rim voids tend to orient strongly vertically, probably representing the drawing of the clay up to produce the flap to be folded over to form the rim. Orientations more ambiguous on the body: they seem to tend towards the horizontal but this is uncertain in most areas. One tight cluster of voids about halfway down the reconstructed sherds is most convincing of horizontal orientation, and this may hint at a seam here.	Rare.		?Coiled.	Uncertain for body: rim was certainly folded.
1/BHS-015	LIA/ER	LIA	n/a	Storage jar	Little of wall survives (sherd is mostly rim). This is mostly even in thickness throughout.	Moderate & elongated. Most orient vertically, indicating that the rim was pinched or drawn up from the body. Closer to the rim edge orientations are distinctly horizontal and - based also on inspection of the hand-specimen - this is likely to be the result of folding.	Common but equant.		Pinching/drawing up from the body (primary forming of the body uncertain)	Rim-edge folded to round it off
1/BHS-018	IA, Phase I	MIA	n/a	Bead-rim jar/bowl	Wall varies slightly in thickness in the vertical axis. Not wheel-marks.	Moderate & elongated; strongly visible. Orientations are predominantly horizontal.	Rare.	Visual observation shows a clear folding-seam visible on the interior of the rim.	Coiled, at least in part.	Smoothed out and shaped by hand. Rim folded.
1/BHS-020	IA, Phase I	MIA	Fasham & Keevil 1995 Fig.24 No.27	Saucepan pot	Uniform in thickness throughout.	Common, but small and mostly equant.	Common but equant.		Uncertain.	Probably smoothed out and shaped simply by hand.
1/BHS-026	IA, Phase I/II	MIA	n/a	Bead-rim jar/bowl	Distinctly thinner at the body versus at the neck and rim. Several broad, darker patches may correspond with paddle-strikes.	Moderate & elongated. These show little patterning on the body and may be described as 'random'. Some more prominent clusters orient strongly horizontally and may signify coiling.	Rare.	Hand specimen shows texture in the break that is suggestive of rim-folding. Also one coil seam clearly visible on interior surface.	Coiled, at least in part.	Paddle-and-anvil for the body; folding for the rim.
1/BHS-027	IA, Phase I	MIA	Fasham & Keevil 1995 Fig.25 No.41	Saucepan pot	Largely uniform in thickness aside from at least two broad concavities 3cm+ beneath the rim; these may represent paddle strikes.	Common & elongated; many fine. Some orient horizontally or diagonally. More prominent are hairline 'fissures' mostly running vertically. These are of uncertain origins.	Sparse ; equant.	Seam visible beneath rim on interior surface: evidence of folding.	Uncertain.	Paddle-and-anvil for the body; folding for the rim.
1/BHS-028	LIA/ER	LIA	Fasham & Keevil 1995 Fig.26 No.50	Storage jar	Largely uniform in thickness.	Abundant. Elongated. Many voids align vertically and this is suggestive of pinching/drawing at some point in the production sequence of the upper body, in particular. Orientations at the rim are more clearly horizontal/diagonal, and are accompanied by at least three distinct discontinuities in the wall of the neck, which suggest the bonding of a coil to form this part of the vessel.	Rare.		Uncertain for the body; rim/neck	Upper body formed by pinching/drawing.

1/BHS-029	IA, Phase I	MIA	Fasham & Keevil 1995 Fig.25 No.42	Bead-rim jar/bowl	Somewhat uneven in thickness. At least two - and probably more - broad concavities on the body represent paddle-strikes. Some suggestion of a broad, thick band running through the shoulder area; this may represent a coil.	Moderate. Elongated but many faint. Many of those voids that are discernible appear to run horizontally, or diagonally near the rim. This suggests coiling.	Sparse ; equant.	Clear seam beneath rim on exterior surface - evidence of folding.	Likely to have been coiling.	Paddle-and-anvil, with a folded rim.
1/BHS-030	IA, Phase II	MIA	Fasham & Keevil 1995 Fig.25 No.39	Bead-rim jar/bowl	Largely uniform in thickness throughout.	Common but equant and small.	Sparse ; equant.	folded' texture associated with rim visible in break.	Uncertain.	Uncertain. Rim folded.
1/BHS-031	IA, Phase I	MIA	Fasham & Keevil 1995 Fig.25 No.33	Saucepan pot	Uneven throughout, though these do not seem to correspond to broad paddle-strikes.	Common and elongated. Many are vertical or strongly diagonal in orientation; this suggests the vertical stresses associated with pinching/drawing.	Sparse ; equant.		Uncertain.	Pinching/drawing.
1/BHS-033	LIA/ER	LIA	Fasham & Keevil 1995 Fig.26 No.61	Bead-rim jar/bowl	Uneven throughout, though these do not seem to correspond to broad paddle-strikes. Thicker at the rim.	Moderate & elongated. More common at the rim, possibly due to visibility. Throughout the radiograph the predominant orientation seems to be horizontal, suggesting coiling (albeit tentatively for the body).	Rare.	Seam and 'folded' texture visible at the rim.	Coiled.	Uncertain. Rim folded.
1/BHS-038	IA, Phase I	MIA	Fasham & Keevil 1995 Fig.24 No.11	Saucepan pot	Largely uniform in thickness.	Rare.	Abundant; equant.	Folded' texture tentatively identified at rim.	Uncertain.	Uncertain. Rim possibly folded.
1/BHS-040	IA, Phase I/II	MIA	n/a	Saucepan pot	Somewhat uneven in thickness, though this does not seem to form a pattern.	Sparse. Some elongated, but faint.	Abundant; equant.		Uncertain.	Uncertain.
1/BHS-041	IA, Phase II	MIA	Fasham & Keevil 1995 Fig. 25 No.37	Saucepan pot	Largely uniform in thickness throughout.	Sparse; equant.	Sparse ; equant.		Uncertain.	Uncertain.
1/BHS-042	IA, Phase II	MIA	Fasham & Keevil 1995 Fig.25 No.47	Everted-rim jar/bowl	Somewhat uneven throughout. The most prominent zones of variation are arranged in horizontal patterns - there is one particularly prominent area of the lower body that may represent a slightly thicker coil.	Moderate, mostly elongated. Some fissures orient vertically towards the rim but most of the discrete voids appear to orient horizontally, tentatively indicating coiling. Orientations are weaker on the lower part of the body, which may have been pinched/drawn up based upon some vertical orientations here.	Sparse ; equant.		Probably coiled.	?pinched/drawn (lower body).
1/BHS-043	LIA/ER	LIA	Fasham & Keevil 1995 Fig.26 No.60	Bead-rim jar/bowl	Largely uniform; some slight variations form horizontal bands of even thickness.	Common; many elongated, some very fine. Most appear to align horizontally, suggesting coiling. This may also be corroborated by at least one horizontal fissure partway down the body.	Moderate; equant.	Exterior features are exceptionally well-crafted and even. This applies not just to the rim but to the body also. Competent wheel-use is clearly in evidence.	Coiled.	Wheel.
1/BHS-044	LIA/ER	LIA	Fasham & Keevil 1995 Fig.26 No.64	Bead-rim jar/bowl	Uneven, with clear horizontal banding visible on radiograph. One of these forms a particularly sharp boundary. Strongly suggestive of coiling. The lower body has at least three discrete digital impressions indicative of pinching.	Common. Many elongated but fine. In all but the lowest part of the body there is a habit towards horizontal orientations. Orientations appear somewhat more random towards the digital impressions on the lower body.	Common but equant.		Coiled.	Pinching/drawing (lower body)
1/BHS-045	LIA/ER	LIA	n/a	Bead-rim jar/bowl	Uneven, though zones do not appear to form any patterns.	Voids are mostly fine and faint, but elongated and oriented horizontally where visible. Tentatively suggests coiling.	Sparse ; equant.	A coil seam may be visible on the interior surface, while a folding seam is clearly evident beneath the rim on the exterior.	Coiled.	Uncertain. Rim folded.
1/BHS-046	IA, Phase II	MIA	n/a	Saucepan pot	Largely uniform in thickness throughout.	Sparse and faint.	Sparse ; equant.		Uncertain.	Uncertain.

1/BHS-049	IA, Phase I	MIA	n/a	Saucepan pot	Largely uniform in thickness apart from the rim, which is far thicker, and one patch at the very bottom of the sherd. It is unclear if this is a localised thin patch or not.	Common. Several large and elongated. These all orient strongly along the horizontal.	Sparse ; equant.		Coiled	Uncertain.
1/BHS-051	LIA/ER	LIA	Fasham & Keevil 1995 Fig.26 No.51	Storage jar	Uneven: rim is very thick whilst thickness decreases somewhat going further down the body (to the upper body/shoulder).	Abundant. Elongated. There is a very strong diagonal habit to the voids, with these forming a 'wavy' texture. There is also at least one and possibly two coil seams visible on the upper body in radiograph. These also comprise of wavy lines, probably as a result of the action used to bond the coils to one-another. A similar void orientation pattern is visible at the rim; the only place where it is unclear is the neck. Nevertheless, the rest of the evidence argues strongly for coiling.	Rare.		Coiled.	Uncertain.
1/BHS-052	LIA/ER	LIA	n/a	n/a	Largely uniform in thickness. Some slight thin patches towards the top of the sherd, but these do not form a coherent pattern.	Moderate. Many elongated. Voids show little sign of consistent orientation; they may be described as random. Forming technique uncertain. Two large discontinuities are evident at the join between base and body, and may represent the join between base and body components.	Rare.		Uncertain.	Uncertain.
1/BHS-053	LIA/ER	LIA	n/a	n/a	Base is largely uniform in thickness. Body is very varied in the horizontal plane. At least three discrete thin patches are evident, these probably representing pinching/drawing.	Rare. The only feature is a fissure at the join between base and body. This may represent a join between clay components.	Sparse ; equant.		Uncertain.	Pinching/drawing (lower body)
1/BHS-055	Unphased	MIA	n/a	Saucepan pot	Largely uniform in thickness.	Moderate. Elongated but many faint. Many of those voids that are discernible appear to run horizontally. This tentatively suggests coiling.	Common but equant.	Seam visible beneath rim on interior surface: evidence of folding.	Coiled?	Uncertain.
1/BHS-056	Unphased	MIA	n/a	Bead-rim jar/bowl	Largely uniform in thickness. There are some potential localised thin patches, but these are only slight variations.	Sparse. Elongated but many faint. Many of those voids that are discernible appear to run horizontally. This tentatively suggests coiling.	Rare.		Coiled?	Uncertain.
1/KFM-004	MIA	MIA	Chapman 2006 Fig.20 No.12	Bead-rim jar/bowl	Largely uniform in thickness aside from variation between the upper and lower parts of the rim/upper body (the rim is thicker); and in the centre of the base (which is thicker). No clear evidence of discrete concavities representative of digital impressions or paddle-strikes.	Moderate, but often fine and faint. Those voids that are in evidence tend to be elongated and - where discernible - appear to orient horizontally, possibly suggesting a coiled preform. The base has evidence of a network of fissures, the significance of which are unclear. They may be the result of post-production/post-deposition processes.	Common but equant.		Coiled?	Uncertain.
1/RFM-003		MIA	(FSN 46) Lobb & Morris 1993 Fig.13 No.73	Everted-rim jar/bowl	There is a clear discontinuity visible in radiograph c.2-2.5cm beneath the rim; this corresponds with a visible seam on the interior surface, and is strongly suggestive of a coil seam.	Sparse; elongated where visible. Predominant orientation among finer voids appears to be horizontal, and this would corroborate the evidence for coiling.	Sparse ; equant.	Clear seam beneath rim on exterior surface - evidence of folding.	Coiled.	Uncertain. Rim folded.

1/RFM-005	Early Pre-Flavian	LIA	(FSN 135) n/a	Bead-rim jar/bowl	There is a clear discontinuity visible in radiograph c.1.5-2cm beneath the rim. This corresponds with a seam on the interior surface; it is uncertain whether this is a coil join or another feature, such as the seam from the folding of a flap of clay.	Voids sparse and faint. One very clear, undulating seam visible c.1cm beneath the rim - this is certainly a coil seam with evidence of the gesture bonding the coil down.	Sparse ; equant.		Coiled.	Uncertain. Rim folded.
1/RFM-006	Early Pre-Flavian	LIA	(FSN 137) Lobb & Morris 1993 Fig.13 No.59	Bead-rim jar/bowl	Somewhat uneven but this does not resolve into clear patterns. Rim is thicker than upper body.	Common & elongated. Clear horizontal orientation, suggesting coiling.	Rare.		Coiled.	Uncertain.
1/RST-003	MIA	MIA	Oliver & Applin 1979, No.51	Saucepan pot	Largely uniform in thickness aside from slight thickening at rim.	Rare. Fine elongated, horizontal fissures near rim.	Abundant; equant.		Uncertain.	Uncertain.
1/RST-004	MIA	MIA	Oliver & Applin 1979, No.47	Bead-rim jar/bowl	Largely uniform in thickness aside from slight thickening at rim.	Sparse, fine and faint. Some elongated; these may primarily orient horizontally. Coiling is suggested by this, but this is uncertain.	Sparse ; equant.		?Coiled.	Uncertain.
1/RST-005	MIA	MIA	Oliver & Applin 1979, No.19	Bead-rim jar/bowl	Uneven. At least one, and probably more, discrete paddle-strikes visible as thin patches on the upper body. Beaded rim distinctly thicker than body.	Abundant. Elongated. Random orientations at the body; this corroborates the evidence for paddle-and-anvil in this area. At the rim there is a clear horizontal orientation, and this may suggest coiling.	Common but equant.		?Coiled (with orientations at th	Paddle-and-anvil.
1/RST-006	MIA	MIA	Oliver & Applin 1979, No.20	Saucepan pot	Largely uniform in thickness.	None clearly visible.	Abundant; equant.		Uncertain.	Uncertain.
1/RST-008	MIA	MIA	Oliver & Applin 1979, No.16	Bead-rim jar/bowl	Numerous discrete thin patches on the upper body; these probably represent paddle strikes.	Common. Many elongated. Orientations unclear for much of the upper body (may have been disturbed by paddle-strikes), but some horizontal orientations are visible between strike-zones. Horizontal orientations more visible near rim. All potentially suggests primary coiling.	Sparse ; equant.		Coiled?	Paddle-and-anvil.
1/RST-009	MIA	MIA	Oliver & Applin 1979, No.52	Saucepan pot	Largely uniform in thickness throughout.	Moderate. Elongated but faint. Orientations are predominantly horizontal, suggesting coiling.	Rare.		Coiled?	Uncertain.
1/RST-010	MIA	MIA	Oliver & Applin 1979, No.48	Bead-rim jar/bowl	Largely uniform in thickness. Somewhat thicker towards the rim.	Voids common and elongated, but often faint. At the upper body, voids appear to blend from horizontal into diagonal/vertical orientations. Orientations clearly vertical near the rim. This may suggest a coiled preform that has been secondarily formed by pinching/drawing.	Sparse ; equant.		Coiled?	Pinching/drawing.
1/SCT-001	M-LIA	MIA	Piggott & Seaby 1937 Fig.5 No.19	Saucepan pot	Largely uniform in thickness throughout.	Common & elongated. Clear horizontal orientation throughout the body, suggesting coiling. Some seams may be in evidence. Random fissures throughout the base suggests slab construction.	Rare.		Coiled. Slab-made base.	Uncertain.

1/SCT-008	M-LIA	MIA	Piggott & Seaby 1937 Fig.3 Pit F No.1	Everted-rim jar/bowl	Somewhat uneven: some possible small concavities visible on upper body may suggest pinching/drawing.	Moderate; some elongated. Some fainter voids appear to orient horizontally, and these may suggest coiling. Clearer voids/fissures on the upper body/neck orient vertically and these are clearer suggestion of pinching/drawing, corroborating with the evidence of the wall concavities.	Common but equant.		Coiled?	Pinching/drawing (upper body/neck)
1/SCT-009	M-LIA	MIA	Piggott & Seaby 1937 Fig.3 Pit F No.4	Bead-rim jar/bowl	Largely uniform in thickness. Slightly thicker at rim.	Sparse and equant, but very faint against the abundant inclusions. Those that are visible seem to have a clear horizontal orientation, suggesting coiling.	Abundant; equant.		Coiled?	Uncertain.
1/SCT-011	M-LIA	MIA	Piggott & Seaby 1937 Fig.3 Pit B No.3	Saucepan pot	Largely uniform in thickness throughout.	Sparse and faint. One fissure near the rim seems to have broken horizontally, potentially along the line of a coil.	Common but equant.	Folded' texture visible in break near rim.	Coiled?	Uncertain.
1/SCT-014	M-LIA	MIA	n/a	Saucepan pot	Largely uniform in thickness. Some variation through the upper body but this does not resolve into a clear pattern.	Sparse but some elongated. Some appear to orient predominantly in the horizontal, particularly lower in the sherd, at the upper body.	Common but equant.		Coiled?	Uncertain.
1/SIX-001	Pre-Flavian	LIA	n/a	Bead-rim jar/bowl	Largely uniform in thickness. Base and rim somewhat thicker than body. Vertical stripe pattern faintly visible on lower body.	Clear fissure visible between base and body. Numerous equant voids/low-density inclusions visible throughout. Elongated voids faintly visible; these sometimes orient vertically where found in association with the vertical stripe pattern; these features suggest pinching/drawing of the lower body.	Rare.	Clear folding seam visible on exterior surface of rim.	Uncertain.	Pinching/drawing (lower body)
1/SIX-005	Pre-conquest	LIA	n/a	Everted-rim jar/bowl	Numerous small discrete thin patches on the upper body; these probably represent digital impressions. Rim thicker than body.	Common & elongated. Clear vertical orientations around upper body; this corroborates evidence for pinching/drawing. Horizontal orientations visible at rim; this may result from the action of folding.	Rare.	Clear folding seam visible on interior surface of rim.	Uncertain.	Pinching/drawing (upper body/neck)
1/SIX-008	Ti-Nn	LIA	n/a	Everted-rim jar/bowl	Rim thicker than body. Also several digital impressions visible at join between upper body and rim; these suggest pinching/drawing	Sparse. Elongated, some faint. Some horizontal orientations visible, particularly on upper body. These may suggest coiling.	Rare.	Folding seam visible externally.	Coiled?	Pinching/drawing (upper body/neck)
1/SIX-015	Period 1	LIA	n/a	Storage jar	Very uneven. Numerous discrete digital impressions visible on upper body; vertical stripe patten visible on lower body. Rim thicker than body. One clear row of digital impressions at join between base and body.	Abundant. Elongated Orientations appear largely random.	Common but equant.	Coarse horizontal striations clearly visible on exterior of rim; these suggest the use of rotary motion in crafting this area.	Uncertain.	Pinching/drawing. Wheel/rotation used in crafting rim.
1/SIX-016	Period 1	LIA	n/a	n/a	Base even in thickness. Vertical stripe pattern visible on lower body.	Abundant. Elongated. Orientations appear largely random.	Moderate; equant.		Uncertain.	Pinching/drawing (lower body)
1/SIX-019	Period 1	LIA	n/a	Everted-rim jar/bowl	Uneven. Numerous digital impressions visible. Vertical stripe pattern at lower body.	Moderate. Many elongated. No convincing orientations visible at lower body. At least one - possibly two - fissures on upper body which appear to trace the line of coil seams. Vertical orientations near rim suggest more evidence for pinching/drawing.	Rare.		Coiled.	Pinching/drawing.

1/SIX-025	Period 1	LIA	n/a	Storage jar	Uneven. Numerous digital impressions visible. Vertical stripe pattern at lower body.	Moderate. Many elongated. At least one fissure on the upper body seems to trace the line of a coil seam. Several other fissures throughout the lower body are of uncertain significance.	Rare.		Coiled.	Pinching/drawing.
1/TVP-009	LIA/ER	LIA	Barnes et al 1997 Fig.38 No.40	Saucepan pot	Largely uniform in thickness; some localised thin patches may resolve into impressions but this is unclear. Rim is thicker than body.	Moderate; many elongated. Some voids appear to orient horizontally (particularly towards the rim) but the predominant pattern is random, or towards the vertical in some areas. The latter may suggest pinching/drawing, and may corroborate with the localised thinner patches, though in all cases the evidence is ambiguous.	Sparse ; equant.	Coiled?	Pinched/Drawn?	
1/TVP-018	E-MIA	MIA	Barnes et al 1997 Fig.36 No.3	Saucepan pot	Largely uniform in thickness. Slight gradual thickening towards rim.	Sparse; equant where visible.	Common but equant.	Uncertain.	Uncertain.	
1/UFT-001	LIA/ER	LIA	Manning 1974 Fig.16 No.81	Lid	Somewhat uneven. Faint trace of vertical stripe pattern visible in one of the two radiographs; this suggests pinching/drawing. Gradual thickening towards rim.	Moderate; many elongated. At least two clear coil seams visible in one of the radiographs.	Common but equant.	Coiled.	Pinched/Drawn.	
1/UFT-004	AD43+	LIA	Manning 1974 Fig.13 No.27	Bead-rim jar/bowl	Somewhat uneven throughout. This may resolve into a faint vertical stripe pattern, but this is unclear. Markedly thicker at the rim.	Moderate & elongated, but often faint. Orientations throughout the body appear random, or tend towards vertical in some areas. This corroborates the suggestion of pinching/drawing offered by the variation in wall thickness and possible vertical stripe pattern. Some horizontal orientations near the rim may suggest coiling here.	Rare.	Coiled? (at rim)	Pinched/Drawn.	
1/UFT-005	LIA/ERB	LIA	n/a	Bead-rim jar/bowl	Somewhat uneven at the body; may resolve into a vertical stripe pattern but this is faint. Rim much thicker than body.	Common; many elongated. Orientations largely random at body; more clearly horizontal near rim.	Rare.	Coiled? (at rim)	Pinched/Drawn.	
1/UFT-010	Pre-conquest	LIA	Manning 1974 Fig.18 No.115	Bead-rim jar/bowl	Slightly uneven, but no evidence for discrete thin patches. Slightly thicker at rim.	Rare and faint.	Common but equant.	Uncertain.	Uncertain.	
1/UFT-013	Pre-conquest	LIA	Manning 1974 Fig.18 No.120	Bead-rim jar/bowl	Largely uniform in thickness throughout.	Rare and faint.	Common but equant.	Uncertain.	Uncertain.	
1/UFT-018	Pre-conquest	LIA	n/a	n/a	Somewhat uneven throughout. Some broad concavities may be visible in one of the radiographs, and this may suggest paddle-and-anvil.	Abundant. Elongated Orientations appear largely random throughout. The exception to this is one diagonal linear feature at the join between base and body, though the significance of this is uncertain.	Rare.	Uncertain.	Paddle-and-anvil?	
1/VBF-001	Period 2	MIA	Millett & Russell 1984 Fig.6 No.Tr.4 A4.3	Bead-rim jar/bowl	Highly uneven. Very clear vertical stripe pattern at lower body. Further digital impressions on upper body.	Common & elongated. Very faint throughout much of the body. Very clear horizontal orientations at lower body and on base. These are clear evidence of coiling. Possible that pinching/drawing of body has disrupted the evidence of coiling in these areas.	Common but equant.	Coiled.	Pinched/Drawn.	
1/VBF-002	Period 2	MIA	Millett & Russell 1984 Fig.7 No.Pit 3 4A1.2	Saucepan pot	Rim thicker than body. Some small, faint (possible) digital impressions visible on upper body.	Moderate and elongated, but small and faint. No convincing orientations.	Moderate; equant.	Uncertain.	Pinching/drawing (upper body)	

1/VBF-003	Period 2	MIA	Millett & Russell 1984 Fig.7 No.Pit 3 5A1.3	Saucepan pot	Slightly thicker at rim.	Present and some elongated, but these are faint against the silty background.	Minuscule inclusions abundant throughout. These are mostly equant.		Uncertain.	Uncertain.
1/VBF-005	Period 2	MIA	Millett & Russell 1984 Fig.7 No.Tr.4 A1.14	Saucepan pot	Gradually thickens towards rim. Thinness of lower parts may result from two or more broad paddle-strikes, but this is uncertain.	Moderate, often elongated, but faint. No convincing patterns aside from very tentative identification of horizontal orientations near the bottom of the sherd (upper body).	Sparse ; equant.		Coiled? (upper body)	Paddle-and-anvil?

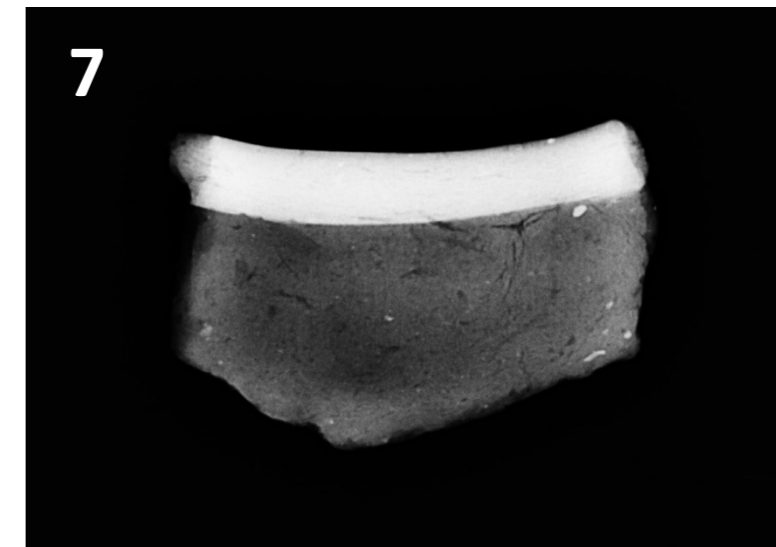
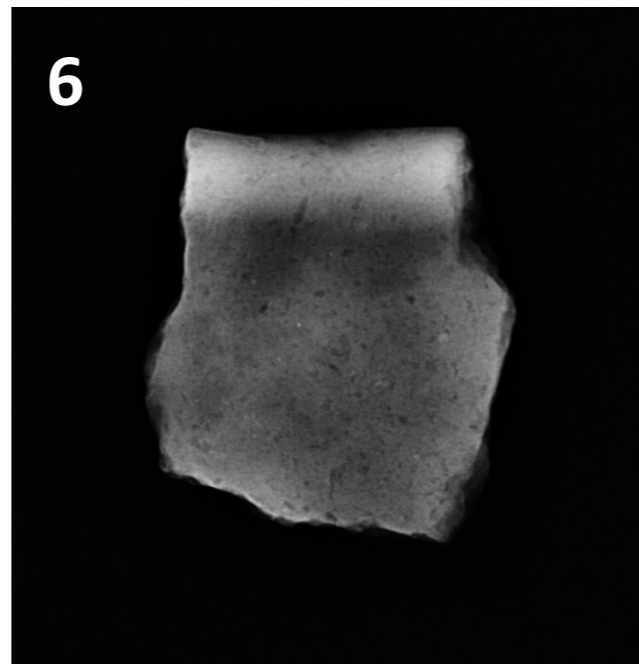
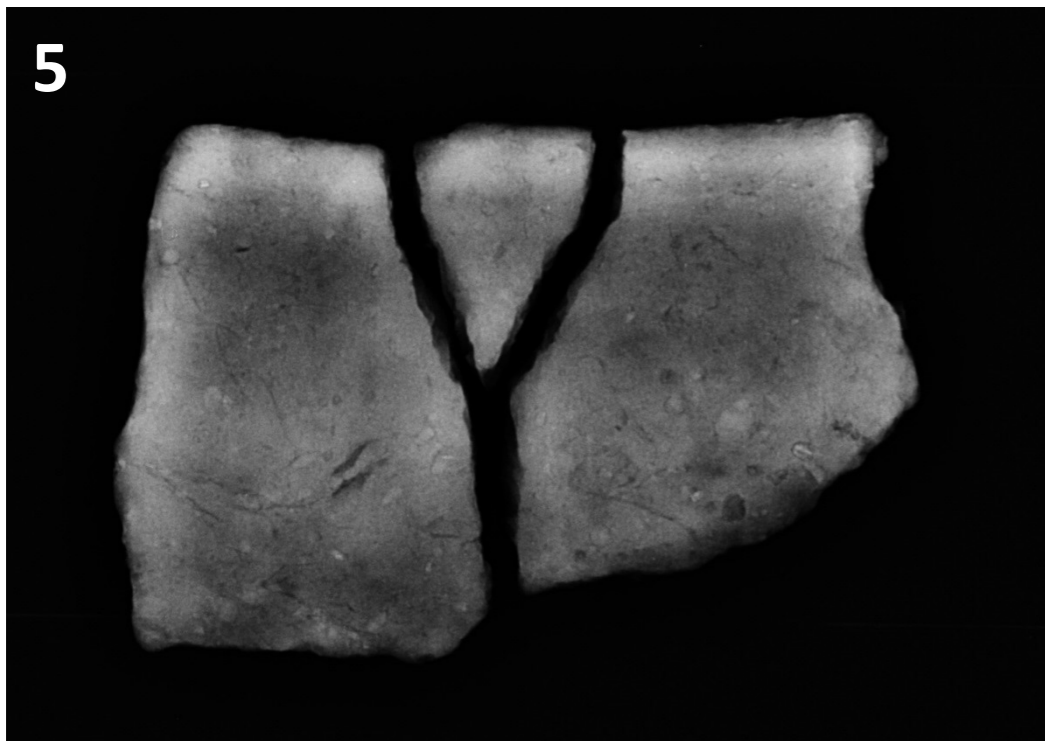
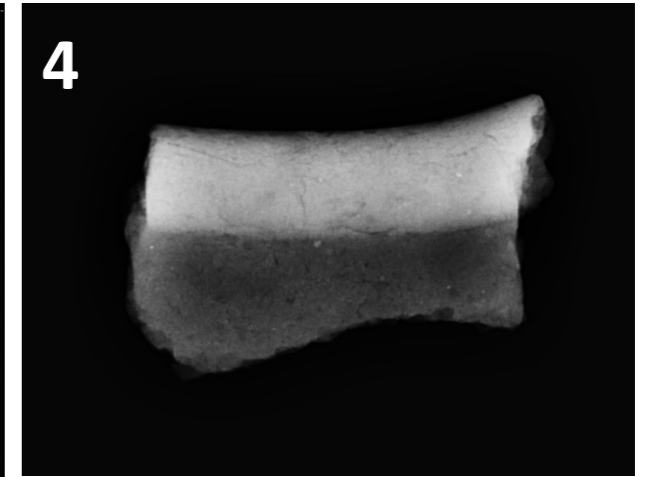
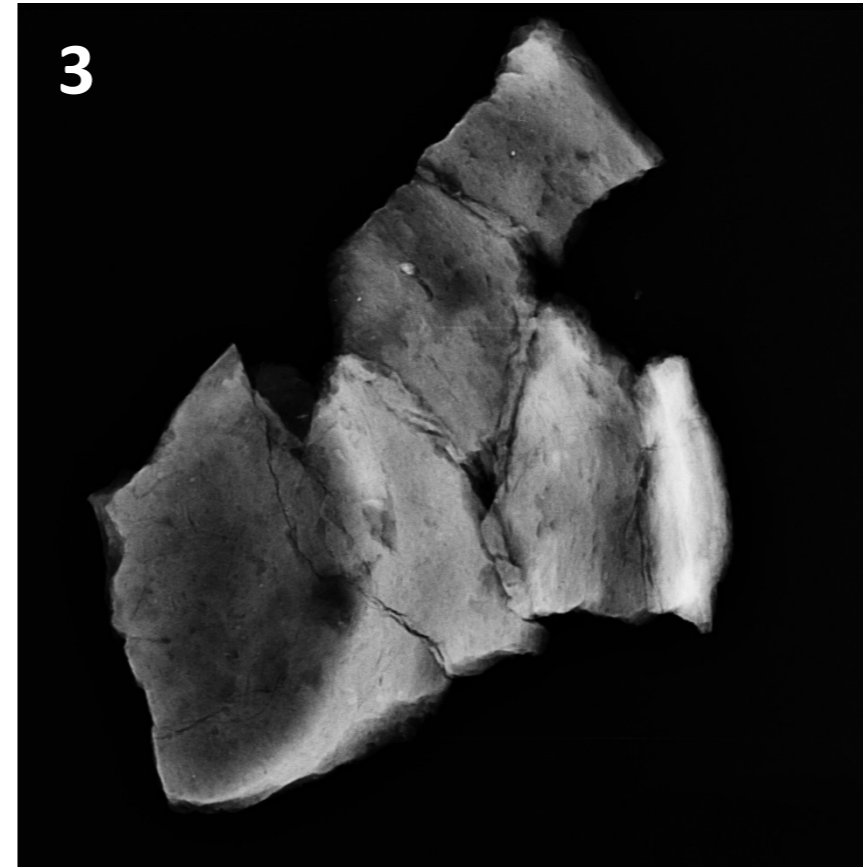
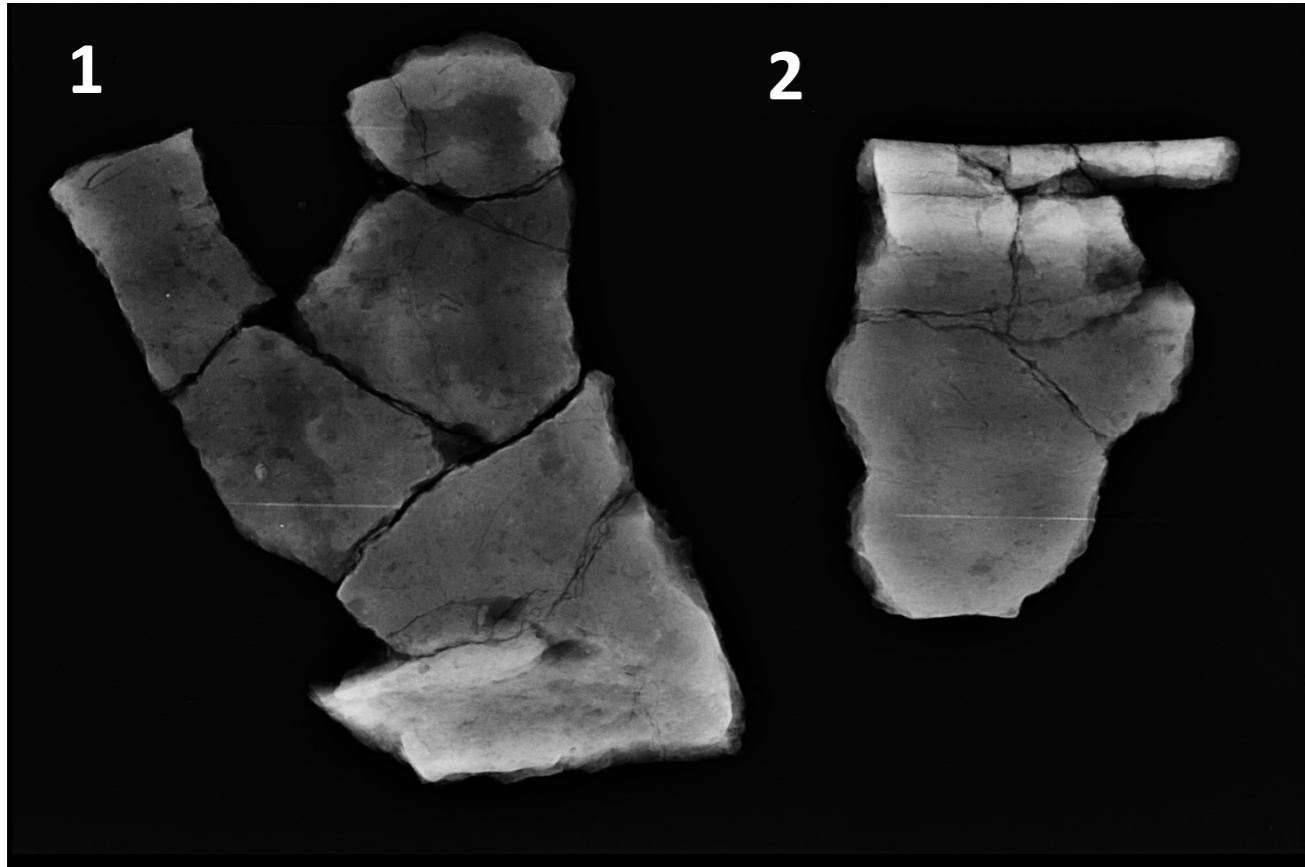
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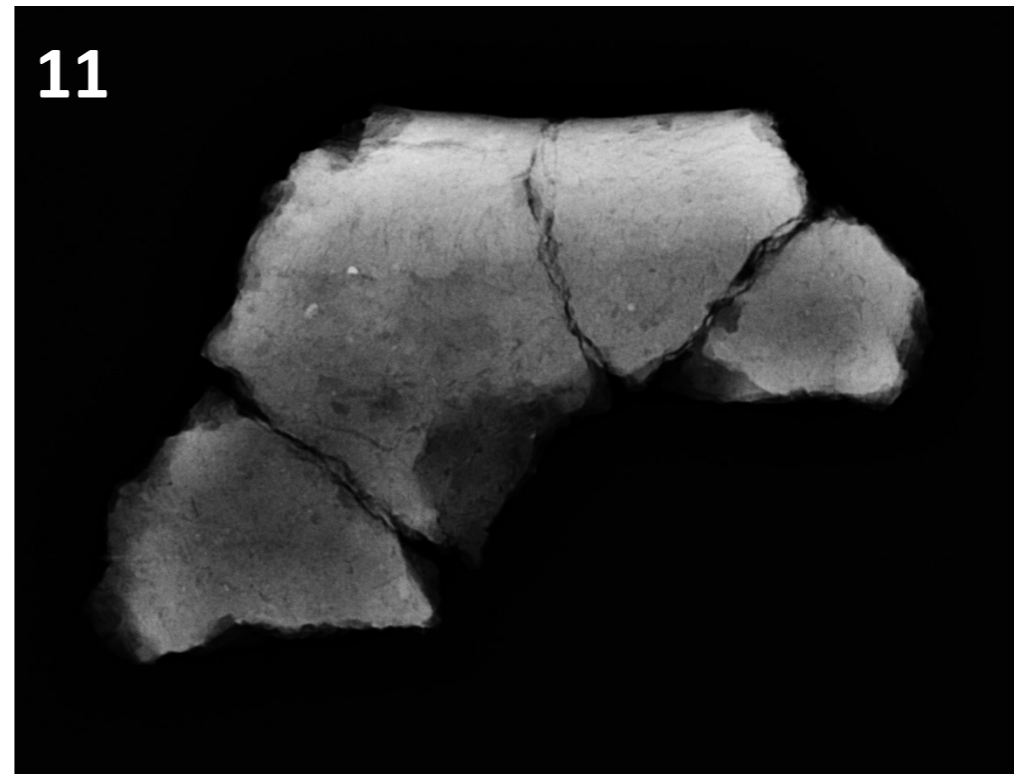
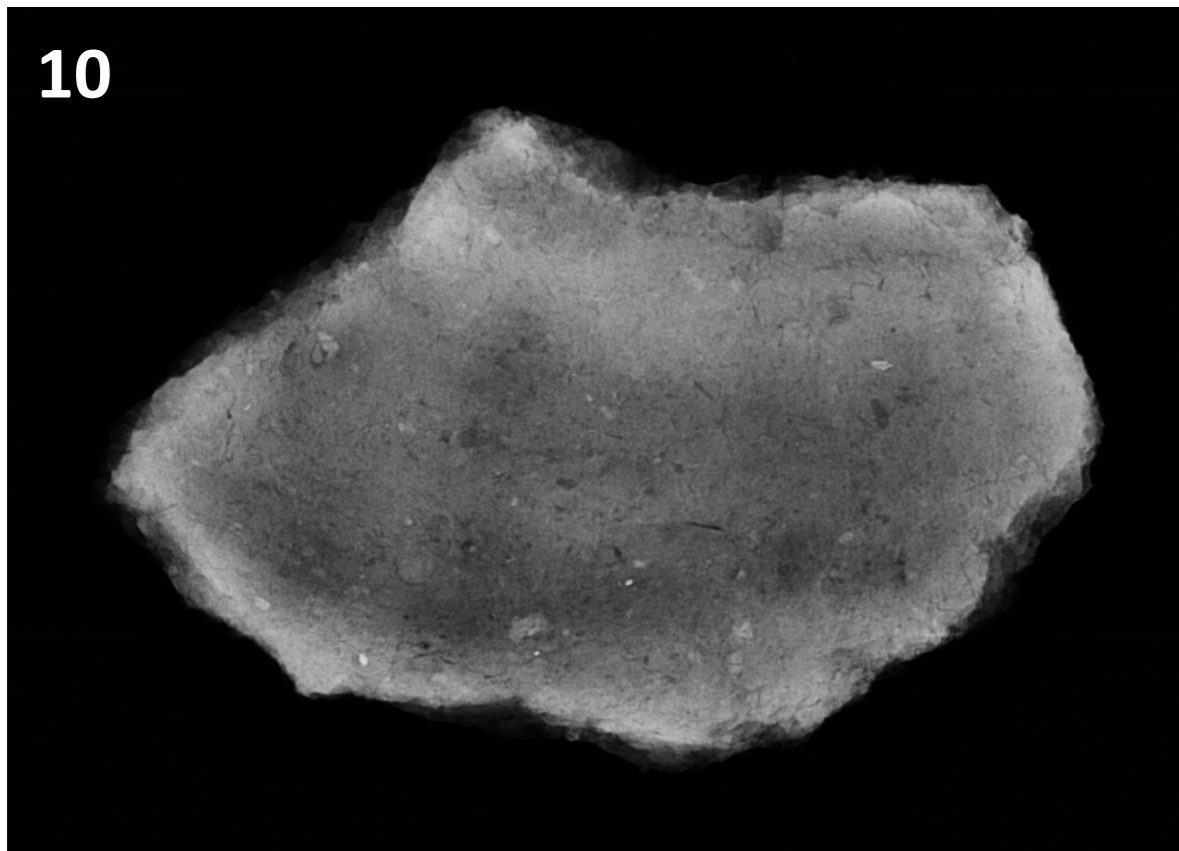
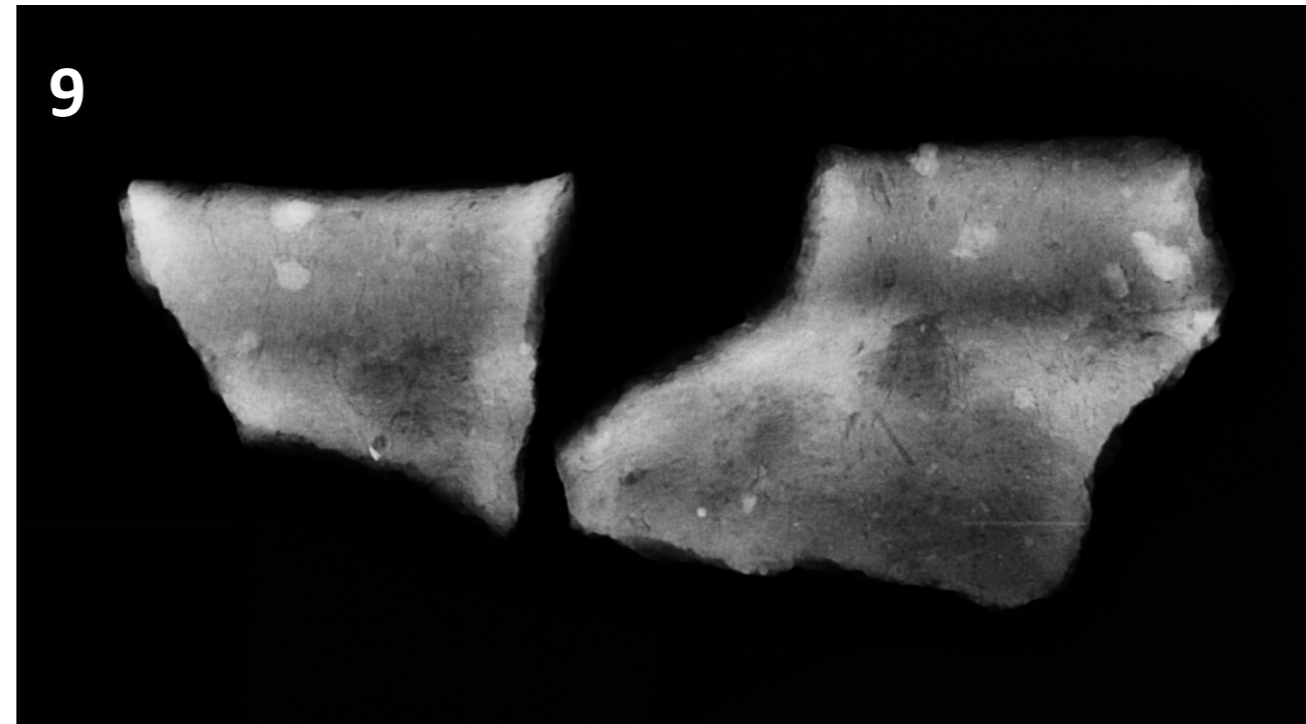
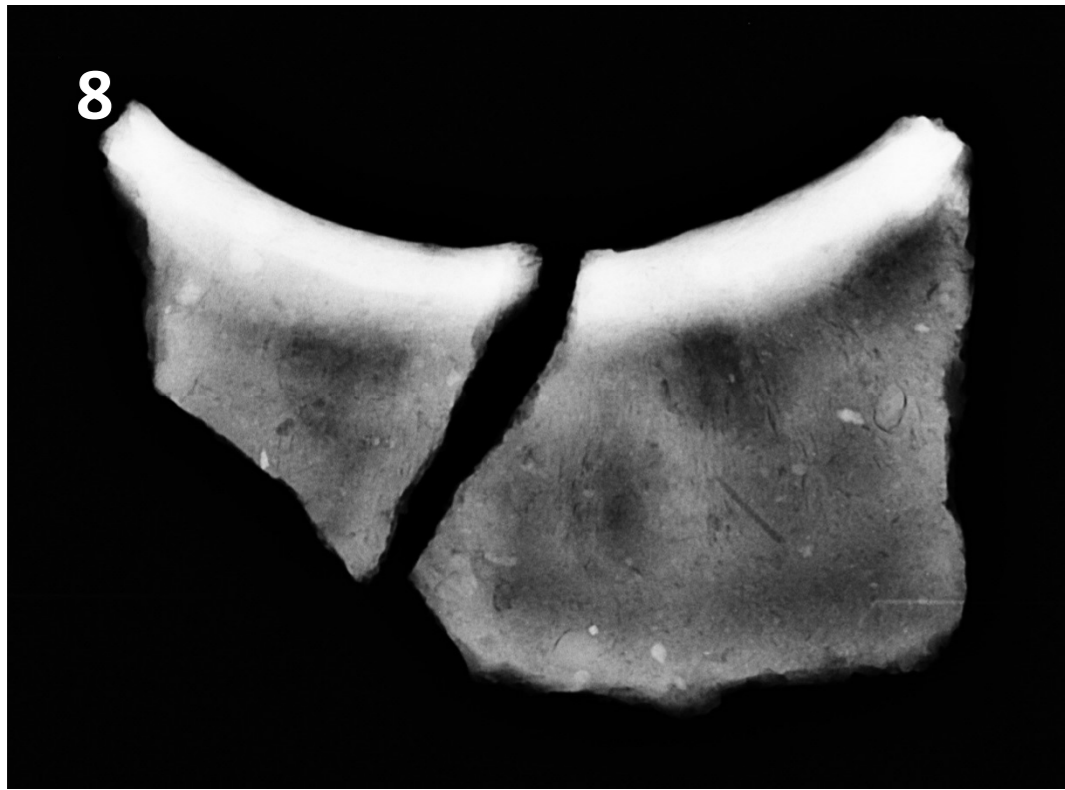
- 1 – 1/BFD-001, base and lower body, viewing lower body.
- 2 – 1/BFD-001, upper body and rim.
- 3 – 1/BFD-001, base and lower body, viewing base.
- 4 – 1/BFD-004, upper body and rim.
- 5 – 1/BFD-009, upper body and rim.
- 6 – 1/BFD-014, upper body and rim.
- 7 – 1/BHS-003, upper body and rim.
- 8 – 1/BHS-009, upper body and rim, viewing upper body.
- 9 – 1/BHS-009, upper body and rim, viewing rim (in two segments).
- 10 – 1/BHS-010, body.
- 11 – 1/BHS-013, upper body and rim.
- 12 – 1/BHS-015, rim.
- 13 – 1/BHS-018, upper body and rim (in two segments).
- 14 – 1/BHS-020, upper body and rim (in two segments).
- 15 – 1/BHS-026, upper body and rim (in two segments).
- 16 – 1/BHS-027, upper body and rim.
- 17 – 1/BHS-028, upper body and rim, viewing rim.
- 18 – 1/BHS-028, upper body and rim, viewing upper body.
- 19 – 1/BHS-029, upper body and rim (in two segments).
- 20 – 1/BHS-030, upper body and rim.
- 21 – 1/BHS-031, upper body and rim (in three segments – all rims align).
- 22 – 1/BHS-033, upper body and rim.
- 23 – 1/BHS-038, upper body and rim.
- 24 – 1/BHS-040, upper body and rim.
- 25 – 1/BHS-041, upper body and rim.
- 26 – 1/BHS-042, complete profile.
- 27 – 1/BHS-043, body and rim, viewing body.
- 28 – 1/BHS-043, body and rim, viewing rim.
- 29 – 1/BHS-044, body and rim.

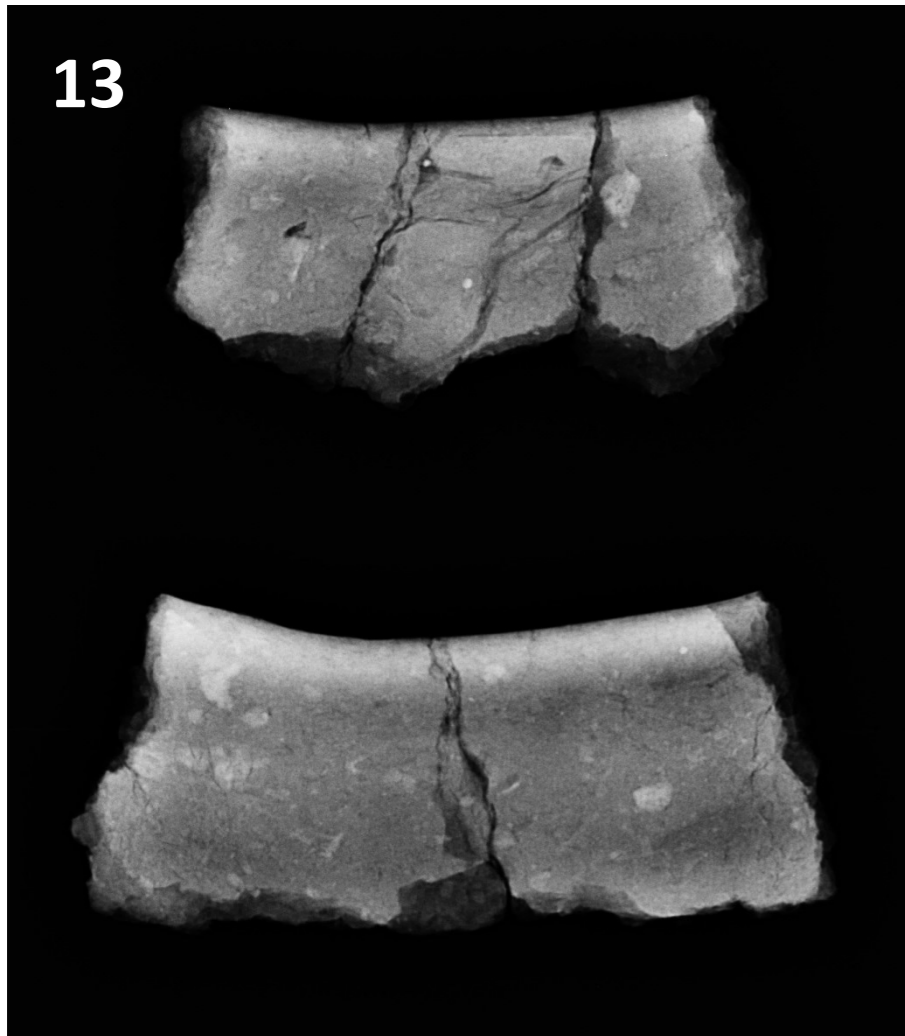
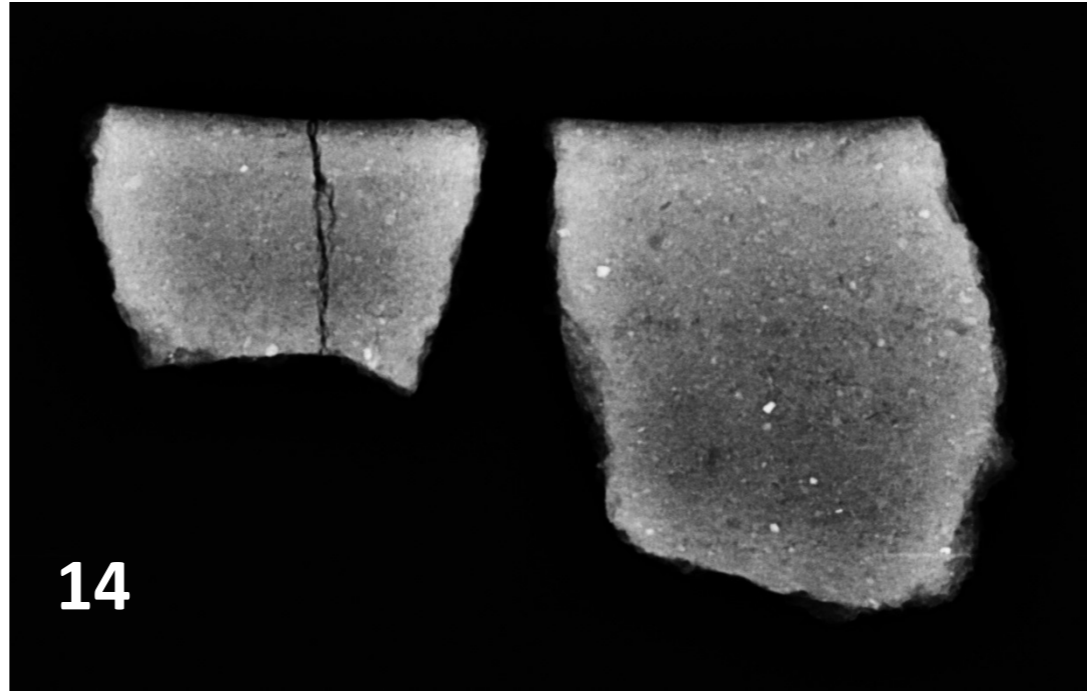
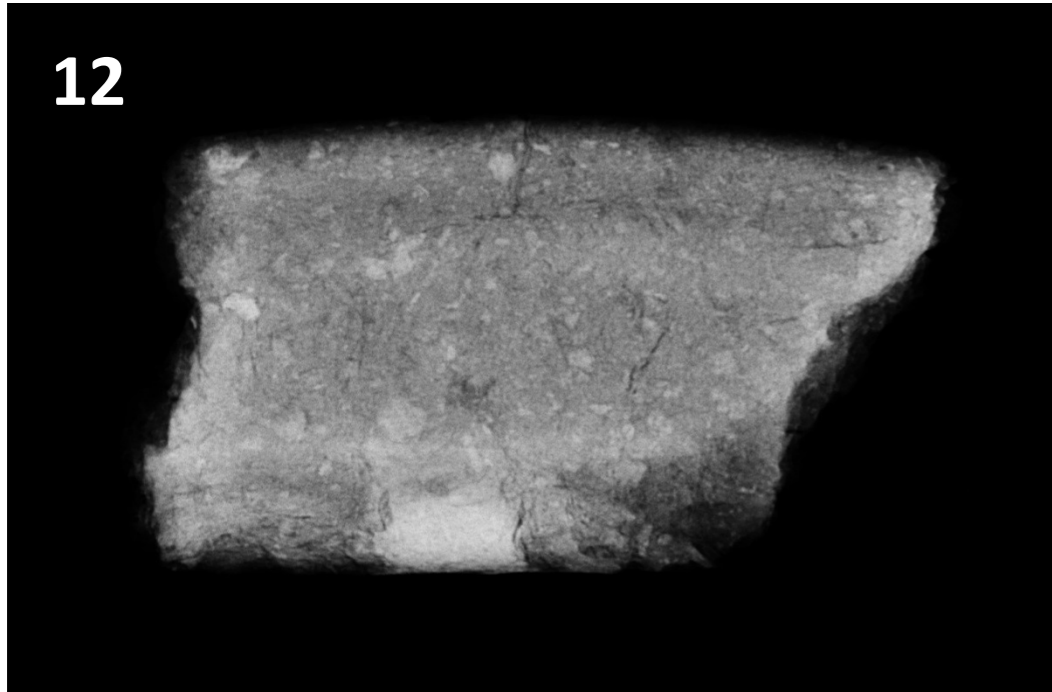
- 30 – 1/BHS-045, upper body and rim.
- 31 – 1/BHS-046, body and rim.
- 32 – 1/BHS-049, upper body and rim.
- 33 – 1/BHS-045, upper body and rim, viewing upper body.
- 34 – 1/BHS-045, upper body and rim, viewing rim.
- 35 – 1/BHS-052, lower body.
- 36 – 1/BHS-053, lower body and base, viewing base.
- 37 – 1/BHS-053, lower body and base, viewing lower body.
- 38 – 1/BHS-055, body and rim.
- 39 – 1/BHS-056, upper body and rim.
- 40 – 1/KFM-004, base, lower body, upper body, and rim (in two segments).
- 41 – 1/RFM-003, upper body and rim.
- 42 – 1/RFM-005, upper body and rim, viewing upper body.
- 43 – 1/RFM-005, upper body and rim, viewing rim.
- 44 – 1/RFM-006, upper body and rim.
- 45 – 1/RST-003, upper body and rim.
- 46 – 1/RST-004, upper body and rim.
- 47 – 1/RST-005, upper body and rim.
- 48 – 1/RST-006, upper body and rim.
- 49 – 1/RST-008, body and rim.
- 50 – 1/RST-009, upper body and rim.
- 51 – 1/RST-010, body and rim.
- 52 – 1/SCT-009, body.
- 53 – 1/SCT-011, body and rim.
- 54 – 1/SCT-014, body and rim.
- 55 – 1/SIX-001, complete profile, fragmented.
- 56 – 1/SIX-005, upper body and rim.
- 57 – 1/SIX-008, upper body and rim.
- 58 – 1/SIX-015, complete profile, viewing upper body and rim.
- 59 – 1/SIX-015, complete profile, viewing lower body.
- 60 – 1/SIX-015, complete profile, viewing base.

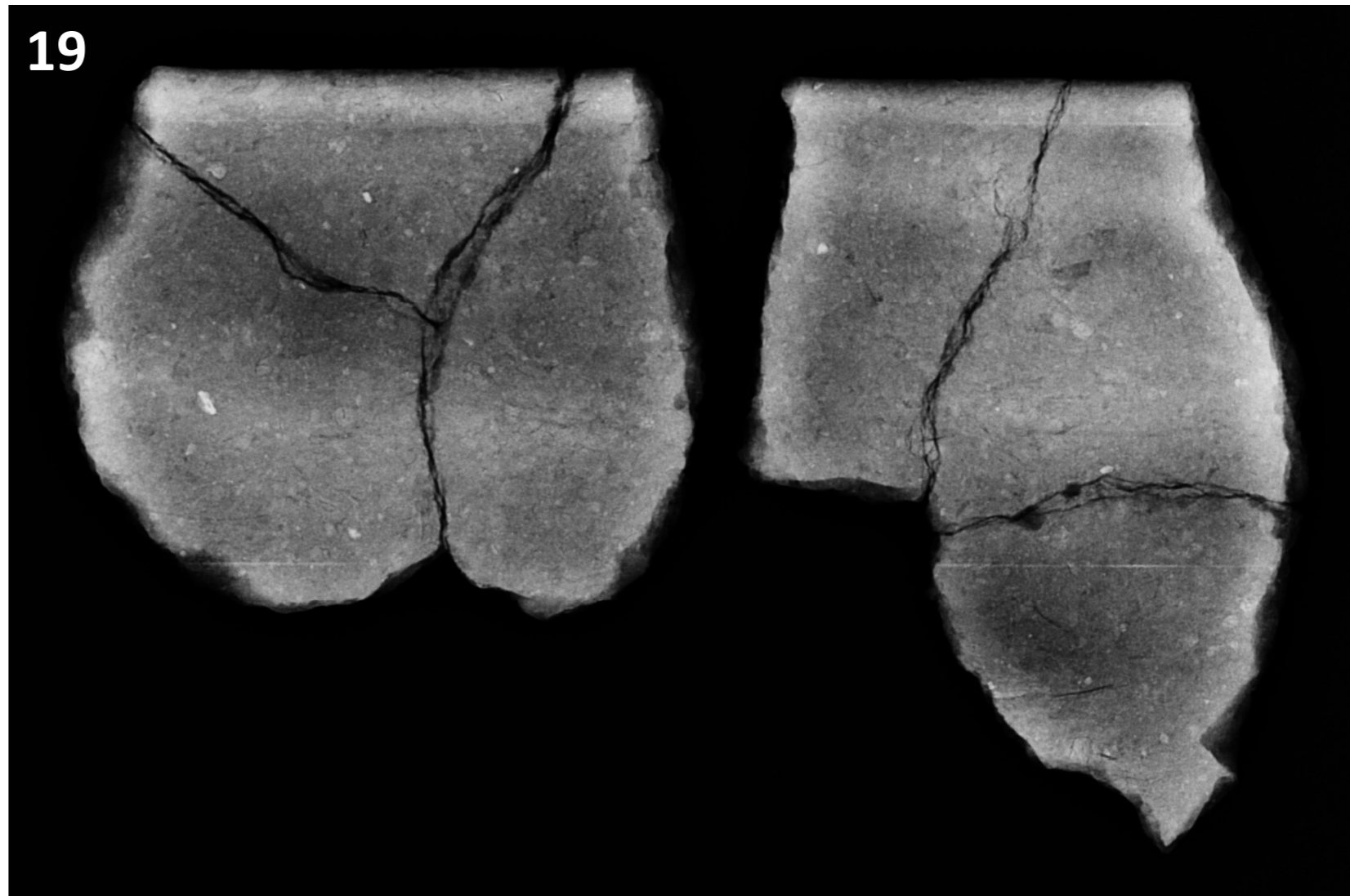
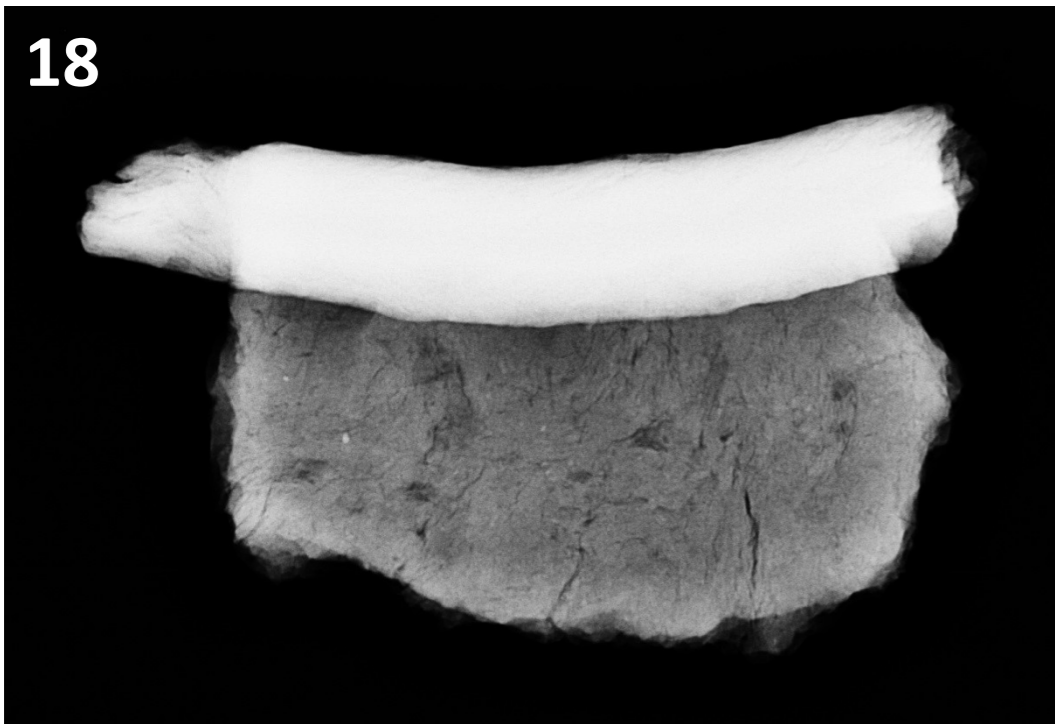
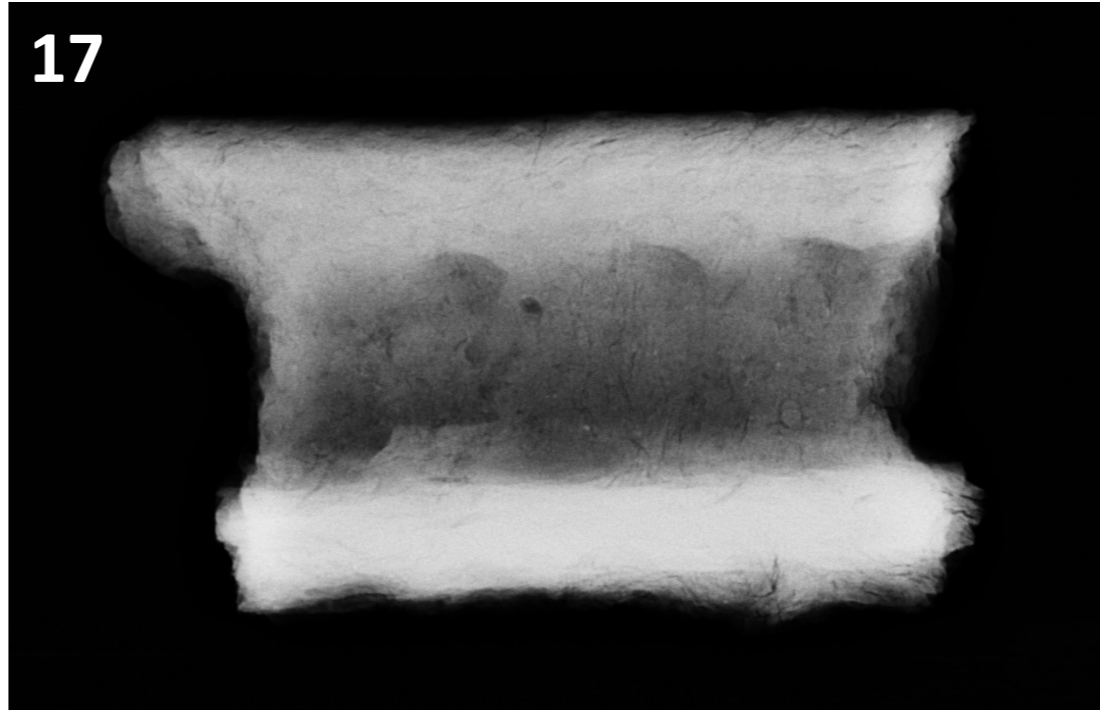
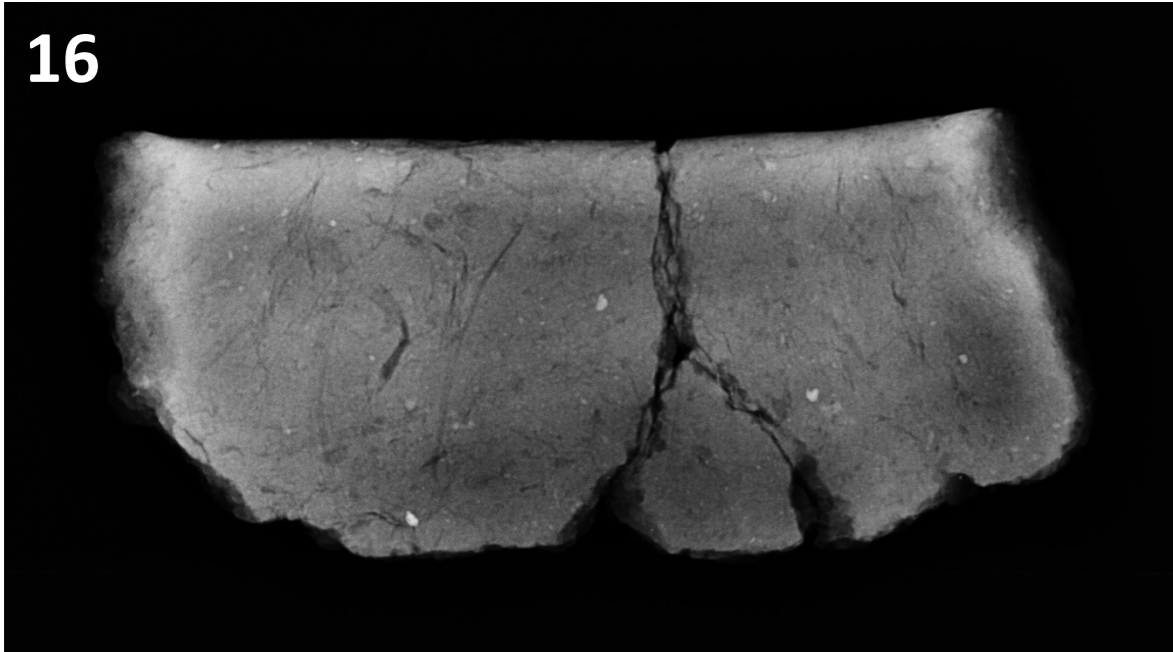
- 61 – 1/SIX-016, base and lower body, viewing base.
- 62 – 1/SIX-016, base and lower body, viewing lower body.
- 63 – 1/SIX-016, base and lower body, viewing lower body (rotated).
- 64 – 1/SIX-019, complete profile, upright view.
- 65 – 1/SIX-019, complete profile, upright view (rotated).
- 66 – 1/SIX-019, complete profile, viewing base.
- 67 – 1/SIX-025, complete profile, upright view.
- 68 – 1/SIX-025, complete profile, upright view (rotated).
- 69 – 1/SIX-025, complete profile, viewing base.
- 70 – 1/TVP-009, complete profile, upright view.
- 71 – 1/TVP-009, complete profile, viewing base.
- 72 – 1/TVP-018, upper body and rim.
- 73 – 1/UFT-001, body and rim.
- 74 – 1/UFT-004, body and rim.
- 75 – 1/UFT-005, body and rim.
- 76 – 1/UFT-010, upper body and rim.
- 77 – 1/UFT-013, upper body and rim.
- 78 – 1/UFT-018, lower body and base, viewing lower body.
- 79 – 1/UFT-018, lower body and base, viewing base.
- 80 – 1/VBF-001, complete profile, viewing body.
- 81 – 1/VBF-001, complete profile, viewing base.
- 82 – 1/VBF-001, complete profile, viewing body.
- 83 – 1/VBF-002, upper body and rim.
- 84 - 1/VBF-003, upper body and rim.
- 85 – 1/VBF-005, upper body and rim.

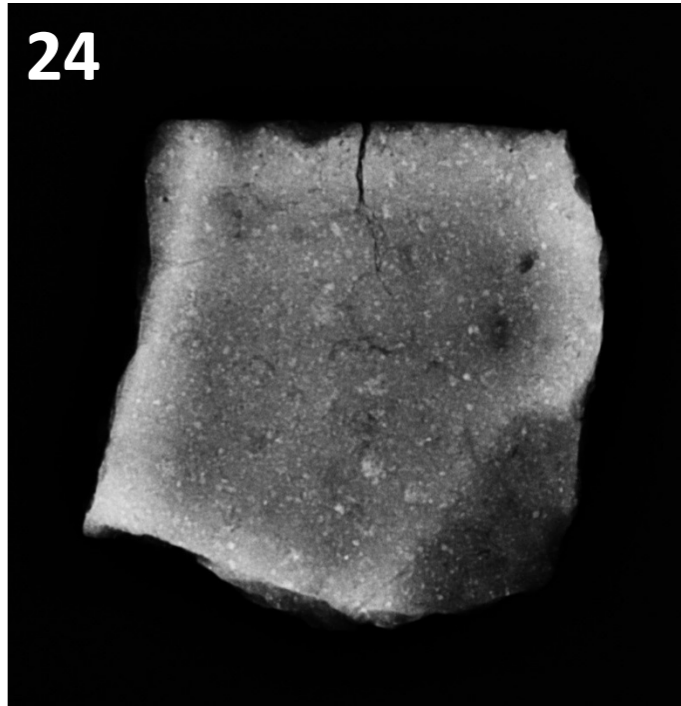
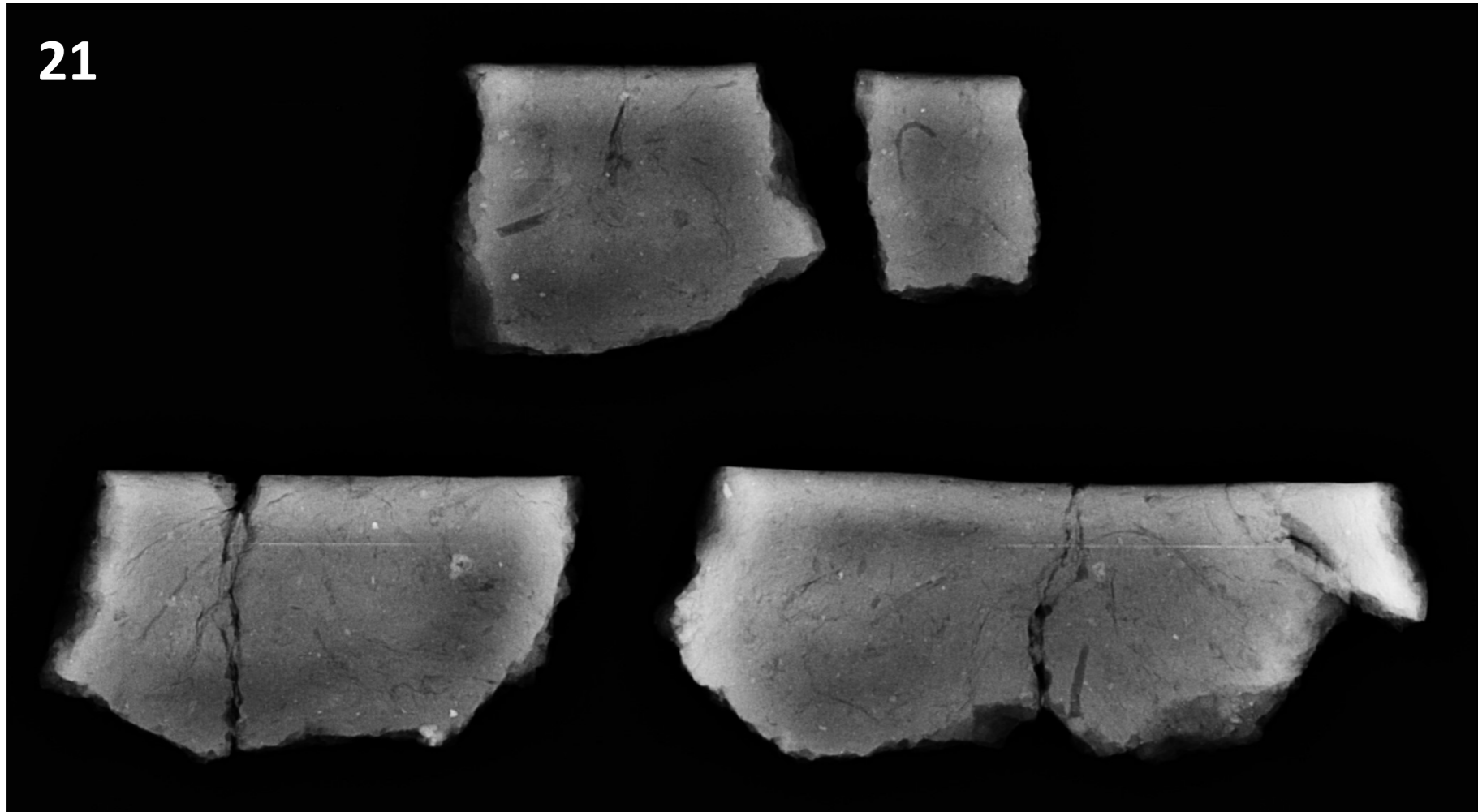
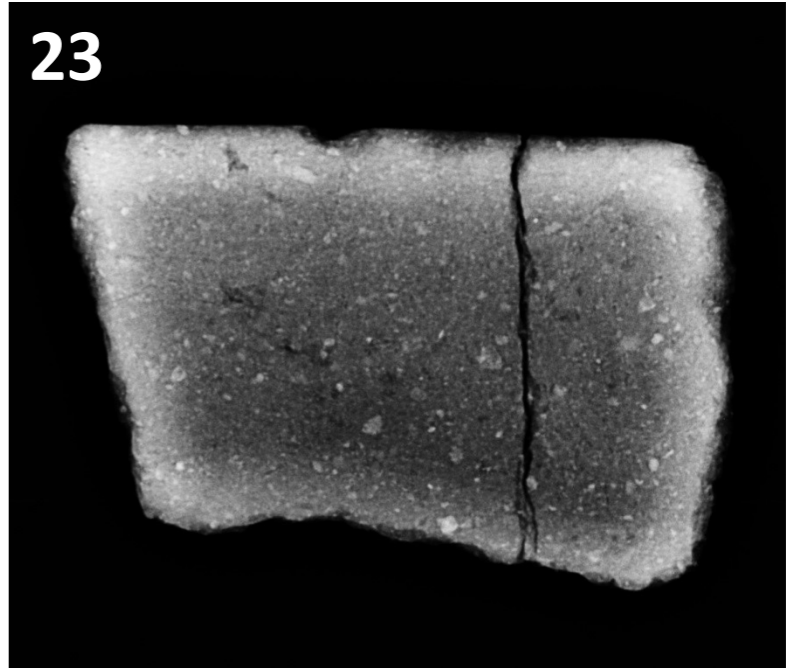
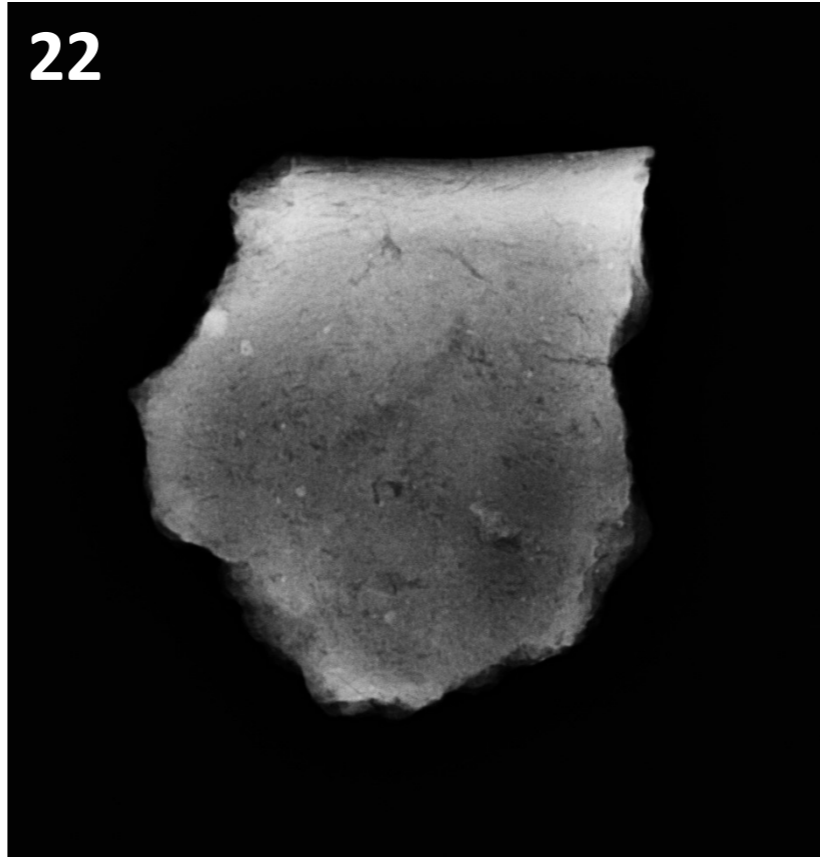
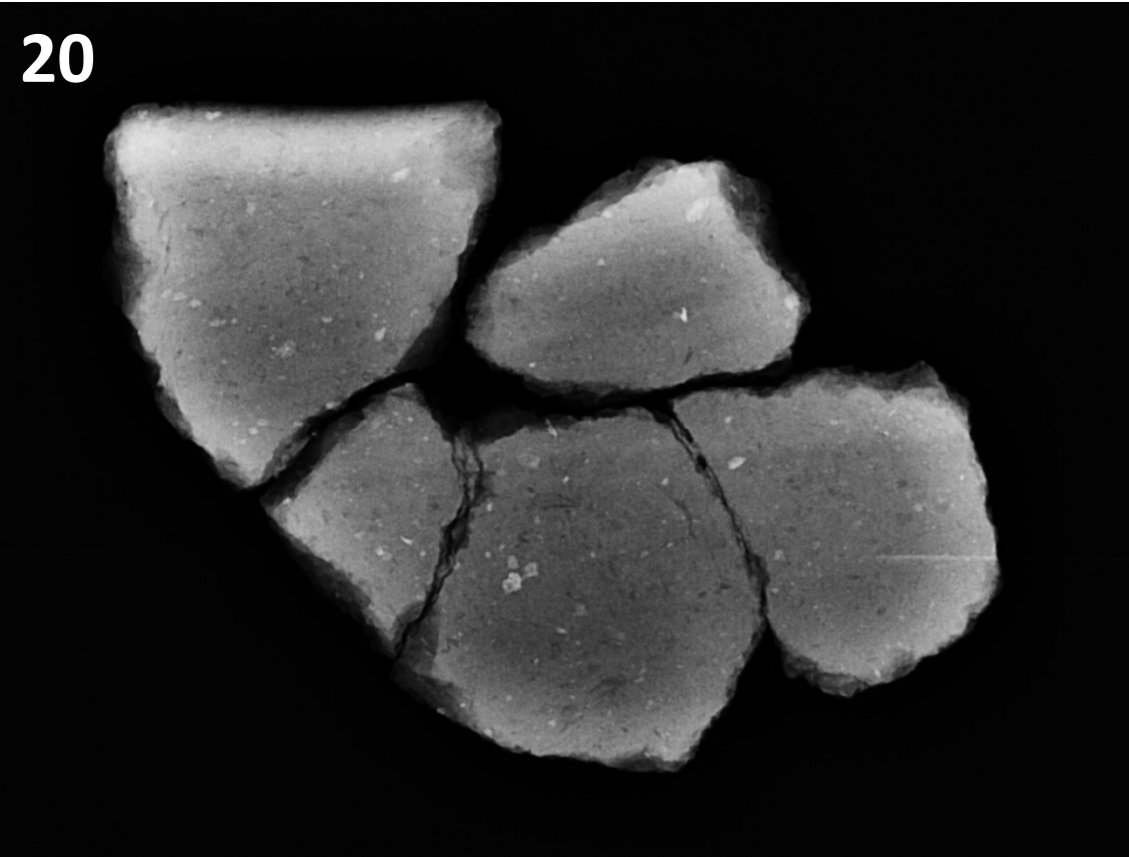
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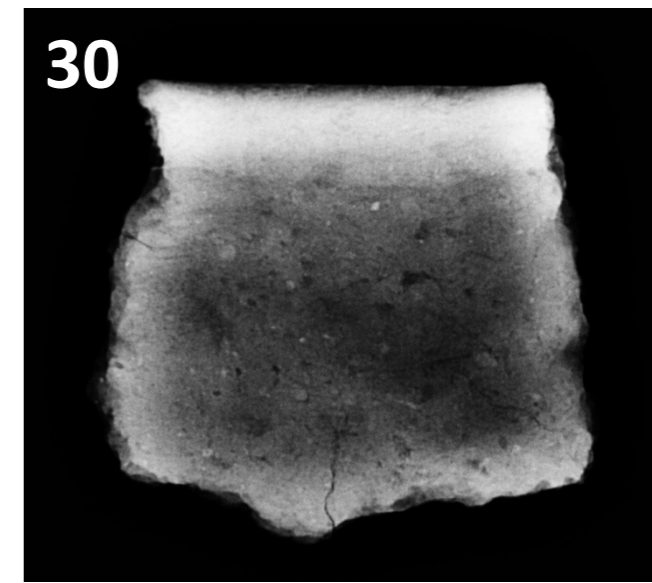
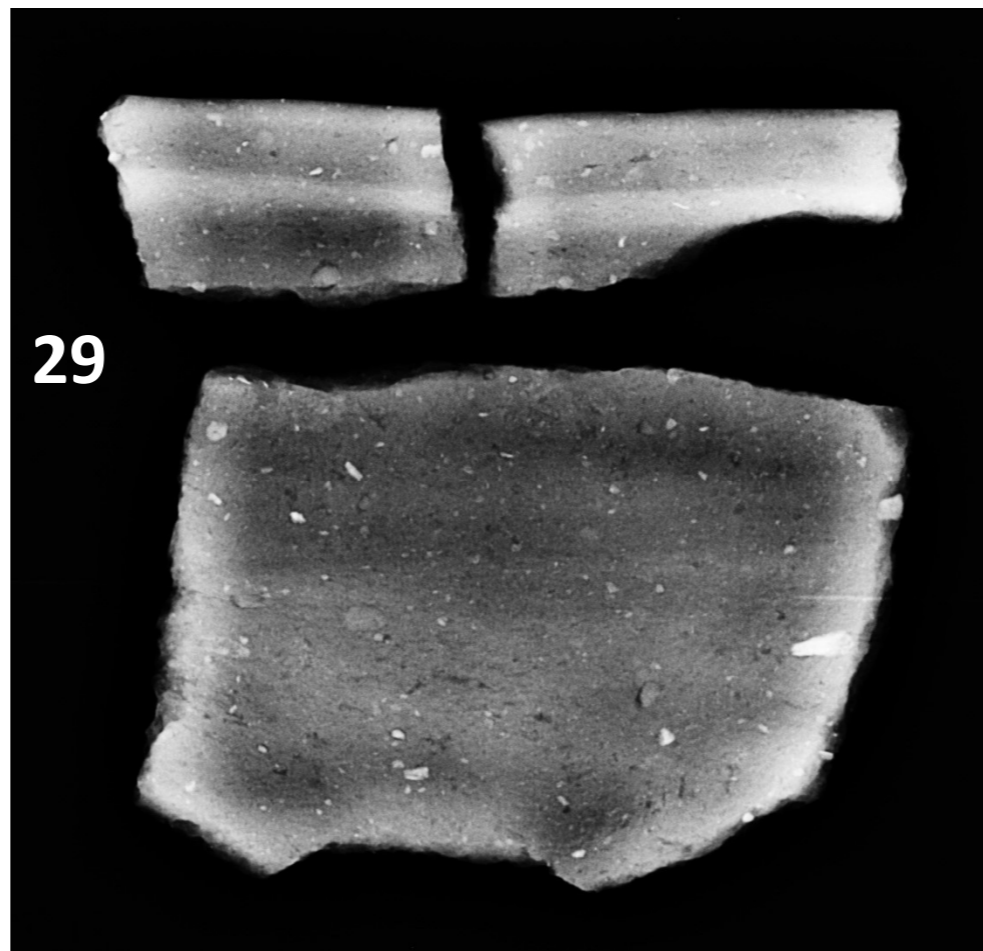
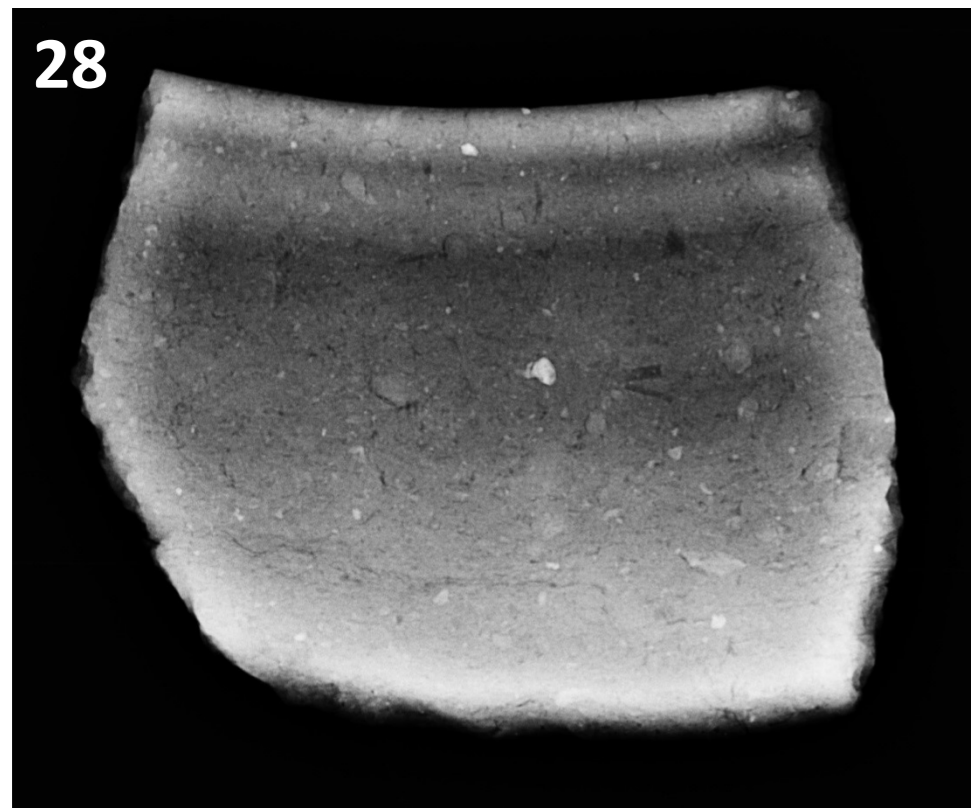
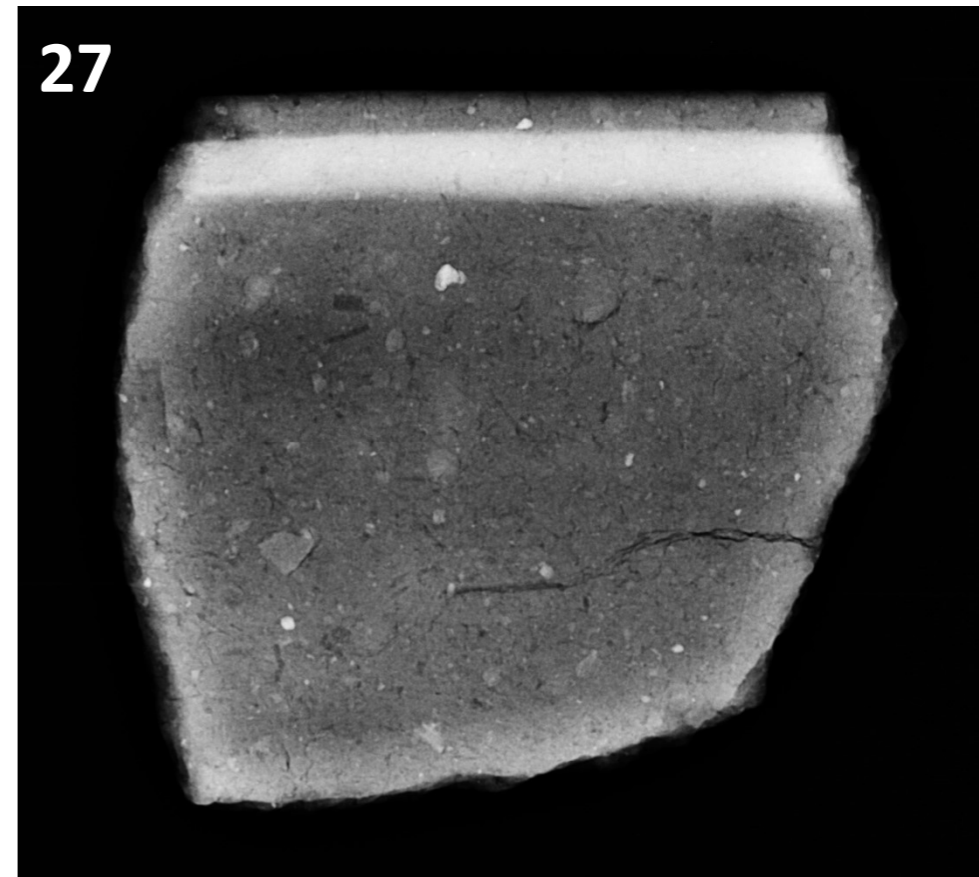
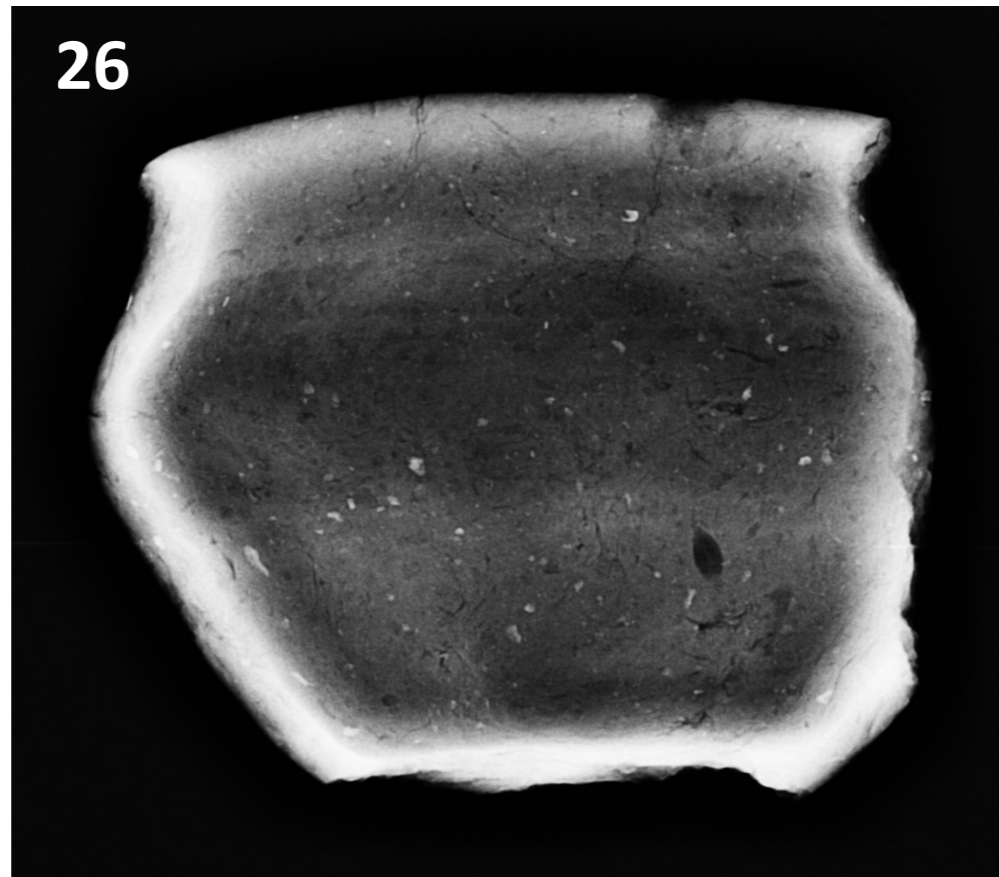
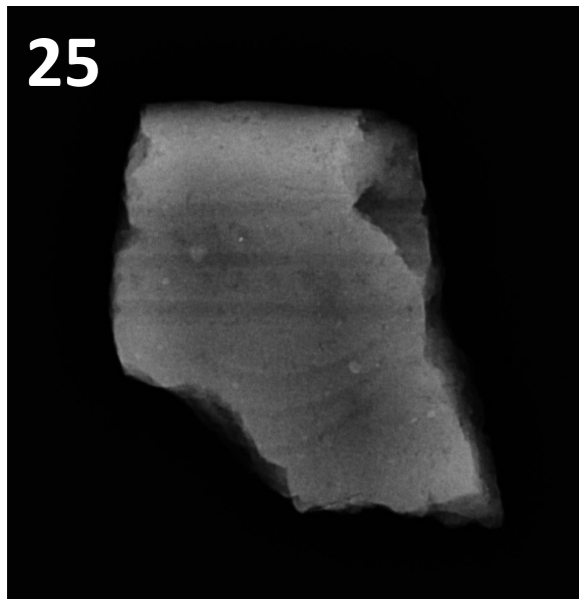




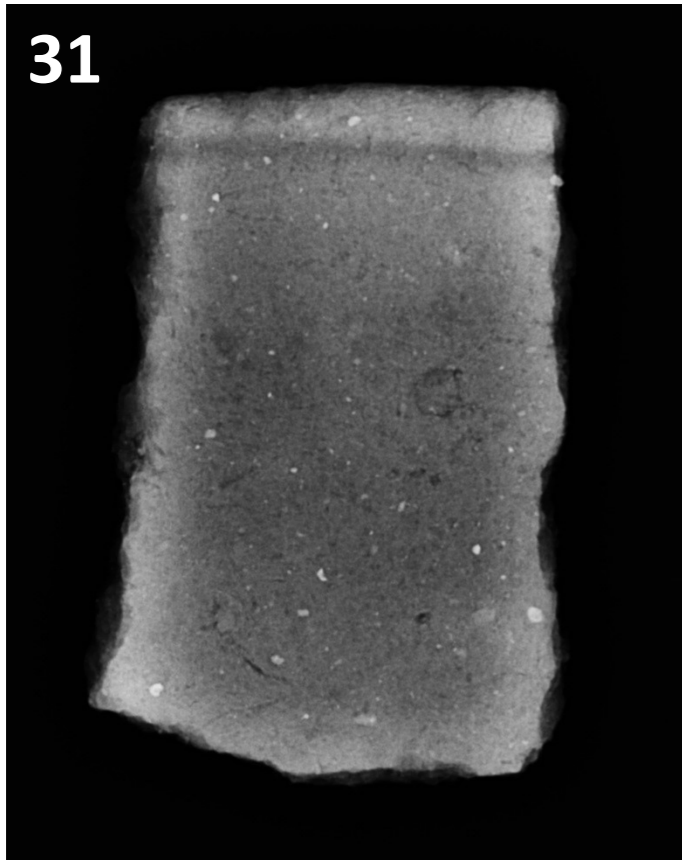




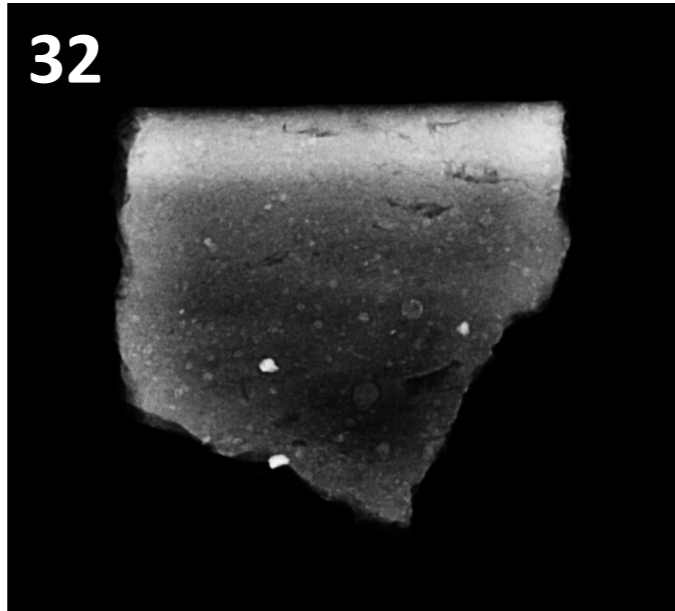




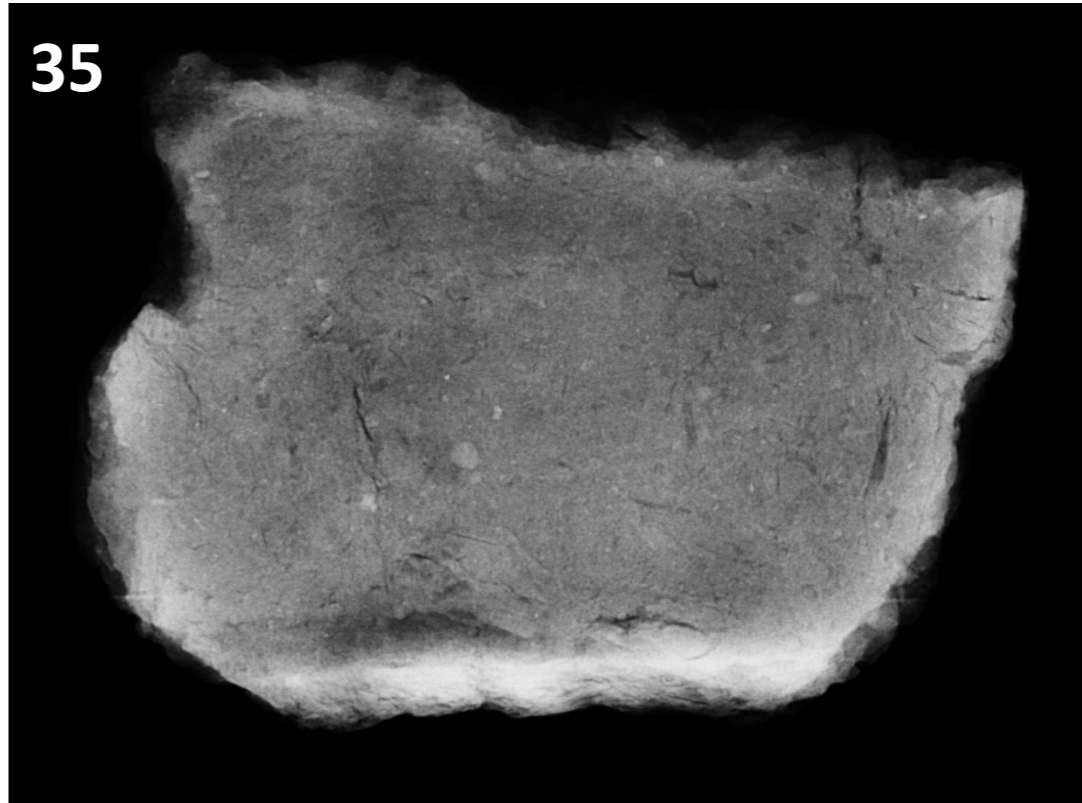
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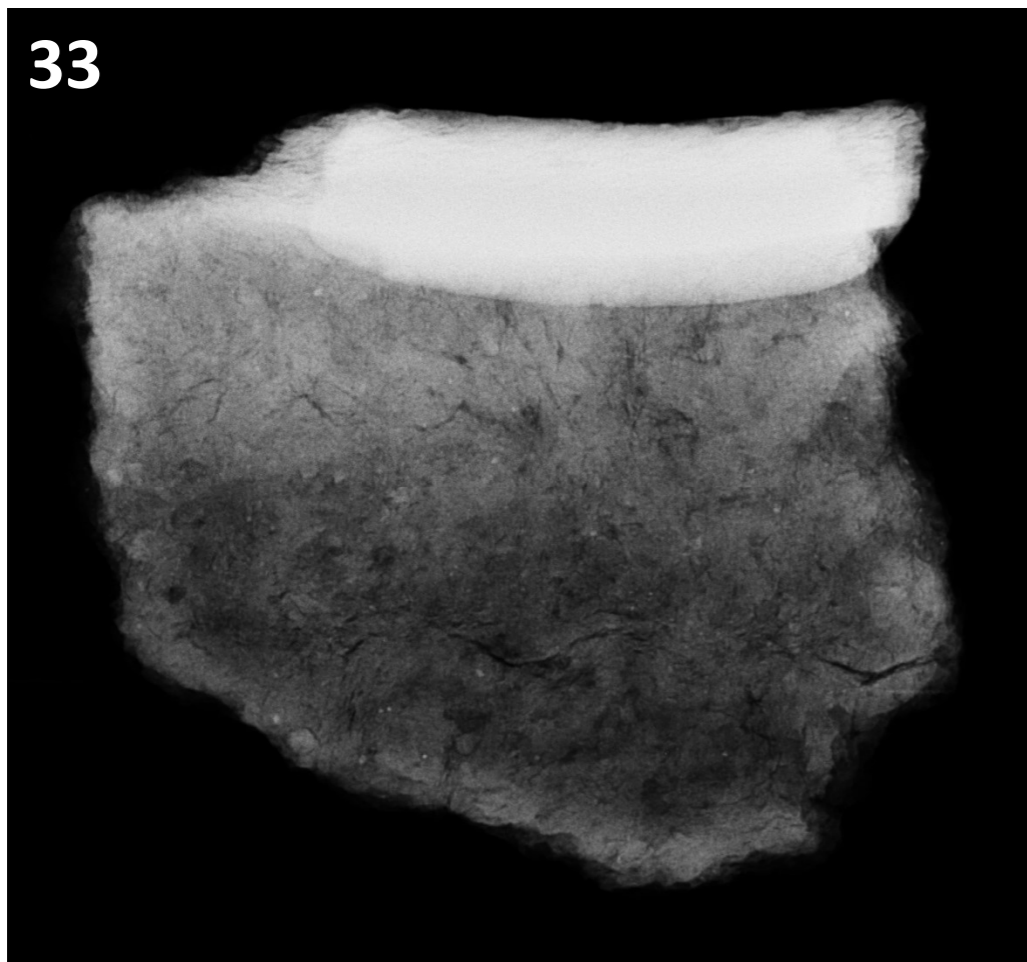
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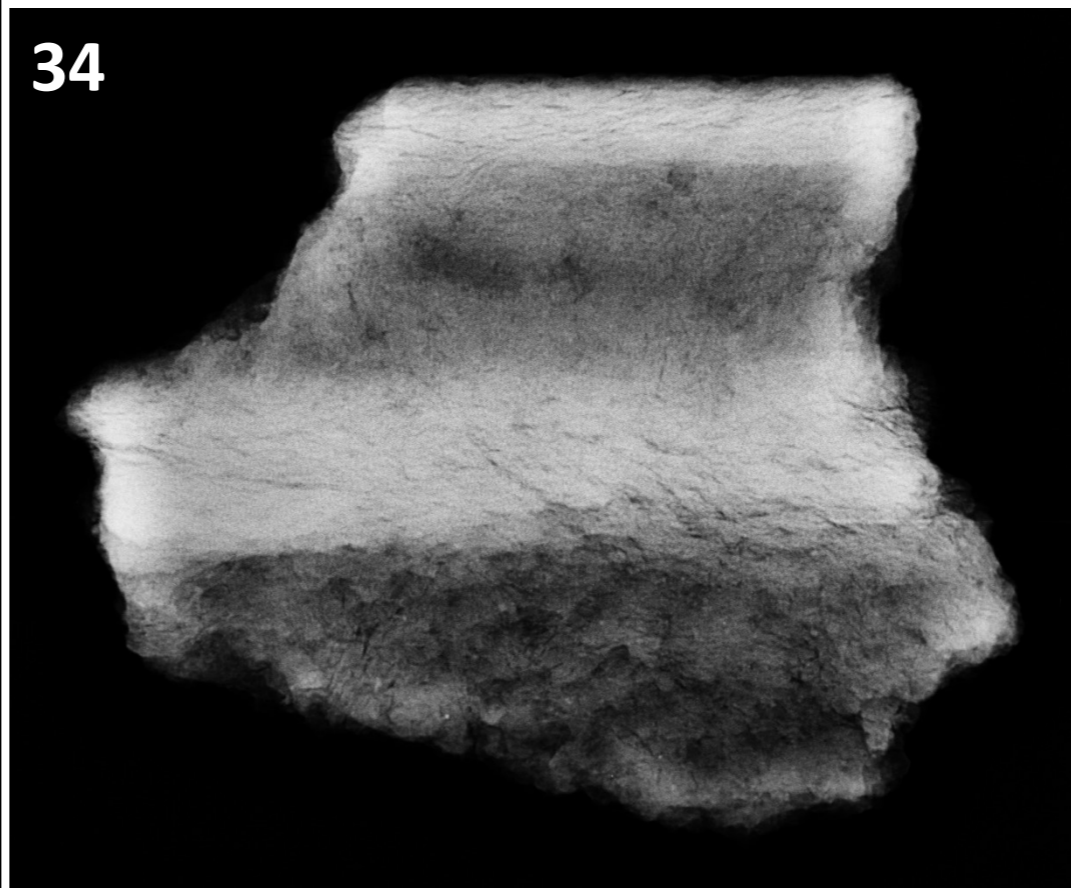
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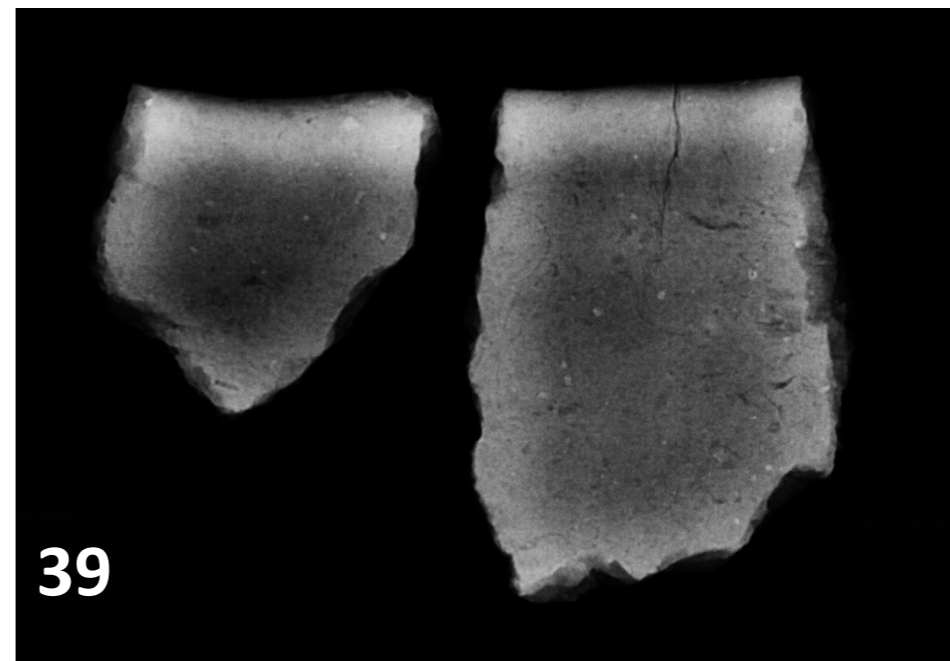
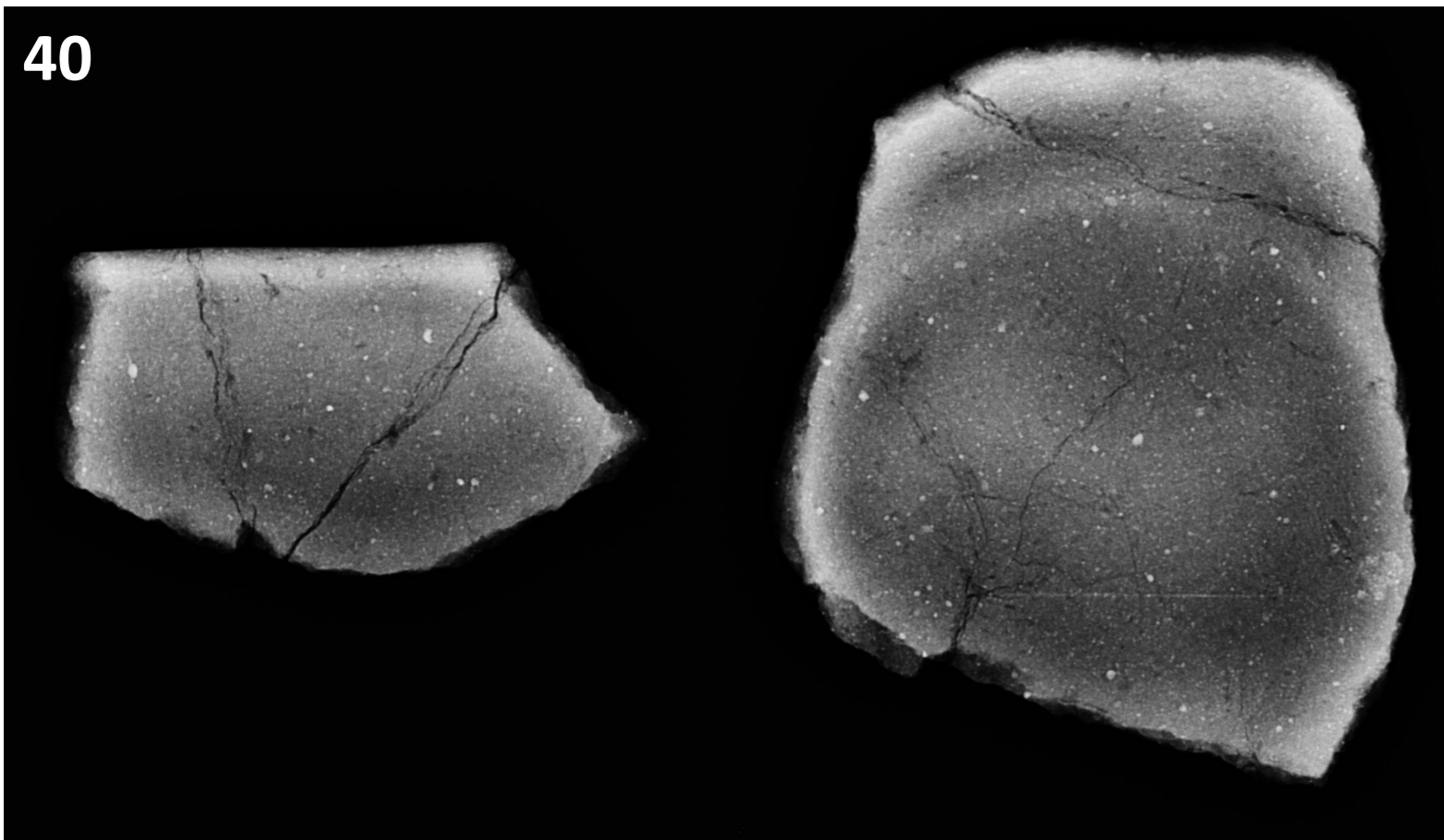
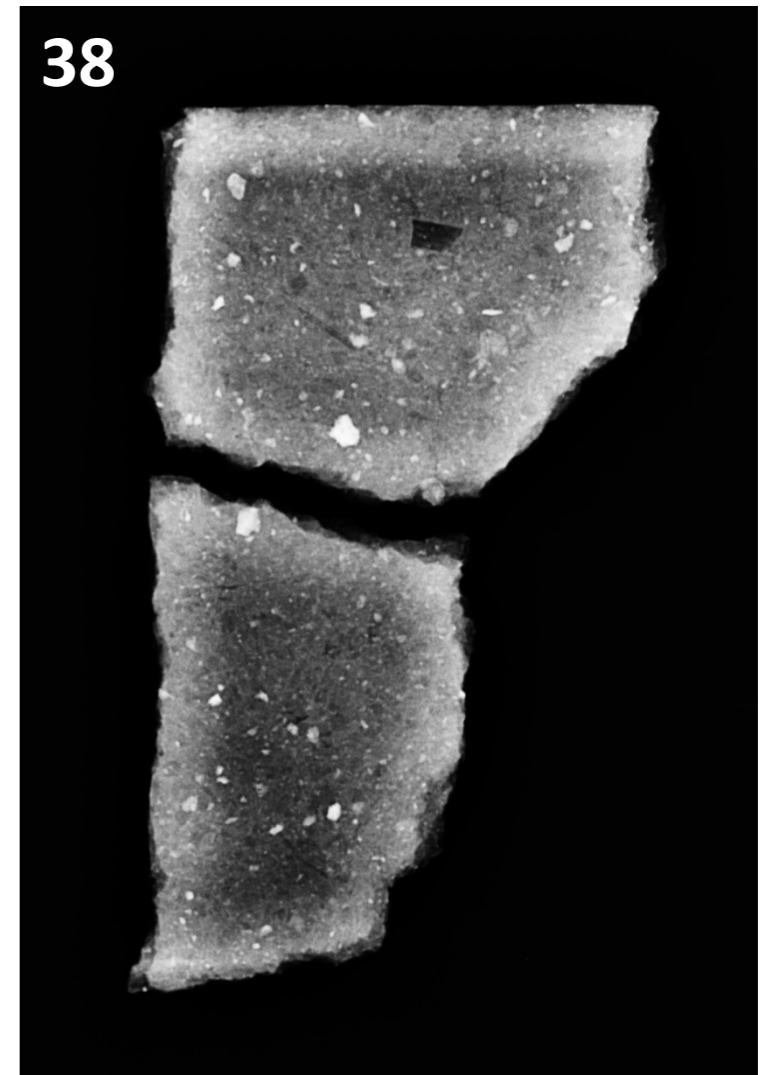
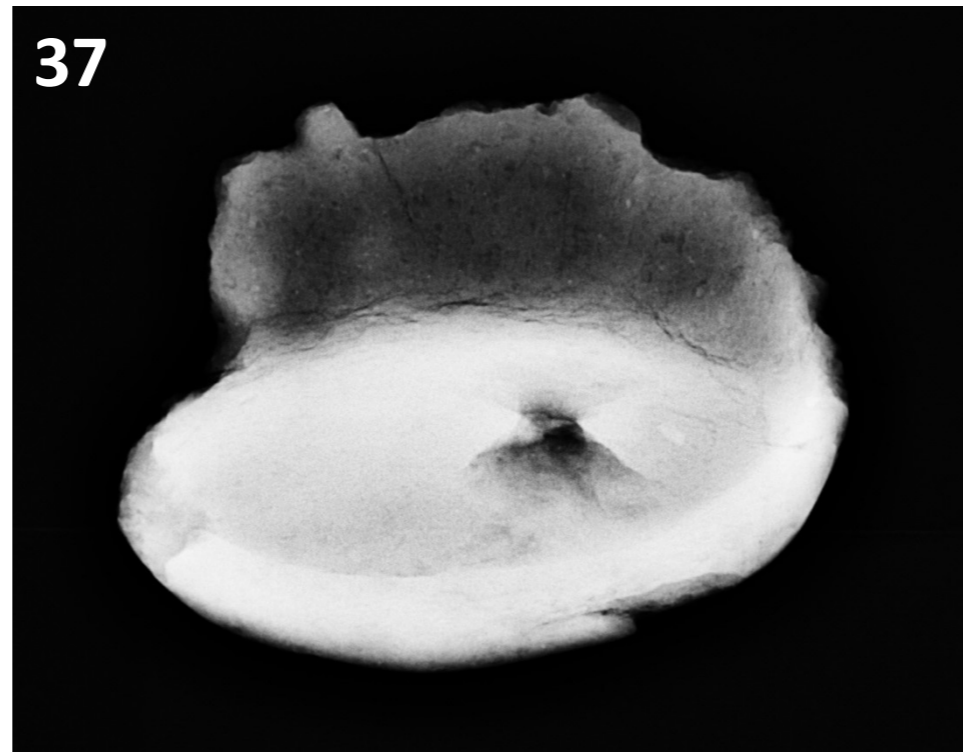
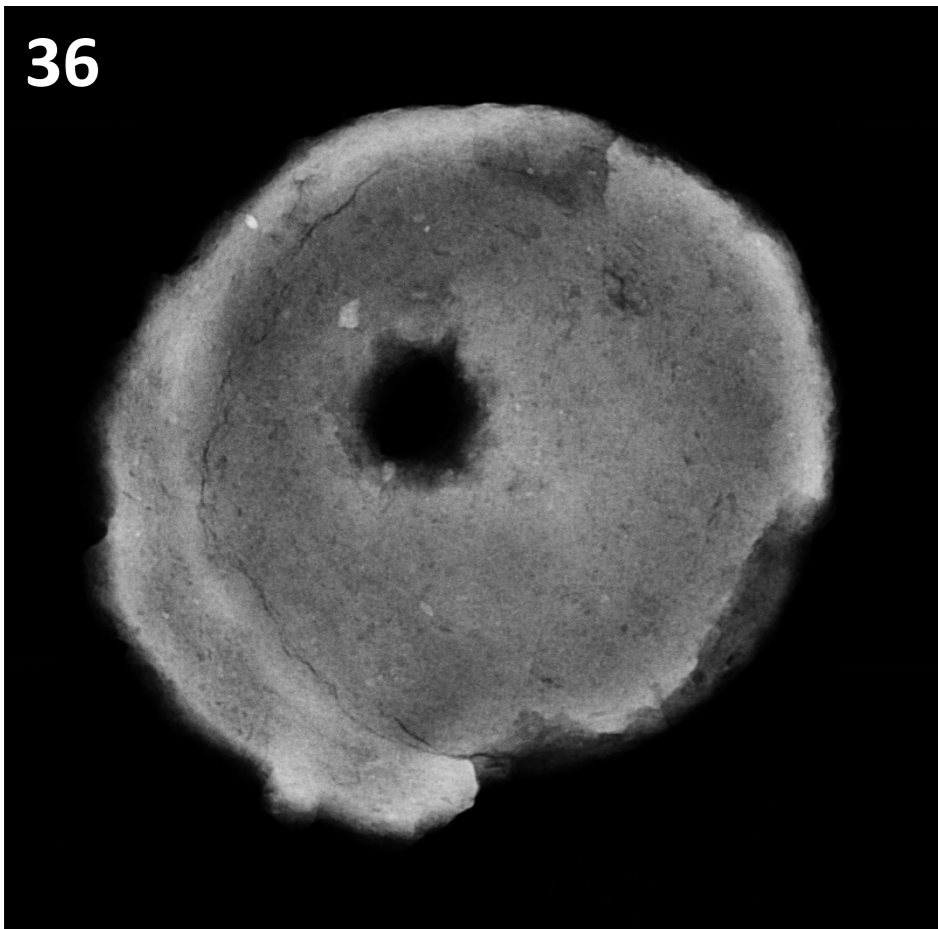


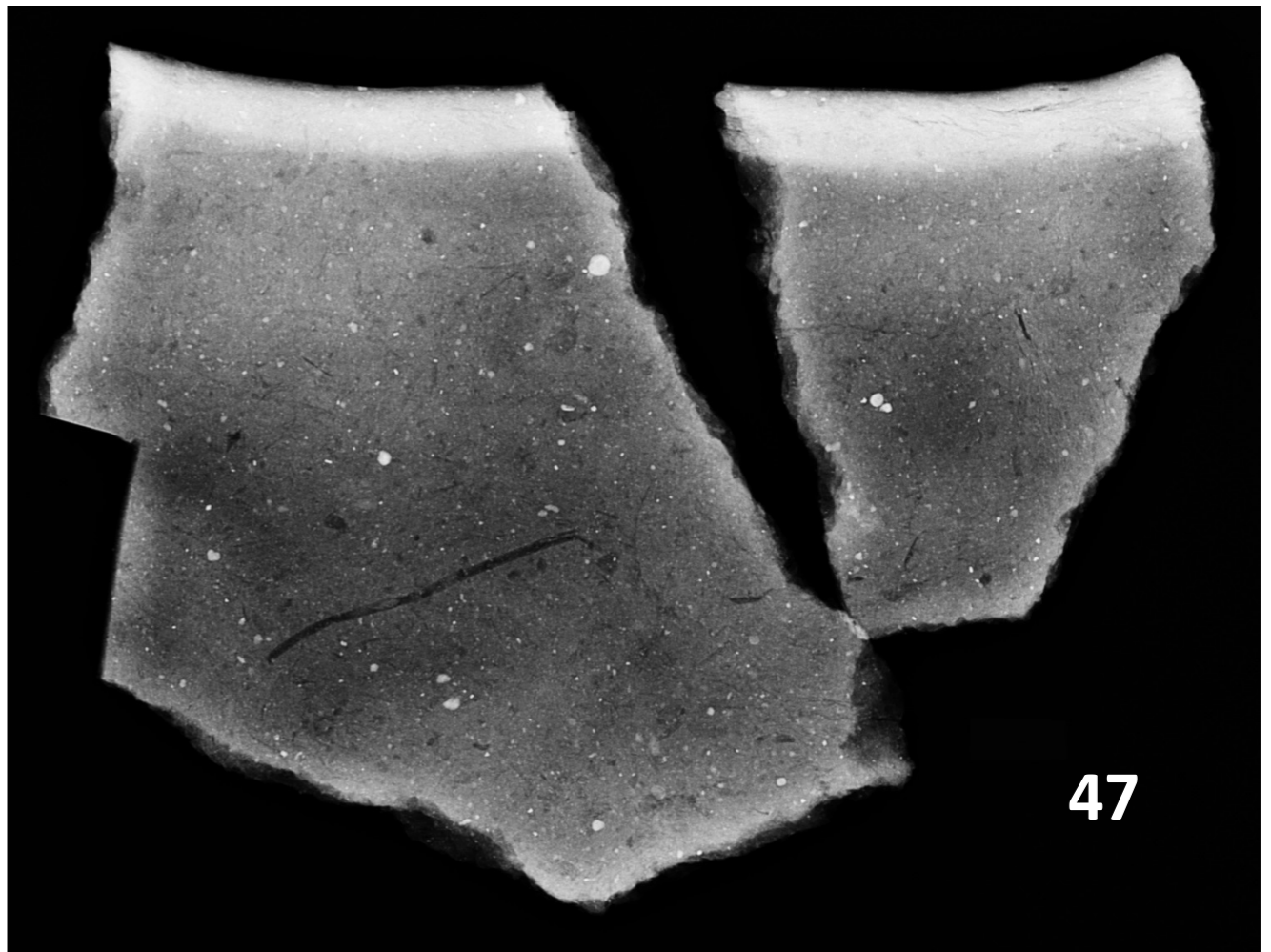
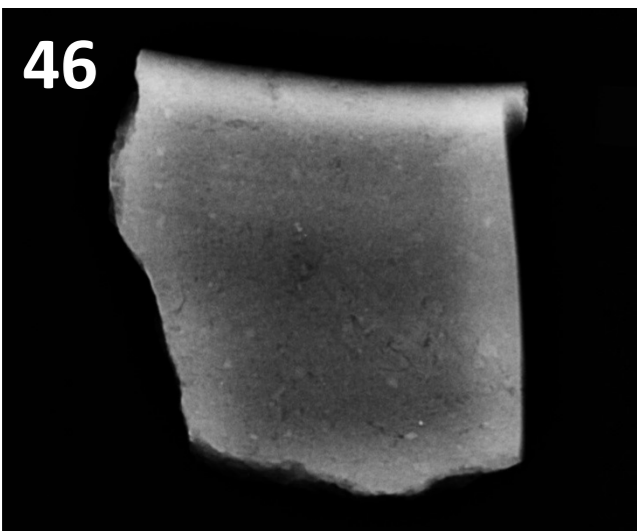
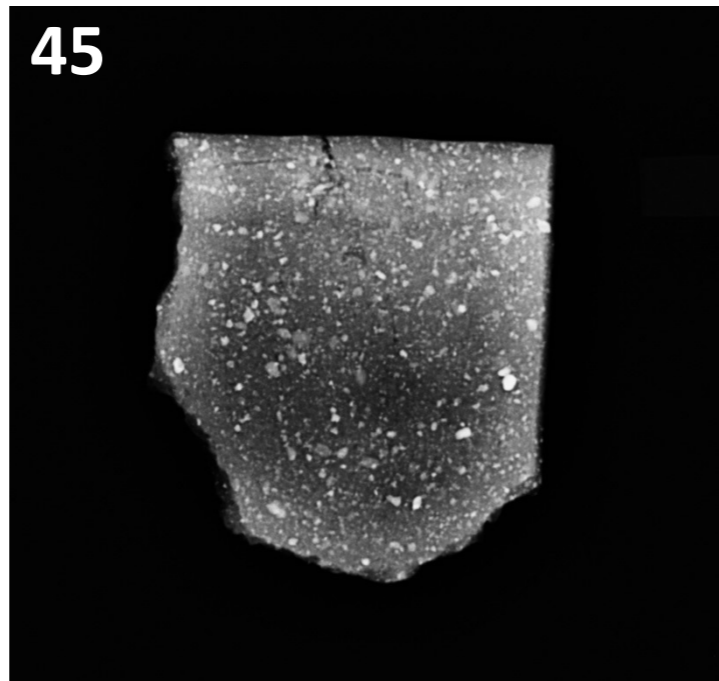
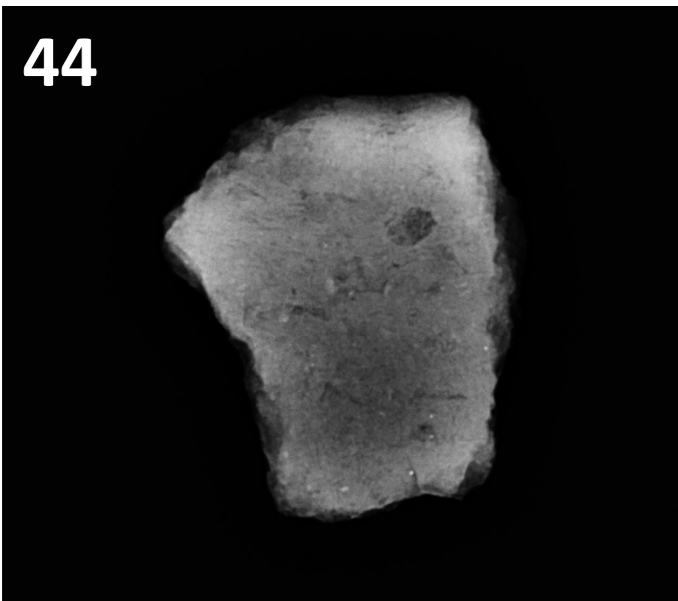
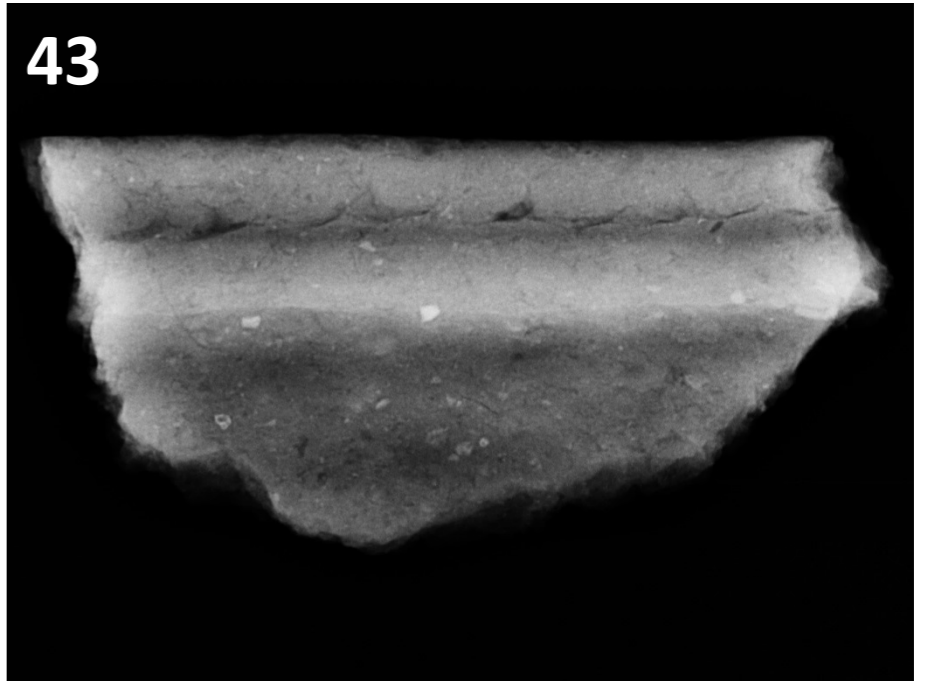
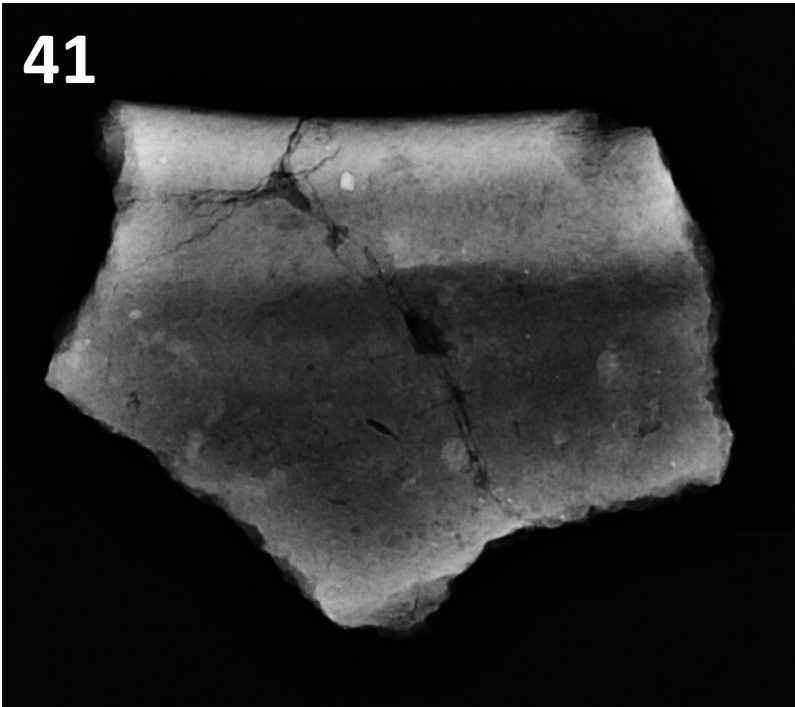
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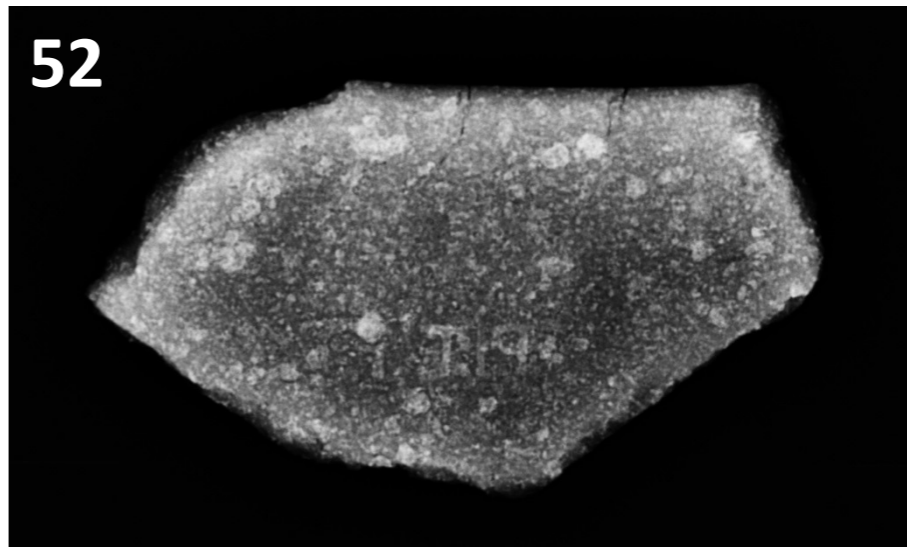
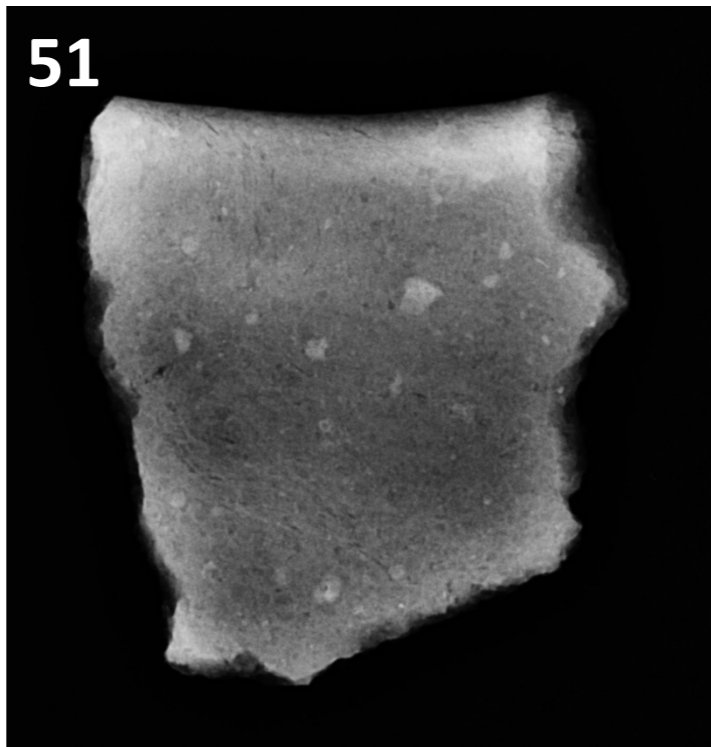
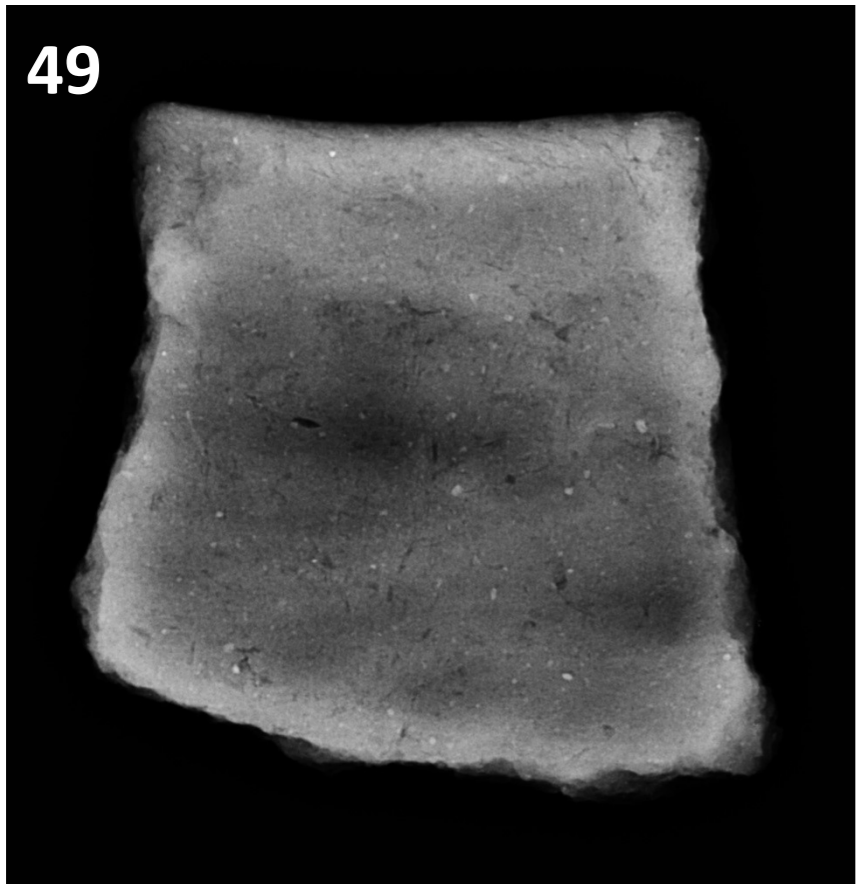
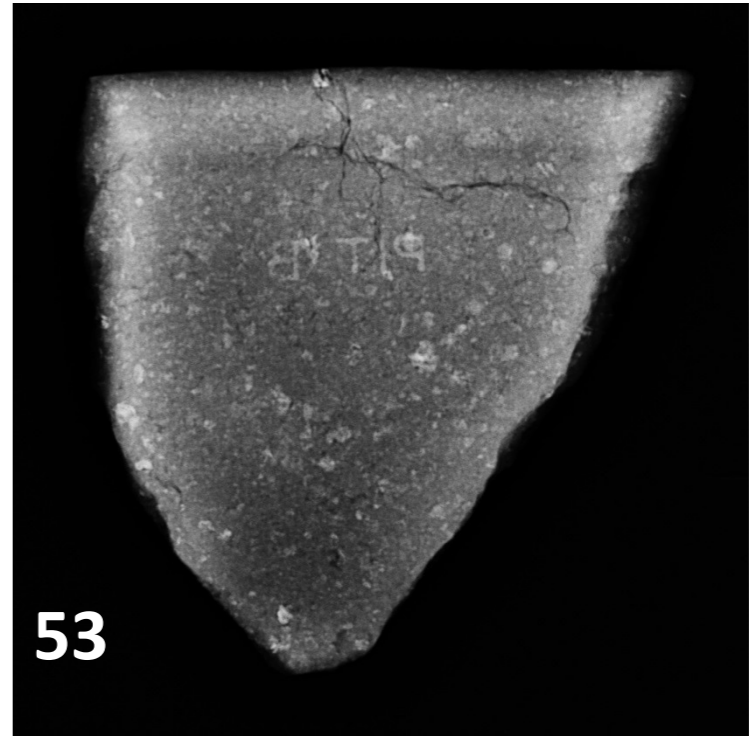
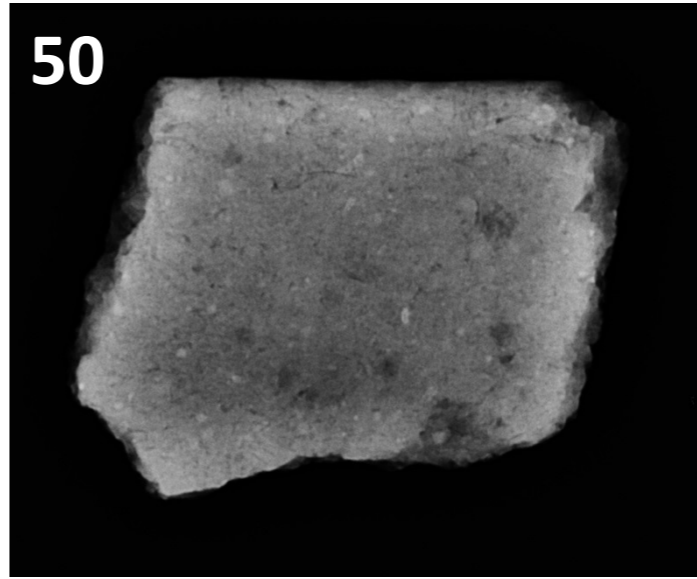
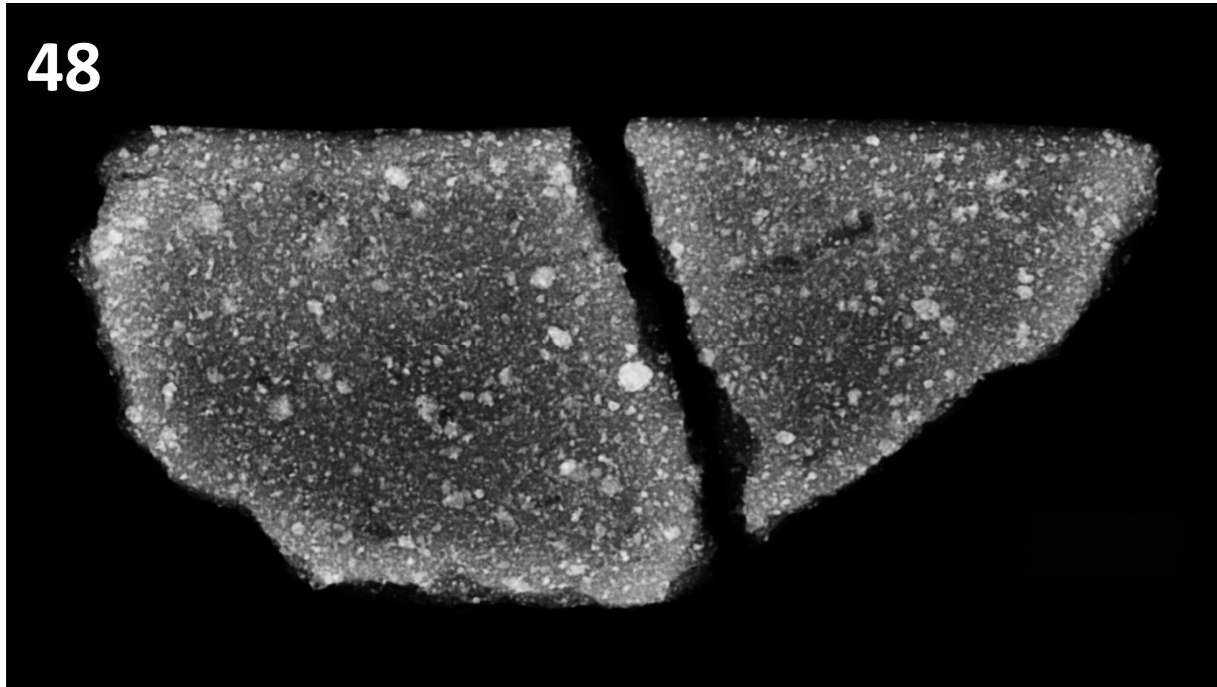


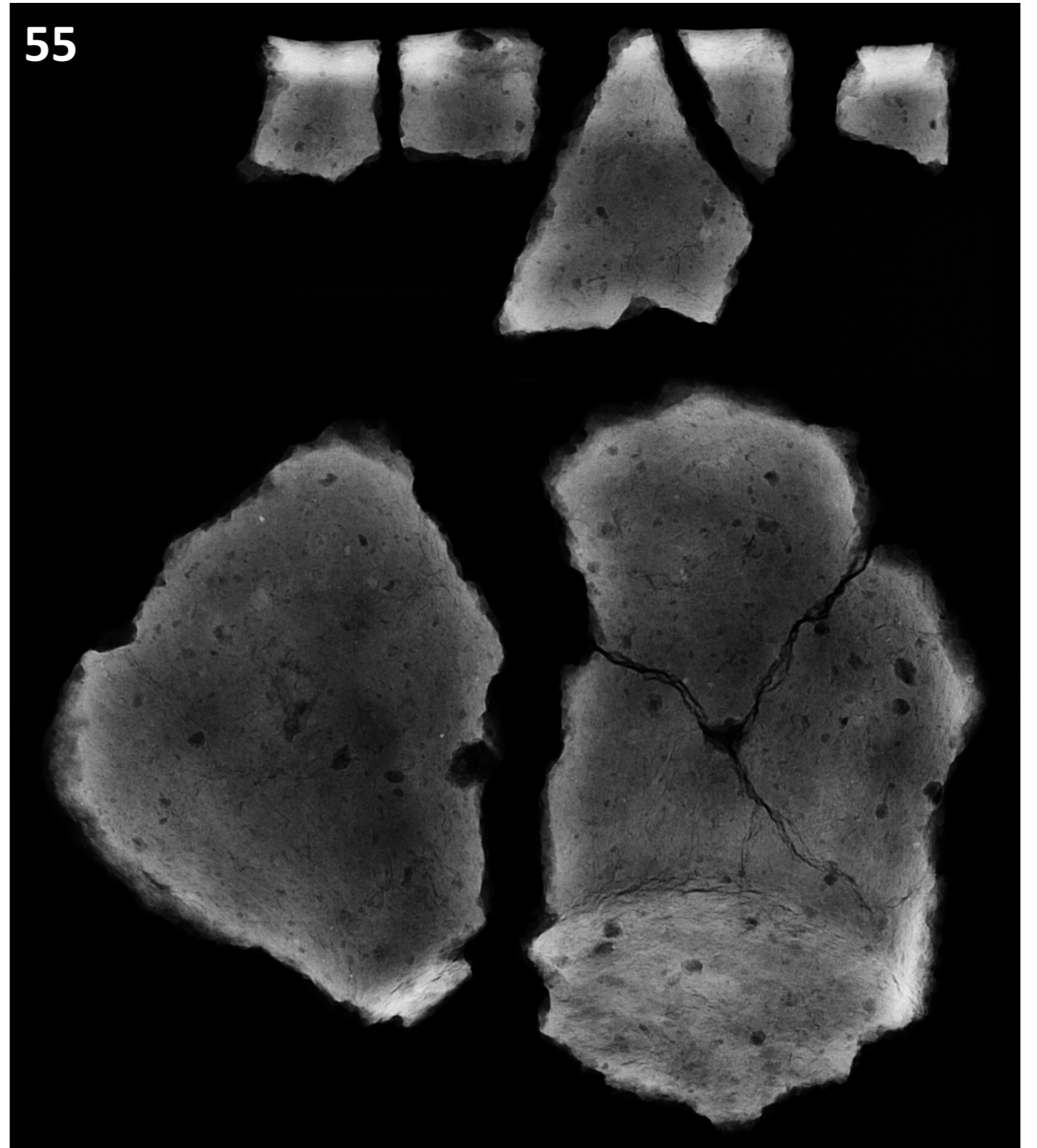
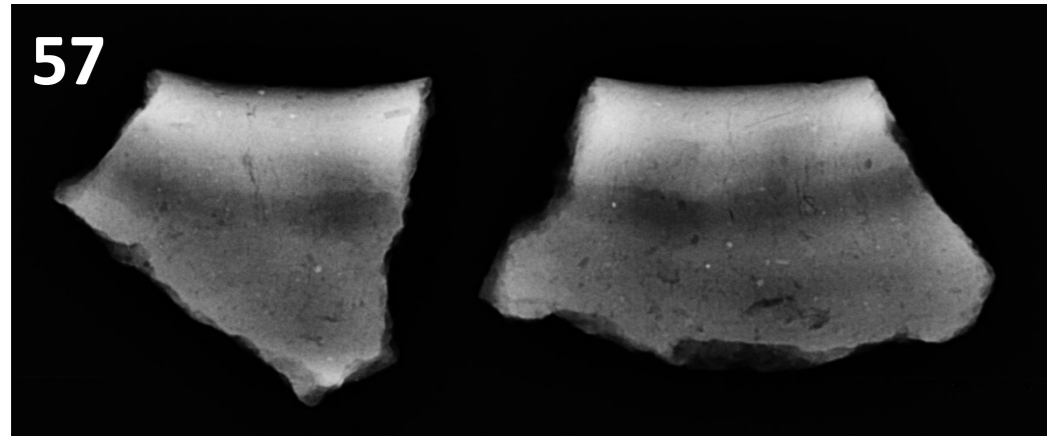
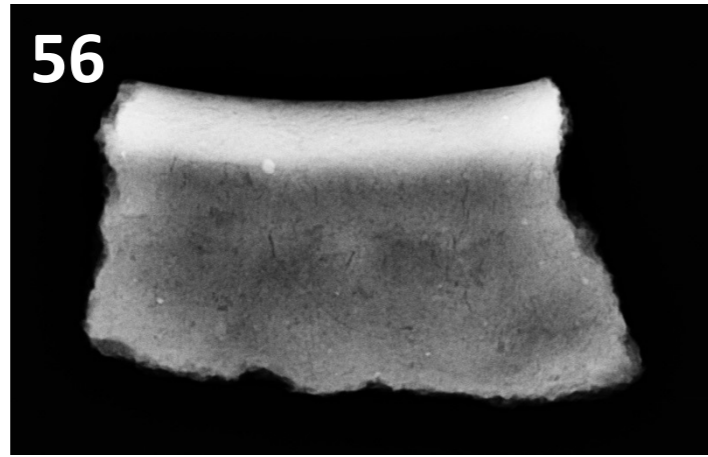
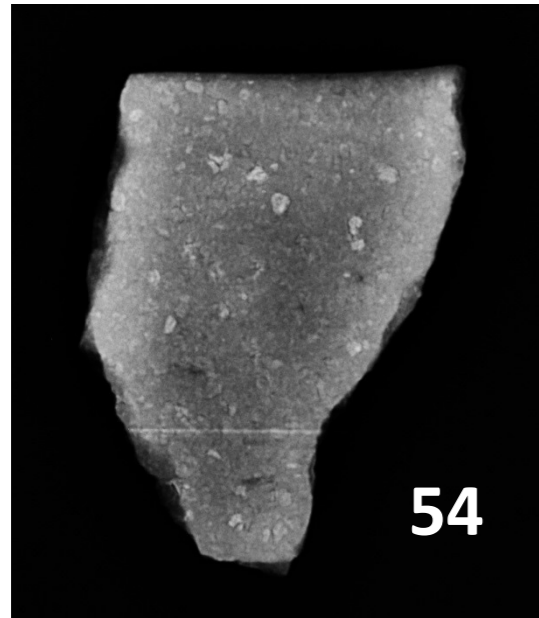
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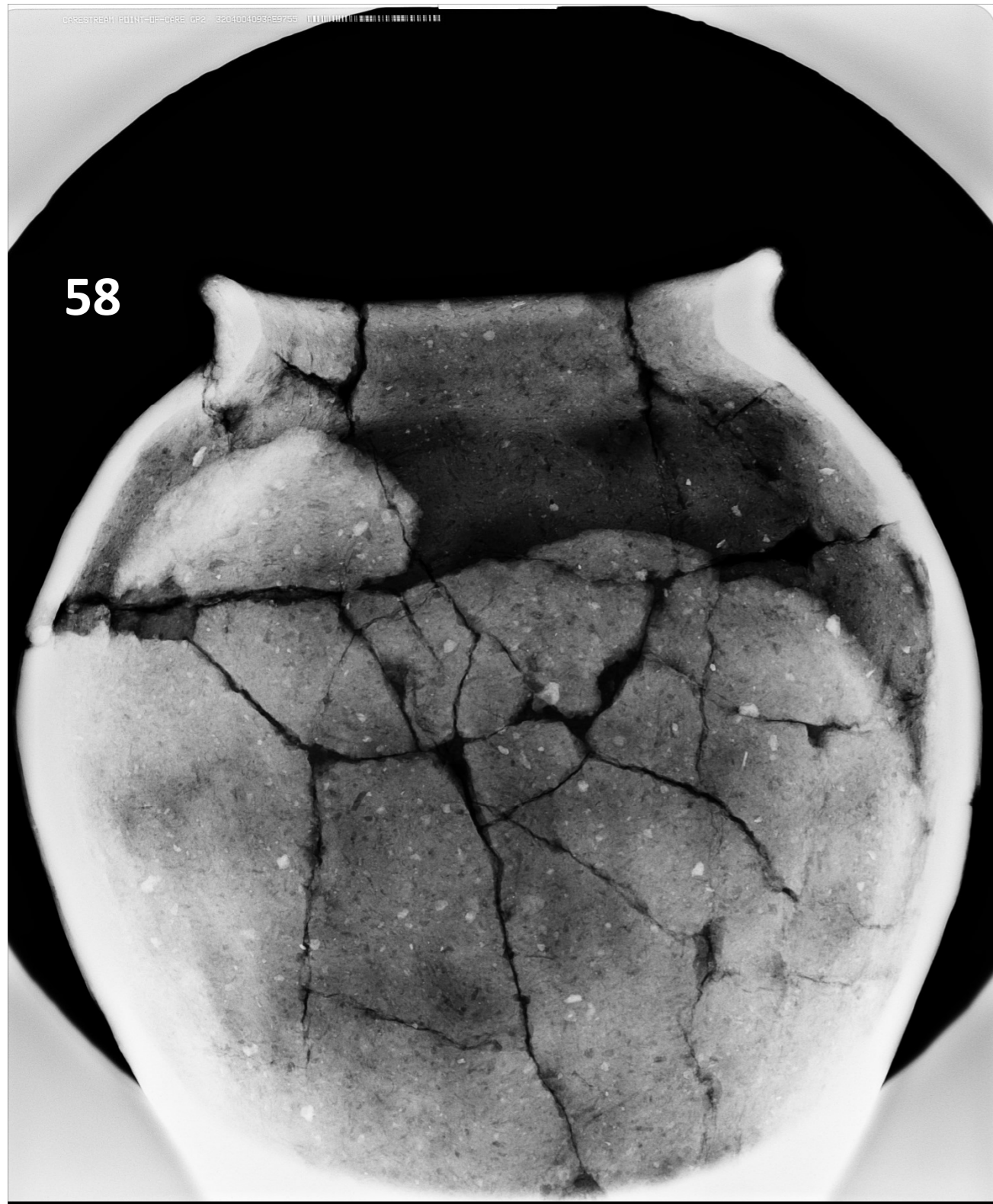


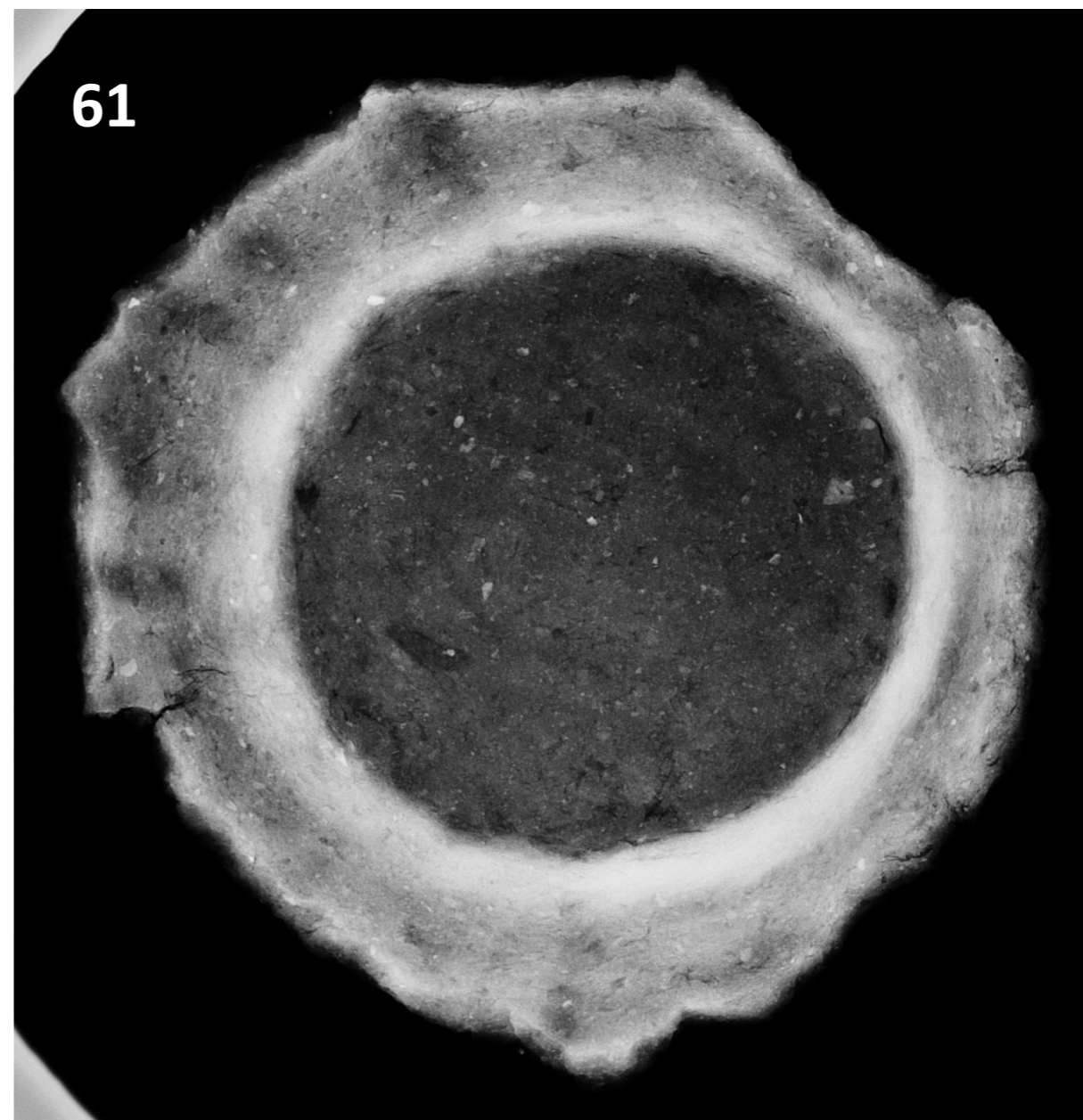
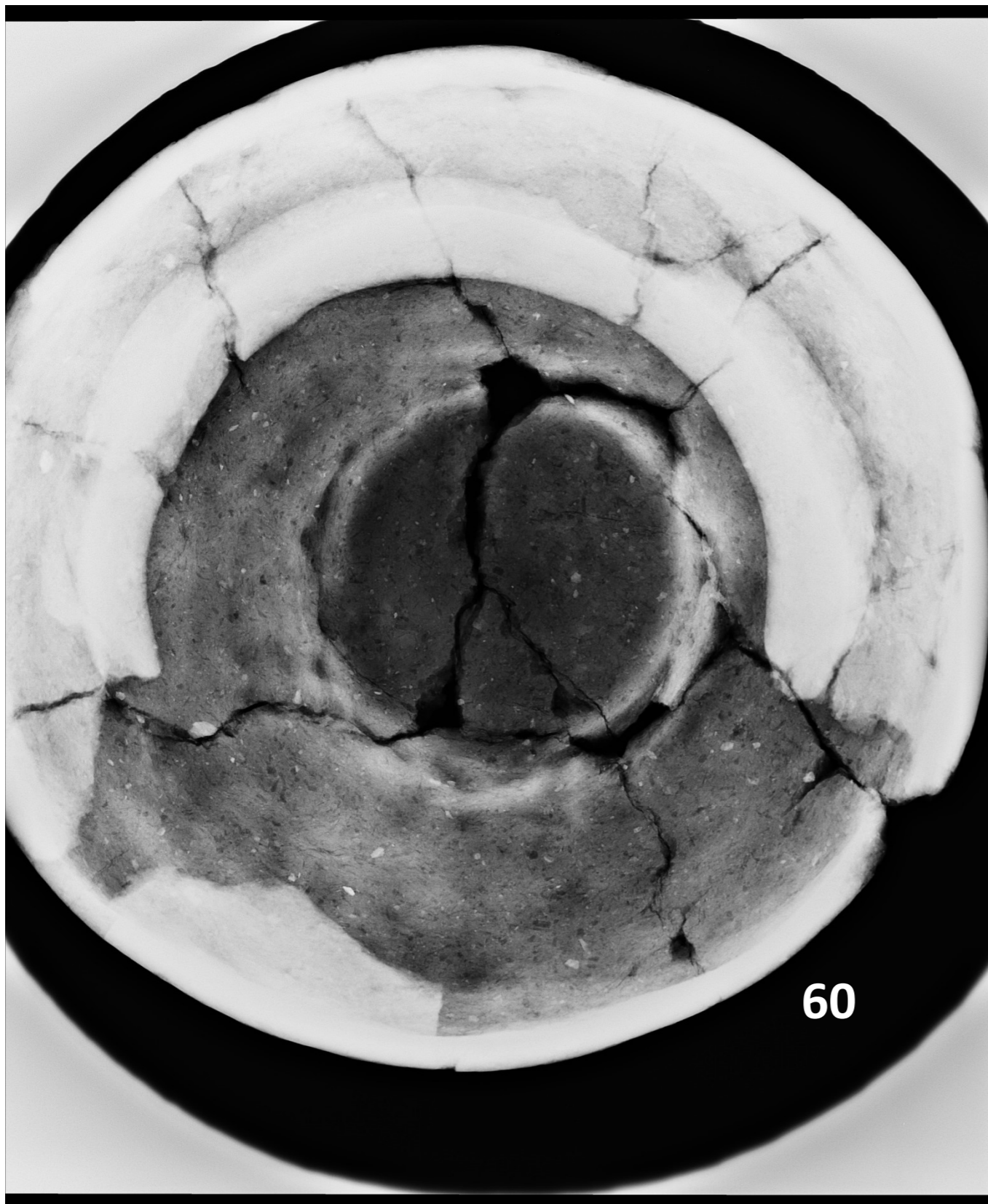


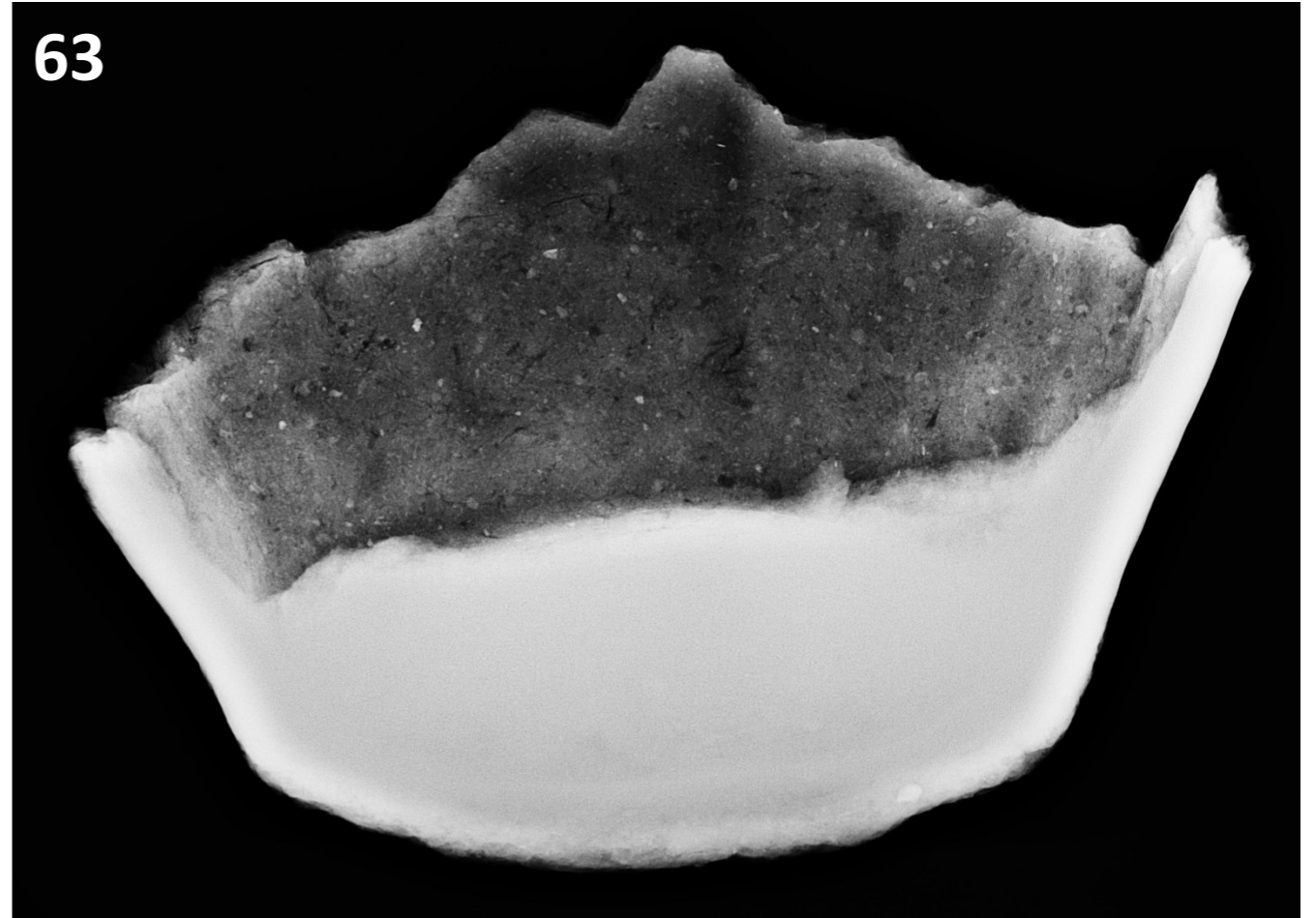
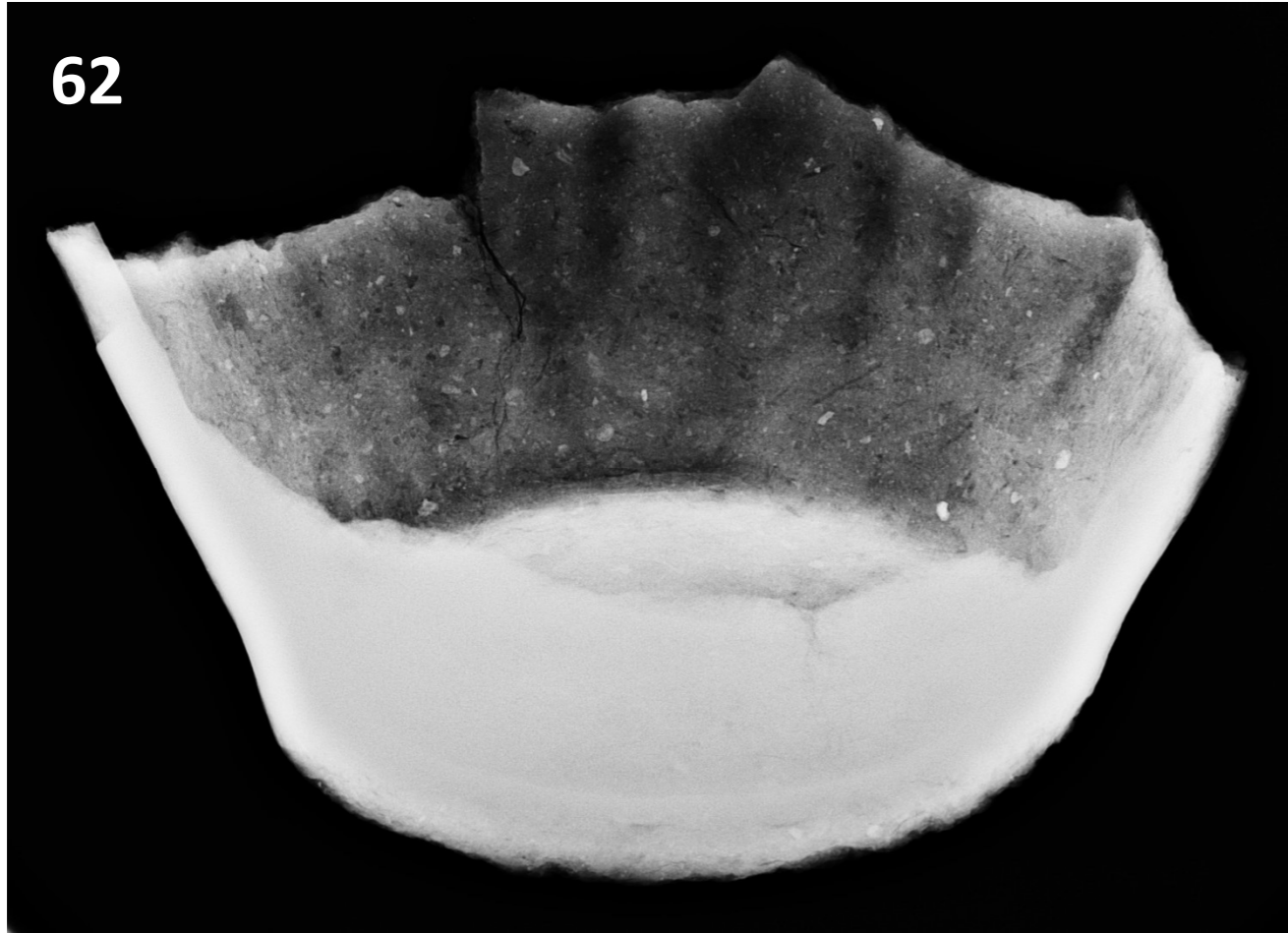










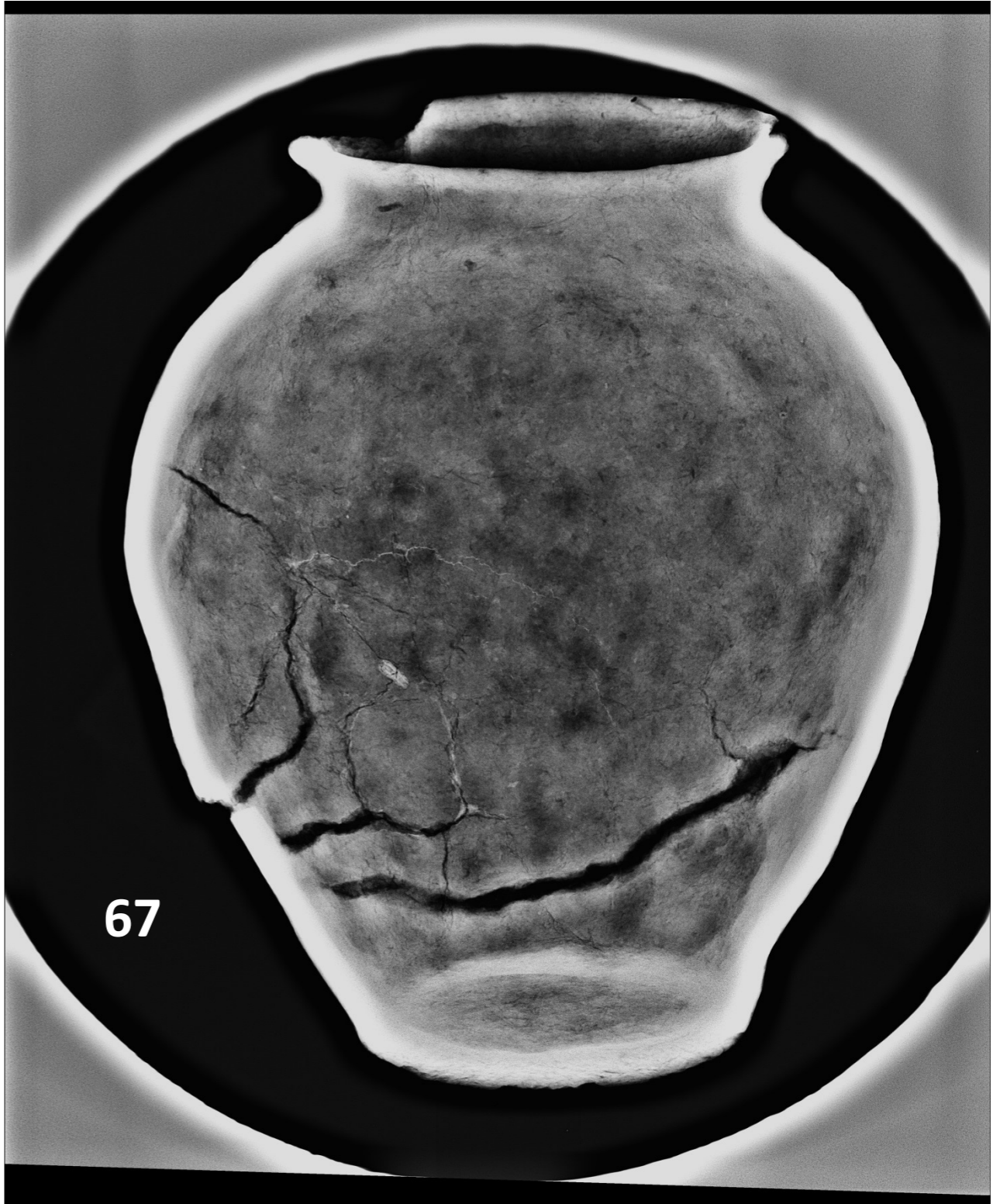
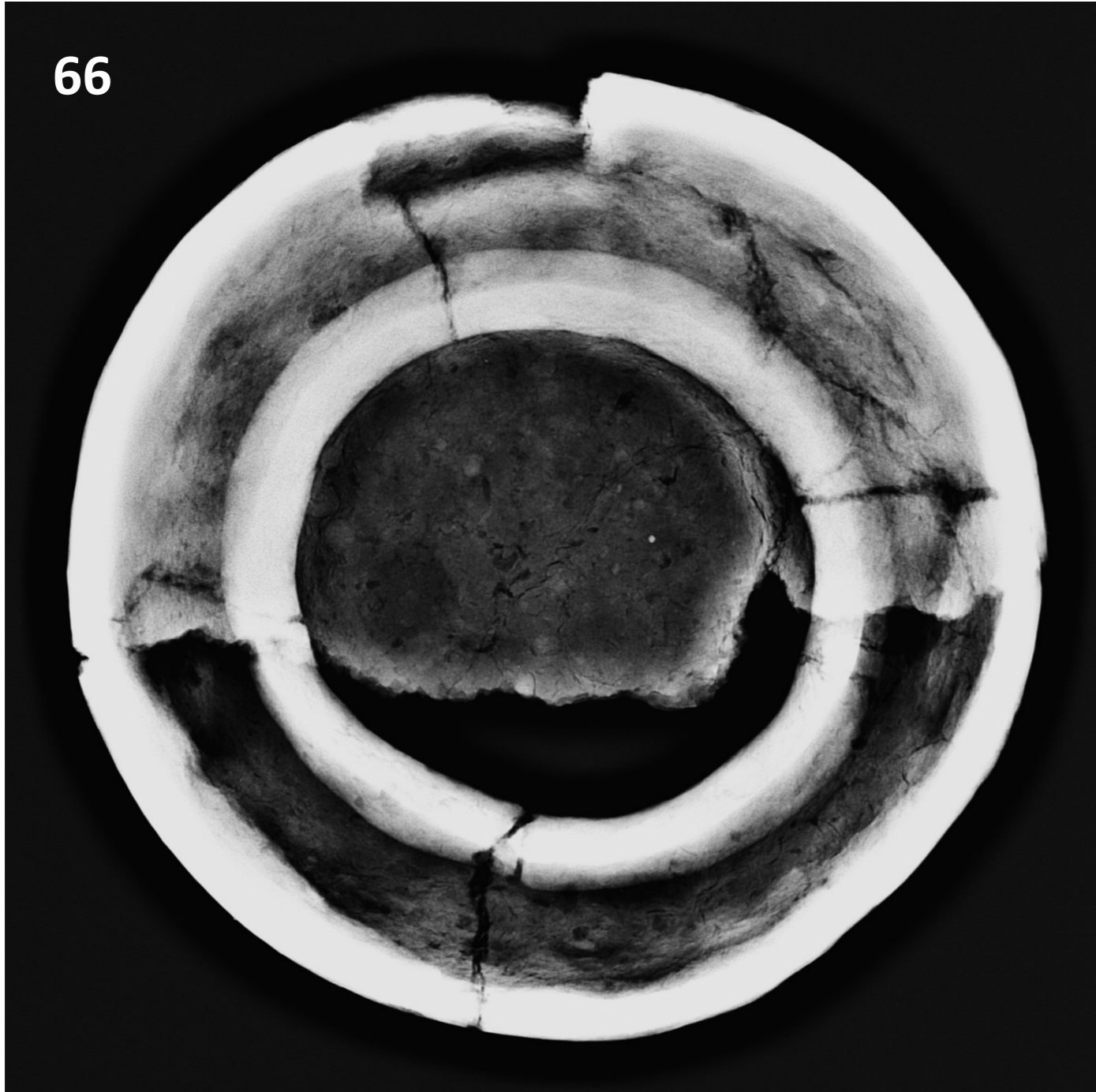


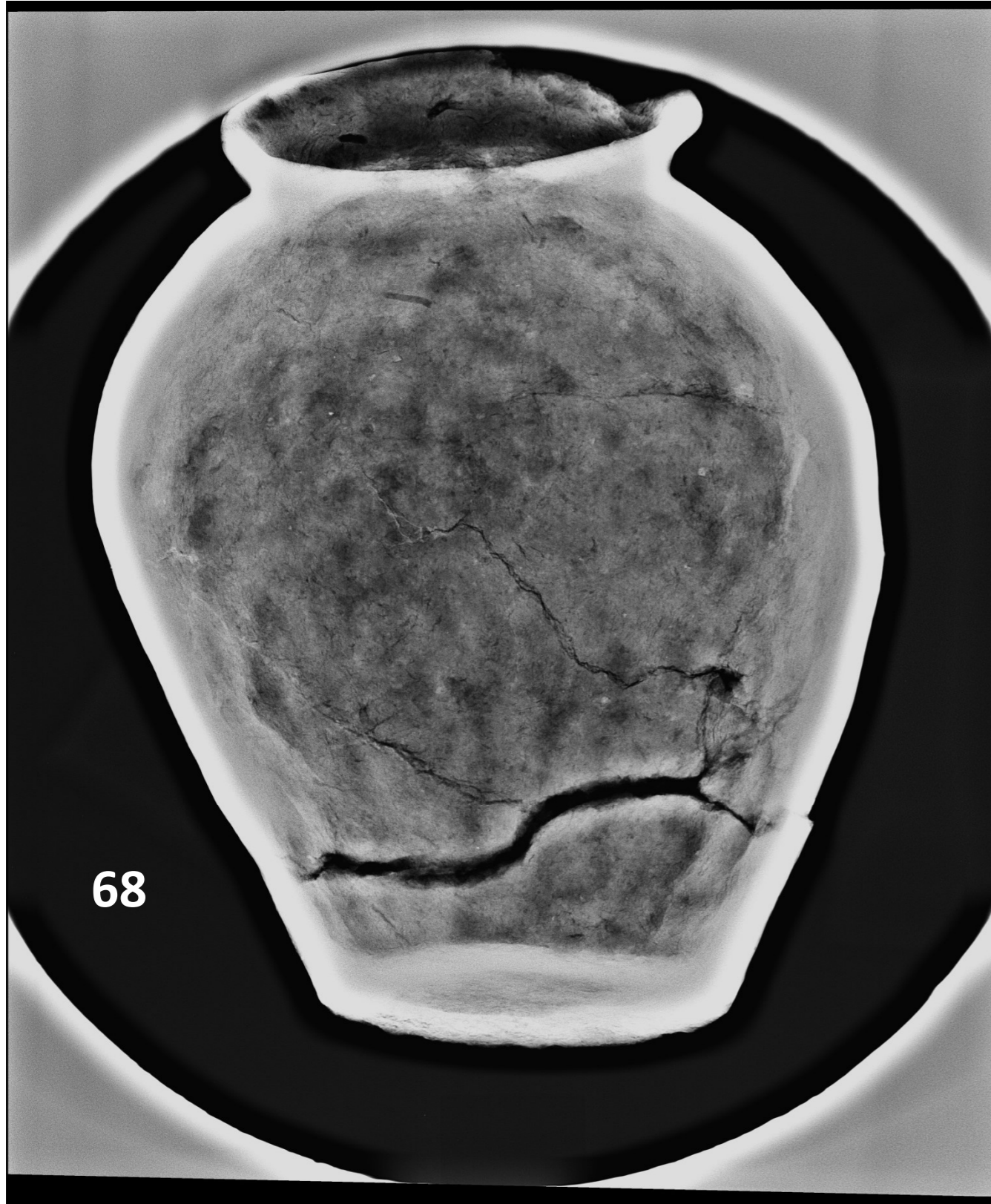
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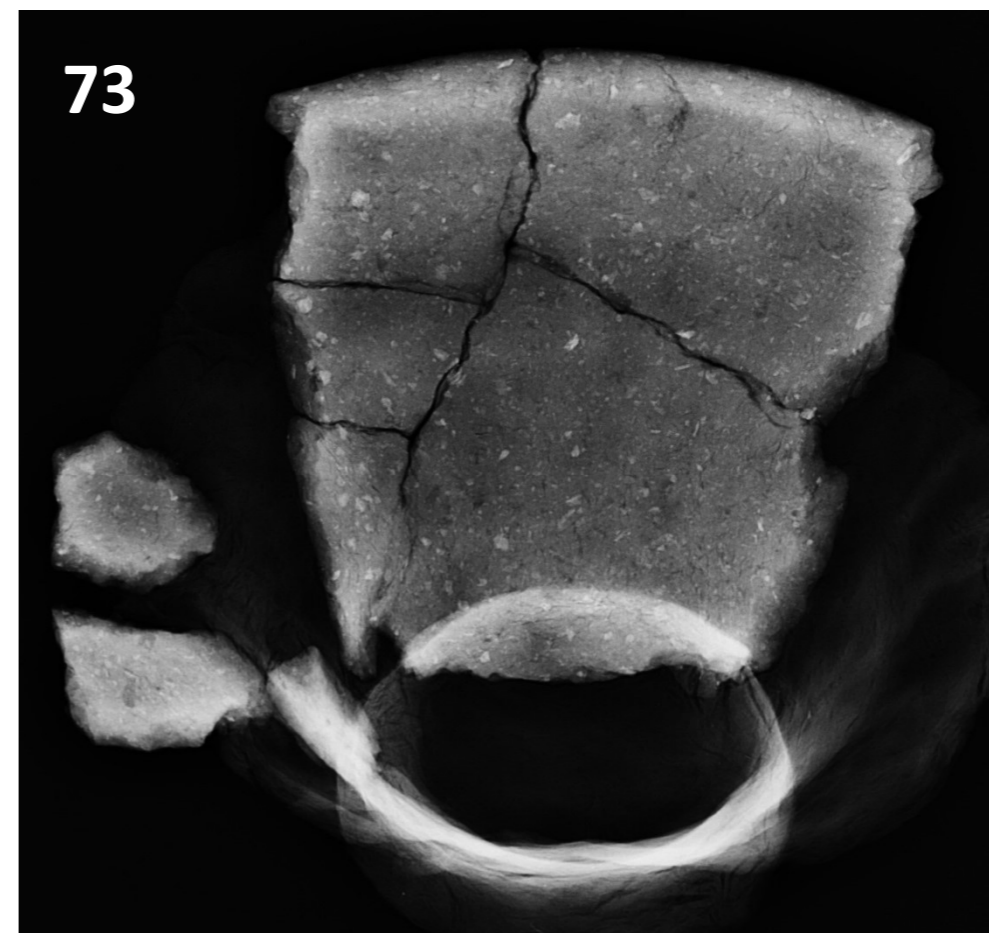
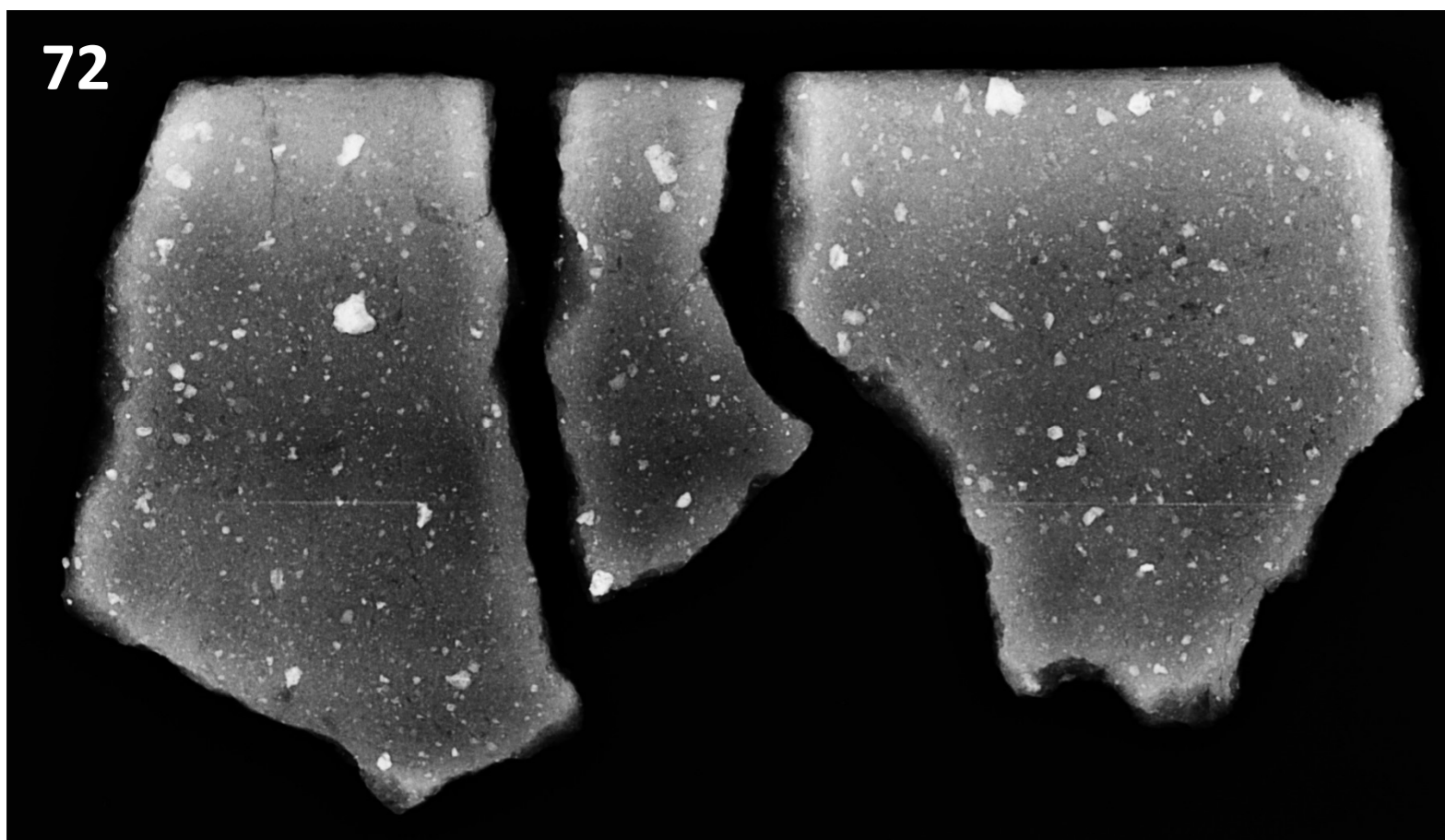
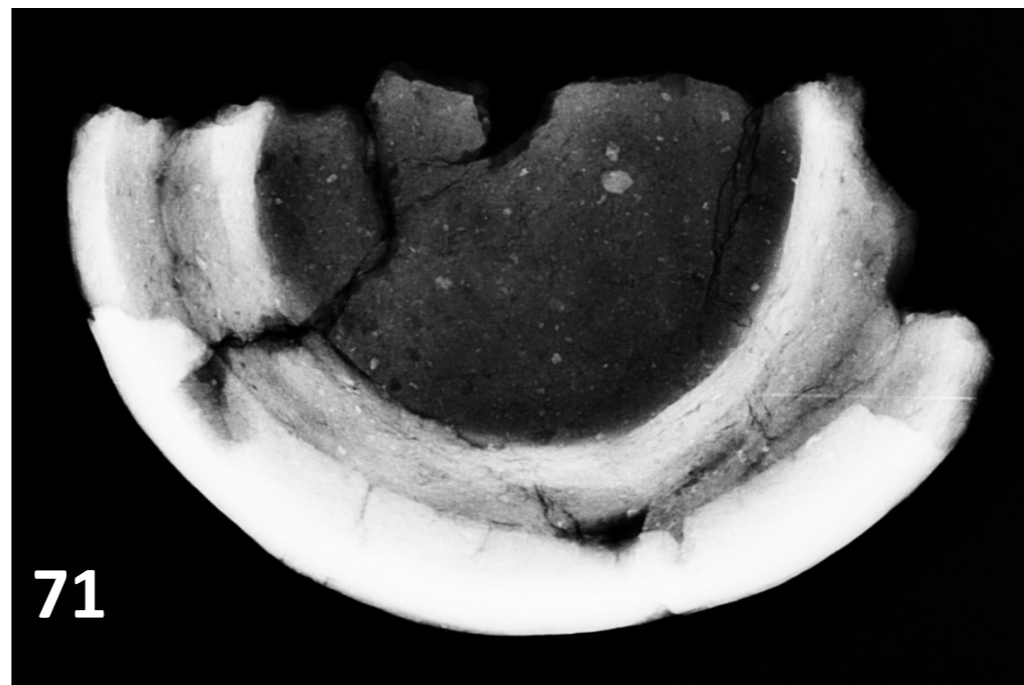


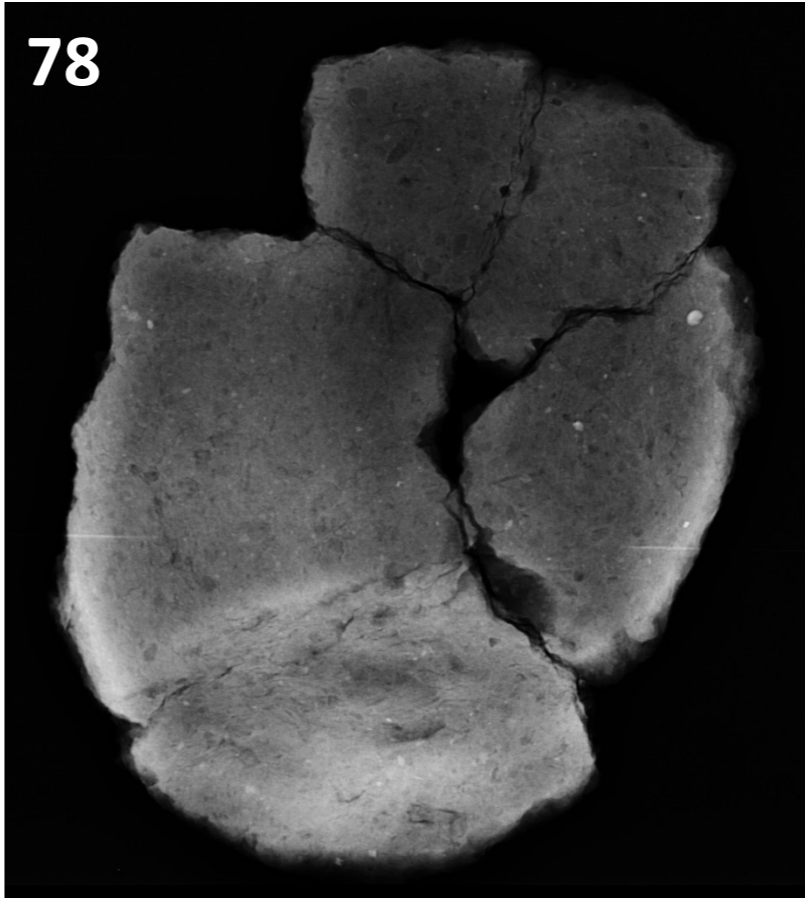
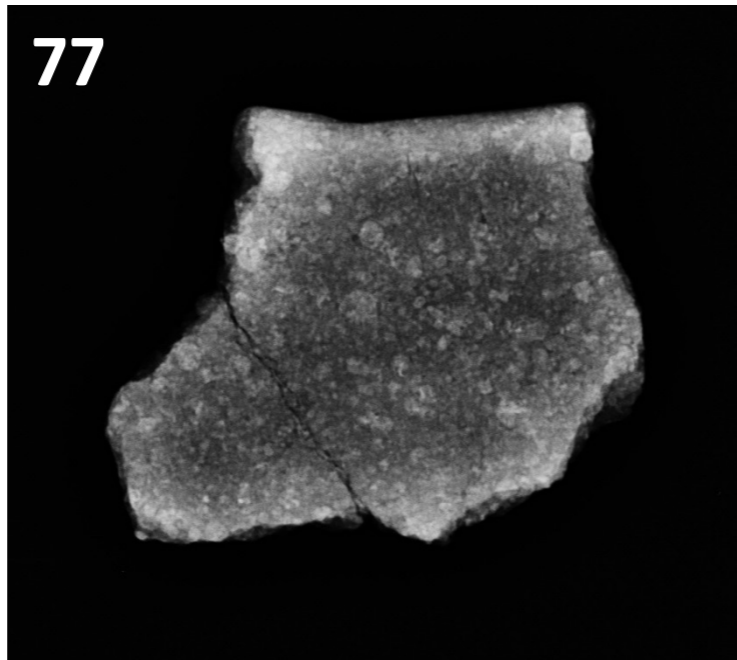
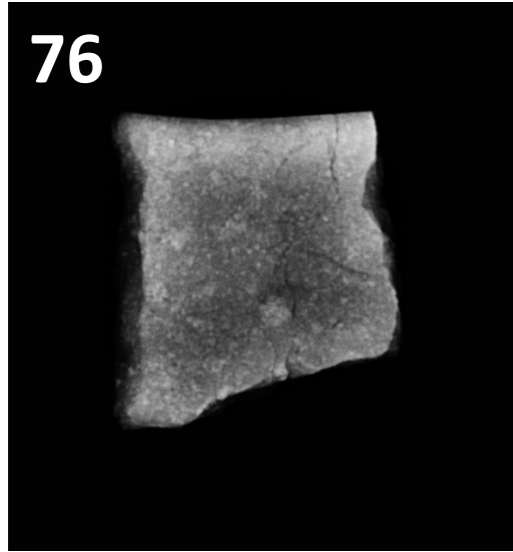
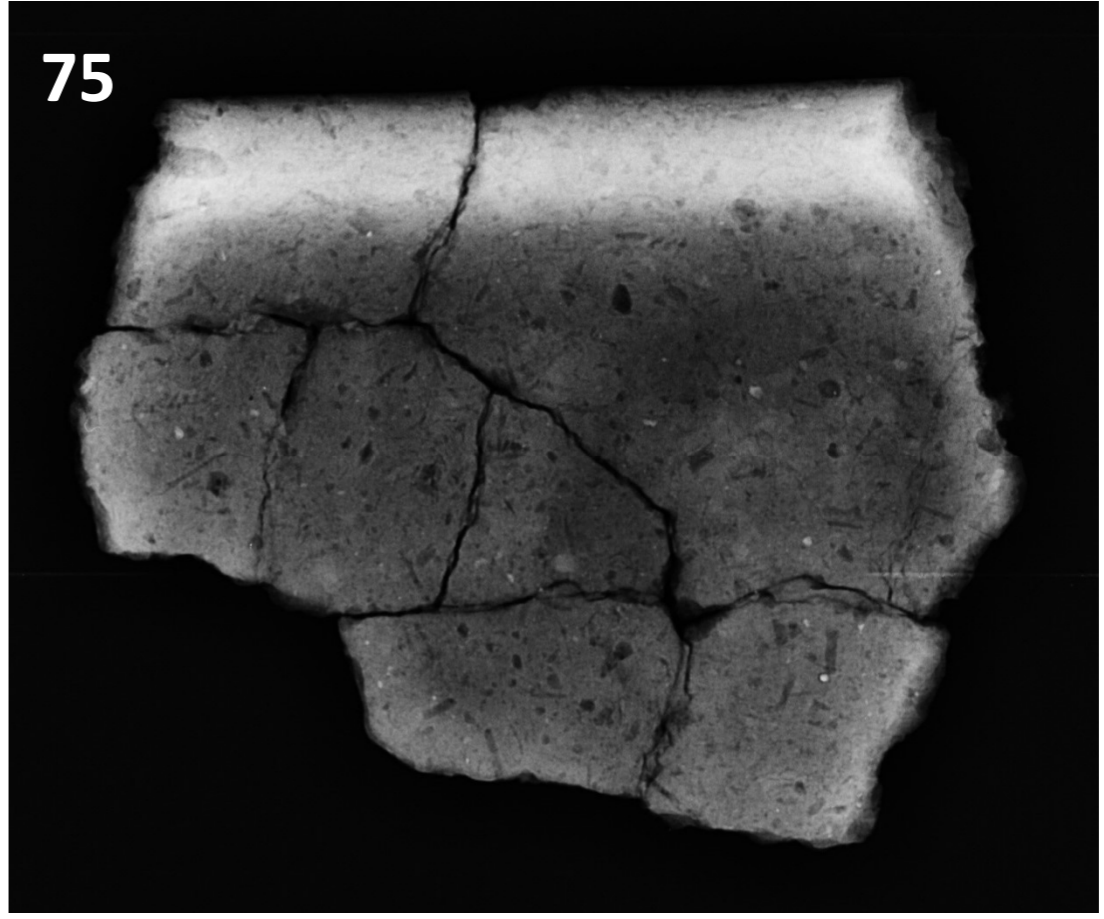
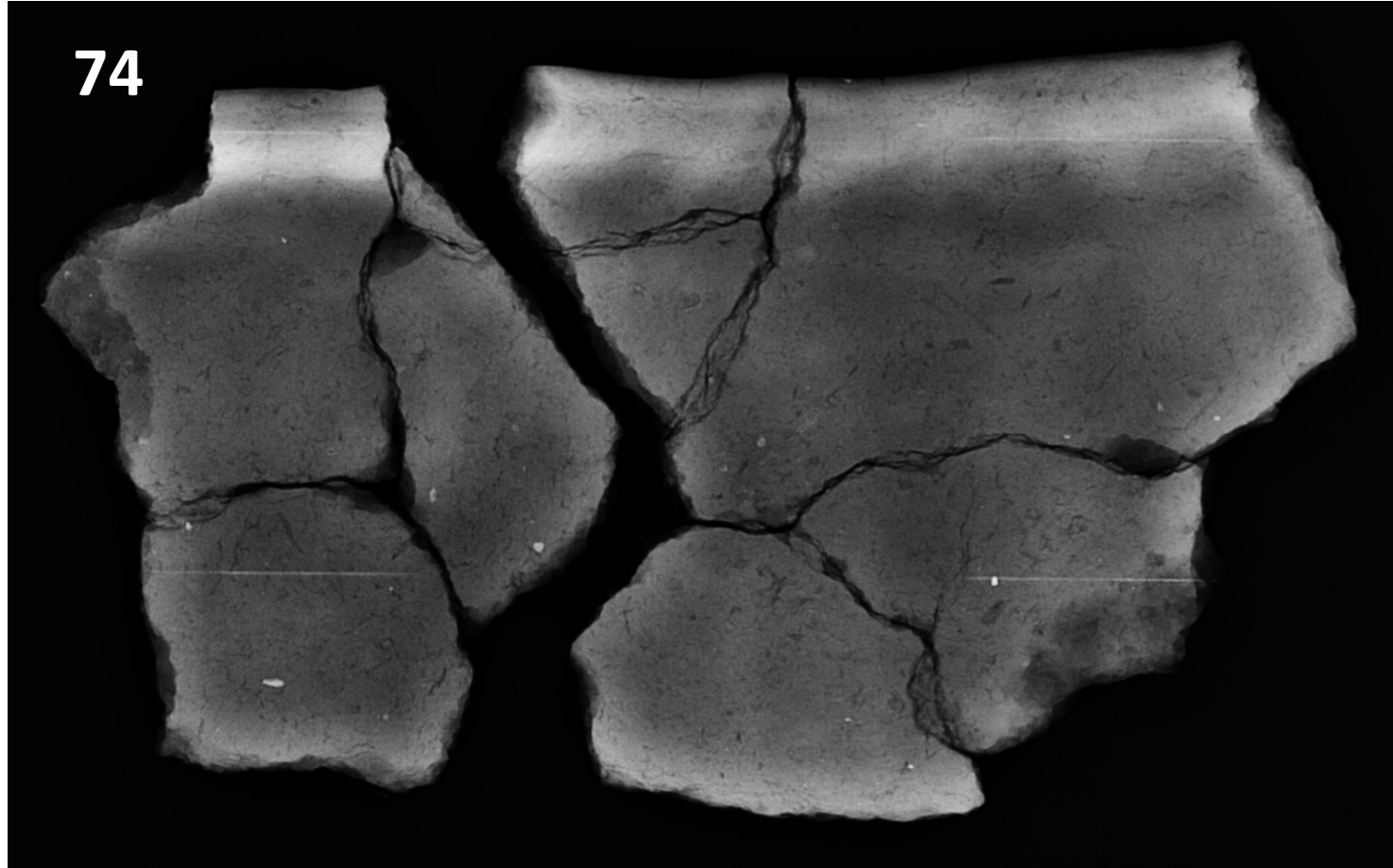
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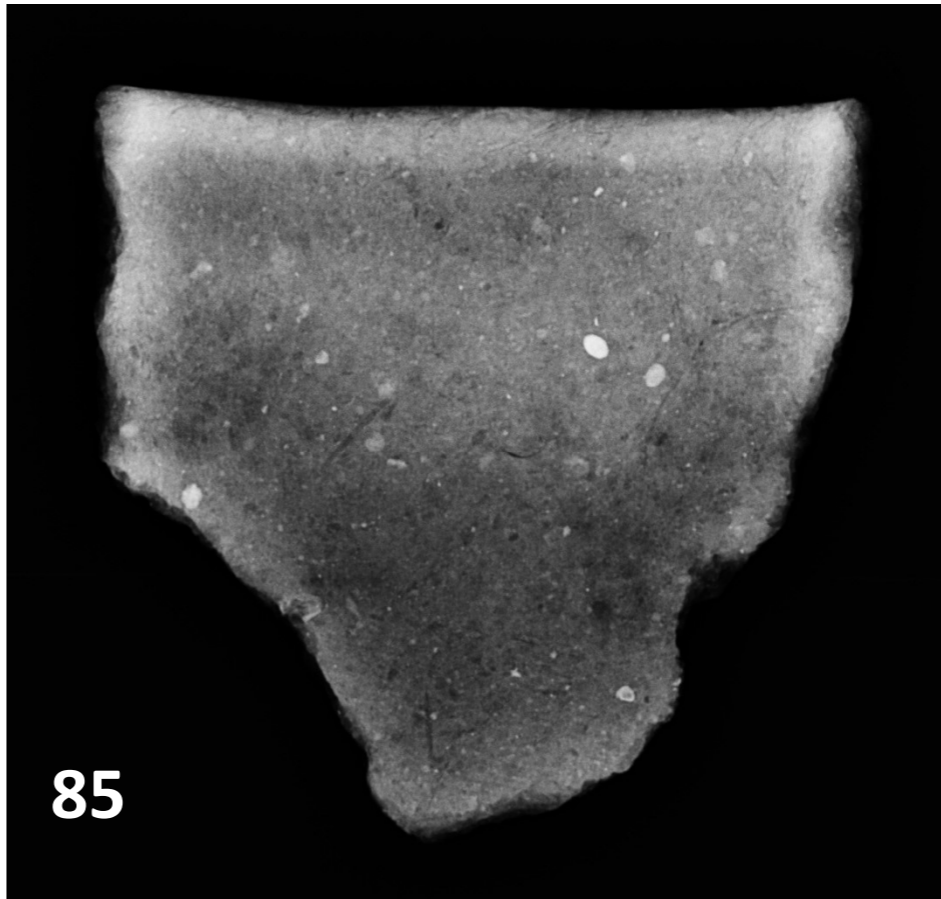
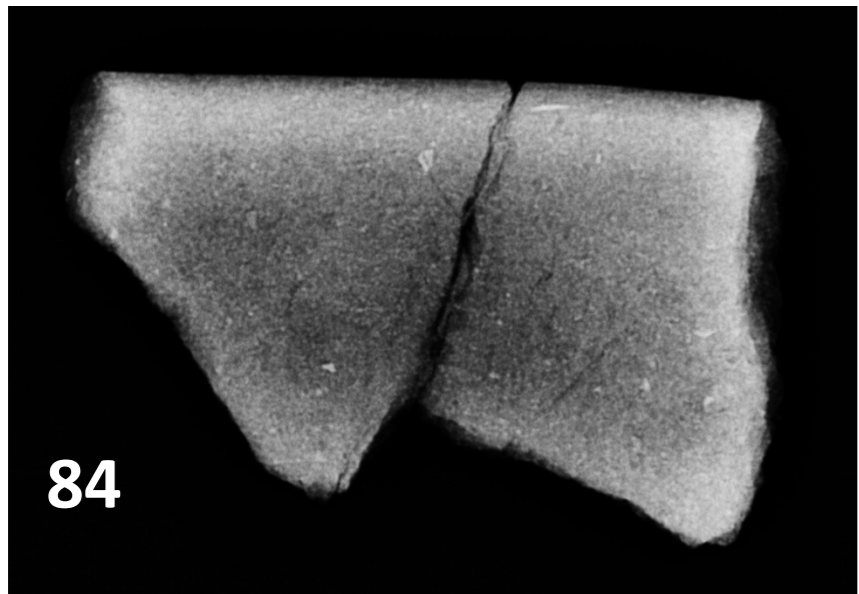
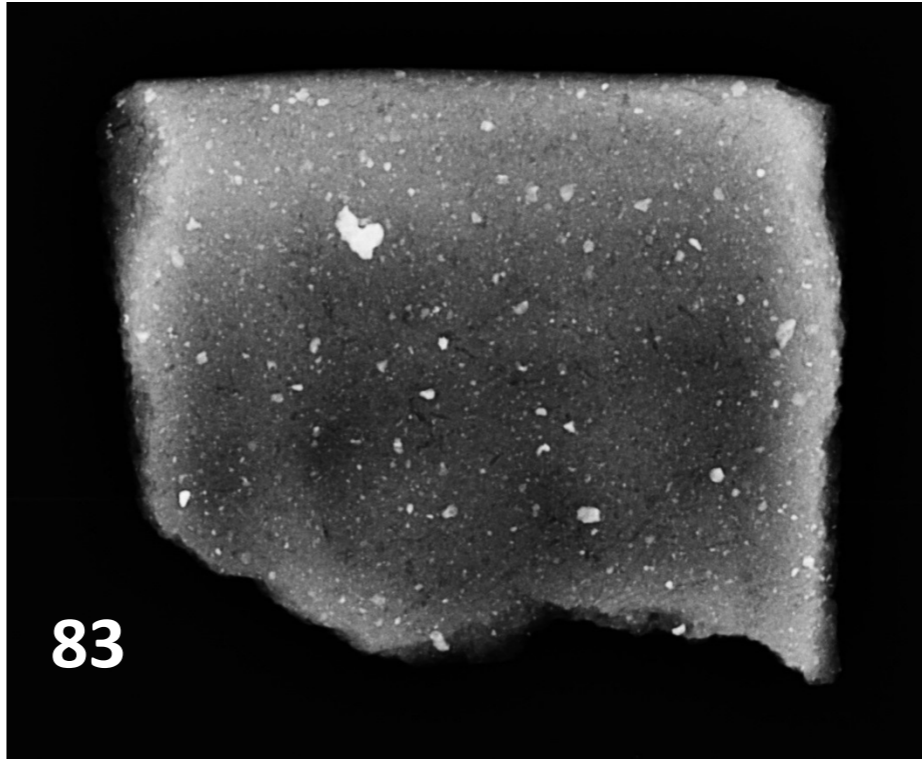
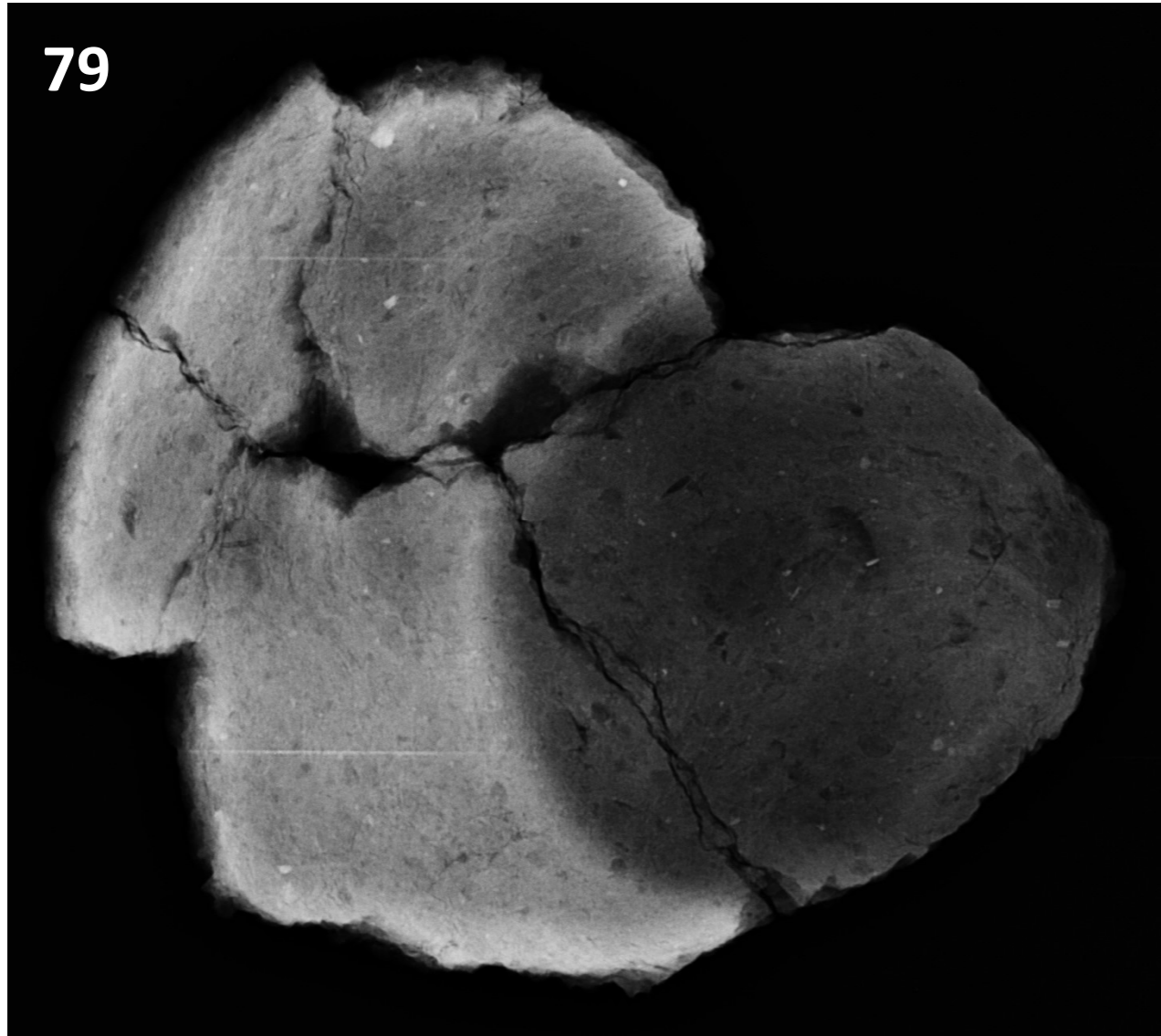


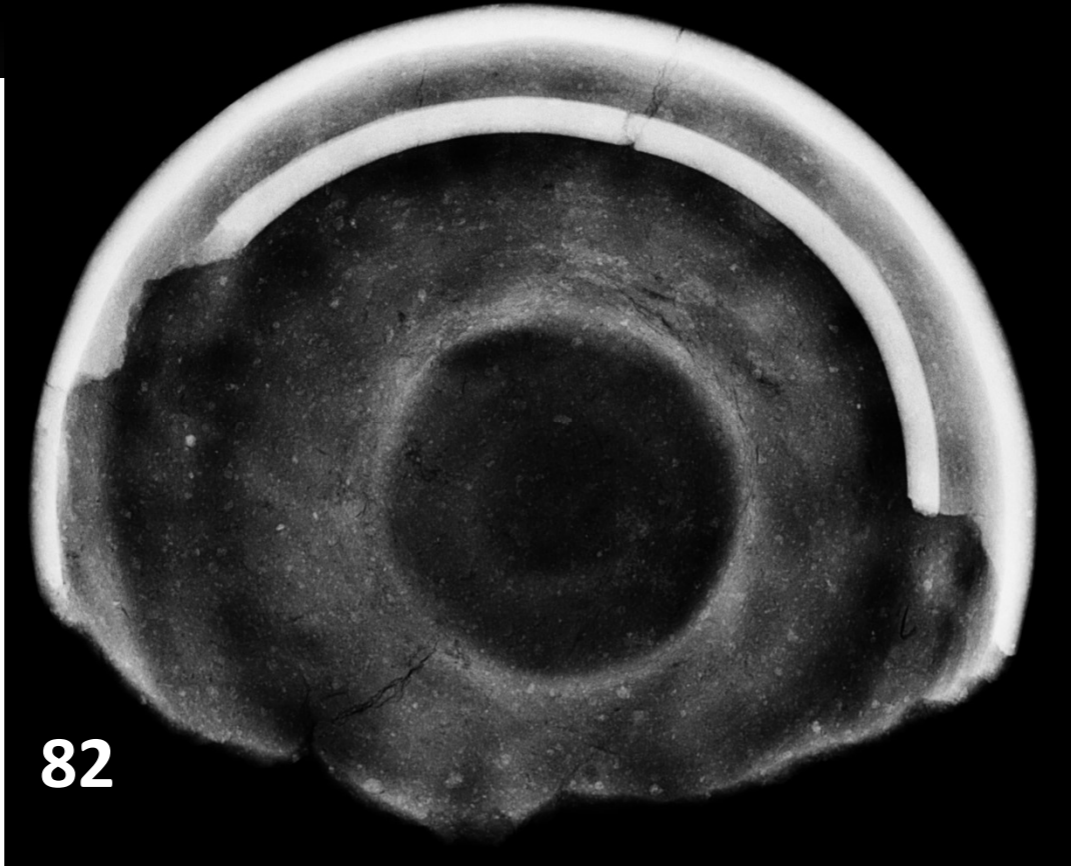
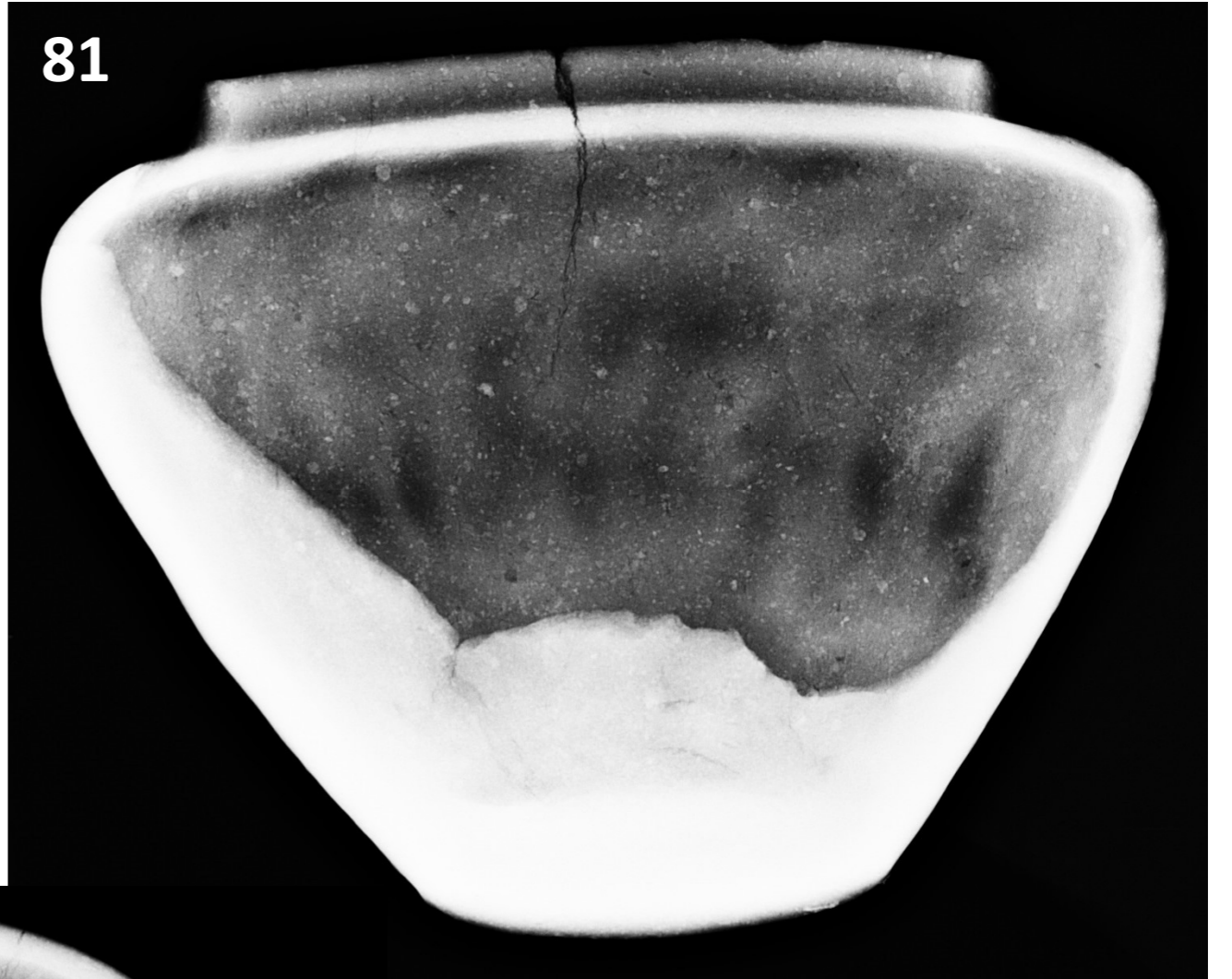
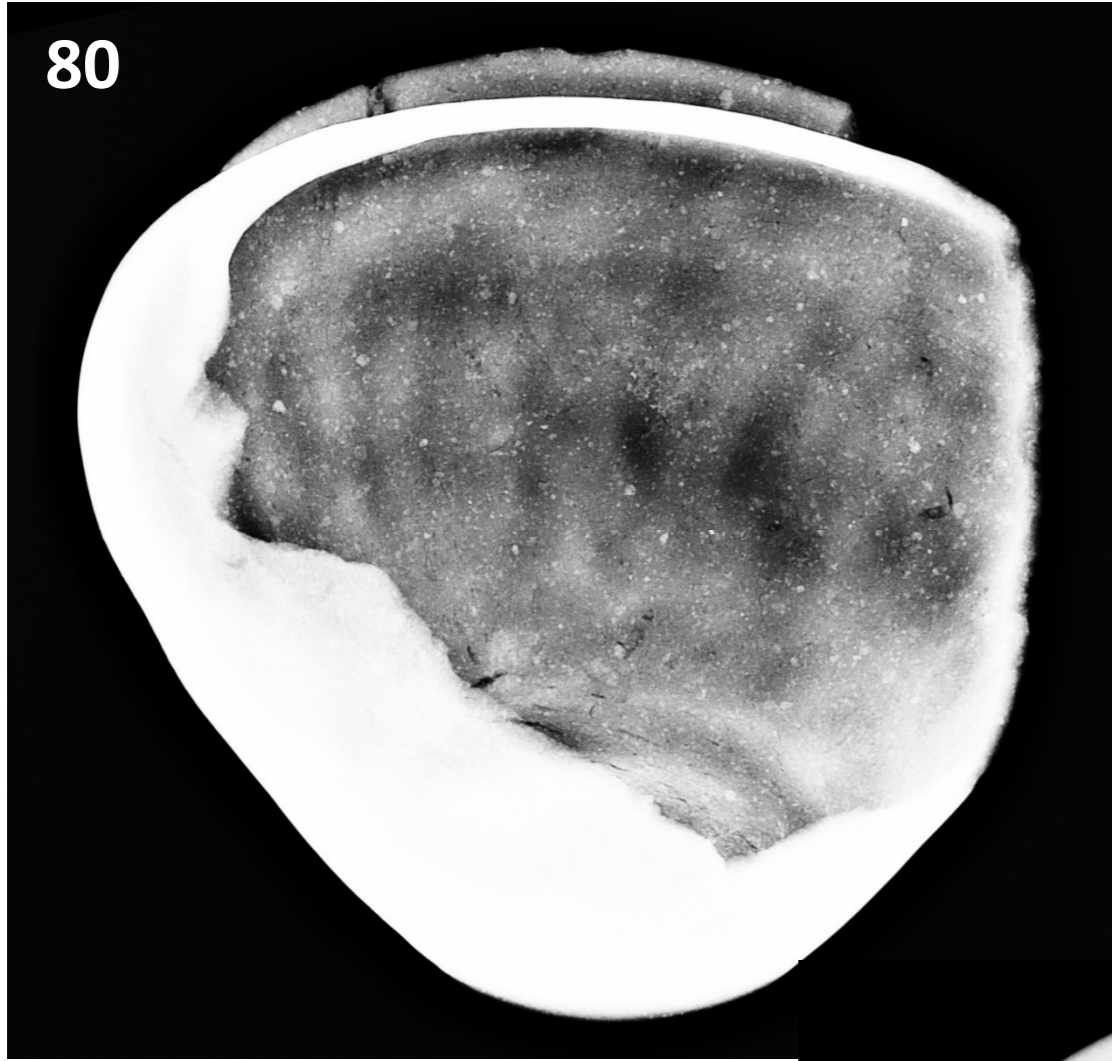












BIBLIOGRAPHY

- Booth, P. 1995: 'Iron Age and Roman Pottery', in M.R. Roberts, 'Excavations at Park Farm, Binfield, 1990: an Iron Age and Romano-British settlement and two Mesolithic flint scatters', in I. Barnes, W.A. Boismier, R.M.J. Cleal, A.P. Fitzpatrick, and M.R. Roberts (eds), *Early Settlement in Berkshire: Mesolithic–Roman Occupation in the Thames and Kennet Valleys*, Wessex Archaeology Report 6, Salisbury, 106–17
- Chapman, A., and Hylton, T. 2006: 'The Iron Age pottery', in A. Chapman, 'An Iron Age enclosure at Site A, Kennel Farm, Basingstoke, Hampshire', *Proceedings of the Hampshire Field Club and Archaeological Society* 61, 41–6
- Copley, M.S., Berstan, R., Dudd, S.N., Straker, V., Payne, S. & Evershed, R.P. 2005a: 'Dairying in Antiquity. I. Evidence from absorbed lipid residues dating to the British Iron Age', *Journal of Archaeological Science* 32, 485–503
- Copley, M.S., Berstan, R., et al. 2005b: 'Processing of milk products in pottery vessels through British prehistory', *Antiquity* 79, 895–908
- Cowell, R.W., Fulford, M.G. & Lobb, S. 1980: 'Excavations of prehistoric and Roman settlement at Aldermaston Wharf 1976-77', *Berkshire Archaeological Journal* 69, 1–35
- Cunliffe, B.W. 1984: *Danebury: An Iron Age Hillfort in Hampshire - Volume 2, The Excavations 1969-1978: The Finds*, London, Council for British Archaeology Research Report 52
- Cunliffe, B.W. 2005: *Iron Age Communities in Britain*, 4th ed, Abingdon
- Fasham, P.J. & Keevil, G. 1995: *Brighton Hill South (Hatch Warren), an Iron Age Farmstead and Deserted Medieval Village in Hampshire*, Salisbury, Wessex Archaeological Report 7
- Ford, S., Pine, J. & Weale, A. 2013: 'Middle Iron Age occupation and iron production and a late Saxon hearth at Grazeley Road Three Mile Cross, Reading, Berkshire', in Preston, S. J. *Iron Age Iron Production Sites in Berkshire*, Reading, Thames Valley Archaeological Services Monograph 16, 37–60
- Gibson, C. 2004: 'The Iron Age and Roman site of Viabes two (Jays Close), Basingstoke', *Proceedings of the Hampshire Field Club & Archaeological Society* 59, 1–30
- Hawkes, J.W. 1985: 'The Pottery', in Fasham, P. J. *The Prehistoric Settlement at Winnall Down, Winchester: Excavations of MARC3 Site R17 in 1976 and 1977*, Gloucester, Hampshire Field Club Monograph No.2, 57–76
- Howell, L. & Durden, T. 2003: 'Late Iron Age and Early Roman field systems and other features at Bath Road, Slough', in Preston, S. *Prehistoric, Roman and Saxon Sites in Eastern Berkshire: Excavations 1989-1997*, Reading, Thames Valley Archaeological Services Monograph 2, 109–117
- Lobb, S.J. & Morris, E.L. 1993: 'Investigations of Bronze Age and Iron Age features at Riseley Farm, Swallowfield', *Berkshire Archaeological Journal* 74, 37–68
- Manning, W.H. 1974: 'Excavations on late Iron Age, Roman and Saxon sites at Ufton Nervet, Berkshire, in 1961–1963' *Berkshire Archaeological Journal* 67, 1–61
- Mathers, S.J. & Smith, N.J.P. 2000, *Geology of the Reading District - A Brief Explanation of the Geological Map Sheet 268 Reading*, Nottingham
- Mepham, L. 1997: 'Iron Age and Romano-British Pottery', in Barnes, I., Butterworth, C. A., Hawkes, J. W. & Smith, L. *Excavations at Thames Valley Park, Reading, 1986-88*, Salisbury, Wessex Archaeological Report 14, 48–66
- Millett, M.J. & Russell, D. 1984: 'An Iron Age and Romano-British site at Viabes Farm', *Proceedings of the Hampshire Field Club & Archaeological Society* 49, 49–60
- Morris, E.L. 1993: 'Pottery' in S.J. Lobb & E.L. Morris 'Investigation of Bronze Age and Iron Age features at Riseley Farm, Swallowfield', *Berkshire Archaeological Journal* 74,

- Morris, E.L. 1995: 'Study 10: Pottery production and resource locations: An examination of the Danebury collection', in Cunliffe, B. W. *Danebury: An Iron Age Hillfort in Hampshire. Vol. 6: A Hillfort Community in Perspective*, London, CBA Research Report 102, 239–245
- Oliver, M. 1992: 'Excavations of an Iron Age and Romano-British settlement site at Oakridge, Basingstoke, Hampshire, 1965-6', *Proceedings of the Hampshire Field Club & Archaeological Society* 48, 55–94
- Piggott, C.M., and Seaby, W.A. 1937: 'Early Iron Age site at Southcote, Reading', *Proceedings of the Prehistoric Society* 3.1–2, 43–57
- Rees, H. 1995: 'Iron Age/Early Roman pottery', in Fasham, P. J. & Keevil, G. *Brighton Hill South (Hatch Warren): An Iron Age Farmstead and Deserted Medieval Village in Hampshire*, Salisbury, Wessex Archaeology Report No.7, 35–45
- Rice, P.M. 1987: *Pottery Analysis: A Sourcebook*, London
- Richardson, J.E. 1978: 'Iron Age pottery', in M. Oliver and B. Applin, 'Excavation of an Iron Age and Romano-British settlement at Ructstall's Hill, Basingstoke, Hampshire, 1972–5', *Proceedings of the Hampshire Field Club and Archaeological Society* 35, 59–66
- Smith, K. 1977: 'The Excavation of Winklebury Camp, Basingstoke, Hampshire', *Proceedings of the Prehistoric Society* 43, 31–129
- Thompson, J.T. & Manning, W.H. 1974: 'The Pottery from Enclosures I and II' in W.H. Manning 'Excavations on Late Iron Age, Roman and Saxon sites at Ufton Nervet, Berkshire, in 1961-1963', *Berkshire Archaeological Journal* 67, 24–39
- Timby, J. 2000: 'The Pottery', in Fulford, M. G. & Timby, J. *Late Iron Age and Roman Silchester: Excavations on the Site of the Forum-Basilica 1977, 1980-86*, London, Britannia Monograph 15, 180–312
- Timby, J. 2003: 'Pottery' in L. Howell & T. Durden 'Late Iron Age and Early Roman field systems and other features at Bath Road, Slough', in Preston, S. J. *Prehistoric, Roman and Saxon Sites in Eastern Berkshire: Excavations 1989-1997*, Reading, Thames Valley Archaeological Services Monograph 2, 112–116
- Timby, J. & Bird, J. 2018: 'The Pottery', in Fulford, M. G., Clarke, A., Durham, E. & Pankhurst, N. *Late Iron Age Calleva: The Pre-Conquest Occupation at Silchester Insula IX*, London, Britannia Monograph 32
- Woodward, A. 1995: 'Vessel size and social identity in the Bronze Age of southern Britain', in Kinnes, I. & Varndell, G. *Unbaked Urns of Rudely Shape*, Oxford, 195–202
- Woodward, A. 1997: 'Size and style: an alternative study of some Iron Age pottery in southern England', in Gwilt, A. & Haselgrove, C. *Reconstructing Iron Age Societies*, Oxford, Oxbow Monograph 71, 26–35
- Woodward, A. & Blinkhorn, P. 1997: 'Size is important: Iron Age vessel capacities in central and southern England', in Cumberpatch, C. & Blinkhorn, P. *Not So Much A Pot, More A Way of Life: Current Approaches to Artefact Analysis in Archaeology*, Oxford, 153–162