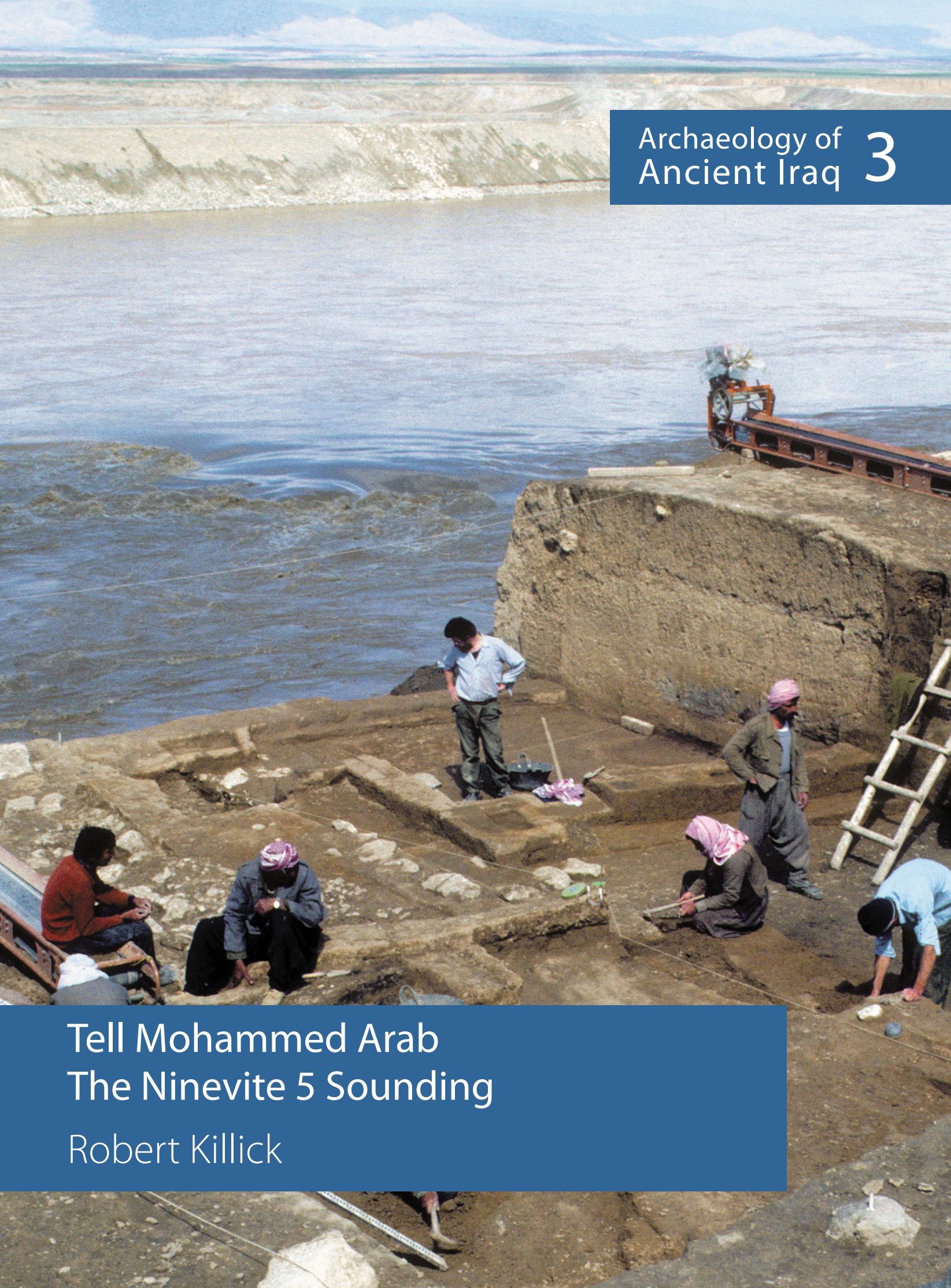


Tell Mohammed Arab
The Ninevite 5 Sounding
Robert Killick



Tell Mohammed Arab

Archaeology of Ancient Iraq

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Tell Mohammed Arab

The Ninevite 5 Sounding

Robert Killick

with contributions by
Dianna Bolt and Michael Roaf

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Foreword

Iraq had been at war with Iran for two years when we started work at Tell Mohammed Arab. The excavations were part of the British contribution to the international effort to rescue sites before the closing of the Mosul dam. This was to be the last of the international rescue projects of the 1970s and 80s initiated by the State Organisation for Antiquities and Heritage in advance of Saddam Hussein's huge dam building efforts. All, of course, to be brought to an abrupt end by the invasion of Kuwait and the long years of international sanctions that followed.

Excavating Tell Mohammed Arab was challenging at times. We worked throughout most of the year: sometimes the ground was frozen, and we had to remove the frozen layer before being able to carry on. There was an unexpected Sassanian cemetery, Hellenistic storage pits, and several phases of Middle Assyrian village occupation to work through before we reached the top of the Ninevite 5 mound. Conscious that it was a rescue excavation with a limited duration, we sometimes had to take shortcuts and were always aware of the need to work quickly in order to complete the excavation before the site was flooded.

I once heard a lecture by Robert Braidwood in which he described his rules of excavation: never dig more than one trench in a site and never dig a trench larger than 5 m by 5 m, otherwise it will be impossible to correlate the stratigraphic sequences of the different trenches or of different parts of the same trench.

Excavating a multiperiod village site with several different houses and external areas is more challenging than excavating a small sondage as recommended by Robert Braidwood, or a monumental building in which the different phases are easily recognised through the architectural features. In a village, the stratigraphy is not simple: sometimes called spiral stratigraphy, it is perhaps better described as a patchwork. In one part of the excavation, there may be a single floor level and in another numerous ones. One building might be rebuilt several times while another might not have had any

major architectural alterations. Sometimes a layer may be clear in one part of the trench but then disappears or changes its nature as it is followed across the trench. The excavation of such a complicated stratigraphic sequence requires great skill and it is to the team's credit that they accomplished the task so professionally and in time.

This volume is the primary record of the excavation of the Ninevite 5 Sounding at Tell Mohammed Arab. It presents the stratigraphic and architectural evidence, the small finds, as well as a detailed analysis of the development of the pottery. The detailed data is included in Appendix 6 in which drawings of the finds and pottery are presented by Level and Excavation Unit. This appendix includes drawings of pottery and fragmentary objects that are not illustrated in the main text.

The preliminary reports on Tell Mohammed Arab, which were published soon after the end of the excavation, outlined the sequence for the first half of the third millennium BC in northern Iraq and north-eastern Syria. This sequence has been widely accepted. In this volume, additional data on which this sequence was based is published. The implications of the excavation of the Ninevite 5 Sounding are discussed in Chapter 5. Apart from my contribution to that chapter and the appendix on the skeletal remains by Dianna Bolt the whole volume is the work of Robert Killick.

As Robert points out in the preface, a long time has passed between excavation and publication. Much has happened in Iraq in the intervening period but, encouragingly, the last few years have seen a renewal of archaeological activity in northern Iraq, from the restoration of sites and monuments destroyed in the recent conflicts to the survey and excavation of many new ones. So I hope that this report, though much delayed, will still be of timely use to the new generation of Iraqi and foreign archaeologists now working to uncover more of Iraq's unique past.

Michael Roaf
August 2025

Preface

The excavations reported on here took place between 1982 and 1985 and were conducted by what was then the British Archaeological Expedition to Iraq (BAEI) which was, in turn, part of the London-based British School of Archaeology in Iraq (now the British Institute for the Study of Iraq).

In 1981, during the Iraq–Iran War, the State Organisation for Antiquities and Heritage, Republic of Iraq, announced the start of foreign participation in the Eski Mosul Dam Salvage Project (quickly renamed the Saddam Dam Salvage Project). In line with previous rescue schemes, the Haditha Dam and the Hamrin Dam, the terms of participation were generous: free accommodation, equipment and labour.

At the start of the salvage project, foreign teams were confined for security reasons to the southeastern corner of the area to be flooded. Here, two sites were identified by BAEI staff that merited further attention: Tell Jikan, a very large *tell* the thorough investigation of which would have demanded resources beyond the capacity of the organization, and Tell Mohammed Arab, where because of erosion by the river it was clear that there were substantial deposits belonging to the Ninevite 5 period. This was at that time one of the relatively unknown periods of north Mesopotamian history and one with a pottery sequence that had remained somewhat puzzling since first identified at Nineveh back in the 1930s.

Excavation at Tell Mohammed Arab started in late 1982 and continued through 1983 and 1984. Then, in the spring of 1985 the site disappeared under the waters of the Tigris River when the dam was closed and the reservoir filled up unexpectedly, without advance warning. I remember that we spent an anxious two days retreating up the hillside pursued by the rising floodwaters. In the rain and mud even with four-wheel drive vehicles we had difficulty extracting ourselves. Fortunately, earth-moving equipment from the nearby dam came to the rescue, towing us and the vehicles to high ground and safety. The villagers were not so lucky: many of them were still attempting to rescue their possessions by boat as the dam waters washed over the rooftops. Other teams lost equipment and antiquities.

In this manner, our excavations at Tell Mohammed Arab came to an abrupt end. Shortly afterwards, the team moved to the Nineveh dig house in Mosul to continue with the finds processing and to catch up on the recording. In the autumn of 1985, all the excavated materials were placed for safe keeping in the hands of the Mosul branch of the State Organisation of Antiquities & Heritage. At least some of it survived the depredations that followed the invasion of 2003 and the occupation of Mosul by Da'esh in 2014: a Ninevite 5 excised jar from the site is currently on display in the new Basra Museum that opened in 2017.

Forty years have now passed since the site was flooded. That is a long time for an excavation to remain unpublished, so I had better offer an apology for this tardiness and some explanation of how it came about.

What happened? Well, to begin with, the end of the excavations and the flooding of the site took place just a few months before the director, Michael Roaf, and I both left the employment of the British Archaeological Expedition to Iraq. We had come to the end of our permitted period of residence under the Iraqi law of the time. Back in the 1980s, funds for post-excavation work were not readily available and so we both had other priorities than the publication of the Tell Mohammed Arab excavations, although we did manage to put together a journal article discussing the Ninevite 5 pottery sequence from the site.

Subsequently, when I applied to the British School of Archaeology in Iraq (BSAI) in the early 1990s for a grant towards excavations at Saar in Bahrain, a prior condition was to produce a report on the Tell Mohammed Arab work. This I completed in much haste and the grant materialised, although it was not repeated, as in the following year the Gulf was deemed to be beyond the school's remit. Anyhow, that manuscript was completed in 1993 and sent to the BSAI to consider for publication. The deliberations were lengthy and I can no longer reconstruct the exact chronology. I do have on file a letter dating to 1999 stating that the BSAI would like to go ahead with publication, and at some point the manuscript was sent to two external referees (with a

comment from one asking ‘have we really been sitting on this manuscript since 1993?’).

But in any case, throughout the 1990s I was busy with excavations in Bahrain. I had no desire or time to revisit Ninevite 5 and Tell Mohammed Arab consistently remained at the bottom of my in-tray. On the odd occasion since then when I thought about moving it up, two obstacles deterred me. Firstly, the knowledge that over the years so much more had been written about Ninevite 5, particularly about the pottery sequence, and that would have to be taken into account. Secondly, the effort of gathering together the material again, the paper and electronic files, the plans, the photographs, the pottery illustrations—pasted up onto A2 sheets and last known whereabouts somewhere in Oxford, revising the text in the light of the reviewers’ comments, digitising the illustrations and drawings, and generally

trying to haul the report into the twenty-first century all just seemed too much.

However, in 2012 I returned to Iraq after a gap of twenty-seven years and together with colleagues excavated first at Tell Khaiber (recently published) and then at Charax Spasinou. This nudged my conscience about the Tell Mohammed Arab report and so for the last few years it has been inching slowly towards publication. It has been a difficult task. I am conscious of many shortcomings and of things I would do differently now. Furthermore, I still haven’t caught up with all of the subsequent literature about Ninevite 5. Consequently, I have presented here only what I could manage in the time and with the resources available to me, in the hope that as one would say in Iraq it is *aḥsen min maaku*, better than nothing.

Robert Killick
January 2025

Babneet village, spring 1985.



Acknowledgements

The Tell Mohammed Arab excavations were undertaken by the British Archaeological Expedition to Iraq under its director at that time, Professor Michael Roaf. They were supported by the British School of Archaeology in Iraq and the British Academy. Accommodation, equipment and labour were provided by the State Organisation for Antiquities & Heritage. The following staff members of the State Organization for Antiquities and Heritage (SOAH) provided invaluable assistance (titles at the time are in brackets): Dr Mu'ayyid Sa'id (President), Dr Behnam Abu Al Soof (Director General for the Northern Region and Director of the Eski Mosul Dam Salvage Project), Mr Hazim al Najjafi (Scientific Director of the Saddam Dam Salvage Project) and Mr Mohammed Subhi (Administrative Director of the Saddam Dam Salvage Project).

The representatives of SOAH on the excavations were Abdullah Amin (November 1982–January 1983), Mohammed Zekki (February–November 1983), and Abd al-Salam (January 1984–January 1985). Their contribution to the smooth running of the excavation was exceptionally important.

The members of the Tell Mohammed Arab excavation team are listed in Appendix 5. Excavating over the winter in northern Iraq was not easy. My personal thanks to them all, particularly to those who worked on the excavation and processing of Ninevite 5 material.

Our Yezidi workmen, the backbone of our local labour force, were a pleasure to work with, remaining ever helpful and in good humour throughout.

I must also acknowledge a personal debt to Michael Roaf, who first suggested that I should study Ninevite 5. He has also been forensic in reviewing a draft of this report, improving it beyond measure, as well as finding the energy and interest to revisit the Ninevite 5 period in Chapter 5.

Finally, I would like to thank the former officers of the British School of Archaeology in Iraq for their support over the six years I was permanently employed in Baghdad.



Yezidi workmen taking a well-earned break.



Excavation along the Cliff Section during the winter of 1982/3.

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ROBERT KILLICK

1. Introduction

LOCATION

Tell Mohammed Arab lay on the left bank of the Tigris River some 35 km northwest of Mosul, close to the now-submerged village of Babneet. The region around the site was mostly rolling countryside with rock outcrops in places, especially on the higher ground to the south. Several wadis bisected the area, draining into the Tigris River. In the vicinity of Tell Mohammed Arab these were, from west to east, the wadis Qara Dere, Kharabeh, Qasrij, and 'Anzeh (Fig. 1.1). The Tigris River here was confined to a narrow flood plain, which near Tell Mohammed Arab lay entirely on the opposite bank from the site. It was easily fordable in high summer and remained swimmable until the winter rains. For the rest of the year its very strong currents and increased volume made it dangerous to cross.

No major land routes passed directly through the immediate area of Tell Mohammed Arab although in recent times the main ford over the river was at Eski Mosul, only 12 km to the south. The broken ground along the riverbanks made travel upstream from Mosul very difficult so that the main routes northwards from Mosul stayed away from the river, keeping to the more level ground nearer Jebel Faida before continuing north to Cizre or westward to Feshkhabur. After crossing the Tigris at Eski Mosul, it was possible either to go westward along the southern foot of the Jebel Sinjar to Tel 'Afar and Sinjar or to proceed in a northwesterly direction into the Upper Khabur.

Several other archaeological sites lay two to three kilometres away from Tell Mohammed Arab but none produced material of the "Late Uruk"/Ninevite 5 periods. These are shown on Fig. 1.1. Those that were excavated and published include Qasrij Cliff and Khirbet Qasrij close to the river just to the east of Tell Mohammed Arab (Curtis 1989), to the southeast Kharabeh Shattani and Shattani village (Watkins and Campbell 1986; Baird et al. 1995), and to the west Khirbet Khatuniyeh (Curtis and Green 1997).

Nearest neighbours with "Late Uruk"/Ninevite 5 occupation were Tell Jikan (Fujii 1987), three kilometres

upstream, Khirbet Hatara (Negro 1998) and Tell Kutan (Bachelot 1987, 2003), both some four to five kilometres to the east away from the river. Slightly further away to the north were Tell Fisna (Numoto 1988, 2003) and Tell Karrana 3 (Wilhelm and Zaccagnini 1993). The extent of Ninevite 5 occupation at Tell Jikan has been estimated to have been as much as 20 hectares. The other sites may be characterised as small villages of similar size to Tell Mohammed Arab.

SITE DESCRIPTION

The extant remains at Tell Mohammed Arab covered about 1.2 hectares, stretching along the riverside for about 150m and up to 80m back from it. Of course, we do not know how much had been washed away by the river. The contour map, however, shows that the apex of the settlement survived, represented by the 29.50m contour line on Fig. 1.2, and that the lower contours were also starting to curve round and join up. Assuming the *tell* only ever had one high point, then it may be suggested that a little more than half of it had survived, increasing the overall size to 2–3 hectares, making it still a modestly sized village, but one with up to 6.5m of archaeological deposits preserved, as we subsequently found out.

PERIODS REPRESENTED

The initial work along the eroded cliff edge on the riverside established the date and depth of the extant deposits (Roaf 1983: 68). Subsequent excavation refined the chronological scheme into six distinct periods of occupation, labelled MA1 to MA6 from bottom to top (Table 1.1). The earliest deposits were dated to the "Late Uruk" period (MA1) and were confined to the central and eastern parts of the Cliff Section. An eroded mound surface separated MA1 from a re-occupation early in the Ninevite 5 period (MA2)

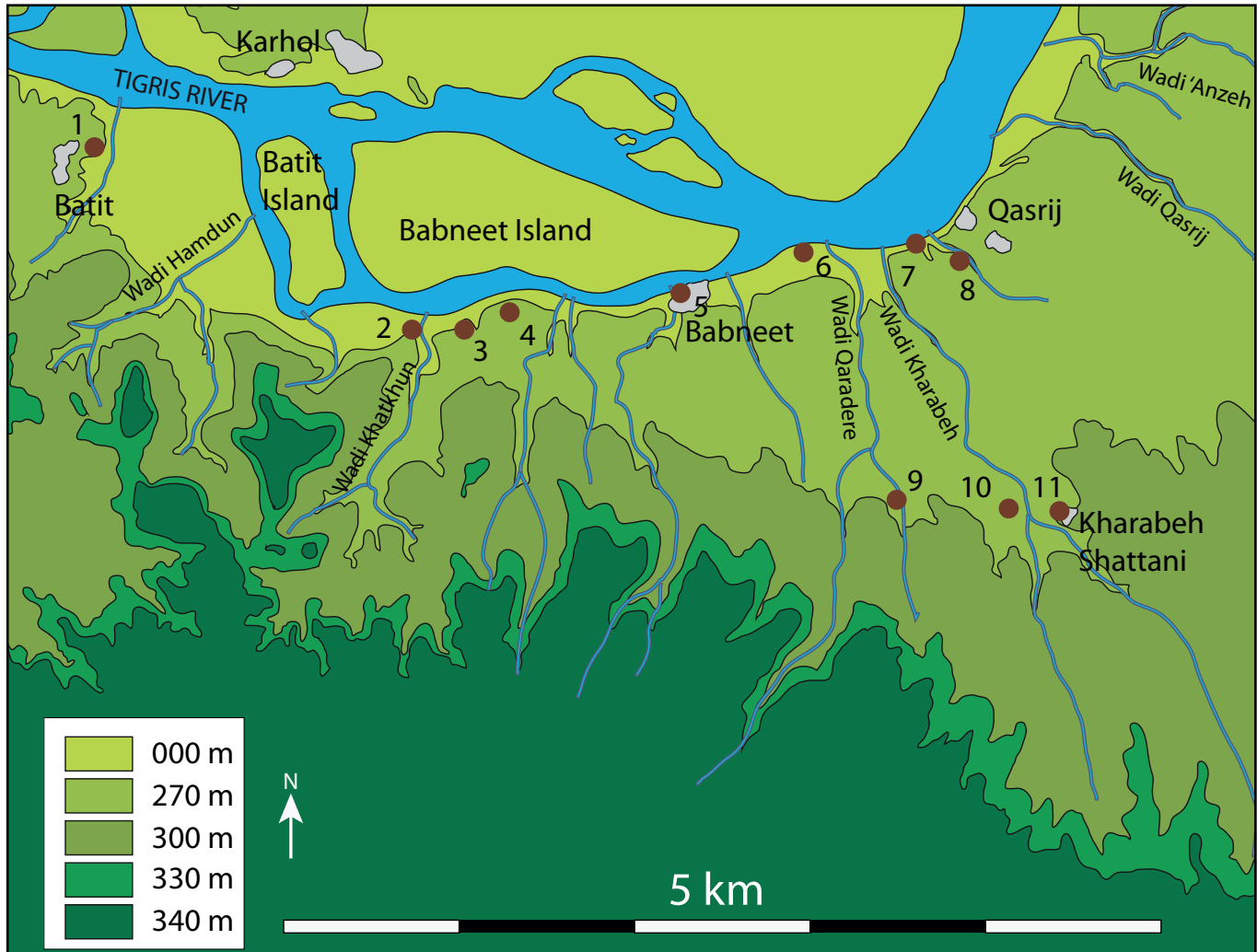


FIG.1.1. Archaeological sites in the vicinity of Tell Mohammed Arab.

- | | |
|-----------------------|-------------------------------|
| 1. Shaikh Sibati | 7. Qasrij Cliff |
| 2. Wadi Khatkhun | 8. Khirbet Qasrij |
| 3. Khirbet Khatuniyeh | 9. Qara Dere |
| 4. Tell Khatuniyeh | 10. Tell Kharabeh Shattani |
| 5. Babneet village | 11. Kharabeh Shattani village |
| 6. Tell Mohammed Arab | |

characterised by the introduction of Ninevite 5 painted and early incised pottery. Remains of this period were found along the entire length of the Cliff Section. At least the central area of the settlement was subsequently used as a cemetery (MA3a), with the graves containing examples of Ninevite 5 excised ware.

It is not known how much time passed before buildings then reappeared in the Ninevite 5 Sounding (MA3b), but it was within the Ninevite 5 period. After which, there was a clear break in the sequence, with Middle Assyrian buildings set on top of the Ninevite 5 mound (MA4), followed by Hellenistic pits (MA5) and a cemetery of the Sassanian period (MA6).

To examine this sequence in more detail, excavations were undertaken in the central and highest part of the

Mohammed Arab Period	Date
MA6	Sassanian
MA5	Hellenistic
MA4	Middle Assyrian
MA3	Late Ninevite 5
MA2	Early Ninevite 5
MA1	"Late Uruk"

TABLE 1.1. Periods of occupation at Tell Mohammed Arab.

mound adjacent to the 48–52V section along the cliff edge (Fig. 1.2). The excavation of the upper Middle Assyrian levels here covered an area of just over 260 square metres. This was reduced to 120 square metres for the earlier periods as the deadline for the completion of the dam approached. So the Ninevite 5 sounding described here spanned six of our 5 x 5 m squares, 50T, 50U, 50V, 51T, 51U, 51V, and in the upper levels a small part of adjacent 52V.

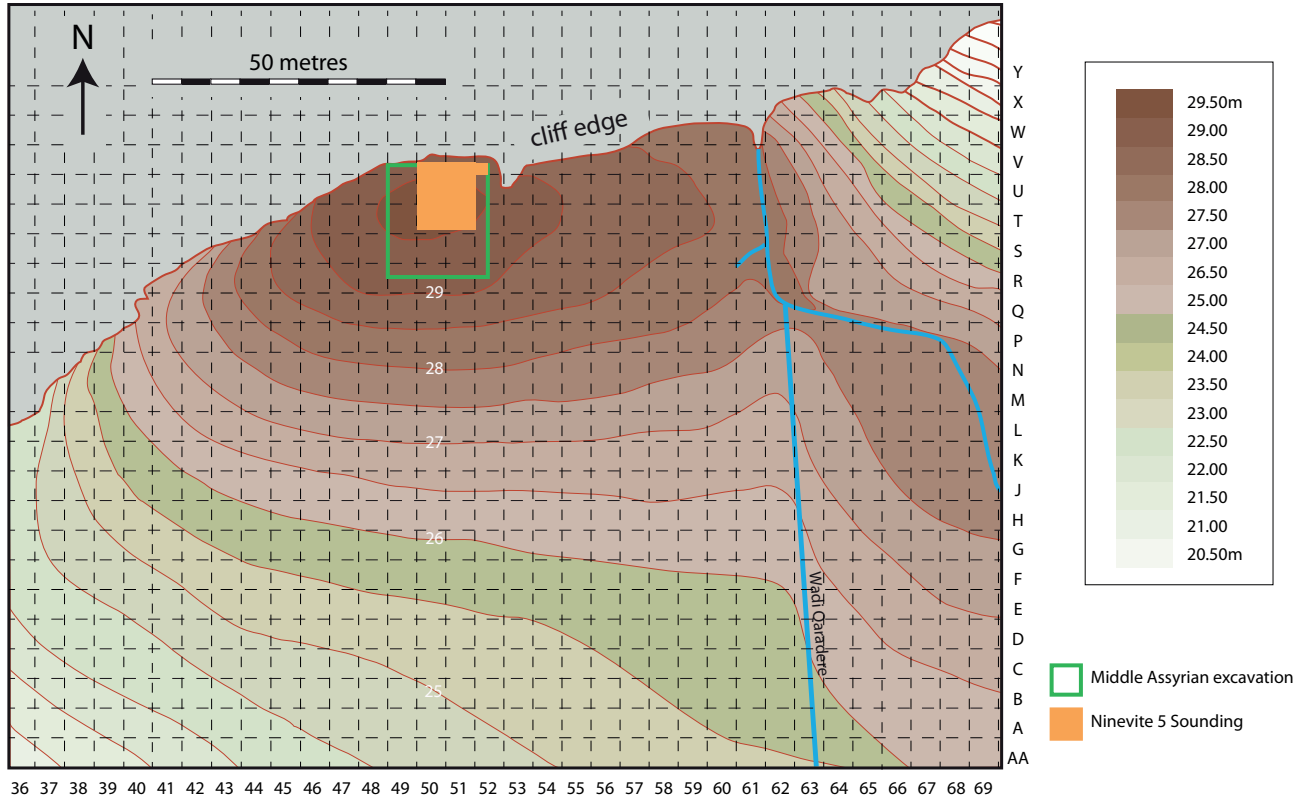


FIG.1.2. Contour map of Tell Mohammed Arab with location of Ninevite 5 Sounding.



FIG.1.3. The Cliff Section after excavation.

METHODOLOGY

A five-metre grid was established across the site and each five-metre square labelled in sequence with a number running from west to east and a letter running from south to north, thus 51U is to the east of 50U and to the north of 51T. Area excavation was carried out within each five metre square. Ideally, the complete square was excavated down to a substantial floor or other distinctive layer and then the sections on the west and south sides were drawn. The excavation was then continued through the sections into the neighbouring trench to the west or south guided by the evidence of the sections. Once a new building level had been reached the intention was to expose the whole of that building level before proceeding to excavate the next level. In some cases, for logistical reasons a baulk had to be left within a trench while the neighbouring trench was being excavated or excavation had to continue into a lower level before the upper level had been completely

excavated so that the work could progress. The excavation was as stratigraphic as possible given the constraints of time and labour on a rescue project.

Each context within a trench was given an excavation unit number after the trench number. For the Ninevite 5 Sounding the sequence started at 101 so, for example, 50T:101 was the first context excavated in square 50T. All objects and samples found within the context were then numbered in running sequence from 01 onwards, thus 50T:101.01, 50T:101.02 etc.

Excavation was carried out by our staff, using trowels, small picks and big picks, assisted in the beginning by an unskilled workforce of local villagers. Later on, some of the workmen were able to function as pickmen and could recognise distinctive layers. Given the time constraints and the complex nature of excavating a village site with poorly preserved walls and compressed stratigraphy, I believe the results were reasonably accurate.

FIG. 1.4. The Ninevite 5 Sounding flooded by the rising waters of the Mosul dam.



ROBERT KILLICK

2. The Stratigraphic Sequence

Eleven building levels were distinguished in excavation. In addition, the layers between bedrock and the earliest walls were assigned a separate level (Level M) as was a collection of graves (Level F), making thirteen levels in all, designated A to M from top to bottom (Figs. 2.1–4).

The earliest building (Level L) was a single-room building of which little remained. It was overlain by an eroded mound surface that represented a break in occupation and separated MA1 from MA2.

Five building levels followed (Levels K–G) before a second episode of abandonment distinguishing MA2 and MA3a. Level K was also a single-room building. Not much sense could be made of the fragmentary remains of Level J. In Level I there was a row of three rooms constructed further to the north than those of Levels L/K. These did not interconnect. The largest room had a rectangular mud-brick platform and hearth in the centre, a feature also present in subsequent levels. This single building was replaced by two separate units in Level H and a third single-room building built at right angles was subsequently added (Level G).

At the end of Level G the area was abandoned and used as a cemetery (MA3a: Level F). Rooms then reappear (MA3b), with the top five levels (Levels E–A) representing rebuilds of the same structures lying along two sides of an open space or courtyard. Initially, there was a single-room building here (Levels E–D), expanded to two rooms (Levels C–B) and then rebuilt finally as one very large room (Level A). Lying at right angles to these was a succession of bins in Levels D–C, rebuilt and enlarged into single rooms in Levels B–A.

The building levels are described and illustrated below from bottom to top. On the accompanying plans, relevant excavation units are listed within each square. The correlations between the sequence of levels along this part of the Cliff Section (48–52V) and the Ninevite 5 sounding are shown in Table 2.1. The sequence as published (Roaf

Mohammed Arab Period	MA Sounding Building Level	48–52V Cliff Section Level
MA3b	A	L
	B	M
	C	P/Q
	D	R
	E	S
MA3a Cemetery	F	T
Break in stratigraphic and pottery sequence		
MA2	G	U/V
	H	W
	I	X
	J	Y
	K	
Break in stratigraphic and pottery sequence		
MA1	L	Z
	M	

TABLE 2.1 Correlation between levels in the Ninevite 5 Sounding and the adjoining Cliff Section.

1984: 152) has since undergone some modifications. For the most part, it matches reasonably well that from the Ninevite 5 Sounding; occasionally it has proved difficult to reconcile the two. Where possible, the relevant Cliff Section plans have been added to those of the Ninevite 5 Sounding.

In the captions for the photographs the direction of view is given in brackets.

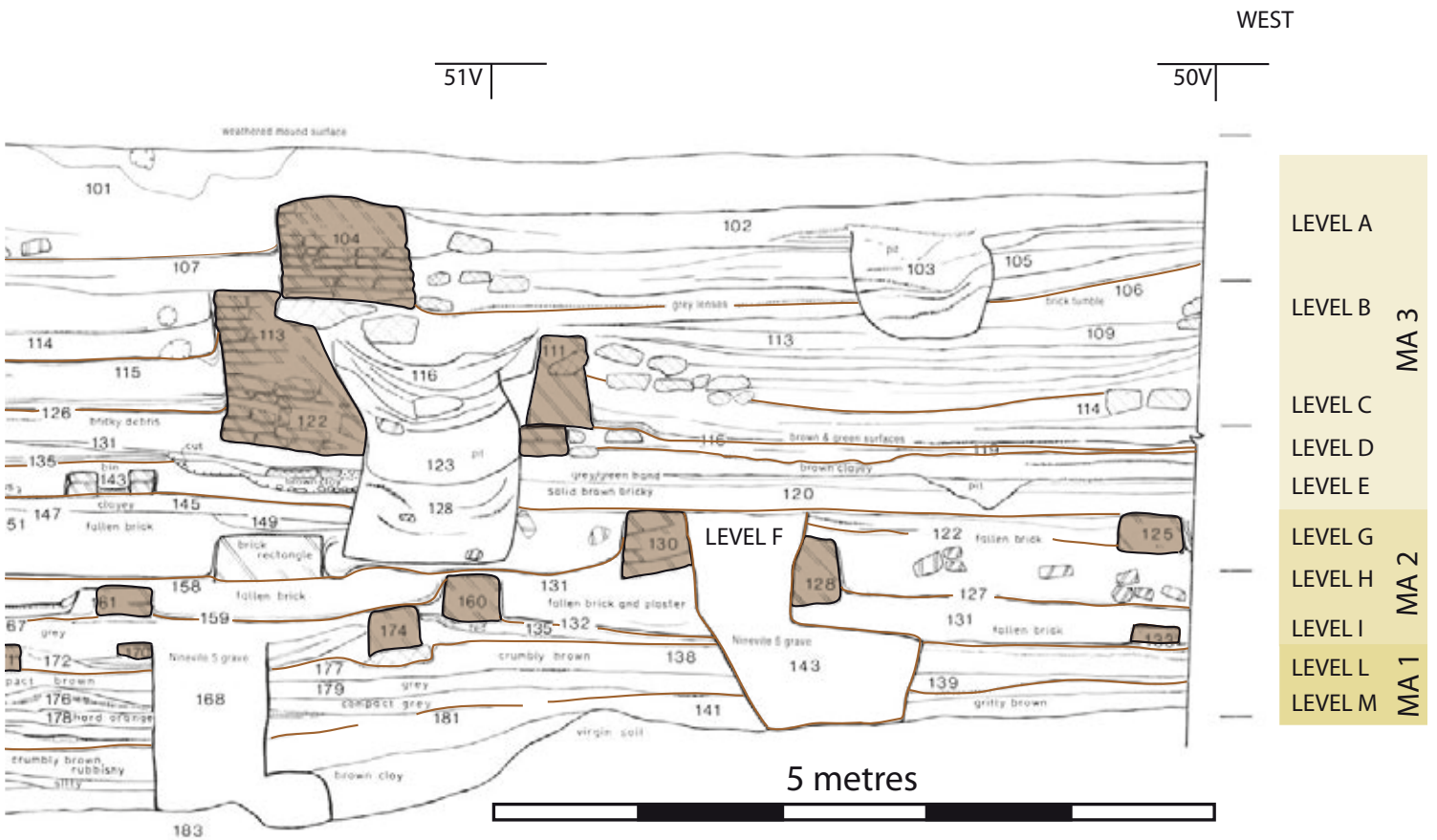
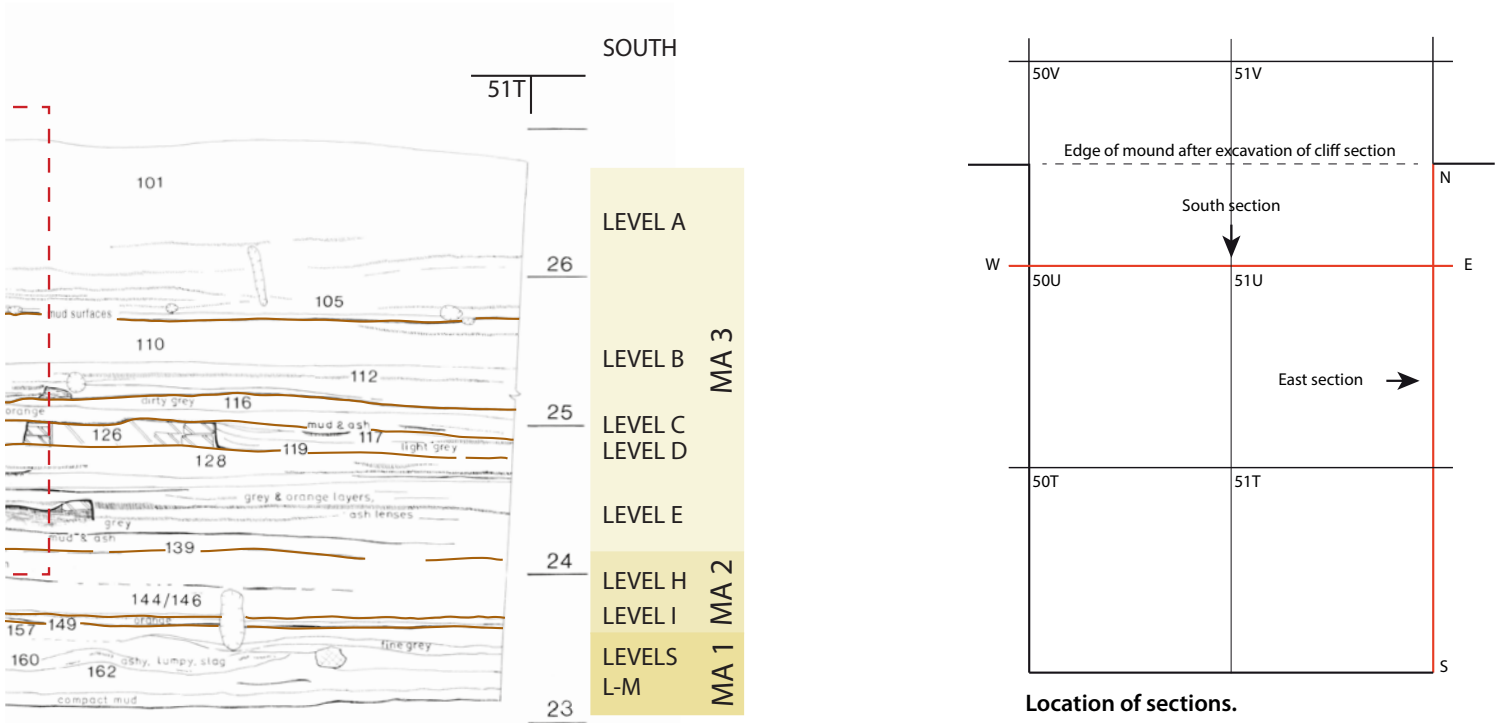


FIG. 2.3. Section along the southern edge of 50V/51V.

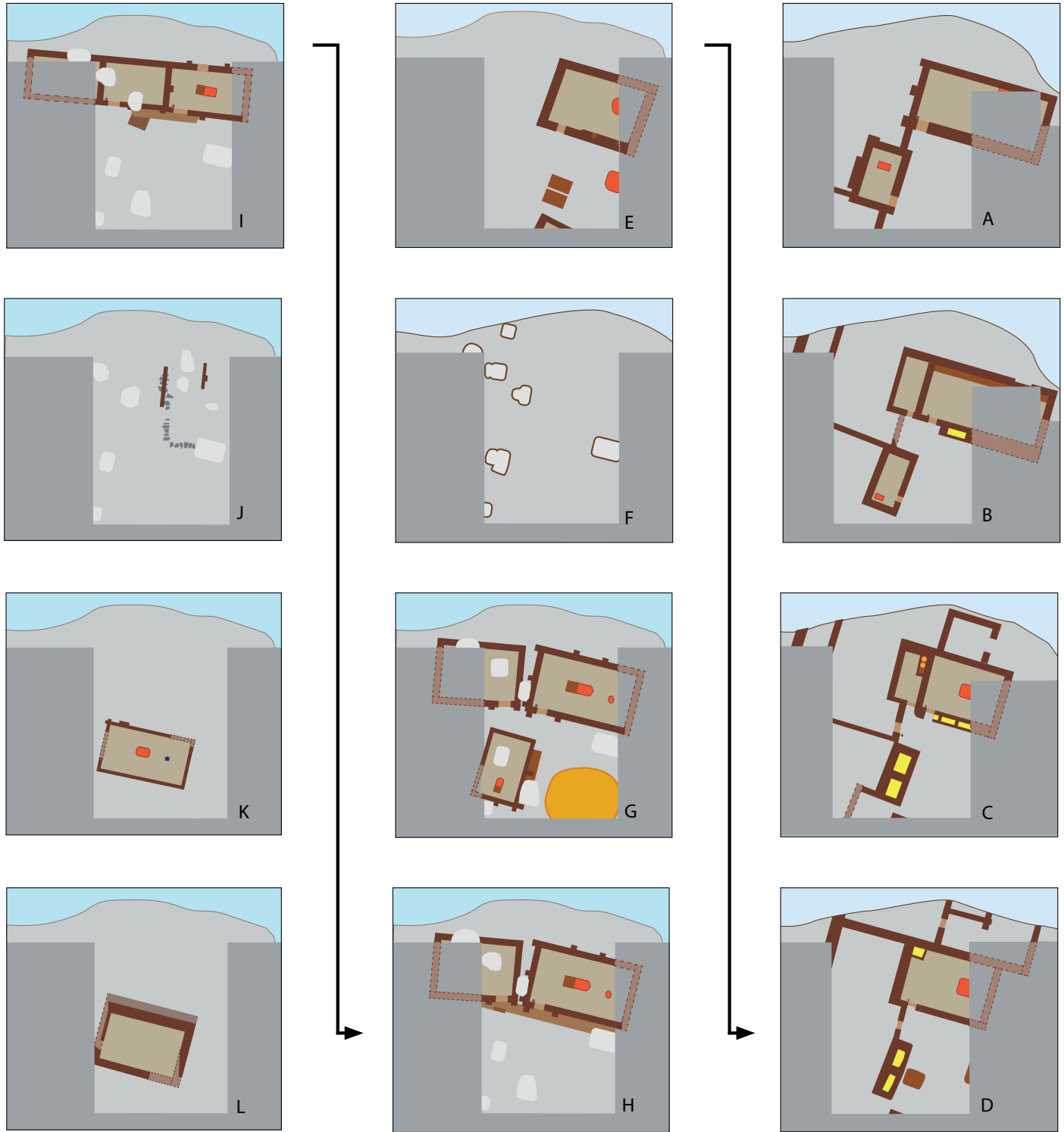


FIG.2.4. Schematic plans of Levels L–A.

LEVEL M

Level M was the designation given to all layers between virgin soil and the earliest building recorded in the excavation of the Ninevite 5 Sounding. Because of the difficulty of tracing the very fragmentary remains of Level L, it is possible that some of the units assigned to Level M also contain Level L material. Furthermore, by the time Level M had been reached during the excavation of the Ninevite 5 Sounding, the flooding of the site appeared to be, and indeed was, imminent. Thus Level M was not excavated with the same precision as higher levels; many of the layers were not individually recorded.

LEVEL L

The remains of this level represented the lowest building above virgin soil and comprised a rectangular structure measuring internally c.5.6m west to east and c.3.4m north to south. The external faces of the walls were difficult to identify. Stone foundations and footings were found in the southwestern and northeastern corners of the building.

The north wall had a clear internal face, occasionally marked by orange plaster. This wall was unusually wide, over 1.35 m, which suggests the possible presence of an external brick bench. A bench is also suggested by the line of stones found at the northeastern corner of the building, which was only 0.65 m wide.

The other walls were similarly difficult to trace: the south face of the south wall was indicated by a line against which an external ashy layer stopped. In other places, traces of wall plaster were found. There was a good internal floor made of orange clay 1–3 cm thick. This appeared to have been put down as a single plastering. In the northwestern part of the room, a scoop of orange bricky material may have represented some initial floor packing. Five rows of horizontal bricks were found in the room. These were preserved to a height of less than 2 cm. It is unclear if they had some function, perhaps the remains of a platform, or constituted debris. The function of the three bricks laid against the east face of the eastern wall is also unclear; they were in an odd position for a buttress.

The west section of 50U showed a wall and bench(?) at the same absolute height as some of the stone footings of the Level L building. This was not noted in excavation. It may have joined the west wall of the excavated building, forming a second, adjacent room.

The Level L building was overlain by a sterile dark brown layer which was found over most of the Ninevite 5 Sounding. It faded at the northern end, in 50V and 51V, where the main east section shows some discontinuity, perhaps representing a later clearance. This layer is interpreted as the eroded mound surface of MA1, prior to the Ninevite 5 reoccupation.

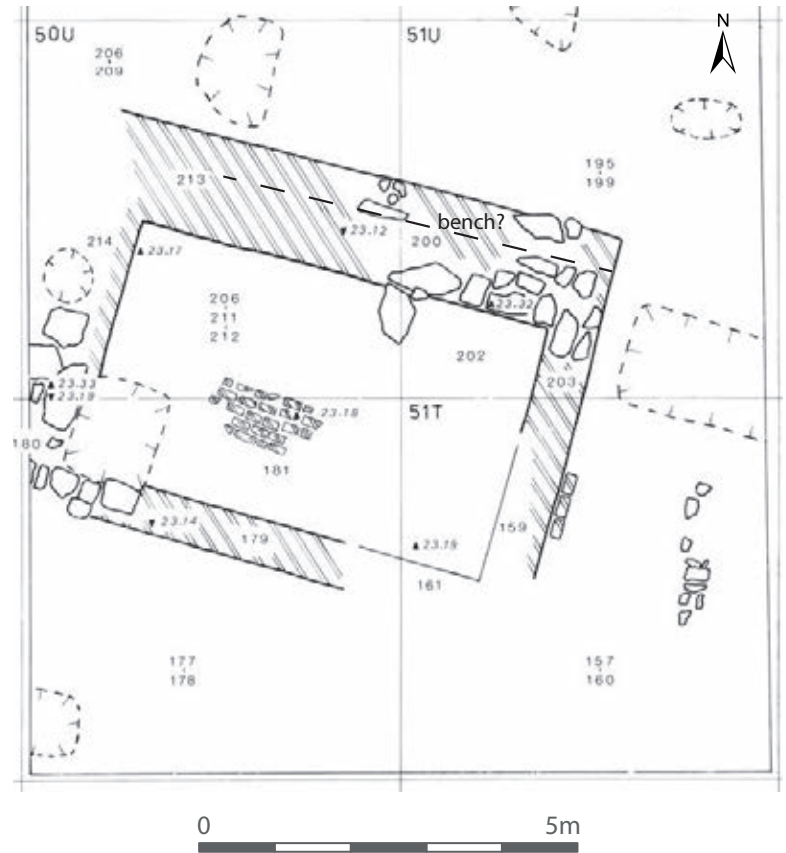


FIG. 2.5. Level L.

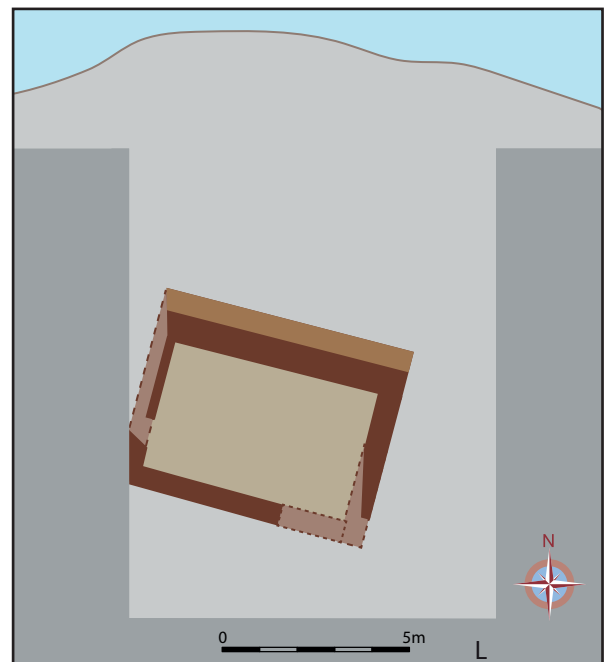


FIG. 2.6. Schematic plan of Level L building.



FIG. 2.7. Level J Stone footings (W).

Grave 50V:140

This was a shallow grave cut scooped out of virgin soil. The body of a small child had been laid upon a large sherd and an earlier plan, made during the excavation of the Cliff Section, indicates that sherds also covered the body. The head was to the south, but it was not possible to determine the position of the body which had been disturbed by rodents and by the workmen. There were no grave goods.

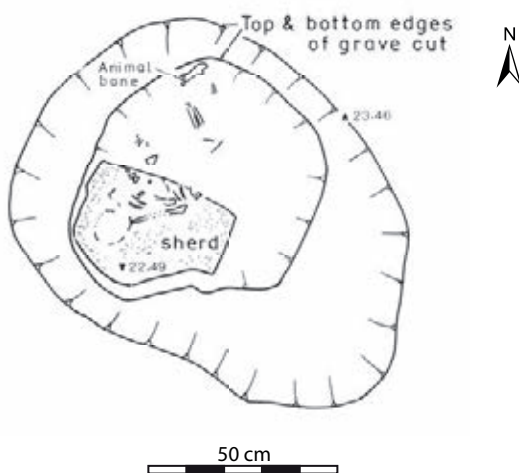


FIG. 2.8. Grave 50V:140.

LEVEL K

The single-room building of Level K lay above that of Level L and on the same alignment. Only faint traces of the walls of this building survived, with much of the extant brickwork only a few centimetres high. At the northwestern corner were two buttresses, each made up of a single brick. Two bricks along the external face of the north wall may also have been structural. The floor of brown plaster with green patches was well preserved. An oval-shaped hearth lay in the centre of the room. It had a black gritty base and a lip of hard yellow plaster 5 cm wide. In the base towards the

western end was a circular depression 18 cm in diameter and 3–4 cm deep, perhaps the setting for a round-bottomed pot. A second round depression located north of the hearth was packed with pebbles and may have served a similar function. A shallow pit in the eastern half of the room was filled with an ashy deposit and surrounded by four holes in the floor, possibly stake holes. The function is unclear; it is reminiscent of the four-legged frames used to support modern water jars, although this would not explain the ashy fill.

Outside the building, only those layers which clearly ran up to the Level K wall fragments were assigned to this level. On the north side these comprised a thin charcoal-flecked layer (50U:201), a layer of gritty green and red lumps of possible kiln refuse (50U:205) and a black ash lens (50U:208). On the south side there was a rectangular area of flat stones (51T:152) and a circular pit (51T:153).

LEVEL J

The architectural remains of Level J were very scrappy but enough was recovered to suggest that there may have been a rectilinear structure. A short stretch of walling with stone footings (51V:174) ran north to south. At the southern end it was destroyed in the construction of the Level I building. A single row of stone footings continued further south before turning at a right angle where they were then removed by a later grave. A second fragment of wall (51V:171) ran parallel to the first, some 2.5 m apart. There were two further wall fragments higher up and then three infant burials, all of which were sealed below the building of Level I. It would appear that most of the Level J structures were removed and levelled off to make way for the substantial rebuilding of Level I.

Three graves sealed below the Level I building were assigned to this level. It is possible that these were dug when the Level J building was no longer in use. A period of abandonment might explain why the buildings of Level J were so poorly preserved.

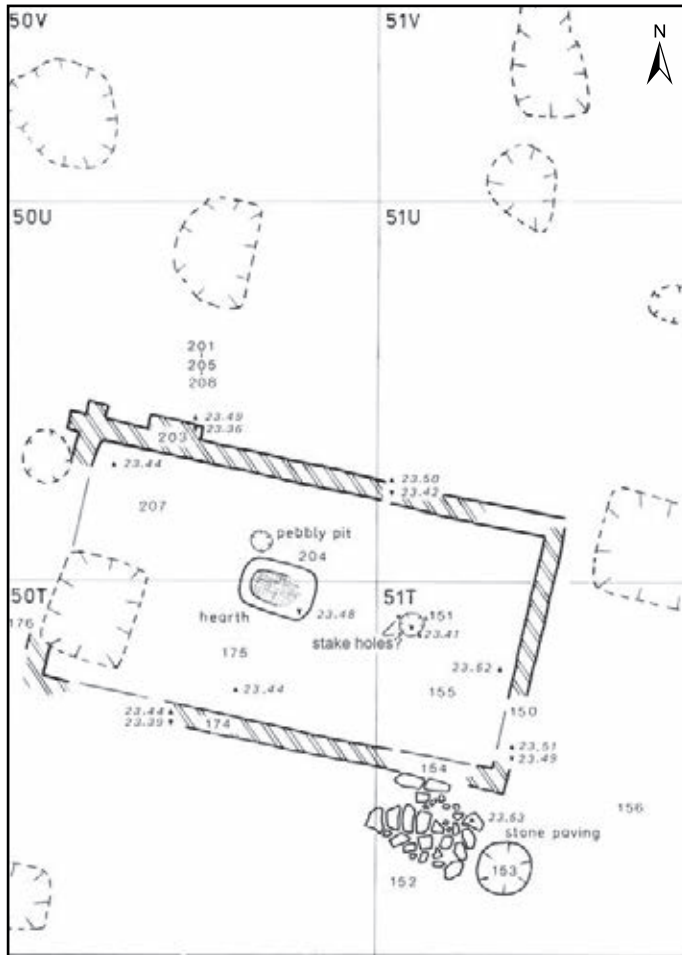


FIG. 2.9. Level K.

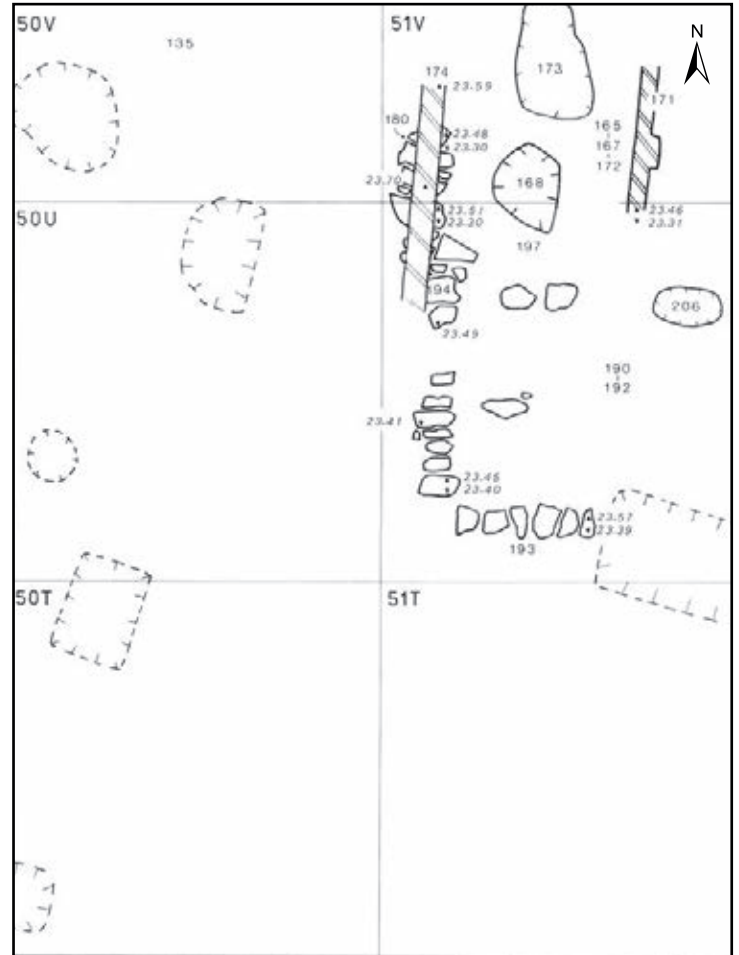


FIG. 2.10. Level J.

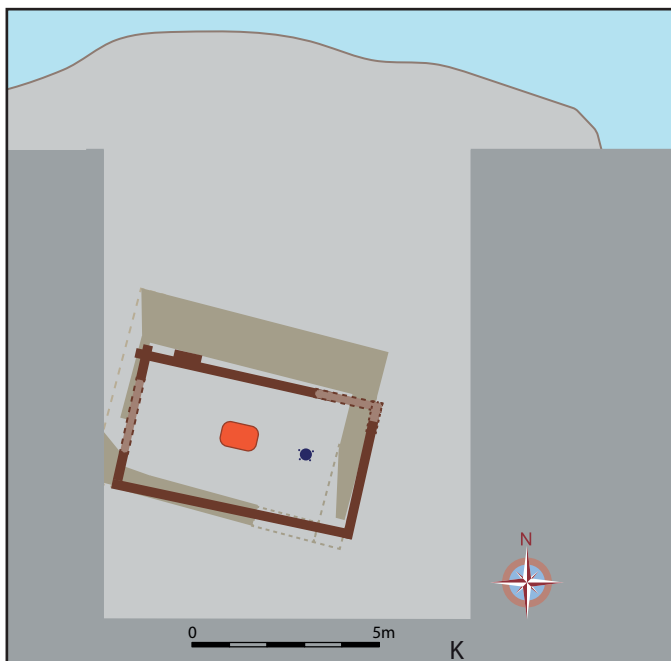


FIG. 2.11. Schematic plan of Level K superimposed over Level L.



FIG. 2.12. Schematic plan of Level J superimposed over Level K.

Grave 51U:206

The grave cut was an oval pit, measuring 50 × 75 cm. This contained in the west half two fetuses, with the heads towards the west end of the grave and facing each other. The bodies had been wrapped in bitumen-coated matting. At the west end of the grave, a potsherd had been placed vertically, outside the matting. At the east end of the grave, a large plain sherd was found covering a third fetus which had been placed in a hemispherical, partly baked, clay vessel.

Grave 51V:168

This grave was a deep shaft with a side chamber to the west which had been cut into virgin soil. The body of an infant lay in this chamber: the head was to the south, with the hands next to the mouth and the legs tightly flexed. It had been wrapped in an oval-shaped mat (51V:168.01), fragments of which were found over the skull and other bones. A necklace consisting of dentalium and frit (sintered quartz) beads was next to the left wrist (51V:168.02). The inclusion of a polished(?) pebble (51V:168.03) next to the knees may have been accidental.

Grave 51V:173

This grave had a c.2m deep main shaft with a smaller burial pit at the bottom dug into virgin soil. It contained the body of an infant, placed with the head to the south, with hands below chin and in a flexed position. The body was wrapped in an oval mat (or pannier?), traces of which were found under the body and over the left elbow, knees and ribs. Two Ninevite 5 Fine Ware cups were found next to the chest (51V:173.01 & 02). There was a belt of beads around the waist (51V:173.03), made up of three rows of frit (sintered quartz) and dentalium shell beads, the latter found only on the lowest row.

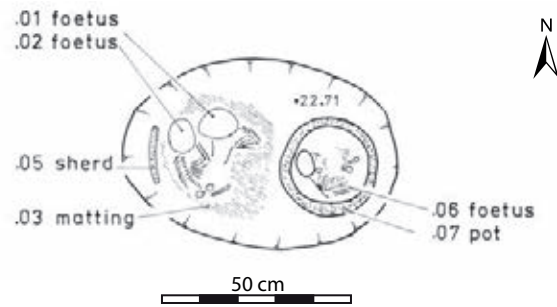
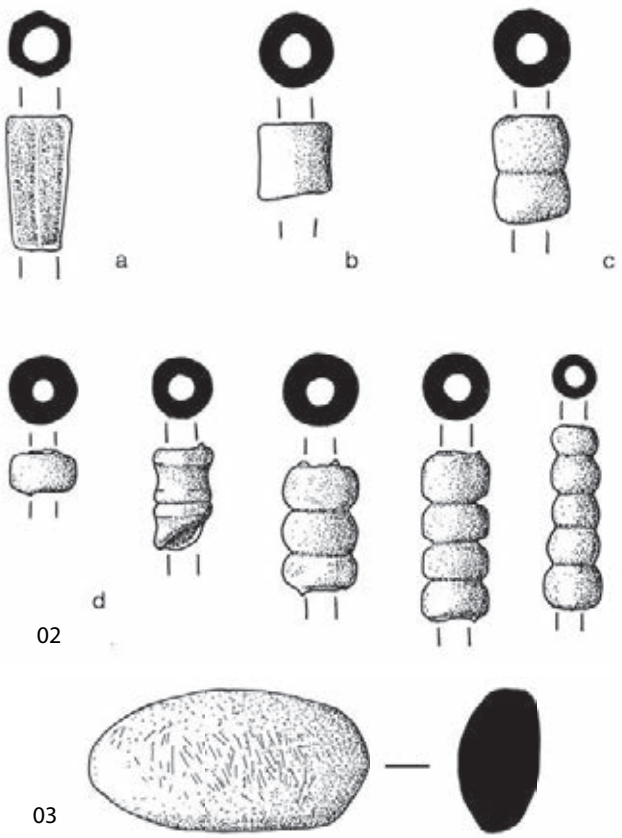
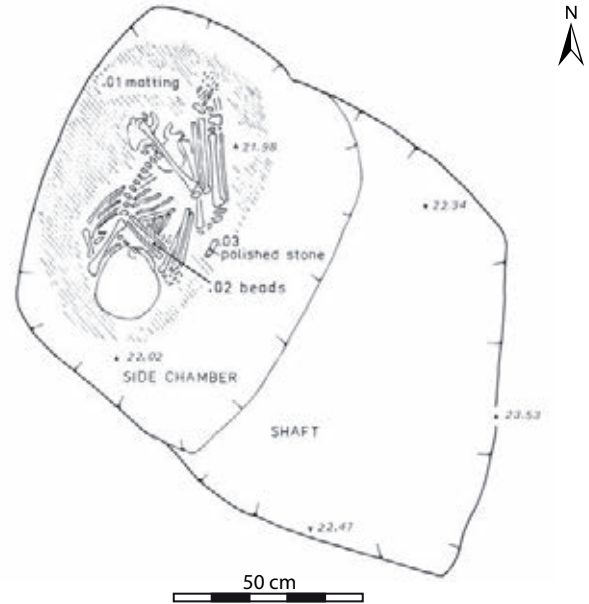
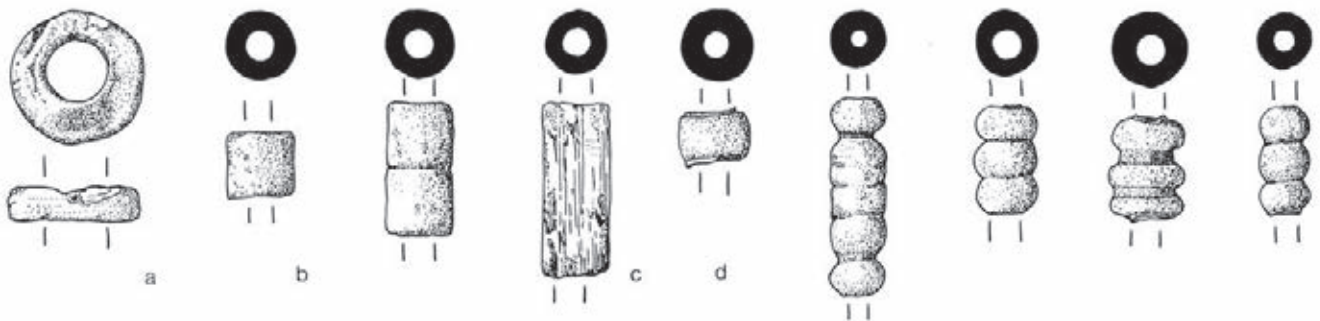
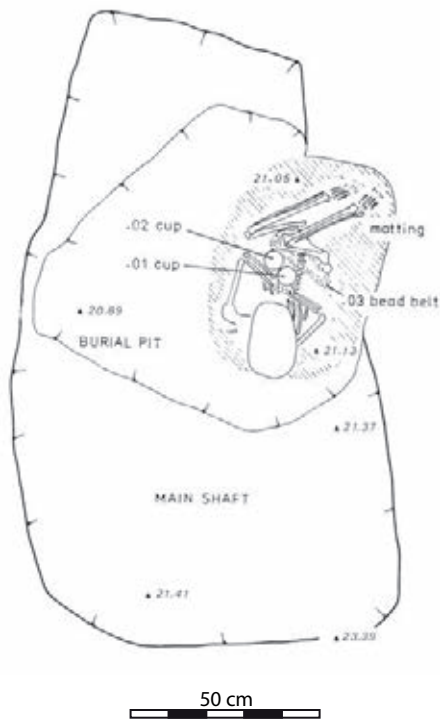


FIG. 2.13. Grave 51U:206.

FIG. 2.14. Grave 51V:168
 02 Examples of necklace beads (total beads in necklace: 102). Scale 2:1.
 a) Dentalium bead. Ht. 0.8. Di. 0.4.
 b) Frit (sintered quartz) bead. Ht. 0.4. Di. 0.2.
 c) Two frit (sintered quartz) beads fused(?) together. Ht. 0.6. Di. 0.45.
 d) Fused frit (sintered quartz) beads.
 03 Polished pebble. Black surface with many surface scratches. L. 7.4. Max. w. 3.8. Th. 2.1. Scale 1:2.



03

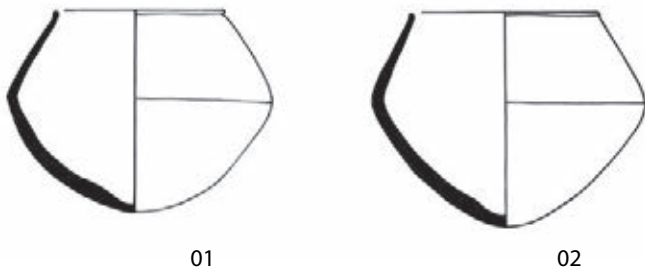


FIG. 2.15. Grave 51V:173.
 01 Pottery cup. Clay: green. Temper: none visible. Rim di. 4.3. Ht. 5.2. Bottom is wet-smoothed. Complete and intact. Scale 1:2.
 02 Pottery cup. Clay: green. Temper: none visible. Rim di. 4.4–4.9. Ht. 5.5. Complete and intact. Scale 1:2.
 03 Examples of beads from the belt (total number of beads: 266). Scale 2:1.
 a) Bone bead. Di. 0.9. Ht. 0.2.
 b) Frit (sintered quartz) bead. Light blue surface. Di. 0.4. Ht. 0.4.
 c) Dentalium bead, with 21 other examples. Ht. 1.1. Di. 0.4.
 d) Fused frit (sintered quartz) beads.

01

02

LEVEL I

The Level I building comprised three adjoining rooms in a row. Only two of these were excavated (Rooms I1 and I2). These were originally one: the plaster of the lowest floor continued under the partition wall and the plaster on the internal face of the north wall also continuous. This may have been a very temporary state of affairs. Two doorways in the south wall suggest that the division was always part of the original plan.

Room I1 measured c. 5.4 × 3.0 m. Its eastern wall was found after the end of the excavations by tunnelling into the section on the edge of the excavated area. The western wall had an internal buttress, the only such example noted in the excavations. In the centre of the room was a mud-brick platform and adjoining hearth (51V:161). The platform was two courses high and on the south face five layers of thick plaster were preserved. The hearth was raised slightly above the floor surface and had been refurbished, an earlier burnt base showing below. A circular depression at the east end of the lower hearth may have been a jar setting, similar to the example in Level K. The floor was very uneven, slumping considerably from east to west. Fourteen bright green replasterings of the floor of the room were noted. All internal wall faces were also plastered with a thin coat of green plaster, sometimes, but not always, slapped onto a bedding of brown mud plaster. Originally, a possible doorway into another room was identified in the northern wall but, on reflection, the surviving wall stubs seem more likely to have been buttresses similar to those found in Level J. In mitigation, the excavation here was right on the edge of the dried-out cliff and there was little deposit left to investigate.

A doorway with two superimposed door sockets in the southwestern corner of Room I1 led into an open space. There was a discrepancy in height between the threshold of the room and the external layers. Not only was this outside area considerably lower but it sloped down significantly from east to west. This necessitated the construction of a narrow external step (50U:191/51U:188), about 5 m long and 60 cm wide to facilitate entry into the room. There were at least three phases to this step: grey bricks were added to the original step at the east end, slapped against the first plaster layer of the original and sealed with a 10 cm band of thick mud which was added prior to a second layer of green finishing plaster. A second step was subsequently tacked on at an angle against the southwestern corner.

Room I2 on the western side measured 4.25 × 2.8 m. Two patches of burning were noted on the floor, but no hearth structure was present. There was a shallow circular pit in the room (50V:134), c. 66 cm in diameter, which had 5–6 layers of plaster on its sides and bottom and was packed with clay. A section of later brickwork (50V:143) built on the highest extant floor might represent a partition wall or perhaps a bench.

West of the steps was a square area of pebbling, one of the later surfaces against the building and perhaps put down to make the area less treacherous underfoot. Further south, there was great compression of the external levels. For example, in the south section of 51U, only 10 cm separated the cut-down walls of Level K from a clearly defined burnt surface belonging to Level H. Nevertheless, layers of plaster against the walls and steps spilled out across the open space and could be traced for some distance to the south, giving at least an approximate correlation.



FIG. 2.16. Level I building (N). Level H step in foreground.

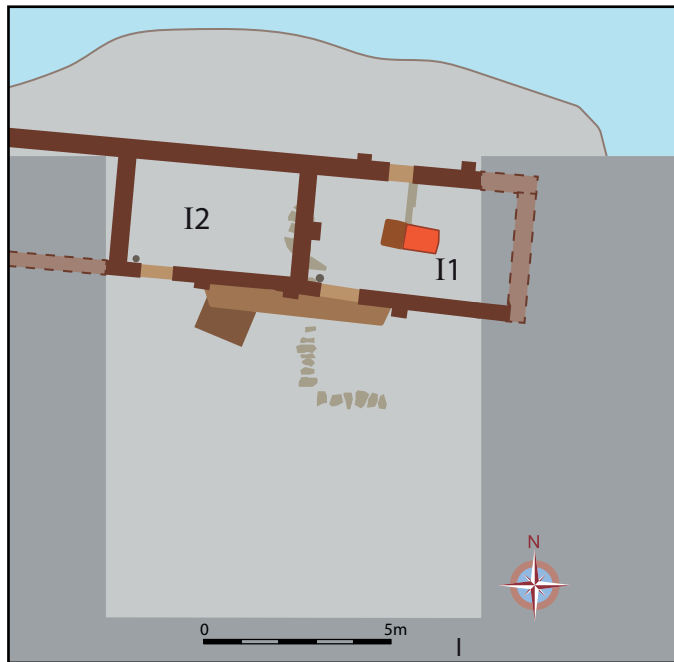
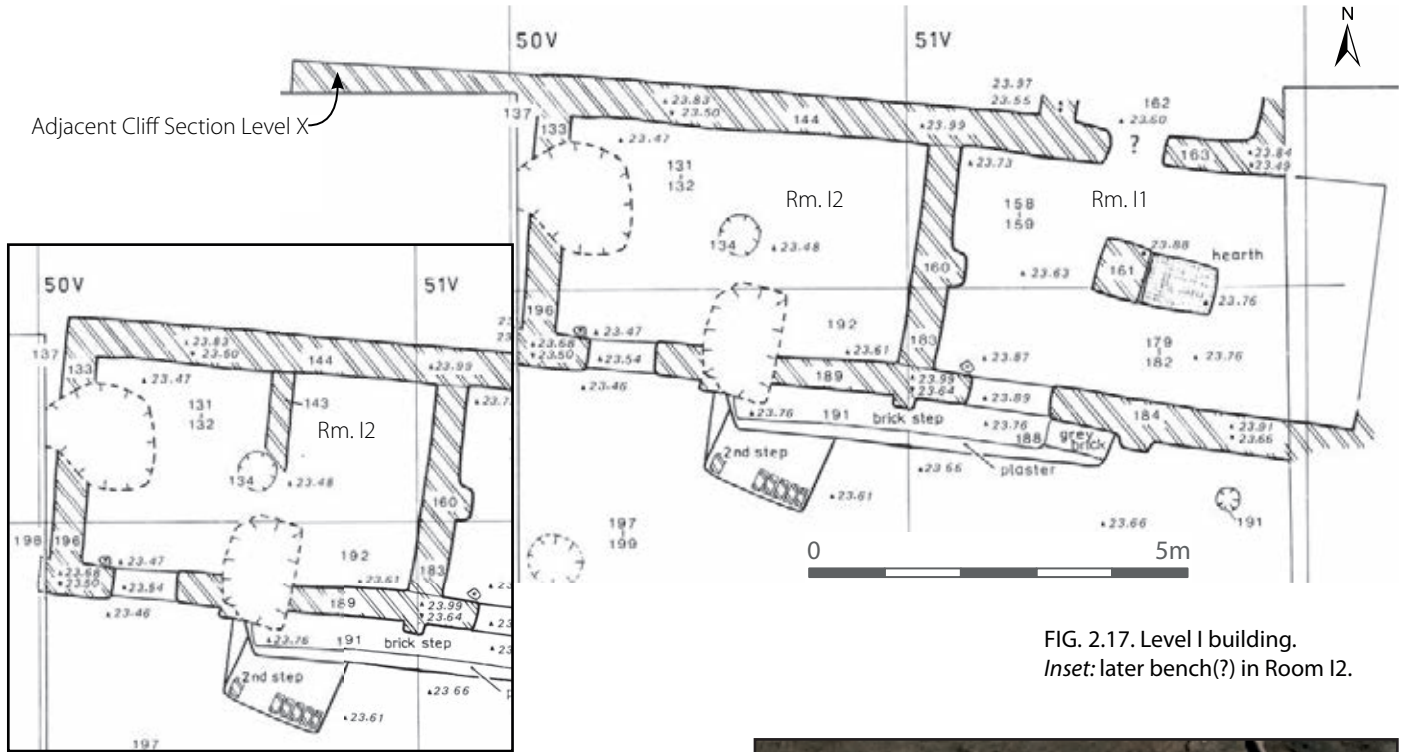


FIG. 2.19. Level I (W). Inset: rectangular platform and hearth.

LEVEL H

The Level H buildings were built directly above those of the Level I structure. The two Level I rooms with the shared wall had now divided into two larger separate buildings, with the eastern one on a slightly different alignment. Many of the features of the earlier building such as external steps, buttresses and a central hearth were repeated. The position of the easternmost wall of Room H1 was originally reconstructed using a width to length ratio of 1:1.56 based on the buildings of Level G. Subsequent excavation into the side of the section produced the fourth wall as calculated.

The walls of this level were preserved in places some 40 cm high, with floors and walls covered in green plaster. External walls had buttresses, sometimes symmetrically placed, for example on either side of a doorway. The floor of Room H1 had eight coats of green plaster, each one interleaved with a bedding of brown plaster. In the middle of the floor was a plastered brick platform and hearth (51U:178). The platform measured 95 × 85 cm and had a small ledge on the hearth side. On the floor and next to the hearth lay four crescentic lugs from cooking pots, evidence of a series of unfortunate domestic accidents. East of the hearth was a small firepit with two shallow internal depressions (51U:180).

In neighbouring Room H2, the hearth lay in the unexcavated section where it was just visible. Much of the floor of the room was scorched, and the face of the east wall was blackened and the plaster burnt. Some of this burnt debris was also found outside where it presumably had been thrown when the hearth was cleaned out in antiquity. In the floor was a small depression with the sides packed with sherds (51U:182).

Linking the two buildings on the south side was a step (50U:190/51U:186) 10.25 m long, 80–85 cm wide and 20 cm high. It had been constructed with neatly-laid bricks, and ran between both doorways and around the external buttresses. A lower step was next to the entrance into the western building. These steps were necessary because, as in the preceding level, the buildings were elevated some 30 cm above the external surfaces. The difference between internal and external levels is demonstrated by 50U:193 which is the residue of the burnt material originally deposited on the room floor: this was at 23.80 m on the floor, at 23.65 m against the step and 23.54 m further south. The step may also have served as a retaining wall behind which the debris of the Level I building was levelled off prior to construction. This is suggested by a layer of bricky material that ran under the wall of the building but up to the step.

LEVEL G

While the Level H buildings were still in use, a single-room building (Room G1) was constructed to the south. Comparative levels suggest that by this time the step into the Level H building was no longer required due to the build-up of deposits in the open space. Room G1 measured internally 4.5 × 2.8 m. The walls were preserved no more than two courses high. The south wall (50T:167) was constructed

of a course of two rows of stretchers, followed by a course of one row of headers. Remains of external buttresses were found on the southern and eastern walls, but no doorway was identified. Within the room was a brick platform and hearth (50T:168), similar to the earlier examples in Levels H and I. The platform was made of two large mud-bricks, each measuring 58 × 33 cm, and bonded with bright orange mortar up to 1.5 cm thick. The hearth was semicircular at one end and had a burnt base and a plastered lip.

Against the external face of the east wall was a poorly preserved mud-brick bench, or possibly, on analogy with the Level H building, a step (50T:164). Further east was an oval-shaped patch of hard, orange mud defined at its edge by a ridge or lip of mud plaster (51T:145). It was originally thought that this oval might represent a threshing floor, although there were no impressions or visible traces of organic matter.

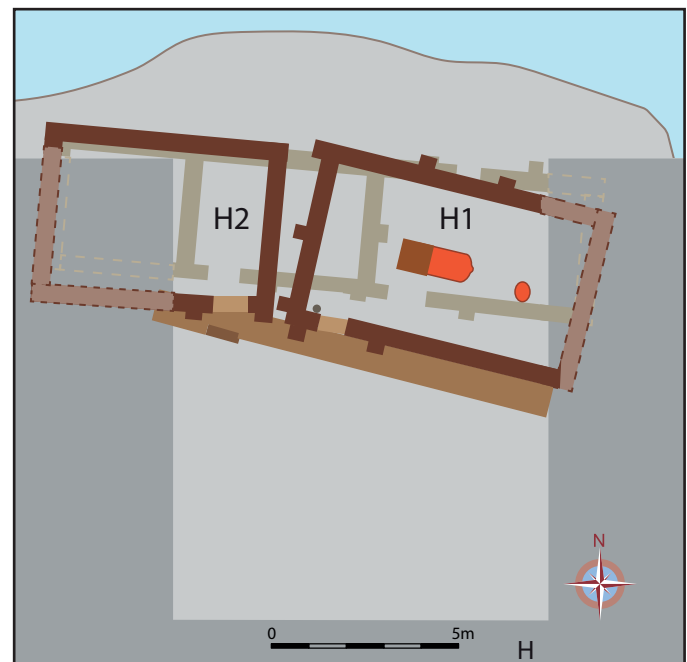


FIG. 2.20. Schematic plan of Level H superimposed over Level I.



FIG. 2.21. Level H, Room H1 (E).

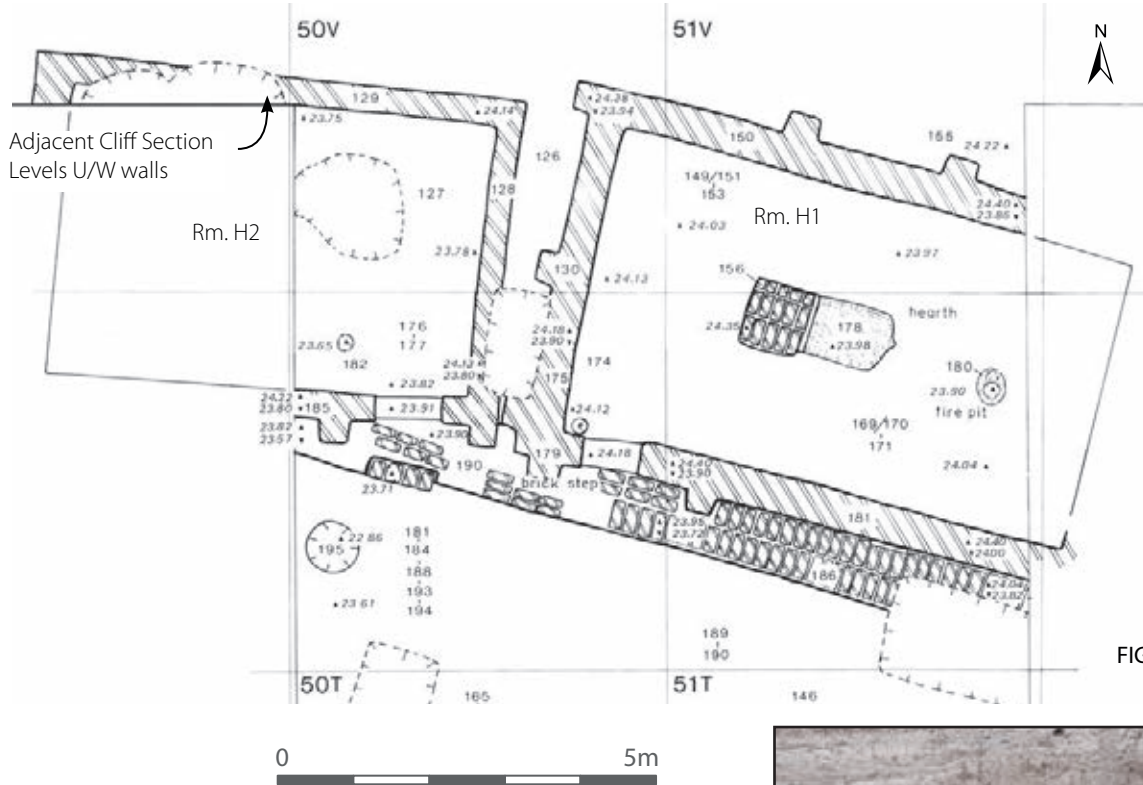


FIG. 2.22. Level H.



FIG. 2.24. Plastered oval in Level G (E).

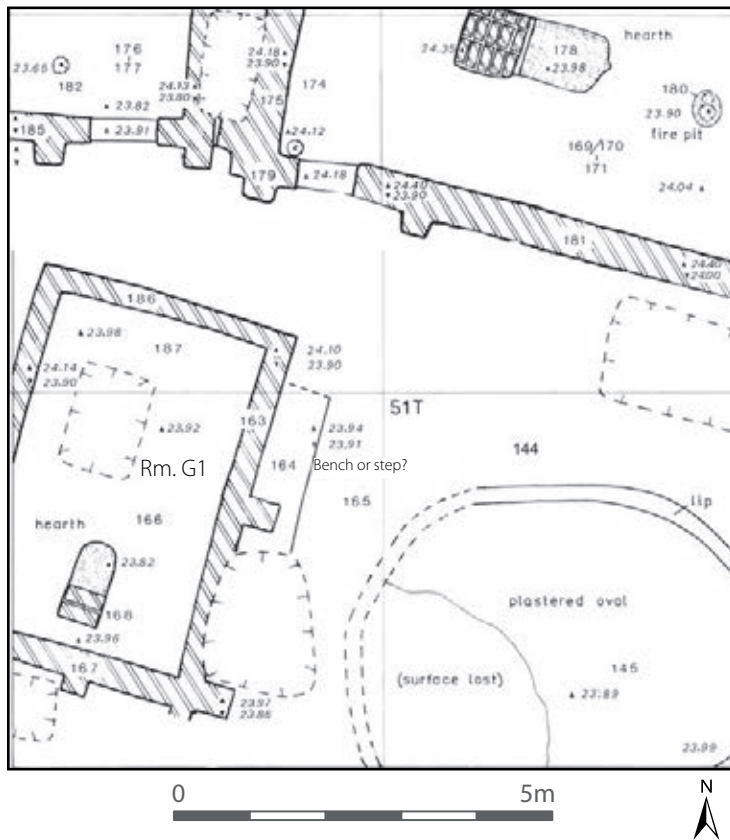


FIG. 2.23. Additional room of Level G.

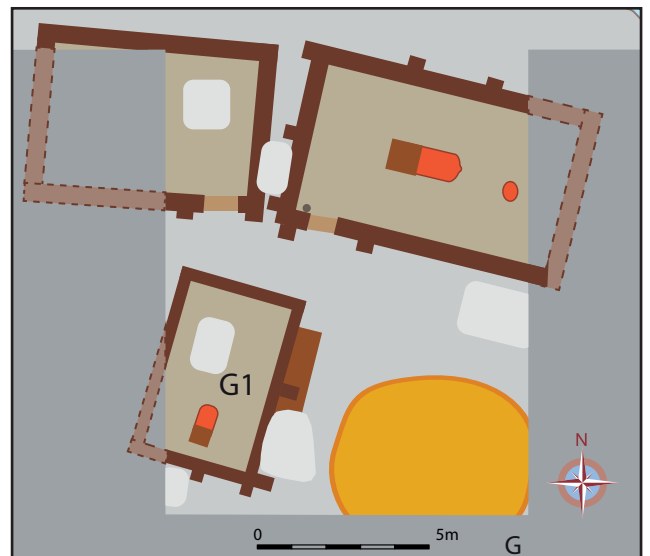


FIG. 2.25. Schematic plan of Level G.

LEVEL F CEMETERY

Sometime after the decay of the Level G structures, the area was used for burials. Five graves were dug into the abandoned buildings within the Ninevite 5 Sounding, as well as two more in the adjacent Cliff Section (49V:29 & 50V:28) and one further to the east in the Cliff Section (54V:23) which was particularly rich in grave goods (Roaf 1983: 74 & fig. 5). Detailed analysis of the human remains from these graves can be found in Appendix 1.

Grave 50T:172

This grave was a double burial with a rectangular grave shaft c.1 × 1.4m wide and c.1.6m deep, and side chambers to the west and to the south.

The western chamber measured 1.15 m north to south and was c.0.50m high. After the body had been deposited in it, the side chamber was blocked with a mud-brick wall, which was at least three courses high. The bottom course of bricks was found c.8 cm further east than the higher ones which were perhaps displaced when the main shaft was filled in. It was possible to articulate individual bricks in the second course and these measured c.24/25 × 11 × 9 cm. Two bricks of the third course had fallen over onto the left shoulder and arm of the body, partially crushing the skeleton.

The western side chamber contained the body of an adult female (50T:172.01). The skeleton lay on its back with head to the north; the arms were bent so that the hands were together near the left shoulder; the legs were tightly flexed with the feet together. The body lay on, or had been wrapped in, matting. Impressions of this matting were observed with alternating parallel horizontal and diagonal strands. Next to the left shoulder of the skeleton was a copper pin with a decorated head (50T:172.04), presumably fastening a garment such as a cloak.

The southern side chamber measured 1.0m across, and was 0.45 m high and 0.40m deep. It was sealed off from the main shaft by a mud-brick wall four courses high, of which two courses remained in place. Again the higher courses of mud-brick had slumped a little. Articulated bricks measured 22 × 11 × 9 cm and 29 × 11 × 9 cm. This chamber contained the body of a c.9 year old girl (50T:172.02), partly crushed by the toppled bricks of the partition wall. The body lay on its back, with the head at the west end; the arms were bent with the hands together on the chest; the legs were also tightly drawn up to the chest, with the feet apart. Badly decayed traces of matting were visible over all of the bottom of the side chamber and up the sides to a height of c.10 cm. No grave goods were found in this side chamber.

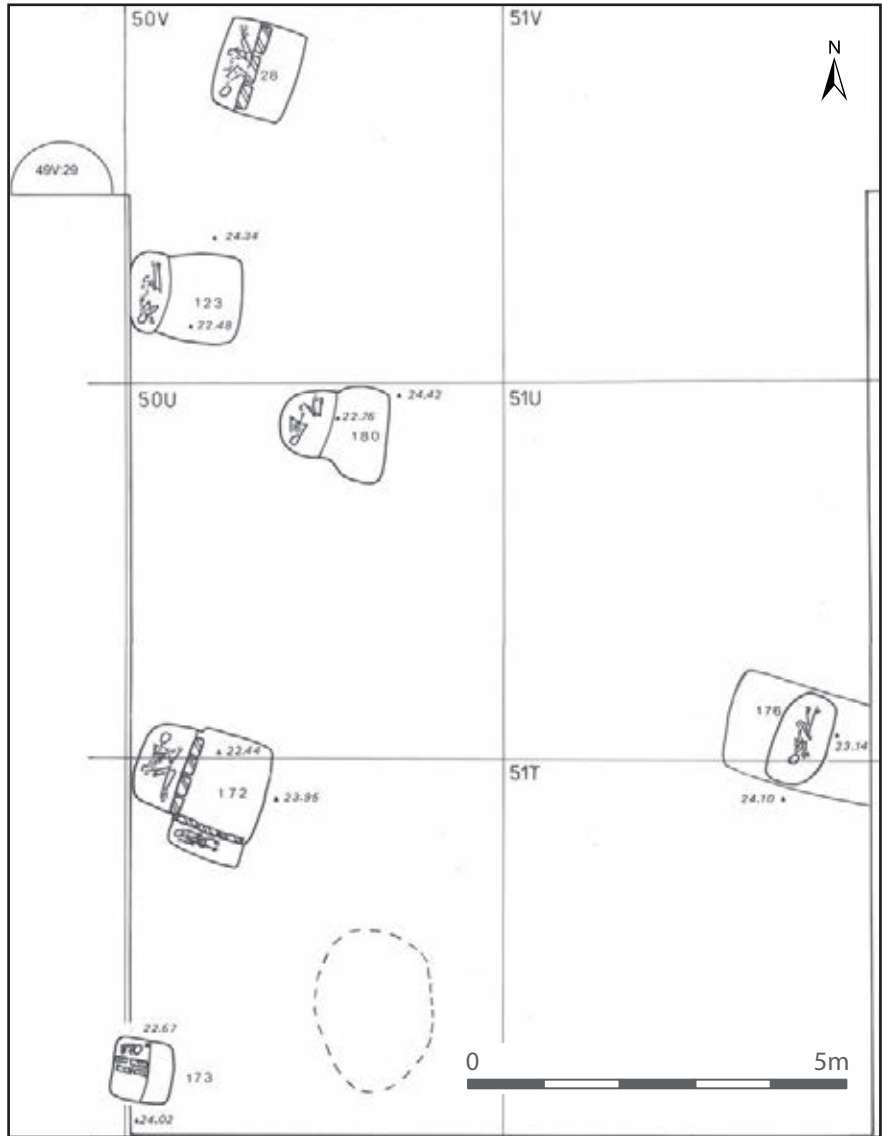
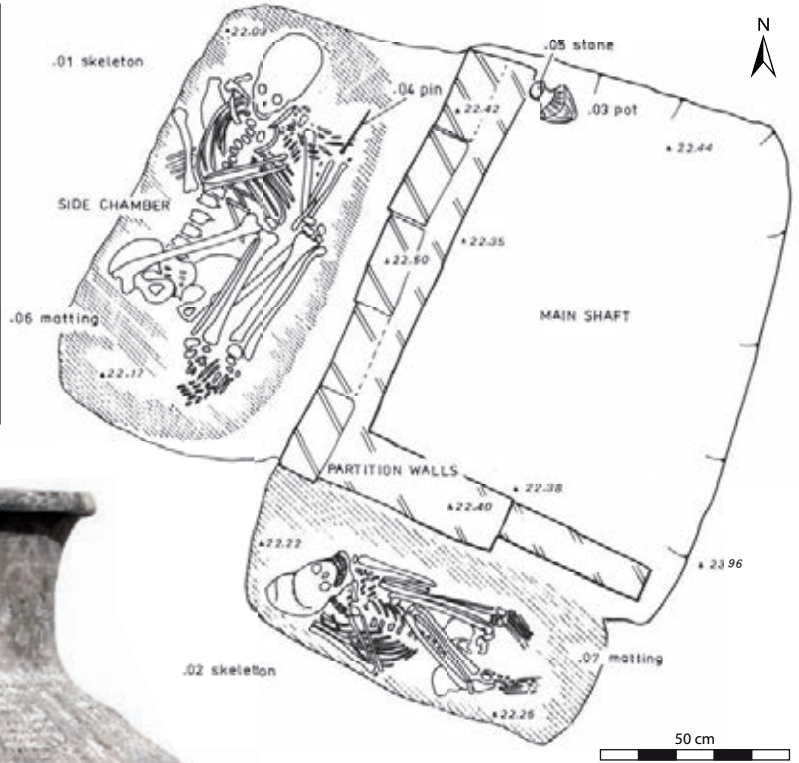


FIG. 2.26. Level F.

Both chambers contained extensive collapse from the sides and roofs and, on some of this debris, traces of the original pick marks survived, suggesting a tool with a blade c.3–4 cm wide.

At the bottom of the main grave shaft was a single excised Ninevite 5 jar, with a flat pebble sealing its mouth (50T:172.03 & 05). This lay above the original bottom of the shaft, on a layer of silty fill.

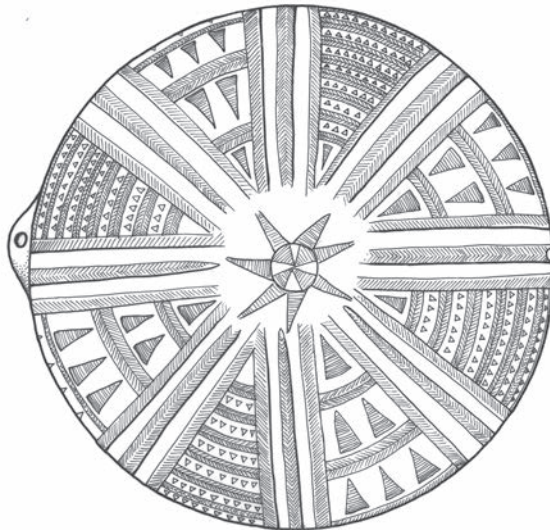
The stages of construction of this grave were as follows. After the main shaft and side chambers had been dug, the first course of each partition wall was laid. Then the bottom of the main shaft where it dipped down into each side chamber was levelled off. The matting and the bodies were then laid in the side chambers, with the matting running up the side of the bottom course of mud-brick. The side chambers were then bricked up completely and the excised jar placed in the northwestern corner of the main shaft. The main shaft was then filled with compact, orange, bricky fill. Subsequently, the roofs and partition walls of the side chambers collapsed.



03



04



05

FIG. 2.27. Grave 50T:172
 03 Clay: grey. Temper: Small inclusions of limestone and mica. Ht. 17.5 Rim di. 9.6. Excised decoration. Four lugs, one only intact. Scale 1:2.
 04 Cu pin. Di. of head 0.4. L. 13. Head decorated with grooves. Circular in cross-section. Scale 1:2.
 05 Natural pebble. Used as jar stopper. Found inside Jar 03. Max. di. 7.3. Scale 1:2.

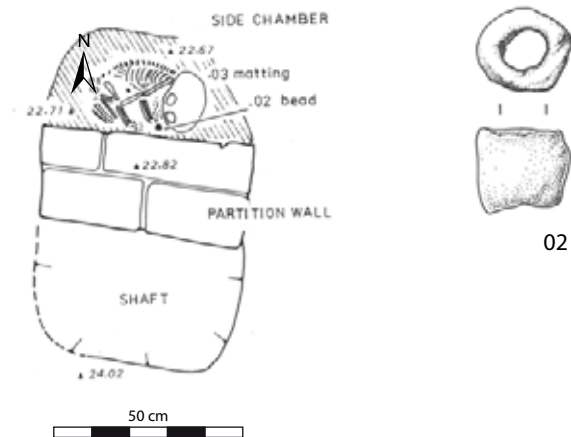
Grave 50T:173

This grave had a main vertical shaft, c.0.60 × 0.55 m and 0.95 m deep, which partly lay in the unexcavated west section of the Ninevite 5 Sounding. A side chamber on the north side was bricked up with a wall two bricks wide and originally three courses high. The bricks of this wall had collapsed into the side chamber on top of the body as had some of the roof of the chamber. The grave contained the body of a 2–4 month old infant (50T:173.01), lying on its left side with the head at the east end. The legs were tightly flexed and the arms bent, with both hands in front of the face. A single bead (50T:173.02) was found near the neck below the jaw. This was the only grave good. Some poorly preserved traces of reed matting were observed under the body.



Grave 50U:180

This grave was a rectangular shaft, 2.9 × 1.5 wide and 1.9 m deep, with a side chamber to the west. The body of an adolescent (50U:180.01) lay in the side chamber, in a flexed position, with the head towards the south, facing east; the right arm was straight, next to the side; the left arm was across the chest. Some fragments of reed matting were noted under the skull. It is possible that a collapsed section of wall noted in the grave fill of the side chamber was part of a partition wall similar to that found in graves 50T:172 and 173. One bone needle or pin was found lying across the ribs (50U:180.02).



Grave 50V:123

A grave shaft, c.1.3 × 1.3 m, had been dug to a depth of 1.6 m and an oval side-chamber scooped out along the western edge. The side chamber measured c.1.3 m north to south and 0.7 m west to east and the bottom was c.30 cm below that of the main shaft.

Traces of rushes were found over this side chamber. They had been laid in the same direction, southwest to northeast, and sloped up on the east side over the lip of the main chamber. On the west side, the rushes turned sharply upwards, marking a crease at the back of the body. The body of an adult female, 20–24 years of age, lay on the right side, in a crouched position; the head faced east; the hands were drawn up in front of the face. A copper pin with a decorated head (50V:123.01) was the only grave good.

FIG. 2.28. Grave 50T:173
02 Frit (sintered quartz) bead. White with decayed surface. Roughly cylindrical. Max. di. 0.55. Max. length 0.55–0.60. Scale 1:1.

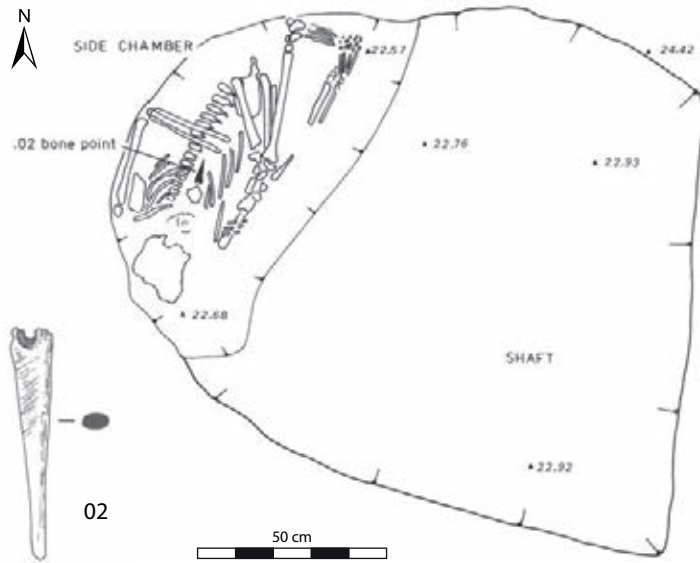


FIG. 2.29. Grave 50U:180
02 Bone needle. Broken at both ends. Remains of drilled hole at top. L. 5.96. W. 0.44. Scale 1:2.

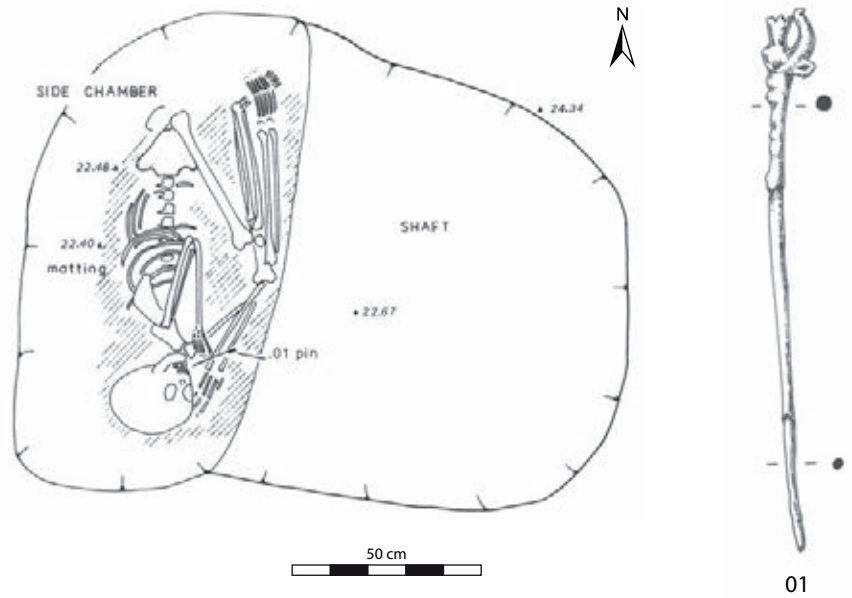


FIG. 2.30. Grave 50V:123
01 Cu pin. Complete and intact. Heavily corroded with unclear motif on head of pin, possibly an animal (or bird?). L. 14.1. Max. di. of shaft 0.48. Scale 1:2.

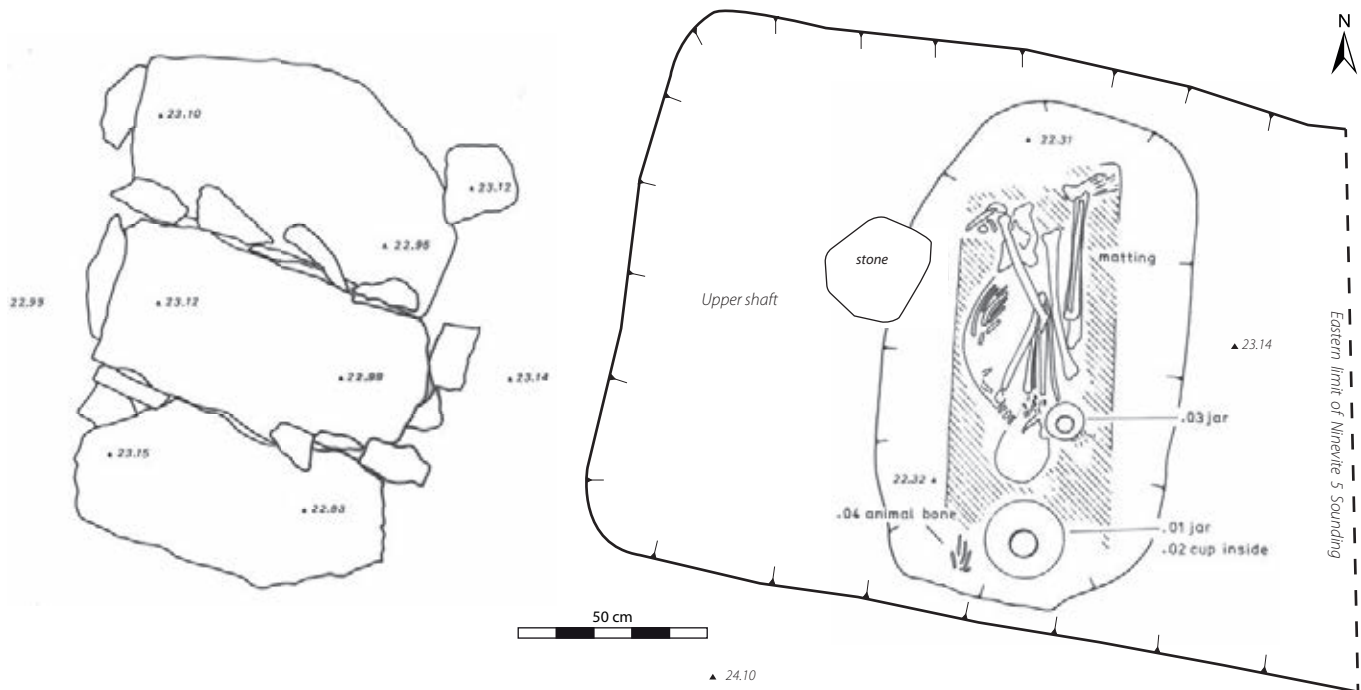
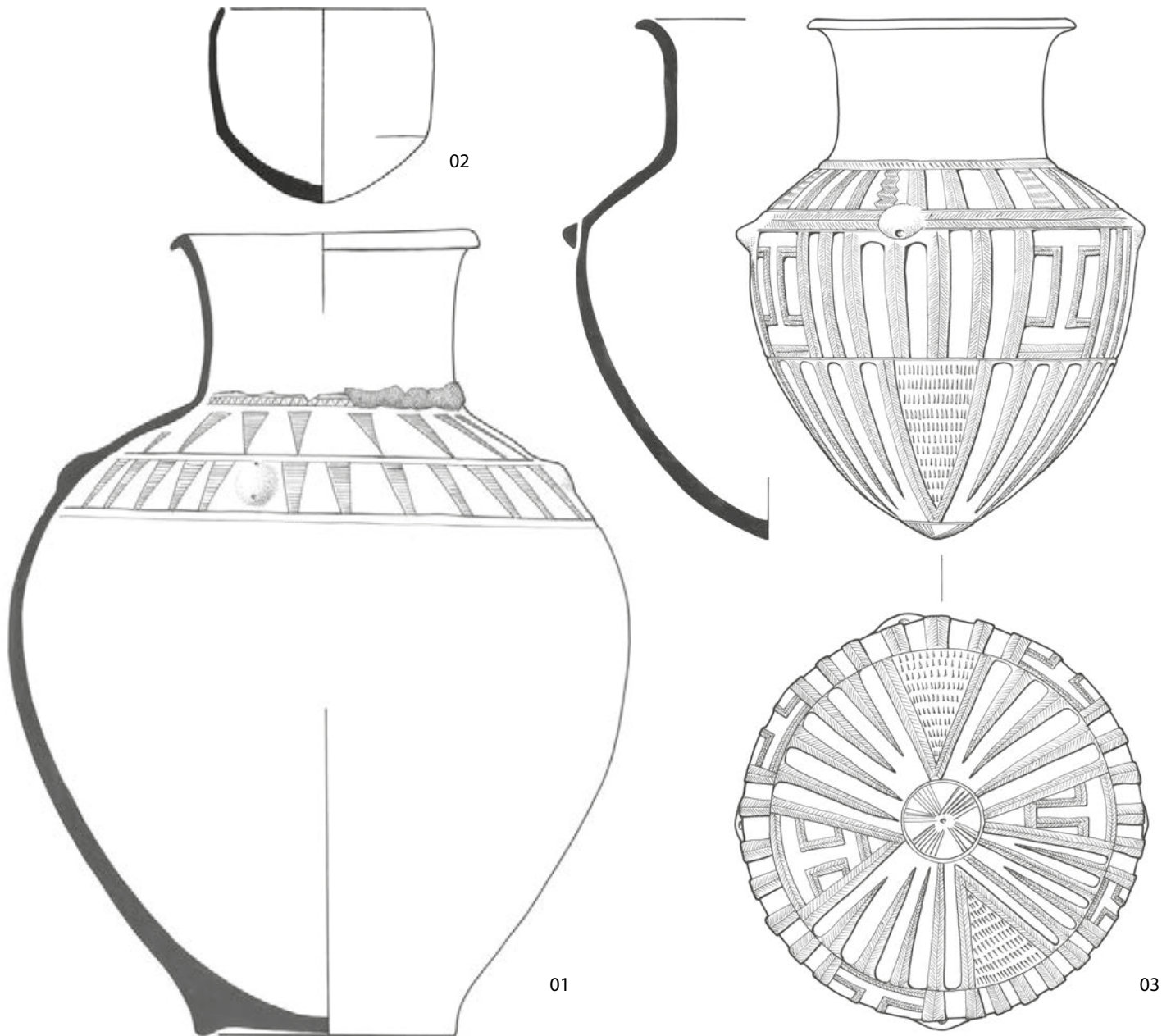


FIG. 2.31. Grave 51U:176

01 Jar. Clay: grey. Temper: fine limestone and mica. Rim di. 8.6. Ht. 16.8. Four lugs. Incised decoration. Complete and intact. Scale 1:2.
 02 Cup. Clay: grey/blue. Temper: none visible. Rim di. c.6.5. Found inside 01. Scale 1:2.

03 Jar. Clay: grey. Temper: Small inclusions of limestone and mica. Ht. 17.5 Rim di. 9.6. Four lugs, one only extant. Excised decoration. Scale 1:2.



Grave 51U:176

A rectangular upper shaft had been dug through the Level H step into bedrock. This upper shaft was 1.2 m deep and measured c.2.0 × 1.3 m. Residual bedrock dug in the excavation of the shaft was observed piled up next to it. A lower oval chamber, 80 cm deep, was cut into bedrock and after the body had been deposited, the chamber was sealed by three large capping stones wedged in position with pebbles (a similar technique was noted in grave 49V:18 along the Cliff Section).

The body of a 60–70 year old female lay in a crouched position on its right side with the head at the south end

facing east; the arms were bent with the hands close to the face. Traces of a rectangular(?) reed mat were noted under the body. An excised jar lay next to the face and hands (51U:176.03) and to the south of the skull was a second jar (51U:176.01) which had been broken in antiquity and then mended with bitumen. Inside this lay a small plain cup (51U:176.02).

At the south end of the grave, next to jar 51U:176.01, were some animal bones sitting upon traces of reed matting. These were not intrusive but had been deliberately placed in the grave.

LEVEL E

Prior to the construction of the Level E building, the area was levelled off. Either the rooms of Level G were in a derelict state at this time, with some walls partially visible, or the walls were revealed during the rebuilding, since the north and south walls of the Level E building were partly on top of and on the same alignment as those of the earlier level.

The building had only one room. It is just possible, although unlikely on analogy with other buildings, that it interconnected with rooms to the east beyond the limits of excavation. There were two floors separated by c.10 cm of brick and mud packing. The higher floor was of burnt green plaster with a deposit of burnt ashy material over its eastern half some 2–5 cm thick. Some stratification within this deposit was observed, with the lower material containing some thin cakes of organic material, perhaps used as fuel.

A small subcircular hearth with a base of friable burnt material and an orange clay lining lay towards the eastern end of the room. Against the north wall at a curious angle were two parallel lines of four bricks approximately 24 cm apart. If I had not written such a detailed account of this feature thirty-five years ago I would now be doubting its existence, since I cannot think of any other example where within a rectangular room bricks have not been laid either parallel or perpendicular to the walls.

The southern wall of Room E1 was preserved 30–40 cm high at the eastern end, but was not easy to distinguish from the surrounding fill. It was of unusual construction. The outer face was made up of one row of bricks set on edge while the inside face consisted of large, very poor quality, grey bricks. The core of the wall was formed of fragments of broken bricks and mud. After the top 20 cm of the wall had been peeled off, two oval-shaped niches appeared in the north face. These were 38 cm wide and were set 43 cm into the wall. Their function remains unexplained; they began at floor level and may have been alcoves which were subsequently blocked in.

The doorway and the southwestern corner of the building were obscured by the later entrance and walls of Level D. The fragmentary remains of a circular *tannur* lodged in the wall here suggest a hiatus between the collapse of Level E and the levelling which preceded the construction of Level D.

As was the case with many of the levels, the internal floors were higher than the external layers and this is reflected in the slope up to the door of an area of pebble pavement 50U:168). This was the result of continually building on the same plan where a great volume of old brickwork was pushed inwards, not compacting very well, and thus forming its own small tell within a tell.

During the lifetime of the Level E building, 40 cm of deposit accumulated outside as a series of rubbish and ashy layers, interspersed with patchy mud surfaces. In the lower deposits were two installations, a bench/bin and a firepit. The bench (51T:141) had undergone several alterations and replasterings. It had originally been constructed with a lip of grey clay with a central depression; the lip was faced and

plastered over with three layers of green and orange plaster. Subsequently stacked against its north face were two lines of bricks set on edge and covered with mud plaster. A central rectangular depression suggests that it may have been a bin rather than a bench.

To the west was a small keyhole-shaped firepit with a burnt clay lining. It was packed with burnt earth and collapse from the side walls. The bench/bin was then built over by a wall (51T:140) that just intruded into the excavated area and may have been the corner of another building.

Two rectangular mud platforms were then built in the courtyard (51T:137 and 138). These were preserved only 5–9 cm high and the western edge had been destroyed by the later Level D structures. The northern platform survived 5 cm high and measured 1.7 × 1.05 m. A small square depression in the centre contained a dark grey ash deposit. The southern platform was slightly smaller at 1.6 × 0.95 m. It is possible that these two structures were part of a single platform, although there was a clear area of softer fill running between them. Alternatively, this fill might have been connected with some stones, perhaps part of a drain, found under a wall of Level D although no waterlaid deposits were detected in the vicinity. To the east was another rectangular structure built of mud-bricks with a plastered face. (51T:136)

Further west in the courtyard, beyond the platforms, the character of the deposits changed and the narrow lensing of the rubbish strata gave way to thicker and more sterile deposits which produced much less pottery. To the west of the building, the area was open and no walls were observed.

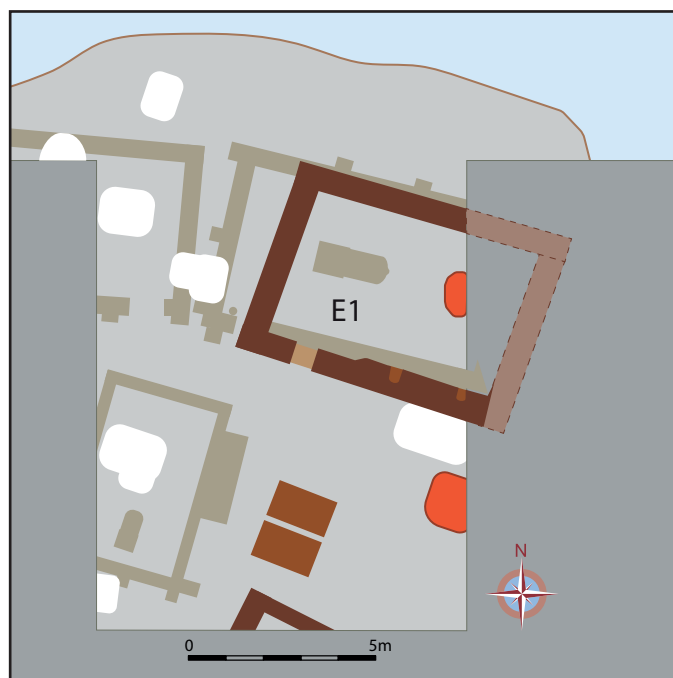


FIG. 2.32. Schematic plan of Level E superimposed over Level F cemetery and Level G buildings.

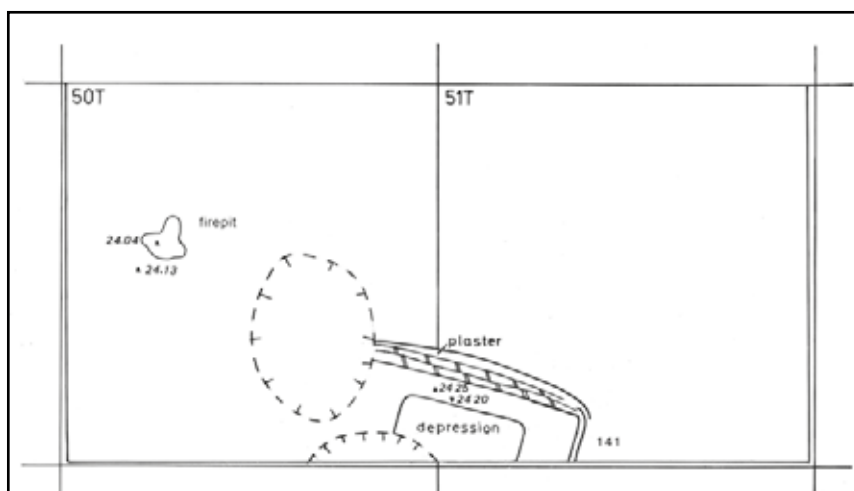
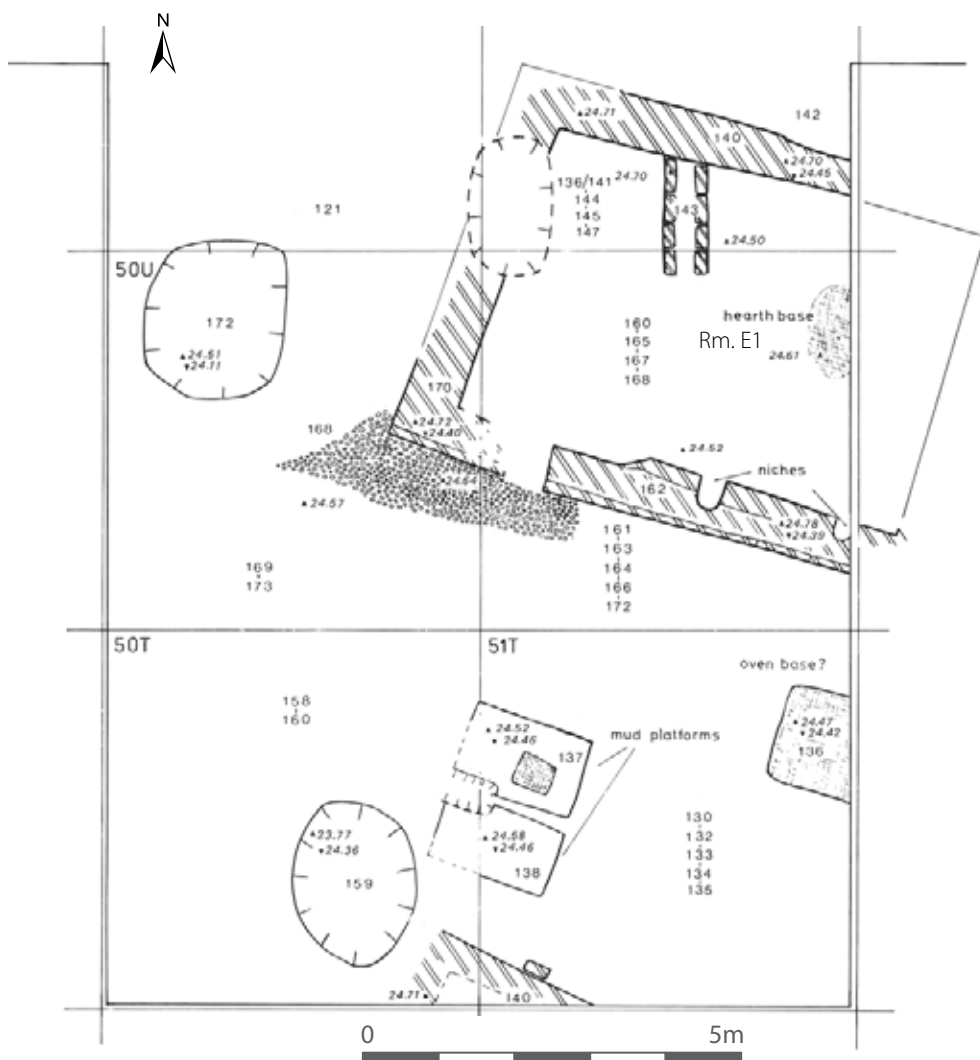


FIG. 2.33. Level E, with underlying platform shown below.

LEVEL D

The Level E structure was rebuilt, retaining much the same dimensions and with the alignment shifting only very slightly. The plan of this building was the only one of the sequence where the southeastern corner was not recovered in excavation or by tunnelling before the site was flooded. Consequently its exact size is not known.

Within Room D1, the lowest floors comprised a series of 8–12 green clay plasterings interspersed with some ashy lensing. These were thin coatings of plaster, measuring altogether only 6–8 cm thick. In the middle of the later plasterings in this series was a subrectangular hearth (51U:152) with a slightly raised and sloping rim which had been mud-plastered; each time a new floor was laid, the rim of the hearth was also replastered. The centre had a burnt base and towards the south side a small yellow clay-lined channel had been cut through the final surface of the hearth.

The internal floor level was subsequently raised by laying a single course of bricks mixed with rubble over the old floor. This was probably done to keep the floor higher than the courtyard. Fragments of two more plaster floors were observed. When the floor was raised, the area around the hearth was carefully delineated and left so that it was sunk below the new floor. After a time it became necessary to renew the base of the hearth and at least two further bases of hard gritty clay were laid down over the original.

The higher floors associated with this level dipped down at the south end of the room under the weight of the superimposed Level C wall. In the northwestern corner, a small square brick bin was built on top of the final plastering of the floor (51V:133). It was preserved three courses high and the sides were built of a single row of bricks. The interior was filled with loose grey material mixed with broken brick.

The north wall of the room was a two-brick thick wall, surviving three courses high, with an upper course of mostly square bricks (c.22 × 20 cm) set in brown mortar. Along the north face, it was abutted by a wall running north to south. This belonged to rooms along the Cliff Section which, although the evidence is incomplete, appear to have been isolated from Room D1 with no interconnecting door or passage.

The doorway in the southwestern corner had a single large brick for the threshold. Two pivot stones, one above the other, were next to the western jamb.

An innovation in this level was the construction of a wall next to the doorway which ran down to two substantial bins and sealed off access to Room D1 from the west (50U:167). It was the first of a series of superimposed walls present throughout the rest of the sequence. A door in this wall provided access in and out of the yard.

To the south of this wall, there was a rectangular structure made up of two small storage bins (50T:148 & 149). This was poorly constructed of broken bricks and rebuilt twice. Initially, the front and back walls were rebuilt some 8–10 cm to the northwest. It is not clear how high any of these walls stood originally but the west wall may have stood higher than the others, forming a boundary

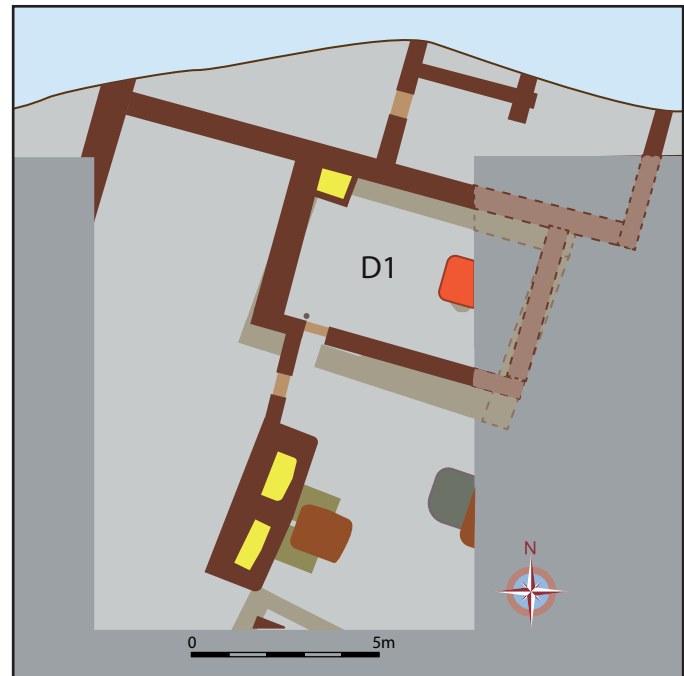


FIG. 2.34. Schematic plan of Level D superimposed over Level E.

wall to the courtyard on that side. To the south of the bins, a short segment of wall intruded into the excavated area, mirroring that of Level E.

In front of the storage bins was a subrectangular platform (51T:120), similar to the Level E platforms. This was made of mud and measured 1.48 × 1.33 m. It survived 9 cm high and had a raised rim with a large central depression. This had received at least three replasterings of clay with signs of burning. Overlying these was a final deposition of ashy material. There was no sign of any superstructure so that it may have been a mud platform used either for cooking and processing whatever material was stored in the two bins beside it.

In the courtyard next to the doors was a rectangular area of pebbling (51U:145). Further south, the courtyard layers consisted of a series of mud surfaces mingled with charcoal, ashy lenses and burnt brick. Associated with the earliest of these was a brick feature, perhaps another bench, which disappeared into the east section (51T:126). It survived only one course high; traces of green plaster were found on the face.

Stake holes were noted in the courtyard (such as 51T:124). Typically, these were 3–5 cm in diameter, mud-lined where the stake had compressed downwards the mud layer through which it had been driven and filled with softer grey ash which had fallen in after the removal of the stake.

Behind the bins to the west, there was a series of dirty, thick deposits (50T:147, 150 & 151) dipping unevenly down from north to south. As in Level E, the area west of the main building was devoid of any installations. A mud-brick wall in the corner of 50V was a continuation of a wall found in the Cliff Section. It ran parallel to the western wall of Room D1 into the baulk. Whether it then ran further south and formed the western edge of an enclosed external space is not known.

LEVEL C

The single-room of Level D was replaced in Level C by a two-room building on the same alignment. Room C1, the larger room, had a series of at least six green plaster floors and in the middle a burnt hearth in the same place as the Level D example. Accumulated over the floors were patches of ashy material spilled from the hearth. The north wall of this room was constructed of poor quality bricks and had been directly built over the wall of the Level D building. The southern wall had originally been a narrow two-brick wide wall, c.32–35 cm wide, but subsequently a 3–4 course high bench had been constructed against it in such a way as to leave three plastered bins within (51U:134). The complete example measured 1.01×0.49 m and was about 20 cm deep. It had been lined with a total of fourteen coats of green clay plaster which had run over the southern lip of the basin and down the face of the bench. Thirteen replasterings were counted in the bin near the east section and eight in the smaller one next to the doorway. These bins were subsequently bricked in to provide a firm foundation for the walls of Level B. The discovery of these concealed bins vindicated our practice of dismantling the walls course-by-course, a procedure which cost much time and effort and was for the most part without benefit.

The doorway had a threshold of plastered brick and a limestone door socket close to the western jamb. The plaster of the doorway extended a little way into the courtyard and had been compressed by two courses of mud-bricks laid subsequently. In the southwestern corner, the outer face of the wall had been rounded off and plastered to make access easier to the smaller room to the west.

Much of the internal floor of Room C2 had been dug away by a later pit, but it was noteworthy for a small brick bin in

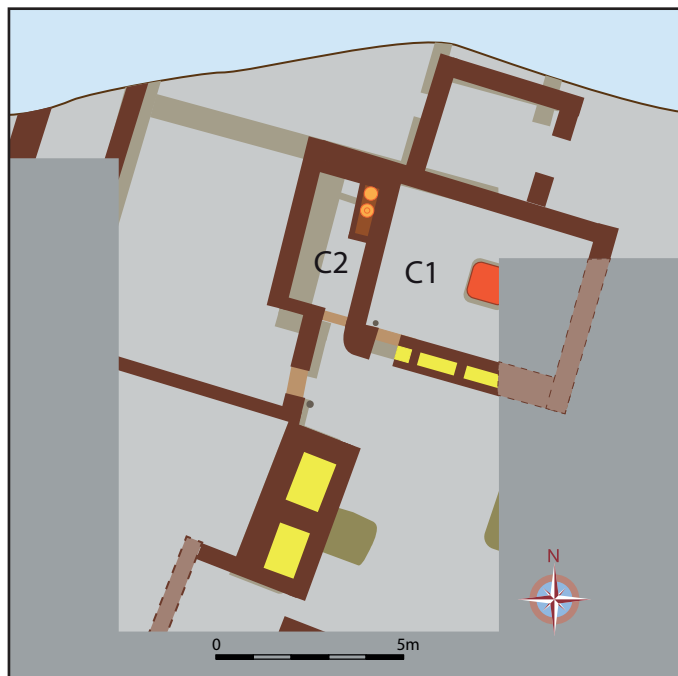


FIG. 2.37. Schematic plan of Level C superimposed over Level D.

the northeastern corner which contained the bottom halves of two coarsely-made jars (51V:118).

To the south, in the main courtyard, the pebble pavement of Level D was relaid. The plastering of the threshold of the door of Room C1 spilled out over the pebbles and over both was the usual detritus of the courtyard: lenses of ash, grit, and burnt brick, mingled in with successive mud surfaces. Along the western side of the courtyard the original installations connected with this level were demolished and replaced. Initially, the two bins of Level D were replaced by one, possibly two, slightly larger structures (Rooms C3 and C4). These must have been storage rooms rather than bins since the preserved room had a door socket on the courtyard side. These structures were for the most part demolished later,



FIG. 2.38. Level C bench with storage jars (NE).

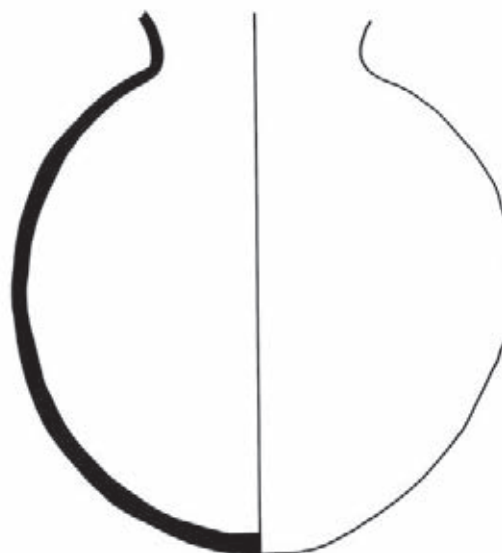


FIG. 2.39. Southernmost jar set in bench (51V:118.02). Scale 1:8.

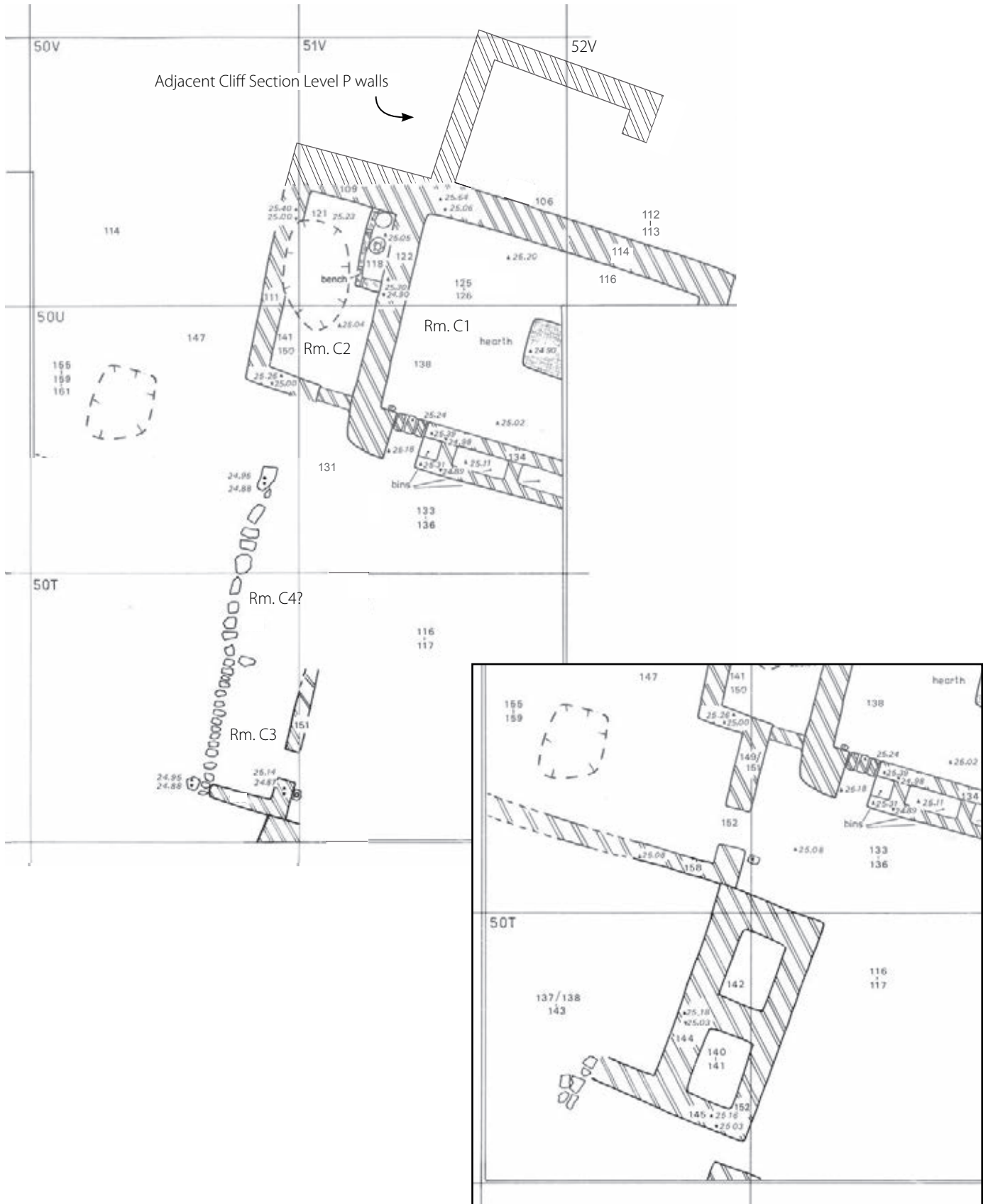


FIG. 2.40. Level C. Inset shows rebuild of bins and walls along west side of courtyard.

surviving only as a single row of pebble/stone foundations running north to south. Halfway along on the east side of this line was one more stone set out at a right angle, providing just a hint of an end wall or of a room division. Sealing all these stones was a dirty ash layer which had destroyed any original brickwork.

The succeeding structure was better preserved, having two bins and relatively thick walls for the amount of internal space. Each bin had plastered sides and a floor with at least three plasterings. The south wall of the bins continued further west where it was cut by a group of stones which might have been part of the foundations of another wall. A difference in the nature of the fill west and east of these stones was noted: to the east was a compacted hard clay layer, while, to the west, running around the back (west side) of the bins, was a clearly defined ash layer.

To the north the bins abutted sections of walling with a doorway which provided the only means of access in and out of the courtyard. The position of the door socket in the courtyard shows that the door was shut from this side. As in earlier levels there is a disconnect between the rooms around the courtyard and those to the north in the Cliff Section, with no easy means of access between the two.



FIG. 2.41. Level C bins, with Level D mud platform showing through in front (NW).

LEVEL B

The walls of the Level C building were cut down and a new, very similar structure built on top. The eastern room of this new building, Room B1, was larger than its predecessor, extending further to the east where the corner was found in the excavation of the Cliff Section. Otherwise, it was very similar, even down to the rebuilding of the bins along the southern wall. On the western side of the courtyard it is clear that in Level B there was an actual room here, with a door and a hearth, rather than some sort of storage installation.

Several alterations and sub-phases to the Level B walls were noted, but whether they were carried out over a short or extended period of time was not clear.

Over the last floor of Room C1 a dense 40 cm thick layer of soft grey material with charcoal and burnt brick fragments had accumulated. Laid above this were the earliest floors of the Level B room: a series of seven green plaster layers. The upper three floors of this series ran up to a row of bricks set against the north wall which was perhaps a narrow bench or ledge. Above this series of floors, and separated by a layer of brick and plaster, was a final single mud-plastered floor—a

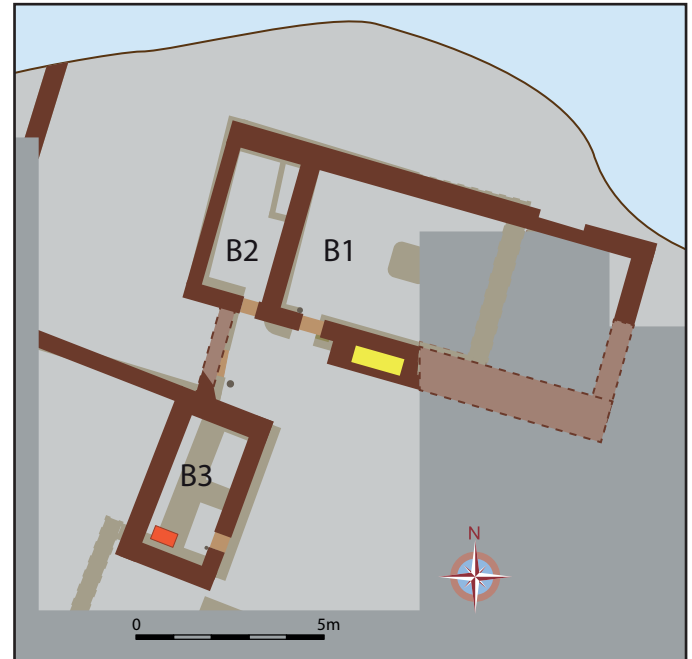


FIG. 2.42. Schematic plan of Level B superimposed over Level C.

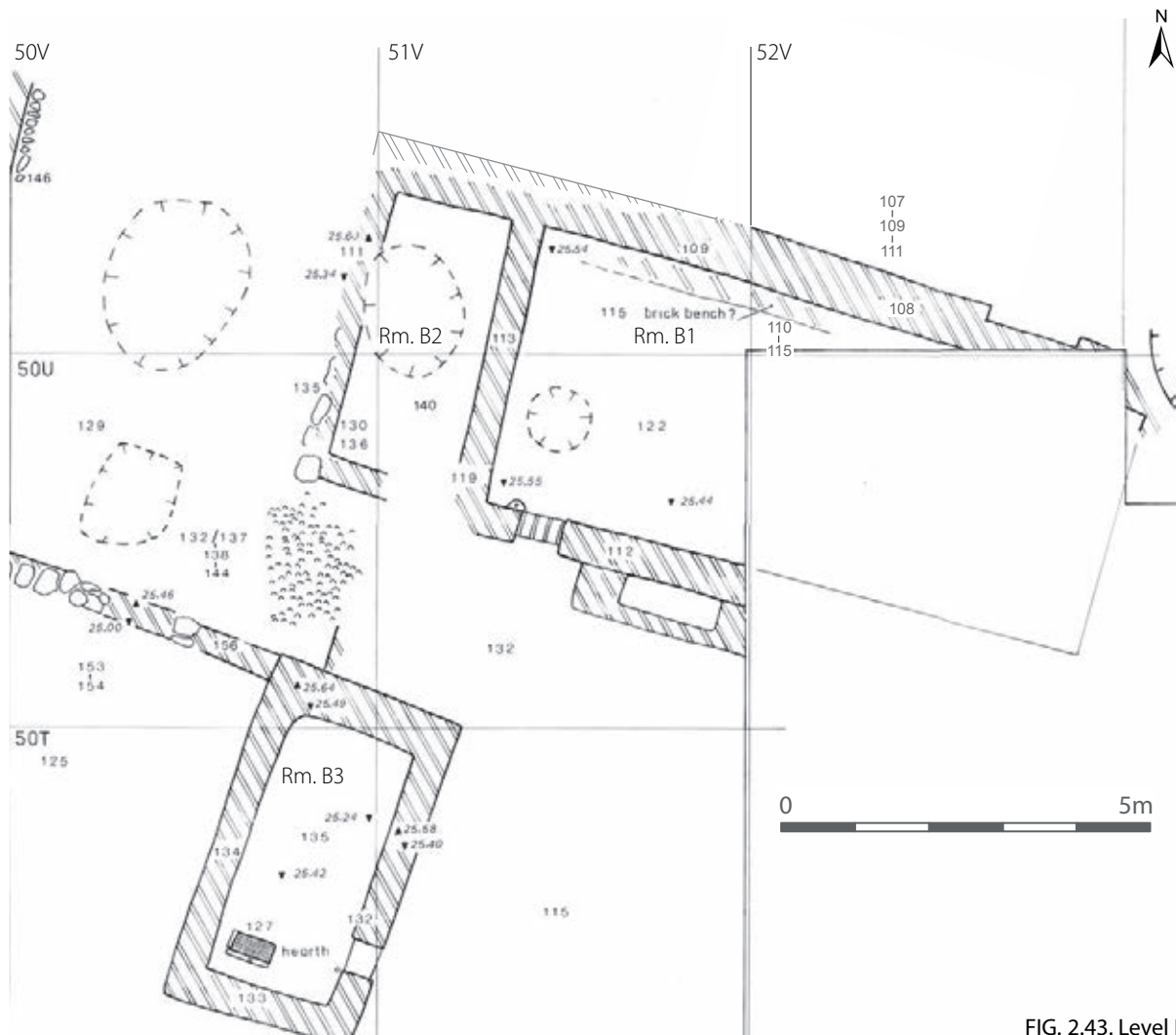


FIG. 2.43. Level B.

sequence which suggested a later phase of this level, perhaps accompanied by an alteration noted in the north wall.

Since the central and eastern parts of the room remained unexcavated it is not possible to say if there was a central hearth in this level.

The north face of the north wall of the room was eroded and unclear. Much of the plaster on the south face had fallen off, but there were at least six coats of green plaster, each on a bedding of brown plaster. The bin in the south wall of Room C1 was blocked in and a new one constructed against the southern wall (51U:112) of Room B1. This was replastered at least nine times, with the last plastering showing traces of burning.

The doorway remained in the same place in this level; the old doorway of Level C was blocked up with bricks and a new threshold laid down. Unusually, the socket for the doorpost was made of hard mud plaster, not stone, an arrangement which it is difficult to believe was satisfactory.

The western room, Room B2, was rebuilt to the same plan as the underlying one. This rebuild was most clearly observed in the west wall where stone footings were put into the wall. Patches of the internal plastered floor were noted, but much had been removed by the deep stone foundations of Level A. Outside this room, to the south, a pebbled area slumped down considerably to the south towards a west–east wall with stone footings (50U:156). A tiny wall fragment near the southeastern limit of these pebbles may have been the boundary wall to the courtyard in this phase. Subsequently, a quantity of stones was deposited outside the courtyard to the west. These may have been piled up on waste ground, perhaps with the intention of using them as building material.

Pits were dug through the floors of both rooms, possibly connected with a period of disuse or with the subsequent building work of Level A.

On the west side of the courtyard, the two storage bins of Level C were demolished and replaced by a single room, Room B3, which had three phases. The original structure was a room measuring 3.55–3.70 × c.1.78 m, with a doorway into the courtyard in the east wall and two green plaster floors. All the internal wall faces were also plastered. Associated with this phase was a badly preserved rectangular hearth in the southwestern corner of the room edged with single bricks. In the subsequent phase, the west wall was rebuilt 5 cm to the west and a new plaster floor laid (50T:128). Some stones in the courtyard may have been laid to facilitate access to the room.

Finally, the west wall was thickened by the addition of a single row of bricks on the inside edge which caused the old floors to sink under the weight. Indeed, all the floors of this room subsided drastically on either side of the old Level C north–south walls, a graphic illustration of why walls were continually rebuilt on top of one another.

So the sequence of structures along the west side of the courtyard went from bins (Level D) to rooms (Level C early phase), to bins (Level C rebuild), and back to rooms (Levels B and A).

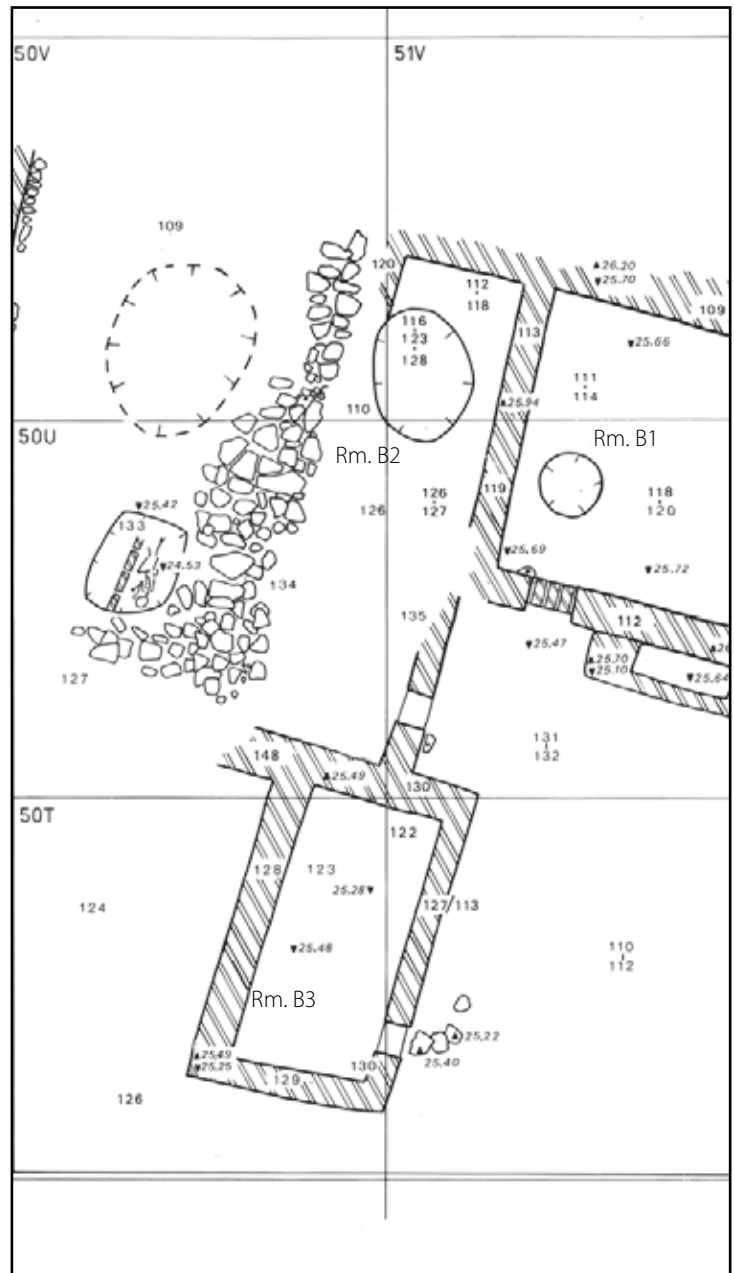
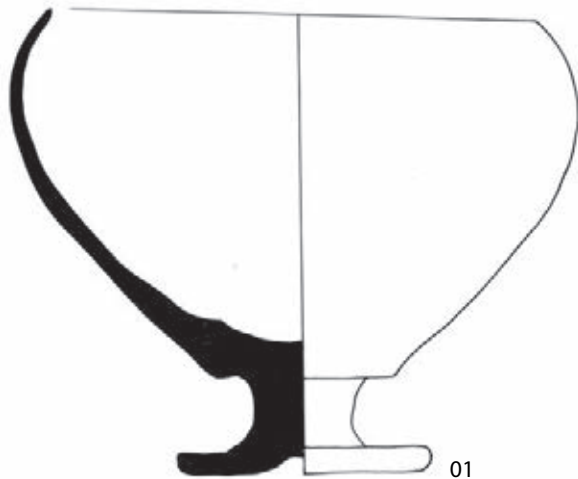


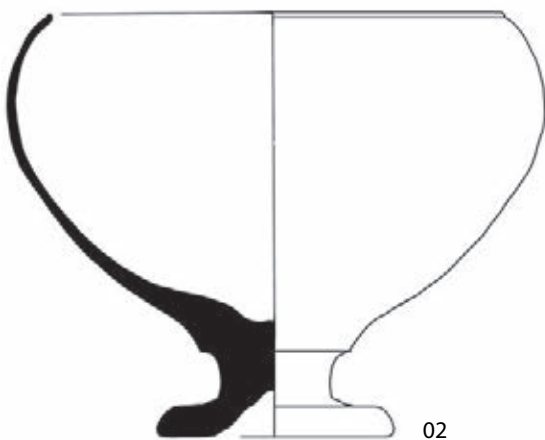
FIG. 2.44. Level B. Modifications to Rooms B2 and B3.

Grave 50U:133

This grave was a subrectangular pit, measuring 3.3×1.8 m, with a grave shaft that had been sunk to a depth of 90 cm. The bottom of the grave chamber was divided longitudinally by a single row of mud-bricks set on edge with the body of a 45–50 year old male in the eastern half. Near the top of the chamber two pedestal bowls had been thrown carelessly into the grave, one of which had been broken in antiquity. The body was in a strange position, face down, the right arm flexed with the hand by the face and the palm upwards, the left arm under the body, the pelvis twisted half onto the left side, and the left leg displaced with the femur sticking up and the soles and heels of both feet uppermost. The bowls were the only grave goods.



01



02

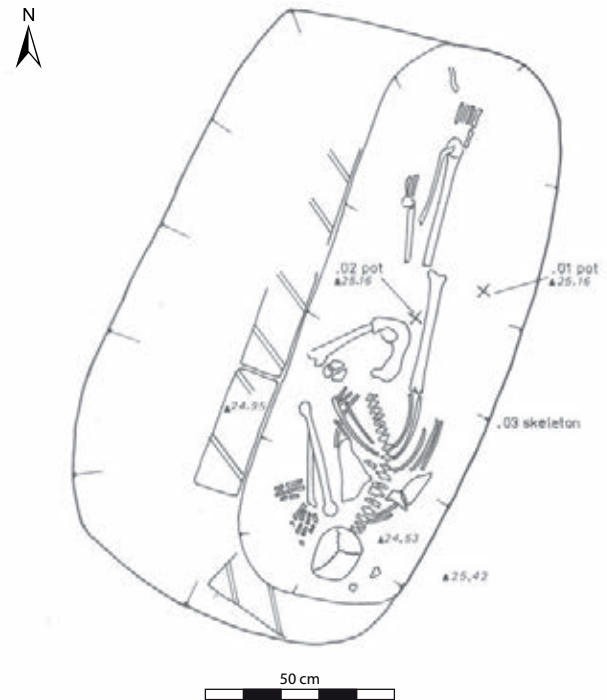


FIG. 2.45. Grave 50U:133

01 Pedestal bowl. Clay: grey. Temper: none visible. Rim di. c.13. Ht. 12.4. Fine-walled but poorly finished. Scale 1:2.

02 Pedestal bowl. Surface: buff. Clay: orange. Temper: none visible, but traces of straw on surface, especially around base. Rim di. 12. Ht. 11.2. Scale 1:2.

LEVEL A

The Level B rooms were rebuilt in Level A, on the same orientation but for the first time stone was used extensively, with some variation for foundations and footings. There was a single large room on the north side of the courtyard (Room A1), measuring 9 m west to east and c.3.7 m north to south, part of which remained unexcavated. The floor had been replastered several times. The last floor was overlain by silty deposits, suggesting that it was exposed to the elements at some point, perhaps after the removal of the roof beams. Against the north wall was a rectangular hearth (52V:106) mostly unexcavated, delimited by a single row of bricks set on edge. The west and east walls were built with up to three courses of stone foundations and footings. Above the stones were traces of mud-bricks, but these were heavily eroded. The west wall had three external buttresses, one of which was clearly bonded to the main wall. The south wall was the only one without stone foundations and there must have been a good reason for this; perhaps the underlying wall of Level B was deemed sturdy enough to build directly above. The wall was unusually thick so may originally have held bins similar to those found in Levels B and C. The door into the courtyard was in the southwestern corner. A stone on the floor next to the west jamb looked as if it should have been the door socket, but it was in fact unworked and without any traces of wear.

Along the west side of the courtyard the Level B room was rebuilt and enlarged. Most of the plan of Room A2 was recovered by tracing the stone foundations; only occasional patches of brickwork were preserved along the west and north walls. Some of these stones were in wide and deep foundation trenches which cut into the Level B walls while others were shallow footings with traces of floor and wall plaster running up them. There was a curious thickening of the west wall (50T:113), represented by a single row of stones, possibly a long buttress. Only a single fragmentary floor survived. Lying above this was a rectangular burnt clay hearth (50T:104). In the courtyard next to the doorway, several large stones were perhaps laid as a step up into the room. The footings of the eastern wall of Room A2 were comprised of much larger stones than used in the other walls.

It is not clear if there was still a door in the northwestern corner of the courtyard as in earlier levels. The foundation stones continue uninterrupted and entry would have been quite restricted here with the jumble of boulders and stones heaped up on the other side suggesting an area that was not well frequented.

Above the remains of the Level A structures was an exposed and weathered mound surface which represented the period of abandonment between the end of the third millennium occupation and the start of the Middle Assyrian resettlement.

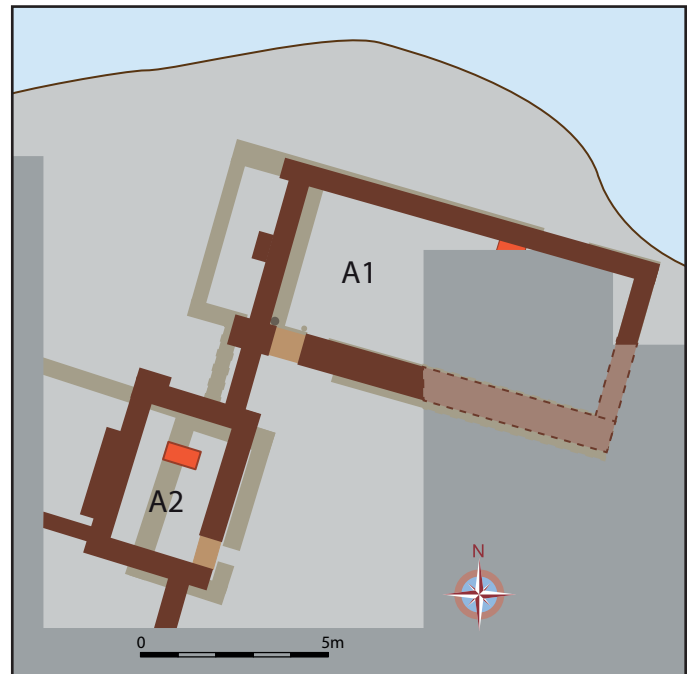


FIG. 2.46. Schematic plan of Level A superimposed over Level B.

SUMMARY

The buildings in the Ninevite 5 Sounding display some common elements, from the earliest level with coherent architecture (Level K) to the latest (Level A), representing a continuity that persisted across the period of abandonment and change of use separating MA2 from MA3b.

The Level K room, although fragmentary, already displays some of the characteristics that typify the rooms that follow: it was a single room with narrow walls, external buttresses, and a central hearth. At this stage no evidence for an associated platform next to the hearth was found. Subsequently, in Level I a building appears for the first time in the northern half of the sounding. It comprised three single rooms in a row. Two of the rooms had doorways in the southwestern corner. A brick step provided access into the easternmost room, Room I1, with a lower second step at an angle. Internally, there was a centrally placed platform, and adjoining it on the side away from the door a rectangular hearth. Fourteen replasterings of the floor were noted. In Level H, two separate single-rooms appear, with the one on the east side (Room H1) on a slightly different alignment. External steps again led up to doorways on the south side, located in a wall with external buttresses. Inside Room H1, there was a platform and hearth identical to that of Level I and a second fire installation to the east in the form of a small firepit. The floor had been treated in the same way, renewed many times with a coating of greenish plaster. The area to the south was originally open but later on a building was constructed at right angles to the existing ones

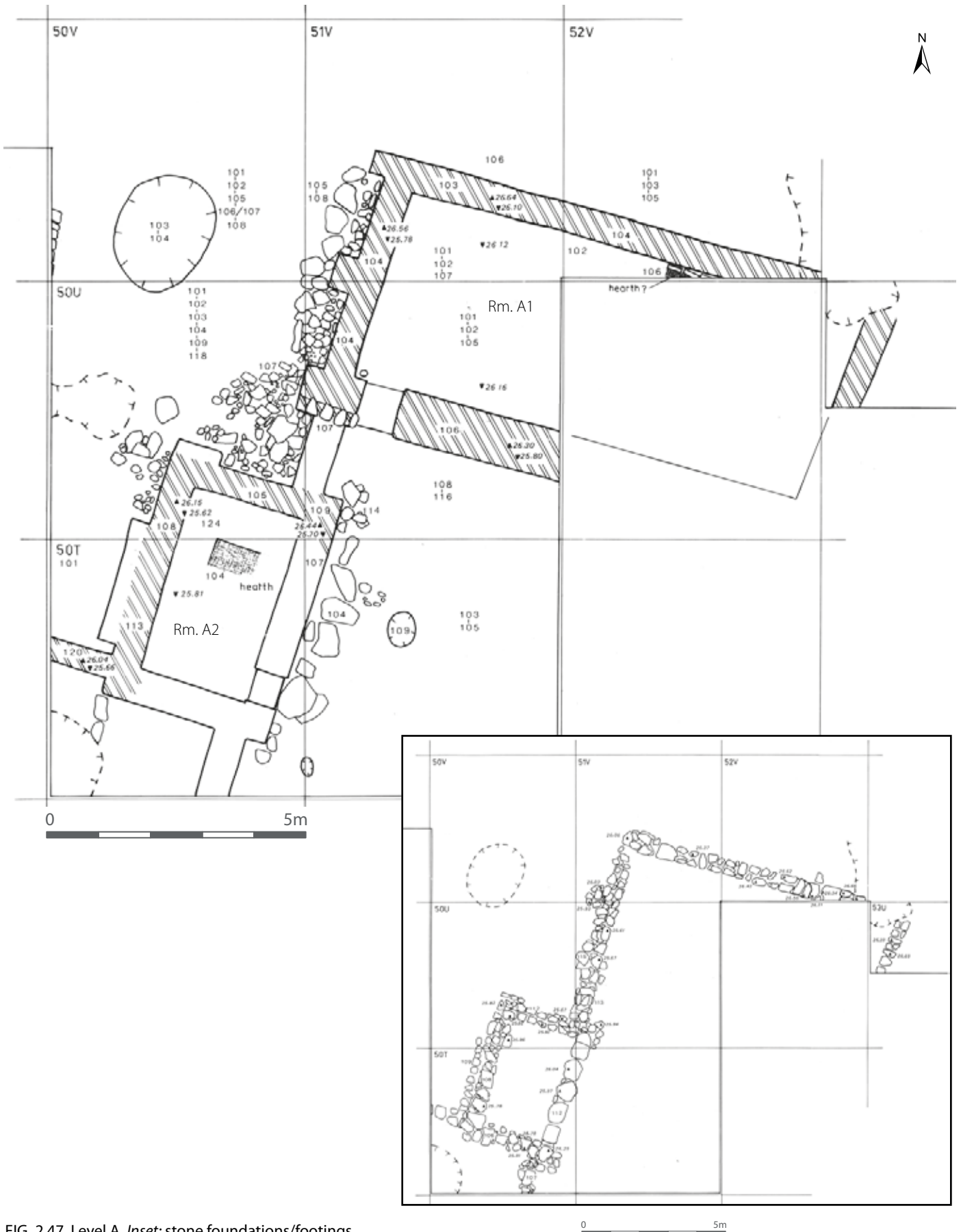


FIG. 2.47. Level A. *Inset: stone foundations/footings.*

(Room G1). It was also a single-roomed unit, freestanding, with external buttresses and bench or step and, inside, the customary hearth and platform. For the first time there is an identifiable feature in the open spaces outside these rooms: an oval-shaped area of hard orange mud with a well-defined plaster lip.

Following a period at the end of MA2 when the area was used as a cemetery (MA3a, Level F), single-room buildings reappear in the same place as earlier and on the same alignment (MA3b, Levels E–A). These rooms underwent sequential rebuilds. Although similar in basic form to the earlier examples, they have a more complicated history, as do first the bins and then the rooms along the western edge of an area that gradually became walled off. The single room of Level E had some curious internal niches and a hearth, but no platform. In the open area to the south were the bases of two platforms and an oven. The rebuilt room of Level D retained the hearth in the same location and added an internal bin in the north corner. Externally, next to the door into the room a short length of wall and doorway restricted access to the courtyard which now contained two substantial bins. This area remained enclosed for the rest of the sequence. The main development of the Level C rebuild was the split into two rooms of unequal size with the smaller containing a bench with two storage jars. In the courtyard the Level D bins were rebuilt and three smaller bins added to the external face of the southern wall of the main room. In Level B, the rebuild resulted in an enlargement of the main room. Notably, this room had a bench running along the northeastern wall, the only example of such an internal feature in the entire sequence. The bins in the courtyard were demolished and replaced by a single room containing a hearth, mirroring a configuration last seen in Level G. The plan is repeated in the Level A rebuild with some minor variations: external buttresses reappear and the hearth has moved from one end of the room to the other. A novel feature of this level is the very extensive use of stone for wall foundations and footings.

Throughout this long sequence, the orientation of the buildings is always the same, with the long sides running not quite parallel with the Cliff Section. They face south towards an open space or courtyard, with limited access to the area to the north. Buildings in the north half of the sounding appear in Level J and remain there in the same location throughout, with each new room built directly on top of its predecessor. This pattern survives the interruption of the Level F cemetery. These buildings may consist of a single room (Level E), sometimes there are two rooms in a row (Level C, for example) and in one case three (Level I). They are either built as separate units or share a dividing

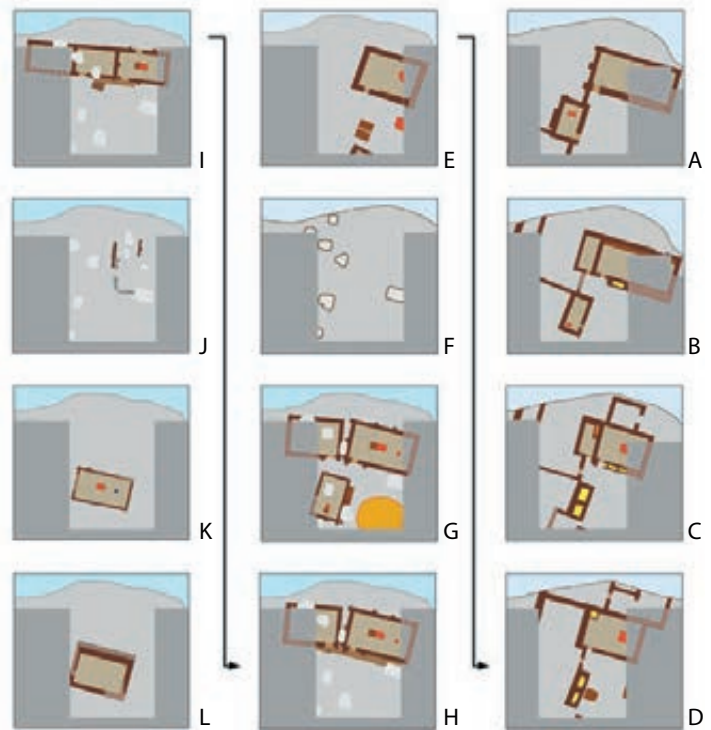


FIG. 2.48. Schematic plans of Levels L–A..

wall. Additional buildings, where there are any, are at right angles to these (Levels G, B, and A). Thickness of walls and positions of doorways exhibit little variation. Doors are located primarily in the southwestern corner of a room but sometimes an adjoining room will have its doorway next to that of its neighbour, i.e. in the southeastern corner (Level G, for example).

A hearth is a common internal feature of these rooms. In the earlier part of the sequence, it is centrally placed with an attached platform on the western side (Levels I–G). After the cemetery of Level F, the evidence suggests that there was still a hearth but that the need for a platform had disappeared (Levels E–C). Post-cemetery, other internal features apart from a hearth appear: niches in the wall of the Level E building, a storage bin in the corner in Level D, storage jars embedded in a platform in the smaller room of Level C, and a bench in the main room of Level B.

The yard to the south was at first devoid of any installations. The only feature appearing early on was the plastered oval of Level G. Later on, mud platforms, storage bins and then rooms appear along its western edge. It also becomes walled off: by Level C a single door controlled access from the west. What happened to the south is unclear, there is just the hint of further buildings here, while the eastern edge was beyond the limit of the sounding.

ROBERT KILLICK

3. Small Finds

The small finds from the Ninevite 5 Sounding comprises a small number of utilitarian objects such as bone tools, spindle whorls, stone pounders and grinders, which testify to a range of domestic activities. Dress items include bone and copper pins, the most decorative of which was a grave good, and two possible pendants. Stamps and sealings were rare, although a complete hand stamp may be unique to the Ninevite 5 period.

Very little of this material came from within the buildings where the floors seem to have been kept clean. Most objects were found in the open spaces to the south. Given the small sample size, it would be unwise to read too much into the vertical distribution of the different object classes beyond noting a general tendency for greater quantities of worked bone and metal objects to be present in the later levels above the Level F cemetery (Table 3.1).

Comparative material for some of the items can be found at nearby sites such as Tell Karrana 3, as well as further afield at, for example, Tell Raqa'i in the Upper Khabur. The nondescript nature of much of the assemblage, however, renders such comparisons for the most part unilluminating.

They are discussed in the following order: worked bone objects; metal objects; stamps and sealings; clay objects; shell beads; small stone objects; and ground and chipped stone. Pottery is discussed in Chapter 4.

For each illustration the find number is given, composed of the excavation unit (e.g. 50T:105) followed by the find number (e.g. 50T:105.04). Brief catalogue details and the MA level in which the item was found are also provided.

MA Period	Level	Number of bone artefacts	Number of metal artefacts
MA3b	A	4	2
	B	3	1
	C	6	1
	D	4	3
	E	2	2
MA3a	F	2	2
MA2	G	0	1
	H	2	1
	I	1	0
	J	1	0
	K	0	0
MA1	L	0	0
	M	2	0
Total		27	13

TABLE 3.1. Distribution of bone and metal artefacts.

WORKED BONE OBJECTS

There were twenty-seven worked bone objects. Sixteen can be described as pins. This number included five complete examples: two undecorated, each with a single point (Figs. 3.1a & b); one with a flattened head notched on both sides (Fig. 3.1d); and two double-pointed examples, so perhaps tools rather than pins (Figs. 3.1e & f). One fragment had a spherical head and was highly polished (Fig. 3.1c). In addition to bone pins, there was a bone point (Fig. 3.1g) spatula (Fig. 3.1i), a possible needle with a drilled hole (Fig. 3.1k), awls (Figs. 3.1h & j), a disc (Fig. 3.1m), a decorated bone toggle or head of a pin with an incised geometric design of horizontal and diagonal grooves (Fig. 3.1l), a perforated tool or toggle (Fig. 3.1o), and a single bead from grave 51V:173 (Fig. 3.1n).

Few bone objects are reported from other Ninevite 5 sites in the area: only a single bone awl at nearby Tell Karrana 3 (Stein 1993: 157 & pl. xlvii.5) and no examples from Telul eth-Thalathat, which may be due to the nature of the excavated deposits—mostly within a granary. Further afield in the Khabur region, awls, pins and needles were found at Tell Raqa'i (Dunham 2015: 349–57).

Abbreviations

Di. diameter

Veg. vegetal (of temper)

Ext. extant

Ht. height

L. length

W. width

Th. thickness

All measurements in centimetres.

FIG. 3.1	Object no.	Description	Level
a	50U:132.01	Bone pin. Complete and intact. L. 7.36. Di. 0.5. Oval-shaped in section tapering to a point.	B
b	50U:169.01	Bone pin. Complete and intact. L. 5.0. Di. 0.27.	E
c	50U:197.01	Bone pin. Broken at bottom. L. 5.5. Di. of head: 0.40. Highly polished with chipped spherical head.	I
d	51T:120.01	Bone pin. Flattened head with three grooves in one side and two in other. Flattened ovoid section, tapering from square-cut head to fine point. L. 8.6. Max. di. 0.7.	D
e	50U:143.01	Bone pin. Complete and intact. Both ends pointed. L. 6.41. Di. 0.24.	D
f	51T:117.02	Bone pin. Complete and intact. Both ends pointed. L. 7.4.	C/D
g	51V:182.01	Bone point. L. 7.8. Max. w. 0.5.	M
h	51T:133.01	Bone awl with finely tapered point. L. 9.0. Di. at centre: 0.98.	E
i	51U:170.01	Bone tool. Spatula? L. 6.3.	H
j	50U:161.02	Bone awl. Both ends broken. L. 7.76. Max. w. 0.81.	D
k	50U:180.02	Bone needle. Broken at both ends. Remains of drilled hole at top. L. 5.96. W. 0.44.	F
l	50T:120.01	Bone toggle or pin head. Cylindrical. Broken at bottom. Ext. ht. 2.53. Di. 0.71. Carved with two bands of diagonal grooves between horizontal grooves.	A/B
m	51U:120.02	Bone disc. Max. h. 2.1. Th. 0.5.	B
n	51V:173.03	Bone bead. Di. 0.9. Ht. 0.2.	J
o	51U:171.01	Bone tool or toggle, perforated. Fragmentary. Max. w. 5.6. Max. ht. 4.6. Di. of perforation: 1.8.	H

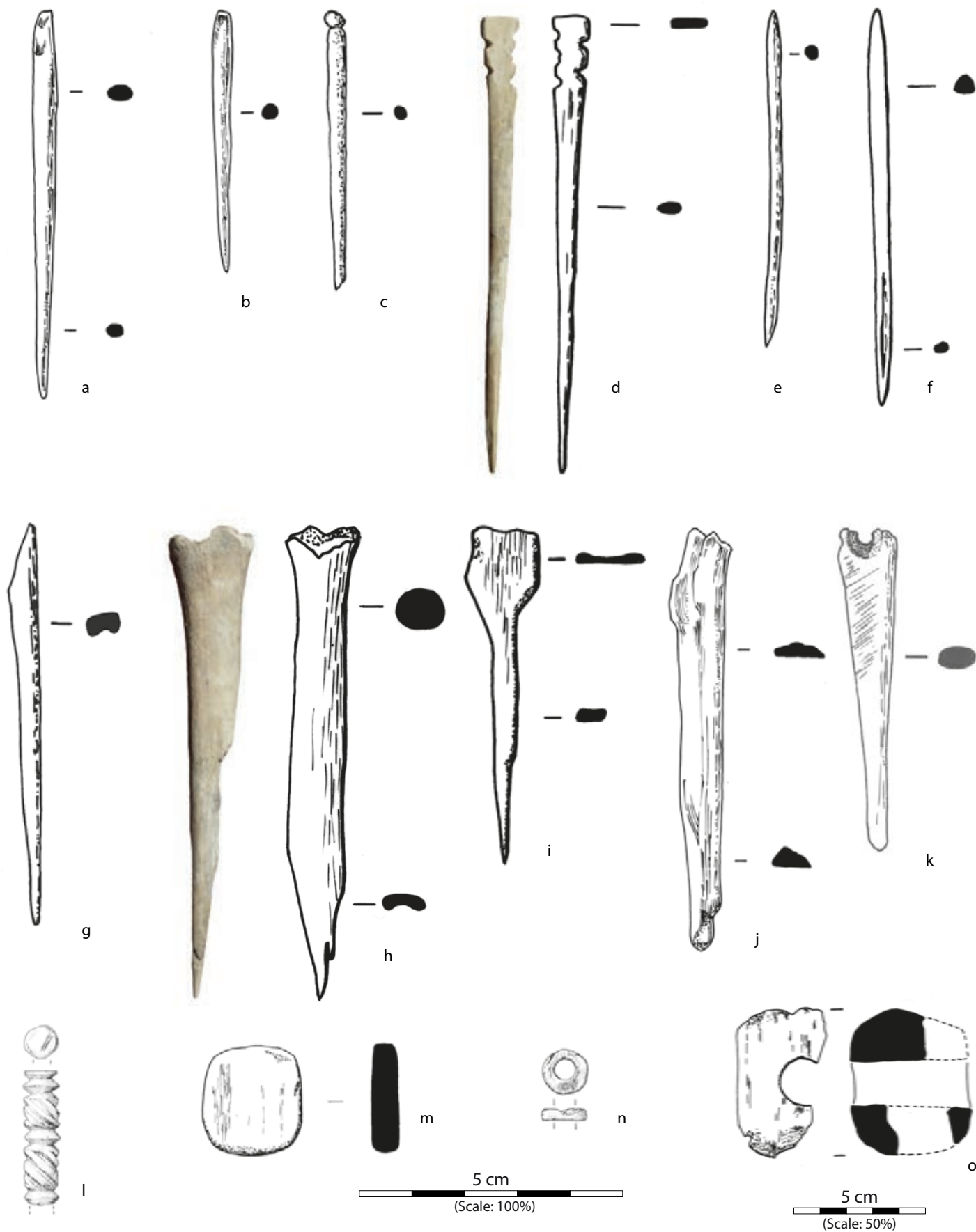


FIG. 3.1. Worked bone (scale 100% unless shown otherwise).

METAL OBJECTS

All the metal items in the Ninevite 5 Sounding were of copper and with a single exception were parts of pins. Nine of these were mostly intact and a further three represented by small fragments. The exceptional item was a single leaf-shaped arrowhead (Fig. 3.2j). The pins varied in length from 5 to 14 cm, with most being at the upper end of this range.

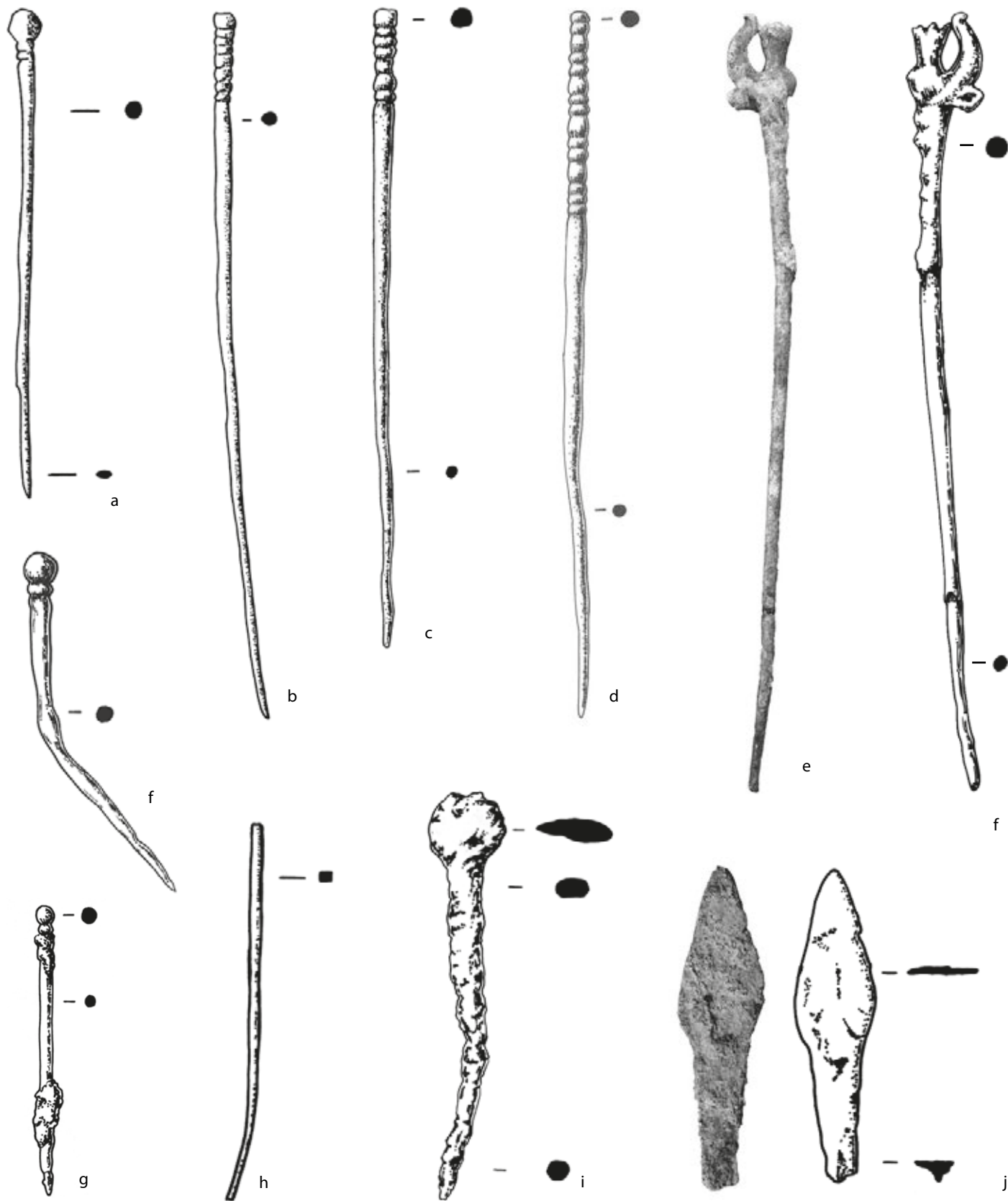
Apart from a plain pin (Fig. 3.2h), there were also pins with spherical heads with one or more spheroids below the top (Figs. 3.2a, f, g), and ones with segmented heads (Figs. 3.2b–d). Further examples of these types were found in the Cliff Section excavation (Roaf 1983: fig. 73.12, 13 & 18), in a grave at Tell Jikan (Ii 2003: fig. 7), at Tell Karrana 3 (Stein 1993: pl. xlvii.7 & 8), and at Chagar Bazar (Mallowan 1937: 133 & fig. 12.7). A pin with a rolled head was found in the Cliff Section (Roaf 1983: fig. 4.13).

One pin had a much more pronounced disc-shaped head (Fig. 3.2i). The two most elaborately decorated pins had been deposited in the Level F graves, where their position close to the shoulder or among the ribs suggested that they had been used for fastening a garment. One of these had a head consisting of four alternate pairs of spheroids and single spheres with three not two spheroids below the fourth sphere (Fig. 3.2d). The other had a more complex but unfortunately unclear design, possibly an animal or bird or perhaps abstract (Fig. 3.2e). This pin may tentatively be linked to two pins of similar date from Chagar Bazar, one with a perforated shank and pair of opposed doves on the head (Mallowan 1936: fig. 8.2) and the second, a horned animal (Mallowan 1947: 190 & pl. xliii, 8). It may be noted that many of the copper pins from the Khabur region have flattened heads and pierced shanks, such as those from Tell Raqa'i (Dunham 2015: 338 & fig. 5.71), and are quite different to the Tell Mohammed Arab examples.

A single silver item, a bead, was found in a grave in the Cliff Section (Roaf 1983: 74 & fig. 4.21).

All Ninevite 5 metalwork, including some of the above material, has recently been inventoried and discussed as part of the ARCANÉ project (Rutlowski 2019).

FIG. 3.2	Object no.	Description	Level
a	50U:118.02	Cu pin. Polygonal head with 3 grooves below. Roughly circular in cross-section, tapering to point. L. 8.9. Di. of upper shaft 0.2.	A
b	50U:168.04	Cu pin. Flattened head with 7 grooves below. L. 13.1. Di. 0.25.	E
c	50T:151.05	Cu pin. Flattened head with 7 grooves below. L. 11.7. Di. of head 0.40.	D
d	50T:172.04	Cu pin. Spherical head with 15 grooves below. Circular in cross-section. Di. of head 0.4. L. 13.	F
e	50V:123.01	Cu pin. Heavily corroded with unclear motif on head of pin, possibly an animal (or bird?). L. 14.1. Max. di. of shaft 0.48.	F
f	50T:120.03	Cu pin. Spherical head with two grooves. L. 6.3. Di. of shaft 0.3.	A/B
g	50T:151.01	Cu pin. L. 5.28. Di. of head 0.36. Di. of shaft 0.23.	D
h	51T:117.07	Cu pin. Square cross-section at top. L. 6.86. Max. di. 0.14.	C/D
i	50T:125.02	Cu pin. Heavily corroded and restored from three pieces. L. 7.47. Max. di. of head 1.47.	B
j	51V:129.01	Cu arrowhead. Leaf-shaped arrowhead with broad tang. L. 5.76. Max. w. 1.53.	D



5 cm
(Scale: 100%)

FIG. 3.2. Metal objects.

STAMPS AND SEALINGS

There were three, possibly four, fragments of clay sealings where some of the seal impression had been preserved (Figs. 3.3a, e–g), and a further two fragments with string impressions on the reverse (Figs. 3.3h & i). One lid fragment appeared to be stamped with a design of two concentric notched ovals with a central groove (Fig. 3.3c). One unusual clay stamp had a stylised human figure on the base (Fig. 3.3d). A second stamp, from the Cliff Section, had a stylised design (Roaf 1984: pl. xiii.c & d). There were similar artefacts at Tell Billa, where Speiser found five clay stamps: three representing female figures, one a human hand, and the fifth one a geometric pattern (Speiser 1931: 12). A stamp with a geometric design at both ends was found at Nineveh (Thompson and Hamilton 1932: pl. lxiii.16). A further possible example was found in an undated grave at Tell Durdara (Spanos 1988: 69 & Abb. 9.1). Perhaps these represent a local Ninevite 5 tradition.

The seal impression on the jar rim was a double rolling of a geometric design (Fig. 3.3b). A row of hatched circles/spoked wheels formed the main element, each separated by an oval motif with vertical grooves below (perhaps a sun-disk). Similar sealings, although without an exact parallel to the design here, were found at Nineveh (Thompson and Mallowan 1933: pl. lxxv.21 & 24; Collon 2003) and at Tell Billa where Speiser recorded seals in the lowest strata ‘all with geometric decoration varied by the introduction of a sun-disk that is represented very much like the spoked wheel of a chariot’ (Speiser 1932: 6). These sealings, in the style generally known as ‘Piedmont’, are discussed in a recent study of the glyptic art of the Tigridian region (Pittman 2019).

FIG. 3.3	Object no.	Description	Level
a	50T:162.01	Sealing. Burnt, broken. Obverse has faintly impressed oval and parts of concentric rings. Reverse has string impressions. Max. ht. 3.82. Max. w. 2.37.	G
b	51V:152.01	Jar with seal impression. Surface: buff. Clay: red. Temper: fine grit. Rim di. c.40. At least two rollings of geometric rosette design impressed below jar rim.	G
c	50V:103.05	Stamp impression on lid. Design of two concentric notched ovals with a central groove, possibly repeated at a different angle.	A
d	50T:158.02	Clay stamp. Clay: grey/brown. Temper: veg. Lump of clay, moulded in the fist and with a design of a dancing man(?) on the bottom. Width across stamp 3.32. Ht. 6.15.	E
e	51T:139.02	Sealing. Black clay. Geometric seal impression on front. Reverse has clear string marks and finger impressions. L. 3.78.	E
f	50U:172.01	Sealing. Fragmentary design, perhaps a cross with lozenge fill motifs. L. 4.12.	E
g	51U:179.02	Sealing. Six small fragments of unbaked brown clay. One fragment impressed with faint traces of linear design.	I
h	50U:169.02	Sealing. Obverse broken. Reverse shows string impressions.	E
i	50T:124.03	Sealing. No impression on obverse. Reverse has string impressions. Ht. 4.45. Max. w. 2.84. Max. th. 1.67.	B

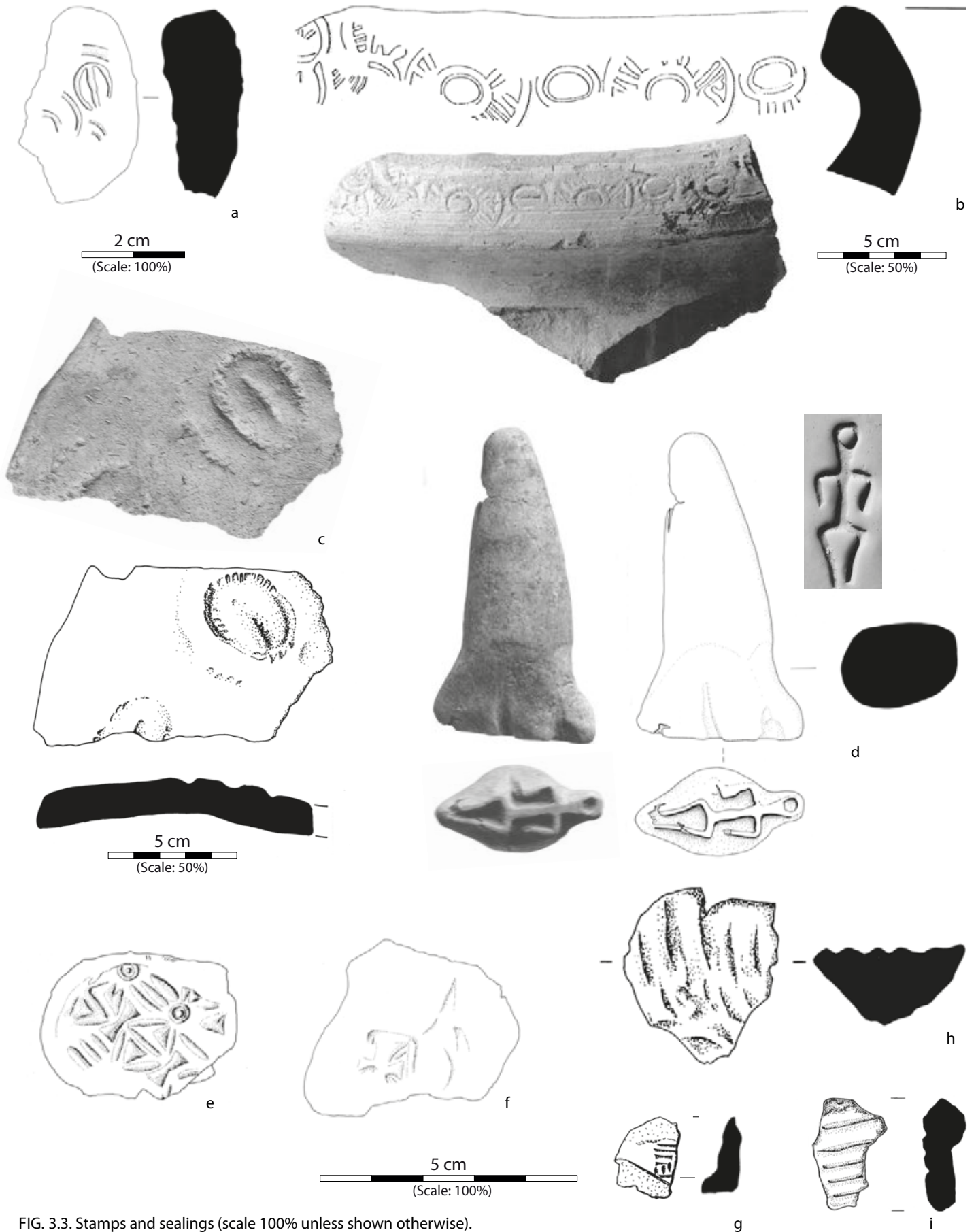


FIG. 3.3. Stamps and sealings (scale 100% unless shown otherwise).

CLAY OBJECTS

These were all of baked clay. There were three broken animal figurines (Figs. 3.4a–c), two beads (Figs. 3.4d & e), a pendant made from a pottery sherd (Fig. 3.4f), a toy wheel (Fig. 3.4m), four spindle whorls (Figs. 3.4i–l), and a ball and a disc that might have been tokens (Figs. 3.4g & h). These are all everyday objects with a wide distribution in time and space.

FIG. 3.4	Object no.	Description	Level
a	50T:101.01	Animal figurine fragment. Baked clay with grey/black surface. Ht. 3.32. L. 4.89. W. 1.99.	A
b	51T:133.02	Animal figurine fragment. Front legs and right ear missing. Black, burnt baked clay. Ht. 2.2. L. 3.6. W. 1.9.	E
c	51V:132.01	Animal figurine fragment. Baked clay. L. 3.5. Max. ht. 3.72.	D
d	51T:112.01	Clay bead. Max. ht. 2.2. Max. w. 2.4.	B
e	51T:139.03	Clay bead. Brown clay. Ht. 1.9. Maximum di. 1.95.	E
f	51V:119.01	Sherd pendant. Clay: red. Temper: fine grit. Drilled from both sides. Ht. 2.29. Th. 0.37.	C
g	50U:147.03	Round clay ball. Di. 1.35.	C
h	50T:126.01	Clay disk. Brown/black clay. Di. 2.13. Th. 0.70.	B
i	50U:168.03	Clay spindle whorl. Complete and intact. Ht. 1.5. Di. 2.4.	E
j	51U:172.01	Clay spindle whorl. Dark grey. Biconical. Di. 2.8. Ht. 2.18.	H
k	51V:136.01	Clay spindle whorl. Baked clay. Highly polished. Di. 2.6.	E
l	51U:164.01	Clay spindle whorl. Baked clay. Ht. 1.67. Di. 2.57.	E
m	51V:105.01	Clay wheel fragment. Baked clay. Pierced through centre. Max. di. 6.3.	A

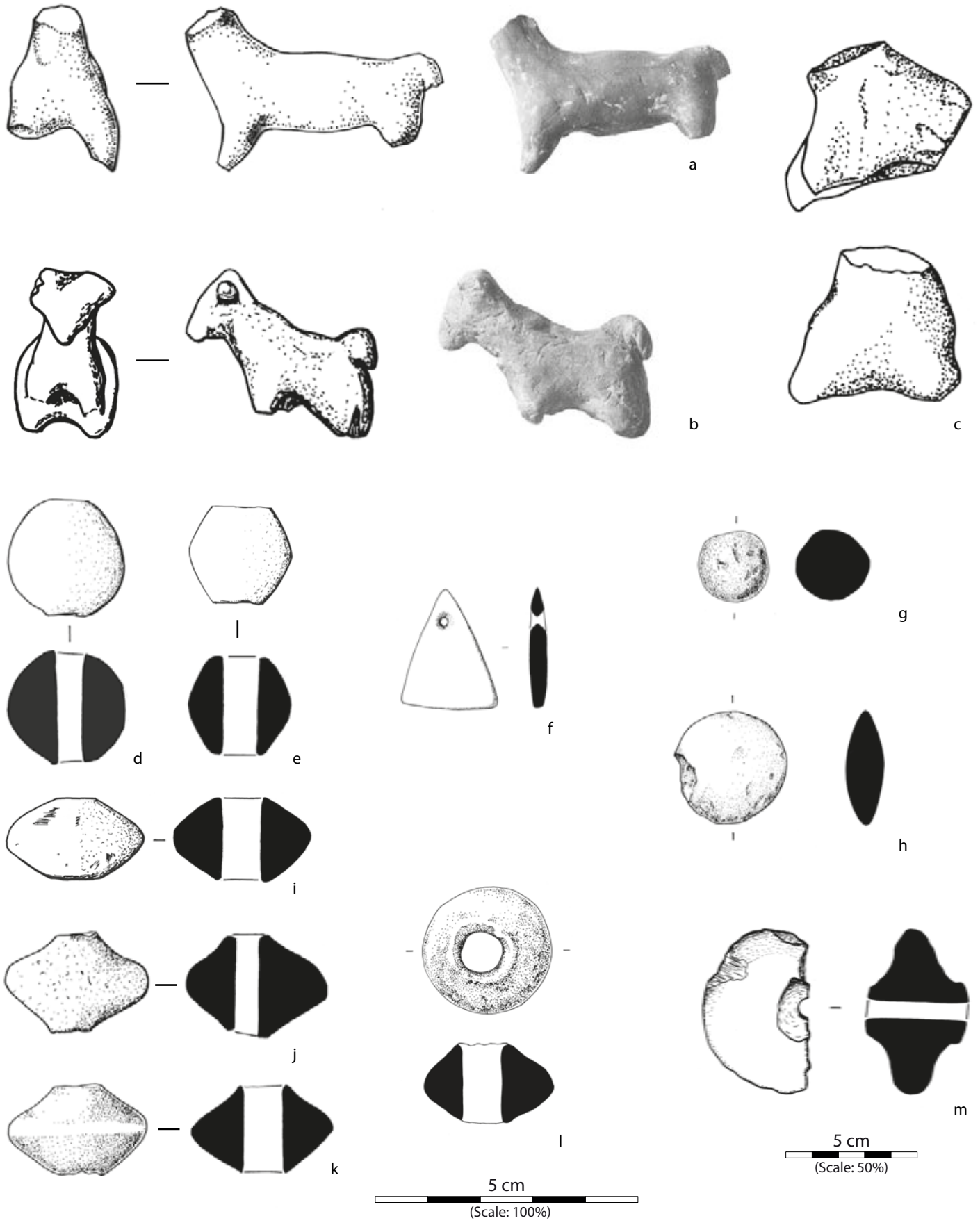


FIG. 3.4. Clay objects (scale 100% unless shown otherwise).

SHELL BEADS

In addition to the dentalium beads from graves 51V:168 and 173 (Figs. 2.14 & 15), there were three single pierced shells (Figs. 3.5a–c) and two worked disc beads (Figs. 3.5d & e).

FIG. 3.5	Object no.	Description	Level
a	50U:154.01	Conus shell bead. Black shiny surface. Pierced at both ends. H. 1.42. W. 0.81.	B
b	50T:124.02	Shell bead, probably <i>Engina mendicaria</i> . Pierced. Striated brown and white. H. 1.4. Di. 0.9.	B
c	51V:150.02	Conus shell bead. Pierced.	H
d	51U:137.01	Shell bead. White, with bevelled edges. H. 0.22. Di. 0.98.	C
e	50U:148.01	Shell bead. Lower surface flat and white. Upper surface grey and irregular. Di. 1.18. H. 0.28.	B

SMALL STONE OBJECTS

Small stone objects comprised a few beads (Figs. 3.6a–d), a pierced pebble (Fig. 3.6e), a fragment of a pendant (Fig. 3.6f), and one intact spindle whorl (Fig. 3.6h). The finest piece of worked stone was the blade of a small stone adze or axe (Fig. 3.6g). Its edge was still sharp. It is similar to an example from Telul eth-Thalathat (Fukai et al. 1974: pl. xxxvii, 4.2).

FIG. 3.6	Object no.	Description	Level
a	50U:194.01	Four transparent crystal beads. Largest: Ht. 0.4. Di. 0.8.	H
b	51U:192.01	Stone bead. White. Ht. 0.25. Di. 0.65.	J
c	50U:206.01	White stone bead. Ht. 0.32. Di. 0.30.	L
d	51U:116.01	Stone bead. Biconical, olive green. Ht. 1.04. Di. 1.38. Di. of perforation: 0.62.	A
e	51V:107.01	Bead? Black river pebble with drilled hole. L. 1.97. W. 1.38. Ht. 0.57.	A
f	51T:141.02	Stone pendant. Green stone. Triangular with irregular facet. Pierced close to top edge. H. 0.7. Width across base: 0.76.	E
g	50T:140.01	Stone adze/axe. Black polished stone, sharp along lower edge. L. 3.1. Th. 0.9.	C
h	50U:191.01	Spindle whorl. Grey stone. Ht. 1.3. Di. 3.6.	I

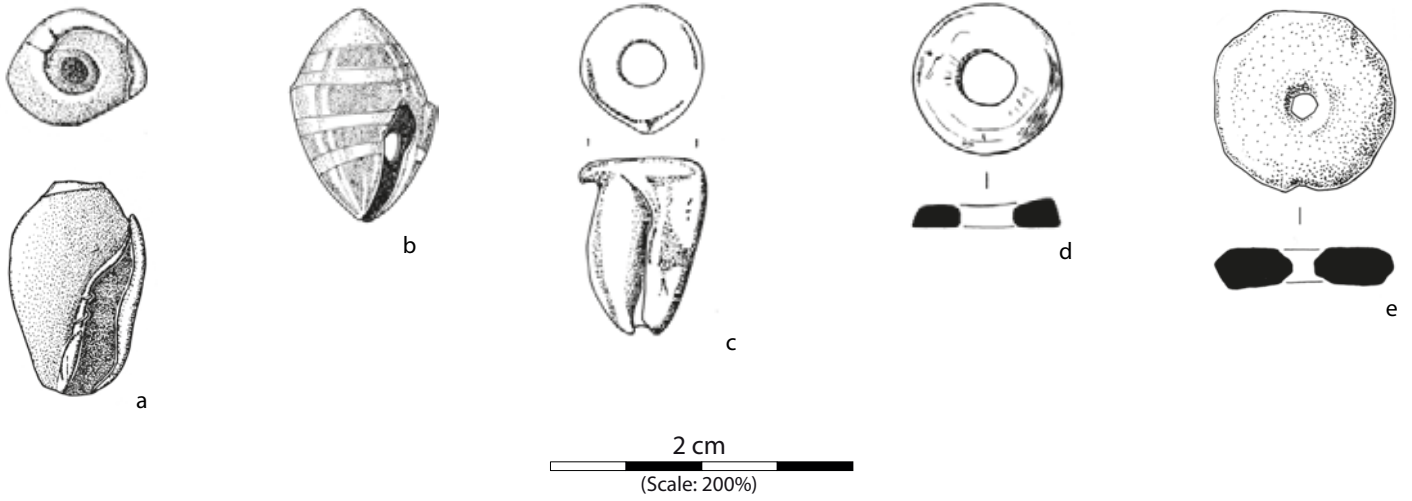


FIG. 3.5. Shell beads (scale 200%).

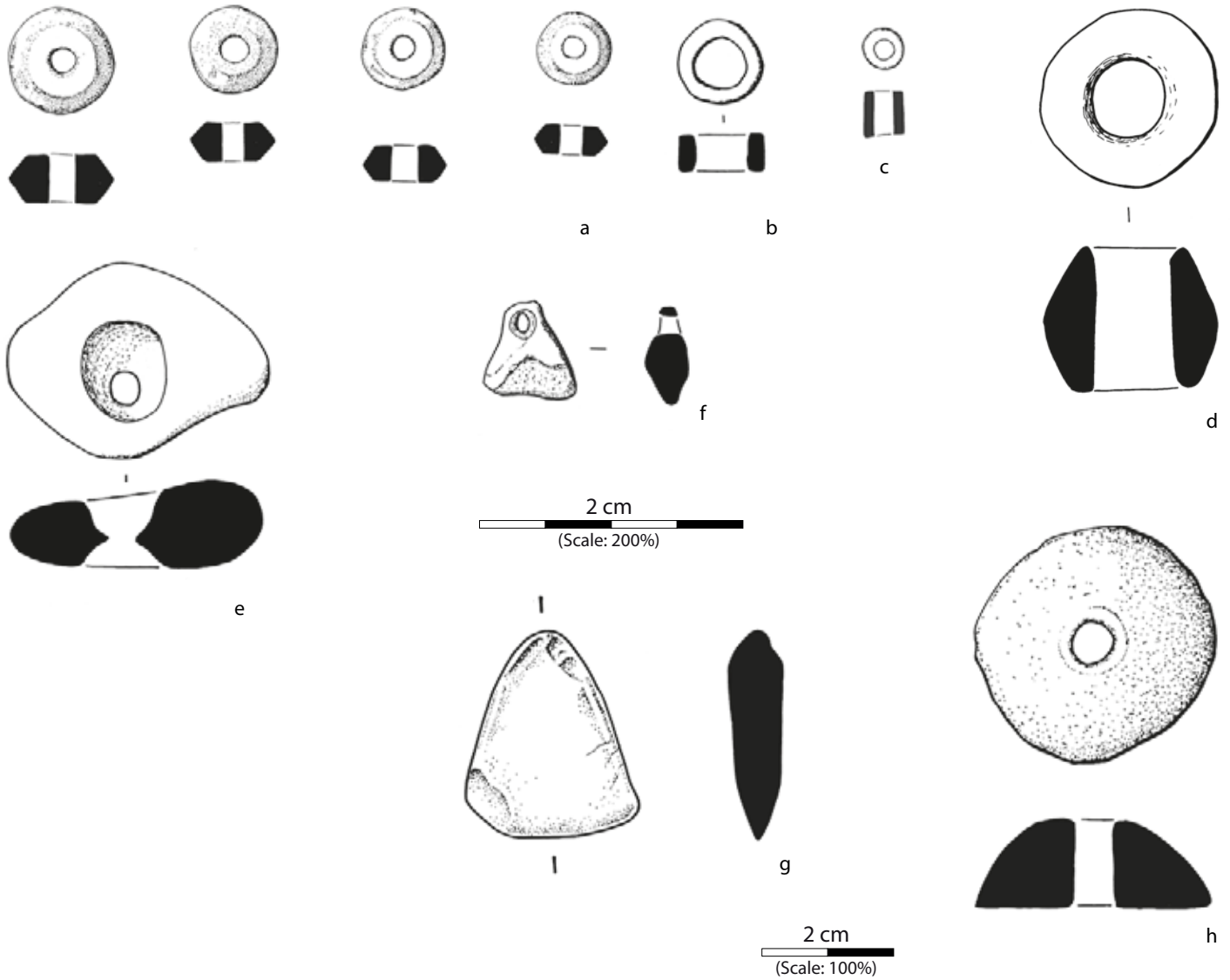


FIG. 3.6. Small stone objects (scale 200% unless shown otherwise).

GROUND AND CHIPPED STONE OBJECTS

Most ground stone objects were made from limestone but some were made of basalt. Roughly-shaped stones were used for door sockets (Figs. 3.7i & j) and for implements such as pounders (Figs. 3.7a–c) and grindstones (Figs. 3.7d–h). River pebbles were also used for pounders and, in one instance, as a lid for a pot (Fig. 2.27). These artefacts are common on many other sites, for example at Tell Karrana 3 (Brautlecht 1993: pl. cii). There were only four pieces of chipped stone, all sickle blades (not illustrated). For further discussion of the chipped stone, see p. 115.

FIG. 3.7	Object no.	Description	Level
a	50U:101.01	Stone pounder. Limestone. Bottom edge chipped. Ht. 9.41. Di. 5.60.	A
b	51T:117.05	Stone pounder. Black. Signs of wear along all edges. Max. h. 11.2. L. 7.5. W. 3.0.	C/D
c	51T:161.01	Stone pounder. Dark grey basalt, with traces of wear along bottom edge. Max. l. 11.5. Max. w. 4.9. Max. Th. 4.8.	L
d	50U:176.01	Limestone grinder. L. 18.4. Max. W. 12.8.	G/H
e	50U:169.03	Limestone grinder. L. 25.2. W. 18.4.	E
f	50T:158.03	Limestone grinder. L. 34.4. Ht. 6.4. Th. 20.5.	E
g	51V:148.01	Limestone grinder. Limestone. L. 37.2. W. 13.2. Traces of wear on flat edge.	E
h	51T:110.01	Quern stone reused as door socket. Evidence of wear on both sides of central hole. Grey basalt. L. 18. W. 16. Ht. 5.4.	B
i	51V:119.02	Door socket, limestone. Ht. 5.44. Di. 13.4.	C
j	50T:135.01	Door Socket, limestone. Traces of wear on upper surface. Ht. 4.0. Di. 11.69.	B

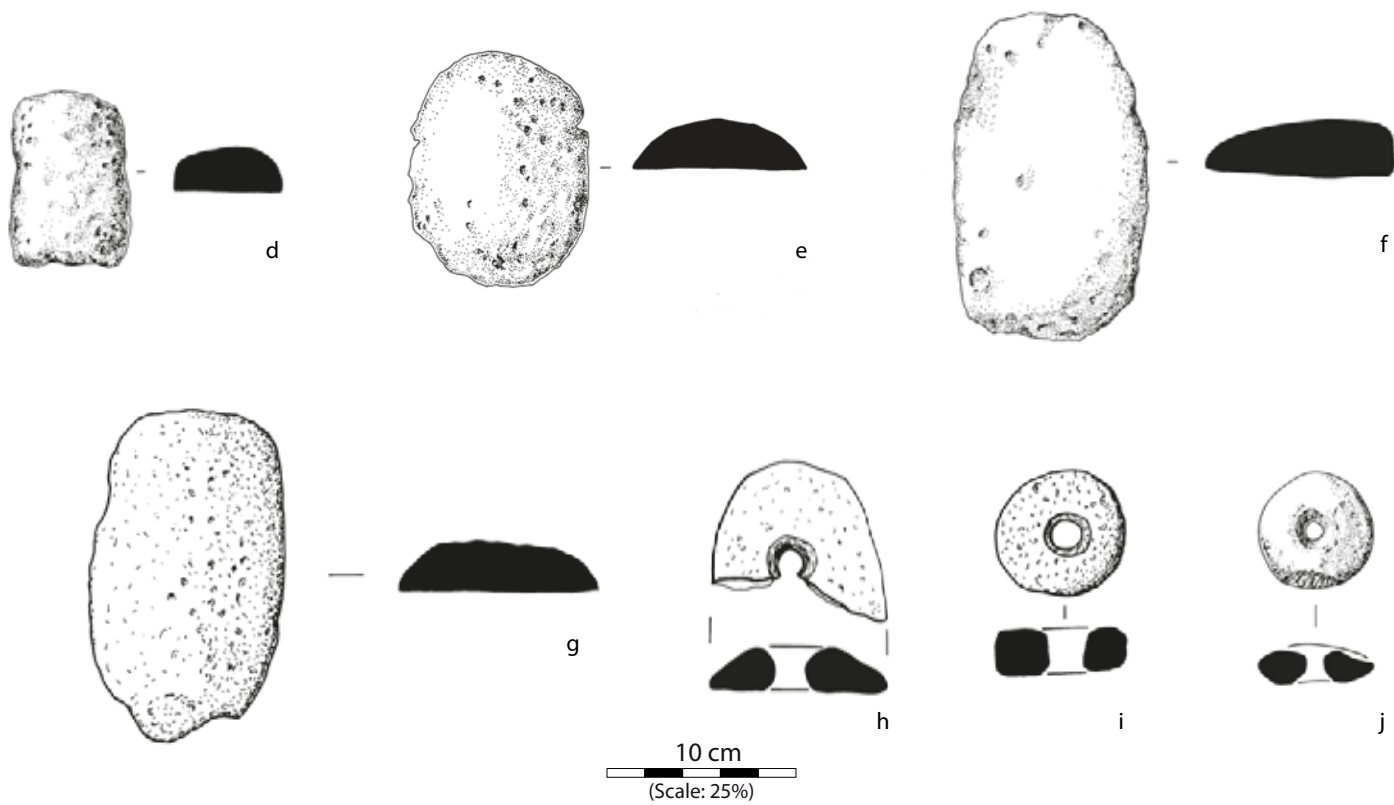
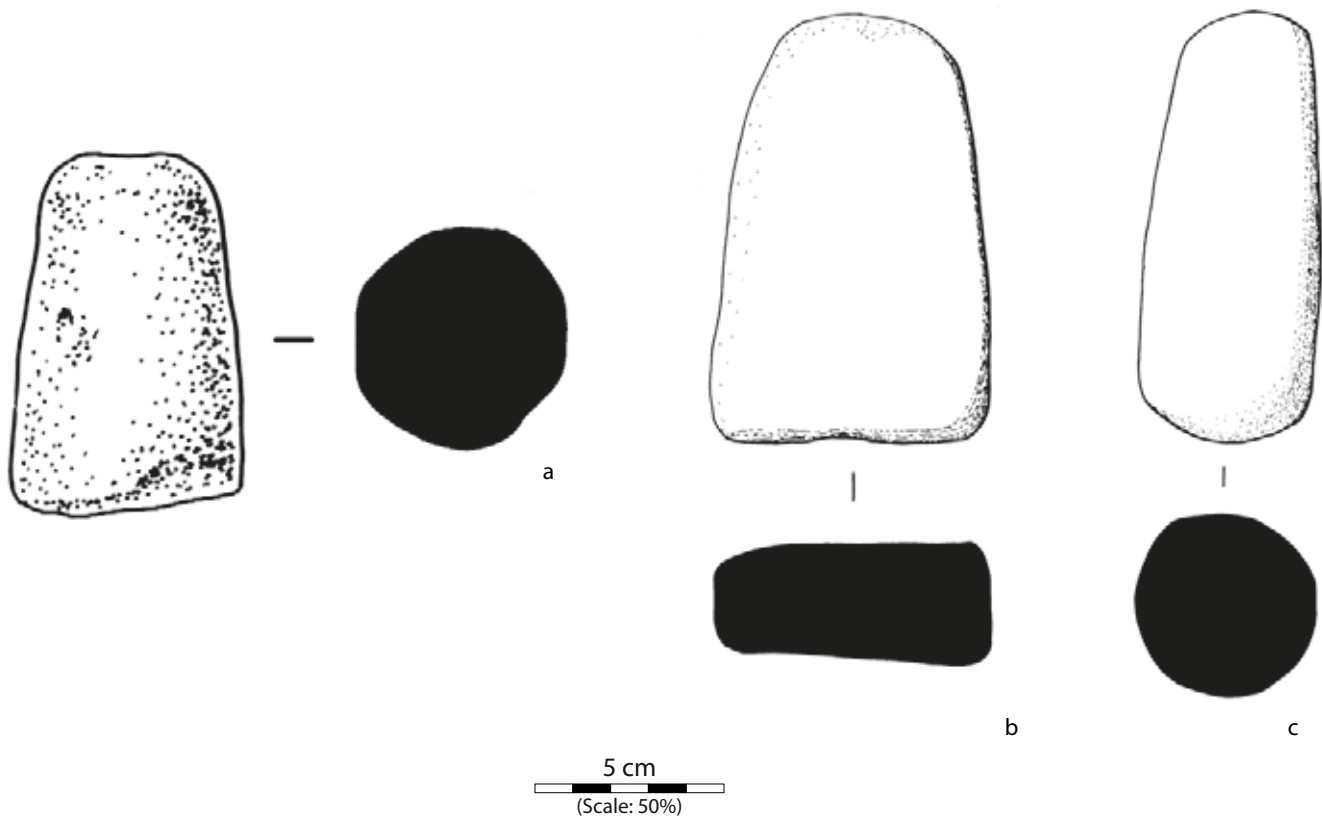


FIG. 3.7. Ground stone (scales as shown).

ROBERT KILLICK

4. Pottery

The pottery illustrated here is predominantly a sherd assemblage. There are very few whole pots or profiles. The pottery is described by site period and it should be emphasised that these period divisions, MA1 to MA3 (bottom to top), are first and foremost based on clear breaks in the stratigraphic sequence as described in Chapter 2. It was our good fortune that these corresponded to obvious changes in the ceramic repertoire. Archaeology is not usually so tidy.

Emphasis is placed on describing the decorated styles of pottery found in the Ninevite 5 Sounding. Less attention is paid to the undecorated common ware. The decorated pottery from the Ninevite 5 Sounding represents just a small sample (768 sherds) of that actually found at the site. Material from the extensive excavation along the Cliff Section included a further thirty-eight intact or near intact vessels (Roaf 1983: 83–90), as well as many more diagnostic sherds. On a few occasions in this chapter, a vessel from the Cliff Section that has already been published has been included to illustrate a type or motif not well represented in the Ninevite 5 Sounding. Where this has been done, such pottery is designated as ‘CS’ in the ‘Level’ column of the figure caption.

Pottery is presented by period from the bottom up in the following order:

Mohammed Arab 1 (Levels M–L)

Painted Ware: jars, bowls

Incised Ware: jars, bowls

Common Ware: jars, bowls

Cooking Ware

Mohammed Arab 2 (Levels K–G)

Painted Ware: jars, bowls, hollow-stemmed bowls, cups

Plain Fine Ware: jars, pedestal bowls, pedestal bases, cups, miniatures

Incised Ware: jars, bowls, cups

Common Ware: jars, bowls

Cooking Ware & Miscellaneous

Mohammed Arab 3 (Levels F–A)

Plain Fine Ware: pedestal bowls, cups

Incised Ware: jars, bowls, cups, stands

Excised Ware: jars, bowls, cups

Common Ware: jars, bowls

Cooking Ware & Miscellaneous

MA1 POTTERY (LEVELS M–L)

Pottery from levels of the site assigned to MA 1 was recovered in quantity from two areas: in the Ninevite 5 Sounding and along the Cliff Section to the east in 61X–67X. A group of sherds from the lowest layer of trench 65X along the Cliff Section may represent an earlier phase of MA1 that was not present in the Ninevite 5 Sounding or elsewhere (Roaf 1998).

Painted Ware

Jars (Fig. 4.1)

Painted jars were not well represented in the MA1 levels of the Ninevite 5 Sounding. There were two sherds from the upper body of medium-sized globular jars (Figs. 4.1a & b), a type better represented in the adjoining Cliff Section (Fig. 4.1c). As a class, these vessels have a ring-base and rounded body with four nose lugs or vertical and horizontal ridging. The ware is the same as the Common Ware. Where jars have pierced lugs, these may be short, but more often are very long, extending halfway down the jar. Where vertical and horizontal ridges are present, the vertical ridges are usually plain without incised decoration, and in groups of two or three; the horizontal ridges are plain or fingernail impressed. Rim diameter is 12–13 cm and height c.23 cm. The paint is red or brown and designs confined to the area above the carination of the pot. A restricted range of patterns is used: cross-hatched triangles and bands, combined with vertical and horizontal ridges and nose lugs. This type is also present at Tell Karrana 3 (Rova 1993: pl. xvii.18).

A painted jar with a straight, slightly flared neck and two lugs was found in the Cliff Section (Killick and Roaf 1987: fig. 2). Red paint had been applied to all of the upper body and neck. There were no identifiable sherds of this type of jar in the Ninevite 5 Sounding and it does not seem to be a type present at Tell Karrana 3.

Bowls (Figs. 4.2 & 3)

Painted bowls from the Ninevite 5 Sounding range in size from relatively small examples with a rim diameter of c.7 cm to medium-sized ones 17 cm in diameter. One intact example had a round bottom (Fig. 4.2a), while a larger deep bowl with a spout had a ring-base (Fig. 4.2g). Many of the rim sherds, of course, could have had either. Painted bowls with both round bases and ring bases are well attested at Tell Karrana 3 (Rova 1993: 64).

Paint is restricted to above the carination with one exception that has concentric loops below (Fig. 4.3k). The commonest motif on this pottery is a row of cross-hatched triangles. The triangles may be separated by one or two vertical lines, or by a vertical band of hatching or cross-hatching. A chequer-board pattern is also present (Fig. 4.3g). One bowl has a complex geometric pattern framing a geometrically-rendered bird (Fig. 4.3h). Other designs noted in the Cliff Section pottery included solid triangles sometimes paired, bands of running diamonds, cross-hatched squares, and zigzags.

Incised Ware

Jars (Fig. 4.4)

Jars with panels of incised decoration were absent in the MA1 levels of the Ninevite 5 Sounding. There was just a single jar sherd with a nose lug and a band of impressed decoration (Fig. 4.4b). Examples are known, however, from the adjoining Cliff Section. One of these unusually has decoration below the carination in a mirror image of that on the upper body (Roaf 1983: fig. 2.3). There are no other examples with incision below the carination either from Tell Mohammed Arab or from Tell Karrana 3 where the repertoire is otherwise comparable (Rova 1993: 56 & pl. xxvi). The commonest motif at both sites is a row of cross-hatched triangles.

Other forms of incised decoration found on jars included rows of jabbed fingernail impressions, combed horizontal bands, and horizontal grooves. There was also a unique jar with two handles decorated with slashes and connected by horizontal and vertical notched bands (Fig. 4.4a).

Bowls (Figs. 4.4c–e)

Unlike the jars, there was no incised counterpart to the painted bowls of MA1. A few sherds were decorated with simple forms of incision, single- and multi-toothed combing, usually applied in a wavy-line pattern close to the rim (Figs. 4.4c–e). This type of decoration was also present at Tell Karrana 3 (Rova 1993: 58 & pl. xxvii.238–41).

Common Ware

Jars (Figs. 4.5a–j)

The plain assemblage of MA1 was wheelmade and manufactured in a buff, cream or pink clay and surface colour, with grit temper. Many rim sherds of medium- and large-sized jars were recovered but no complete profiles could be reconstructed (Figs. 4.5a–d & g–i). These jars had ring-bases (many were found detached from their vessels), were carinated with a high shoulder and short neck, and are similar to those from Tell Karrana 3 (Rova 1993: pl. xxxv).

Smaller jars with a spout and rounded bottom were found in the Cliff Section (Fig. 4.5f and Roaf 1983: fig. 2.5), and again there is a close parallel with the Tell Karrana 3 material (Rova 1993: pl. xxxiv.379).

Bowls (Fig. 4.6)

Common Ware bowls display the same range of shape as the painted examples: round-bottomed carinated bowls (Figs. 4.6a–c), some with very low carination and with beaded or out-turned rims; ring-based carinated bowls (Fig. 4.6e); and larger bowls where the carination is higher on the body (Fig. 4.6f). The range is similar to the bowls from Tell Karrana 3 (Rova 1993: pls. xxx–xxxii). For the incomplete profiles illustrated, of course, it is not possible to determine the base shape.

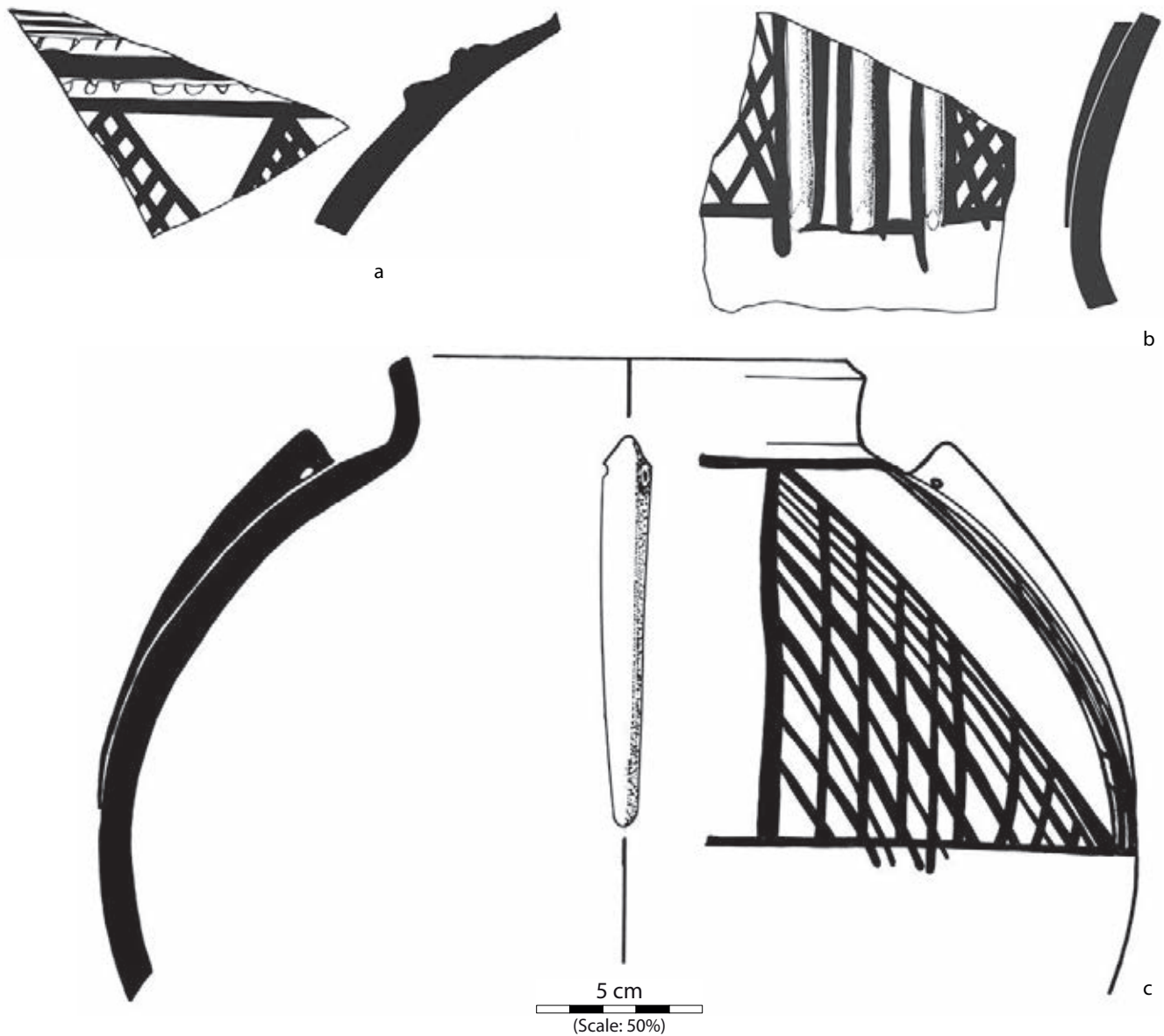


Fig. 4.1	Object no.	MA1 Painted Jars	Level
a	50V:139.03	Surface: buff. Clay: pink. Temper: grit. Red paint.	L
b	50U:209.01	Surface: buff/green. Clay: pink. Temper: grit. Dark brown paint. Three vertical applied ridges.	M
c	60W:031.03	Surface: pale brown. Clay: grey core. Temper: grit. Red-brown paint.	CS

Cooking Ware (Figs. 4.6k–n)

The typical cooking vessel was a globular pot with two or four crescentic lugs either on or close to the rim (Figs. 4.6k–m). The vessels were handmade, with a pink, grey or black surface and clay, and temper was usually coarse grit. Most examples had a rim diameter of 17–20 cm, but there were both larger (up to 26 cm) and smaller (c.9 cm) ones.

Abbreviations

Di. diameter
 Veg. vegetal (of temper)
 Ext. extant
 Ht. height
 L. length
 W. width
 Th. thickness
 CS Cliff Section

All measurements are in centimetres.

Clay and surface of a sherd are the same unless otherwise stated.

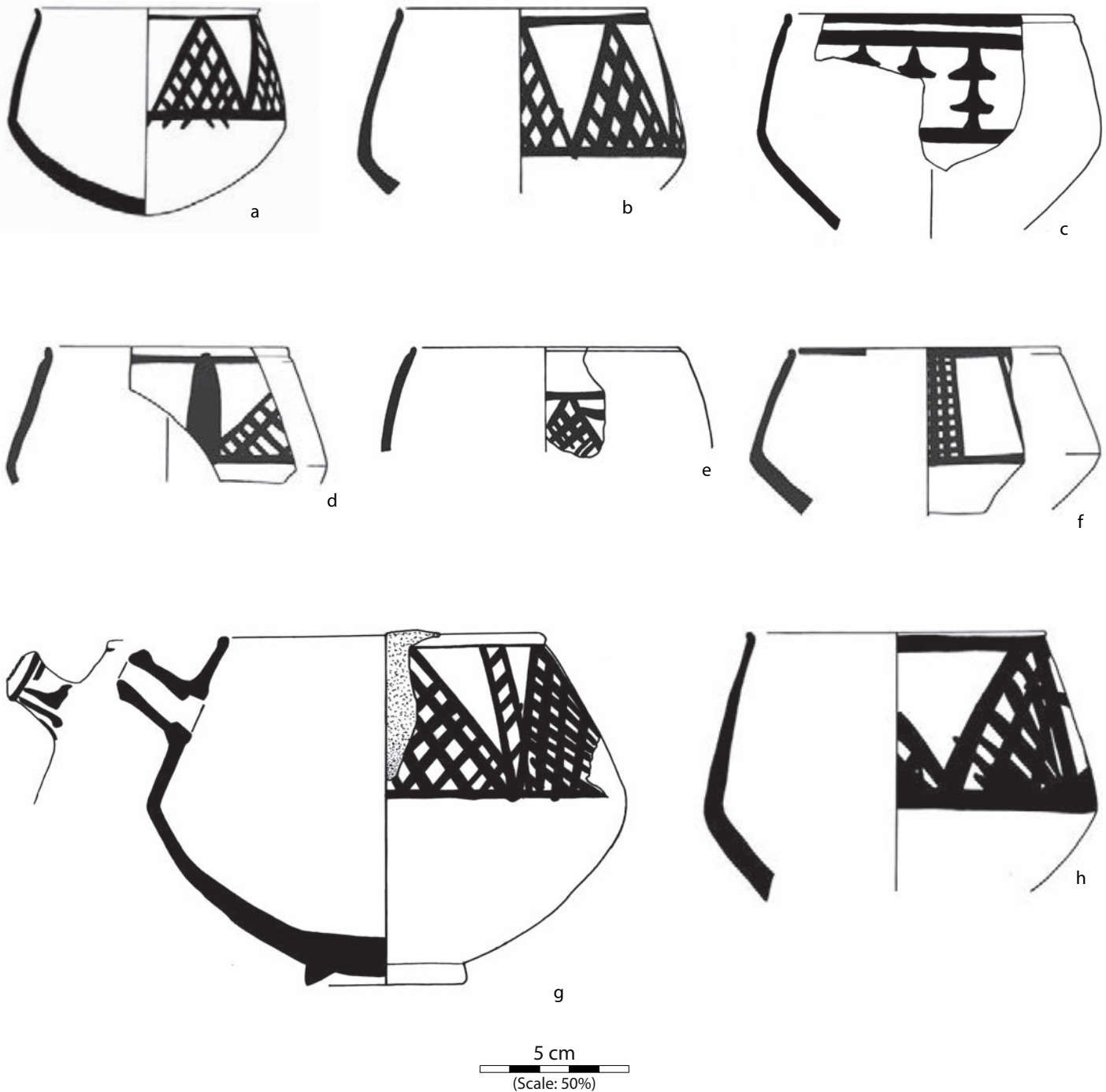


FIG. 4.2	Object no.	MA1 Painted Bowls	Level
a	50T:183.03	Surface: buff. Clay: pink. Temper: fine grit, white mica. Rim di. 7.5. Ht. 6.9. Red paint.	M
b	50V:138.02	Surface: buff. Clay: pink. Temper: grit. Rim di. 8–8.5.	L
c	50T:183.02	Clay: overfired green. Temper: none visible. Rim di. 9–11. Black paint.	M
d	50U:206.06	Surface: buff. Clay: pink. Temper: grit. Rim di. 8. Red/purple paint.	L
e	50V:138.03	Surface: buff/green. Temper: grit. Rim di. 9. Red paint.	L
f	50U:214.02	Clay: green (overfired). Temper: grit. Rim di. 9. Purple paint.	L
g	51T:160.02	Clay: buff. Temper: veg. Rim di. 11. Brown paint. Repaired in antiquity with bitumen.	L
h	51T:160.06	Clay: buff. Temper: veg. Rim di. 10. Brown paint.	L

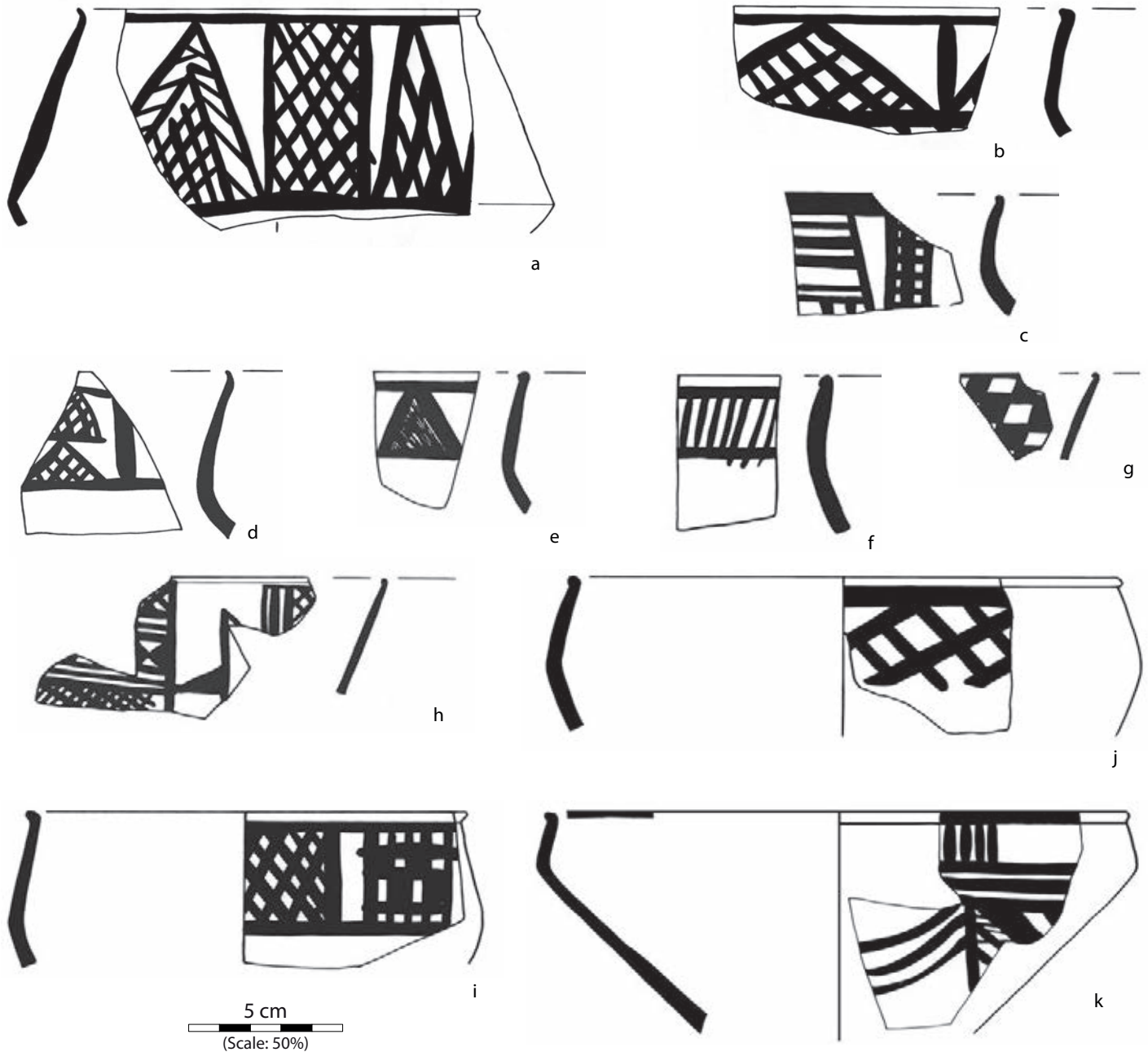


FIG. 4.3	Object no.	MA1 Painted Bowls	Level
a	50T:183.01	Surface: buff. Clay: pink. Temper: grit. Rim di. 13. Red paint.	M
b	50T:183.04	Surface: buff/brown. Clay: pink. Temper: ? Rim di. 17. Red paint.	M
c	50V:139.01	Surface: buff. Clay: pink. Temper: grit. Rim di. 15. Red paint.	L
d	50U:215.02	Surface: pink. Clay: buff. Red paint.	M
e	50U:215.03	Surface: brown. Clay: pink. Temper: grit. Rim di. 14. Red paint. Temper: none visible. Rim di. 13.	M
f	50V:139.02	Surface: brown/buff. Clay: pink. Temper: heavy white grit. Red/brown paint.	L
g	50U:214.02	Clay: green (over-fired.) Temper: grit. Rim di. 9. Purple paint.	L
h	50U:214.03	Surface: buff/cream. Temper: grit. Red paint.	L
i	50V:138.04	Surface: buff. Clay: pink. Temper: white grit. Rim di. c.14. Red paint.	L
j	51V:178.03	Brown surface. Clay: pink. Core grey. Temper: grit. Rim di. 16. Red paint.	L
k	50T:184.01	Surface: buff/green with pocking. Clay: pink. Temper: veg. & occasional white grit. Rim di. 18. Purple paint.	M

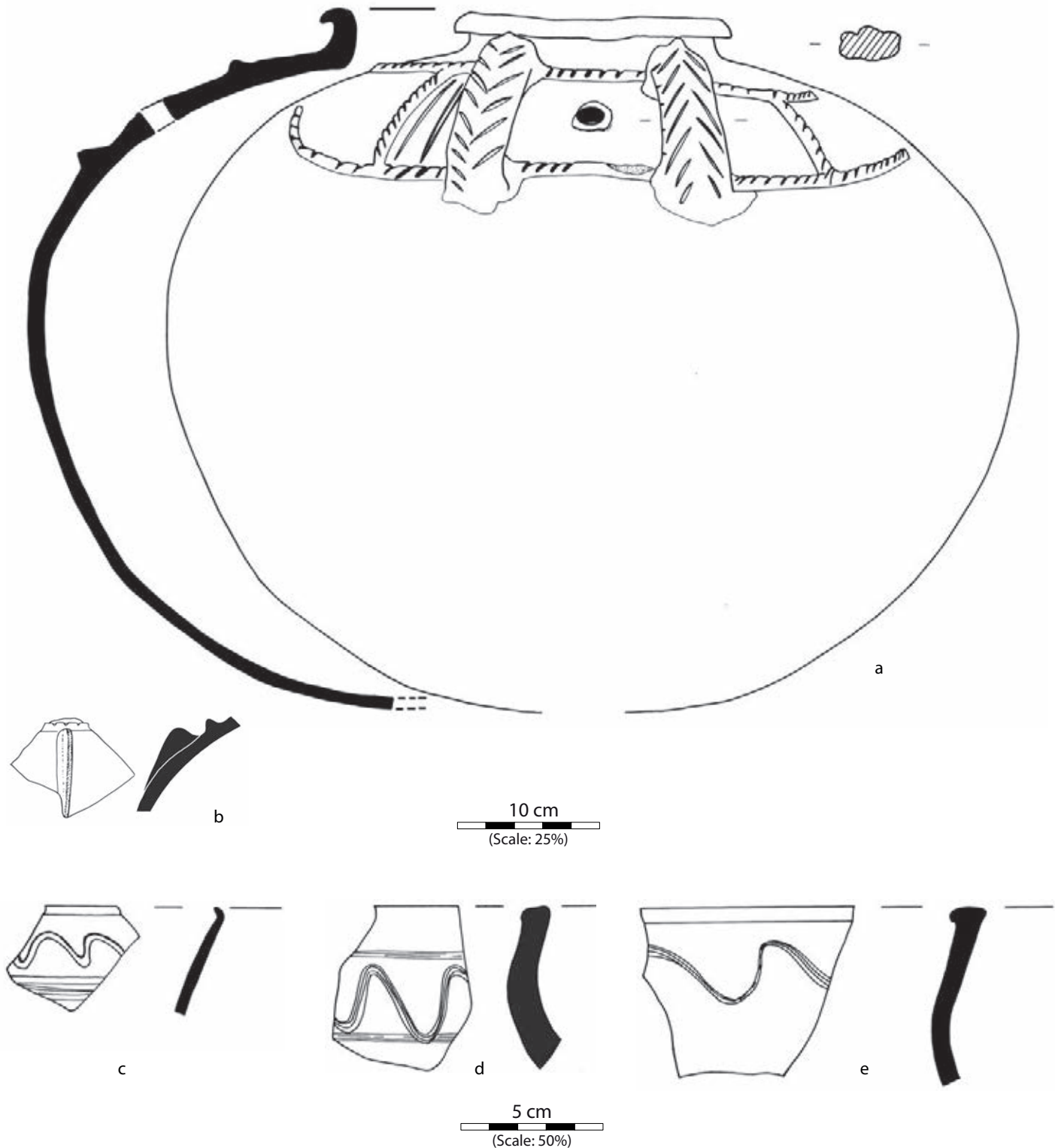


FIG. 4.4	Object no.	MA1 Incised Pottery	Level
a	51T:160.03	Surface: buff/brown. Clay: pink. Temper: heavy medium/fine white grit, some fine veg. Rim di. c.18. Spout missing. Applied notched rope decoration.	L
b	51V:181.09	Surface: buff. Clay: pink. Temper: grit.	M
c	51T:160.07	Surface: buff. Clay: pink. Temper: white grit. Rim di. c.16. Combed decoration	L
d	51V:181.07	Surface: brown . Clay: grey. Temper: grit. Rim di. 17-19. Combed decoration	M
e	51V:178.01	Surface: buff/red. Clay: light brown. Temper: heavy white grit. Rim di. c.26. Combed decoration.	L

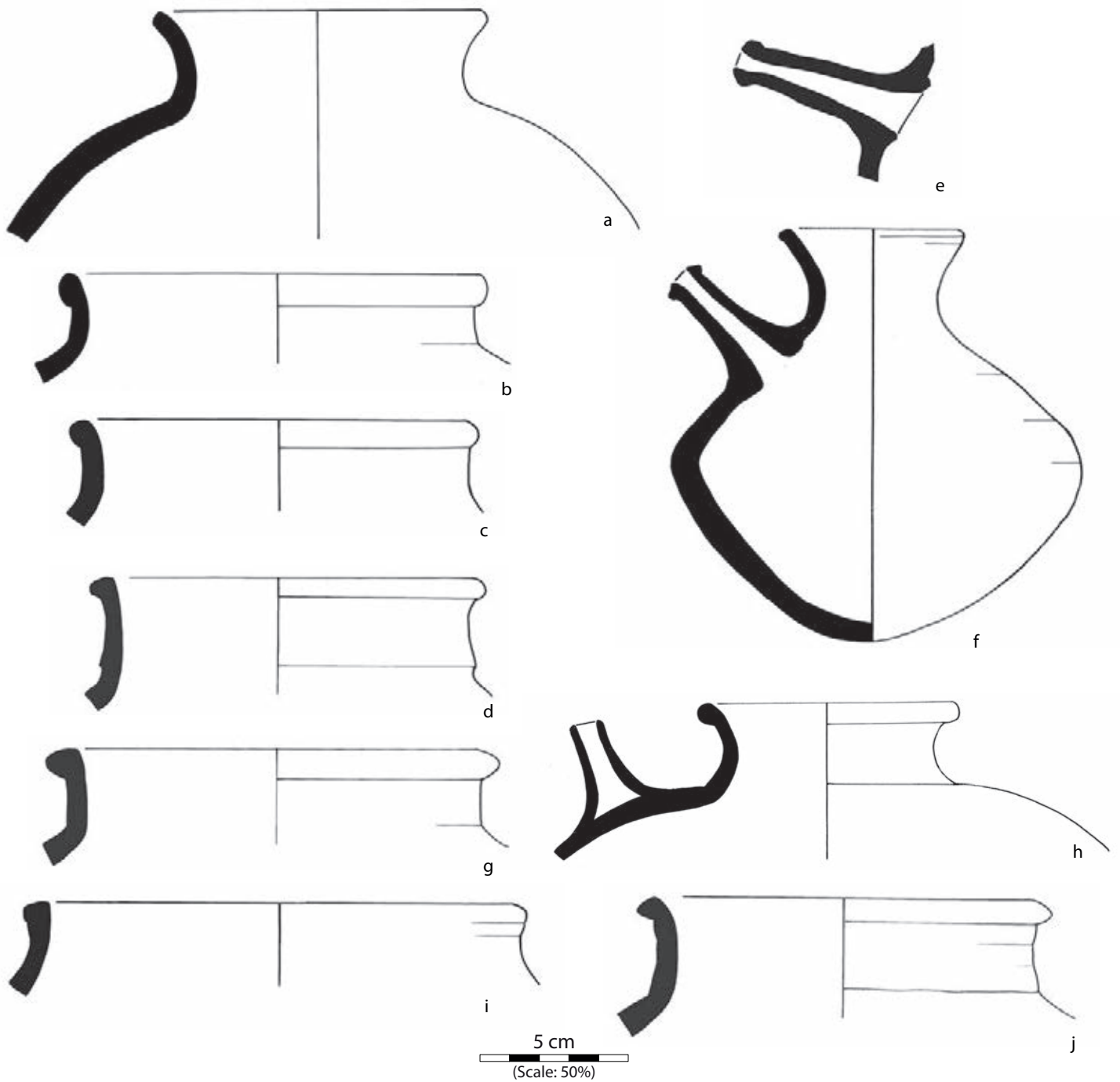
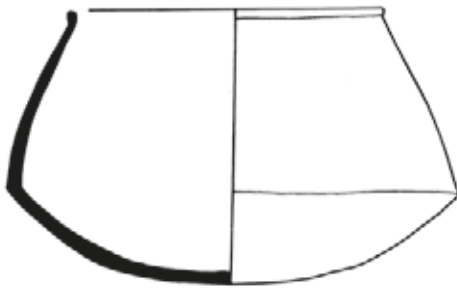
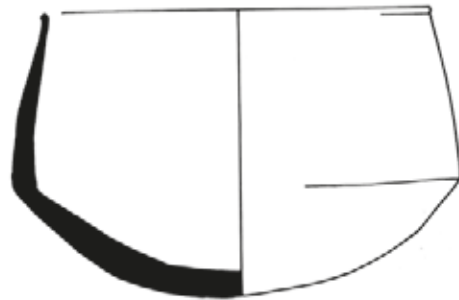


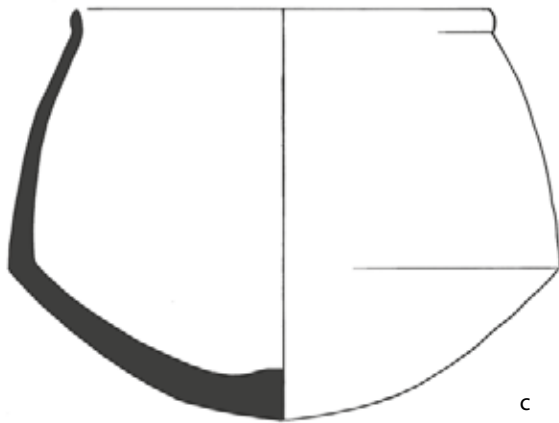
FIG. 4.5	Object no.	MA1 Common Ware Jars	Level
a	51U:202.01	Surface: buff. Clay: pink. Temper: white grit. Rim di. c.11.	L
b	50T:183.09	Surface: buff. Clay: pink. Temper: grit. Rim di. c.14.	M
c	50V:139.07	Surface: buff. Clay: pink/grey. Temper: grit and mica. Rim di. 13.	L
d	50U:215.19	Surface: green. Clay: pink. Temper: fine veg. and some grit. Rim di. 13.	M
e	51V:181.09	Surface: buff. Clay: pink. Temper: grit.	M
f	63X:036.23	Surface: red. Clay: pink. Temper: grit.	CS
g	50U:215.18	Surface: buff/brown. Clay: pink. Core: grey. Temper: very heavy white grit and some veg. Rim di. 14.	M
h	65X:035.01	Surface: buff. Clay: pink. Temper: grit.	CS
i	50V:139.08	Surface: buff/brown. Clay: pink. Temper: heavy white grit. Rim di. 16.	L
j	50U:215.21	Surface: buff/brown. Clay: light brown. Temper: fine grit and veg. Base di. c.7.	M



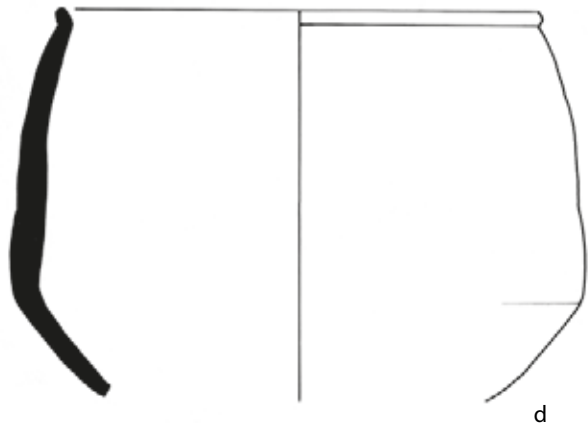
a



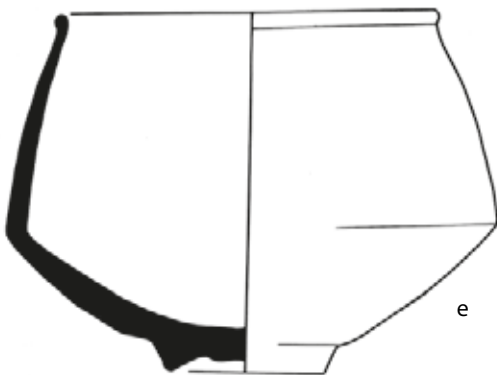
b



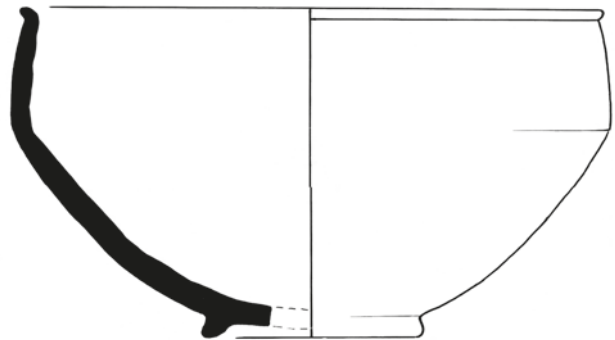
c



d



e



f

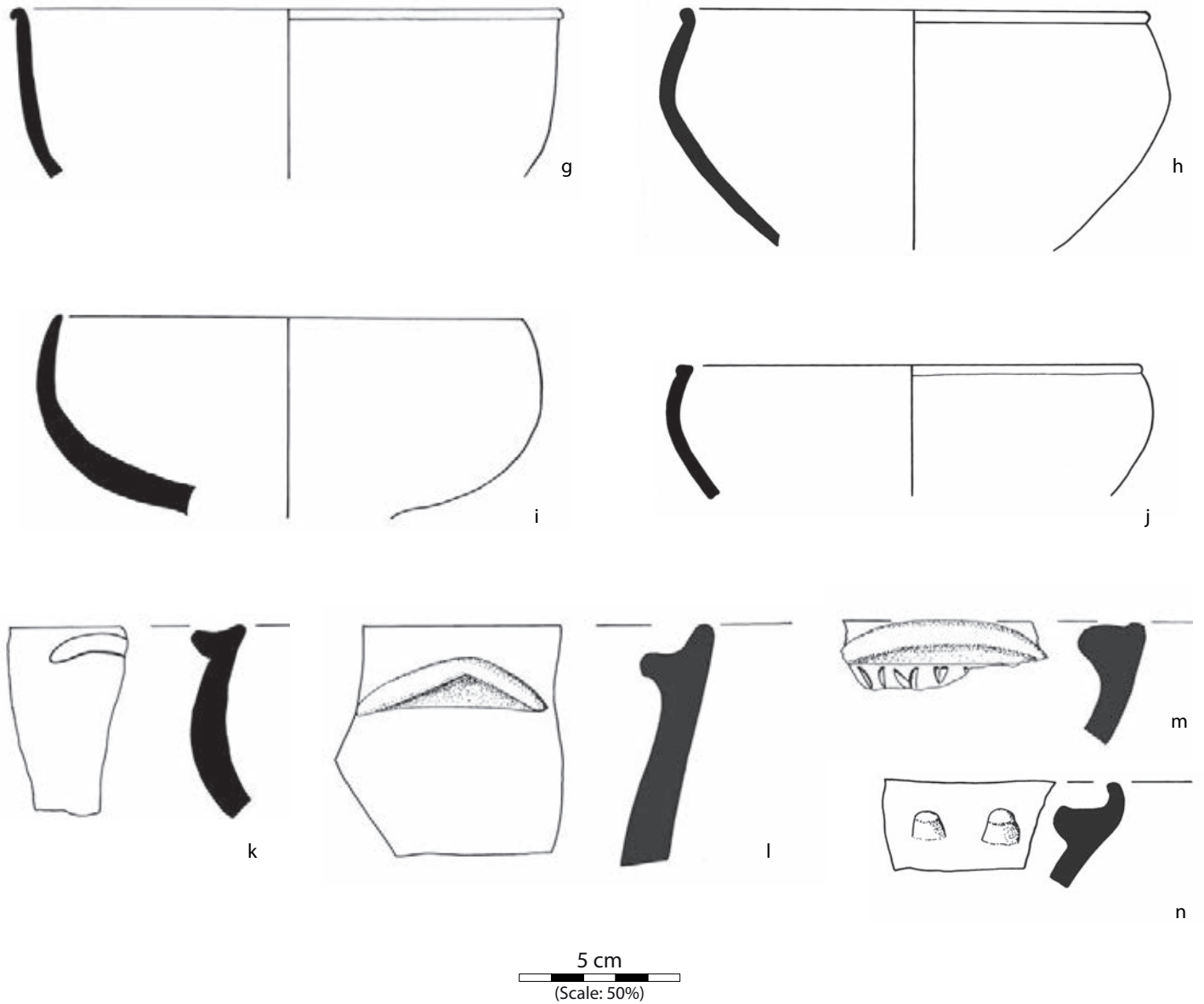


FIG. 4.6	Object no.	MA1 Common Ware Bowls & Cooking Ware	Level
a	51T:160.05	Clay: green (overfired). Temper: veg. Rim di. 8.5.	L
b	51T:157.03	Clay: green (overfired). Temper: veg. Rim di. 9–10.	L
c	50U:206.02	Clay: red/yellow. Temper: fine veg. and fine grit. Rim di. 11. Ht. 10.9.	L
d	50T:183.07	Clay: buff with grey core. Temper: grog and grit. Rim di. 13.	M
e	51T:160.01	Clay: buff. Temper: veg. Rim di. c.10. Base di. 4.	L
f	50T:183.06	Surface: buff. Clay: pink. Temper: white grit. Rim di. 15. Ht. 8.6. Red striations on interior.	M
g	51T:161.02	Surface: red/brown. Clay: grey. Temper: fine white and black grit. Rim di. 17–18.	L
h	50V:139.06	Surface: buff/brown. Clay: pink. Temper: grit. Rim di. 14.	L
i	51U:202.03	Surface: buff. Clay: pink. Temper: decayed limestone grit, some veg. Rim di. 14–15. Handmade	L
j	50V:138.06	Surface: buff/brown. Temper: white grit. Rim di. c.14.	L
k	51V:181.04	Clay: green. Temper: grit and veg. Rim di. 8–9.	M
l	50U:215.22	Clay: black. Temper: large grit.	M
m	50U:215.24	Clay: brown. Temper: grit. Lug off cooking pot. Finger impressions below lug.	M
n	51V:181.16	Surface: brown. Clay: grey. Temper: grit. Two clay knobs stuck to outside.	M

MA2 POTTERY (LEVELS K–G)

Painted Ware

Jars (Fig. 4.7)

Most of the painted jars from Tell Mohammed Arab were found along the (Fig. 4.7a–d & f) Cliff Section. They were vegetal tempered with a cream, buff, pink or green surface and clay colour. Painted designs were executed over the entire exterior of the body, with sometimes a band of paint over and inside the rim. Paint colour varied from black to purple to red. That this was sometimes the result of accidental differential firing temperature in the kiln was demonstrated on one jar where a gradual change from purple to red occurred around the body. A pattern of concentric loops had been applied to the lower body in five cases, the number of concentric loops per portion of the pattern varying from three to five.

The jars were either handmade or formed on a slow wheel. Some handmade examples showed traces of scraping or ‘whisking’ as was noted at Telul eth-Thalathat, where it was also reported that some painted jars were wheel-made (Fukai et al. 1974: pl. li.7–9), and some by hand (ibid. pl. xxi.6). At Tell Billa, the painted pottery was said to be ‘mechanically turned as a rule, but handmade specimens were not uncommon in finer as well as coarser pieces’ (Speiser 1933: 252). This is in contrast to the material from Tell Karrana 3 where nearly all the Ninevite 5 painted ware was turned on the fast wheel (Rova 1993: 44).

The presence of a pedestal base on a jar or bowl is one of the most distinctive features of the Ninevite 5 painted assemblage. Pedestal jars are also known as stemmed vases (Thompson and Hamilton 1932: 85) and as footed jars (Fukai et al. 1974). Many examples have four lugs on the shoulder (Fig. 4.7b–d). There is some variation in the shape and size of the lug which may stick up and be rounded at the end or flattened and rectangular. Variations in rim and in body shape may also be noted. The most distinctive rim is a flared mouth (Fig. 4.7d) which has been described as ‘trumpet-mouthed’ (Thompson and Hamilton 1932: 85). Four other sherds had similar rims and were painted outside and inside the rim with horizontal stripes. The jar body may be rounded, with a curving carination, or more angular, with a sharper carination, sometimes very high on the body. Such variations can be seen at Nineveh (Thompson and Hamilton

1932: pl. lvii) and at Telul eth-Thalathat (Fukai et al. 1974: 33). There were also many examples from Tell Kutani (Bachelot 2003: figs. 22–3) and from Ninevite burials at Tell Rijim (Bielinski 2003: figs. 6 & 7). Size variation is also considerable, from 7 to 38 cm at the carination of the jar.

There are two examples of possible round-bottomed jars, although in both cases the bases are friable and chipped so it is difficult to be certain (Fig. 4.7e–f). A close parallel to these was found at Tell Karrana 3 (Rova 1993: pl. xiv.50).

Bowls (Figs. 4.8d–h & Fig. 4.9)

The only complete profile of a pedestal bowl was a miniature one from the Cliff Section (Fig. 4.8e). However, many of the bowl rim sherds probably had pedestal bases. There were many examples of pedestal bases detached from their parent vessels, whereas there is little evidence for painted round-bottomed bowls either at Tell Mohammed Arab or at other sites.

There are many variations in the shape of the bowl which may be ascribed to differences in the pedestal base itself, the angle and height of carination, the rim shape, and to the size of the bowl. The most common rim shape for painted bowls is a simple beaded rim which is sometimes pulled out slightly (see Figs. 4.8 & 9).

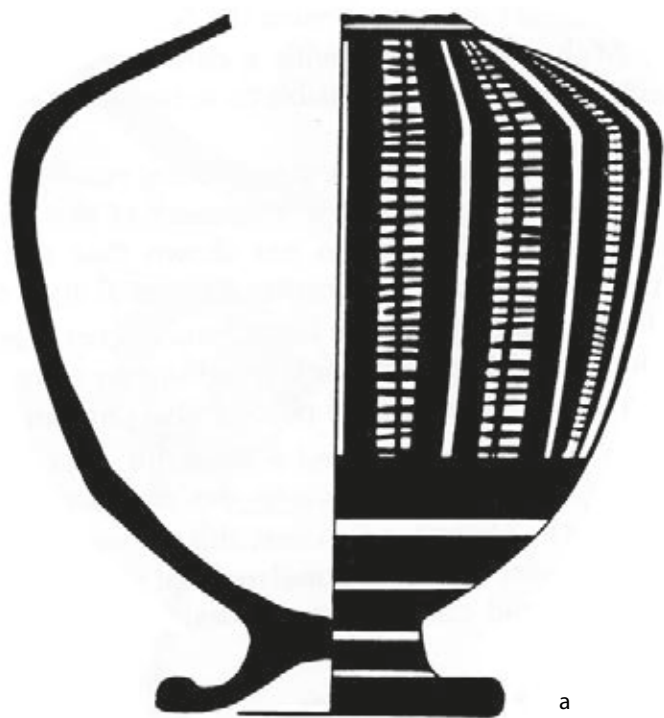
A satisfactory measurement of the rim diameter was not obtained for most of the bowl sherds. The diameters which were measured showed a clustering between 16 and 21 cm.

The fabric of the painted bowls was the same as that of the painted jars: a buff, pink or green surface and clay and a predominance of vegetal temper. Some examples had a creamy slip or wash but in most cases the paint had been applied directly to the surface of the pot. At Telul eth-Thalathat, close examination suggested that all painted pedestal bowls were made on the wheel (Fukai et al. 1974: 35). At Tell Mohammed Arab, most examples were certainly finished on the wheel but some seemed to be handmade.

Hollow-stemmed Bowls (Fig. 4.8a–c)

Large painted hollow-stemmed bowls retain the same shape of bowl as the small pedestal bowls, but the pedestal base has been lengthened into a stem or stand. The stem and the foot of such vessels are always hollow and many have three vertical slits or windows in them (Fig. 4.8a); the stem may also be ribbed. Motifs on the stem include a ladder pattern and vertical rows of hatched diamonds.

FIG. 4.7	Object no.	MA2 Painted Jars	Level
a	60W:008.08	Clay: pink. Temper: veg. and sparse grit. Red paint.	CS
b	51V:038.09	Clay: buff. Purple paint. Four pierced lugs.	CS
c	50V:031.01	Clay: buff. Temper veg. & grit. Cream slip. Purple/brown paint	CS
d	63X:023.01	Clay: buff. Temper veg. Purple paint.	CS
e	50U:191.09	Clay: green. Temper: veg. Purple paint.	I
f	54V:022.02	Clay: buff. Temper veg. Purple paint.	CS



a



b



c



d



e



f

5 cm
(Scale: 50%)



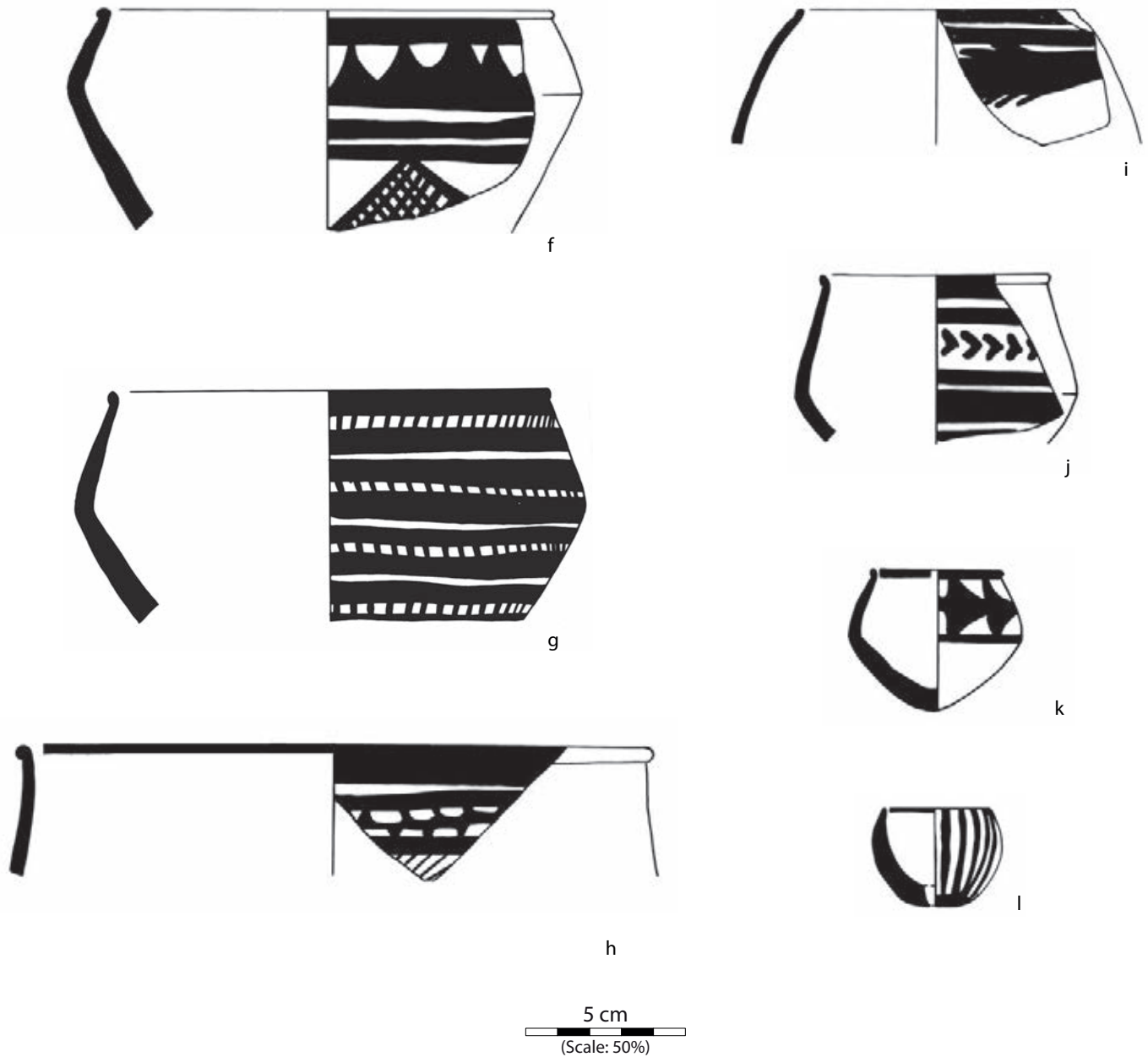


FIG. 4.8	Object no.	MA2 Painted Bowls & Cups	Level
a	50V:126.01	Surface: cream slip. Clay: buff. Temper: veg. Stem fenestrated, three panels of each design in dark brown paint.	H
b	50T:170.02	Clay: brown/buff. Temper: white grit and veg. Red paint, fenestration at either edge.	H
c	51V:167.01	Surface: buff. Clay: pink. Temper: coarse grit and veg. Di. c.12.5. Purple paint. Part of fenestrated stand.	J
d	50V:137.01	Clay: green. Temper: veg. Rim di. c.16. Purple paint.	I
e	51V:040.01	Surface: buff. Temper: veg. Purple paint. Rim di. 9.5.	CS
f	50V:135.01	Clay: green/buff. Temper: veg. Rim di. 13.5.	J
g	50V:126.02	Surface: cream slip. Clay: buff. Temper: veg. Rim di. c.13.5. Black paint.	H
h	51V:172.03	Clay: green. Temper: veg. Rim di. c.19–20. Purple paint.	J
i	50U:191.06	Clay: green. Temper: none visible. Rim di. 8–9. Black paint.	I
j	51V:167.02	Clay: green, vitrified. Temper: none visible. Rim di. c.7. Purple paint.	J
k	51V:172.01	Clay: buff. Temper: fine grit. Rim di. 4. Ht. 4.4. Dark brown paint.	J
l	51U:187.01	Surface: buff/brown. Temper: veg. & occasional white grit. Rim di.: c.3.5. Purple paint, Hand-made.	H



FIG. 4.9	Object no.	MA2 Painted Bowl Rims	Level
a	50T:170.06	Surface: buff. Clay: pink. Temper: fine grit and veg. Rim di. c.27.	H
b	51V:166.01	Clay: buff. Temper: veg. and sparse white grit. Rim di. c.15. Purple paint.	J
c	51V:167.03	Clay; green. Temper: veg. Rim di. c.18–19. Dark purple paint.	J
d	51V:166.03	Surface: buff. Clay: pink. Temper: fine grit. Red paint.	J
e	50U:191.08	Clay: green/buff. Temper: veg. Rim di. 26. Purple paint.	I
f	51T:156.02	Surface: buff. Clay: buff. Temper: veg. Purple paint.	K
g	51U:192.16	Surface: green. Temper: veg. Purple paint.	J
h	50U:197.02	Clay: green. Temper: veg. Black paint.	I
i	51V:176.02	Clay: pink. Core: grey. Temper: grit, large white grits pocking surface. Rim di. 11–12.	K
j	50V:126.03	Surface: cream slip. Clay: pink. Temper: sparse veg. Purple paint.	H
k	51U:170.08	Clay: buff. Temper: medium veg. Rim di. 28. Cream slip. Purple paint.	H
l	50T:177.06	Clay: green. Temper: veg. Dark red paint.	K
m	51V:172.02	Clay: green. Temper: veg. Rim di. c.8. Purple paint.	J

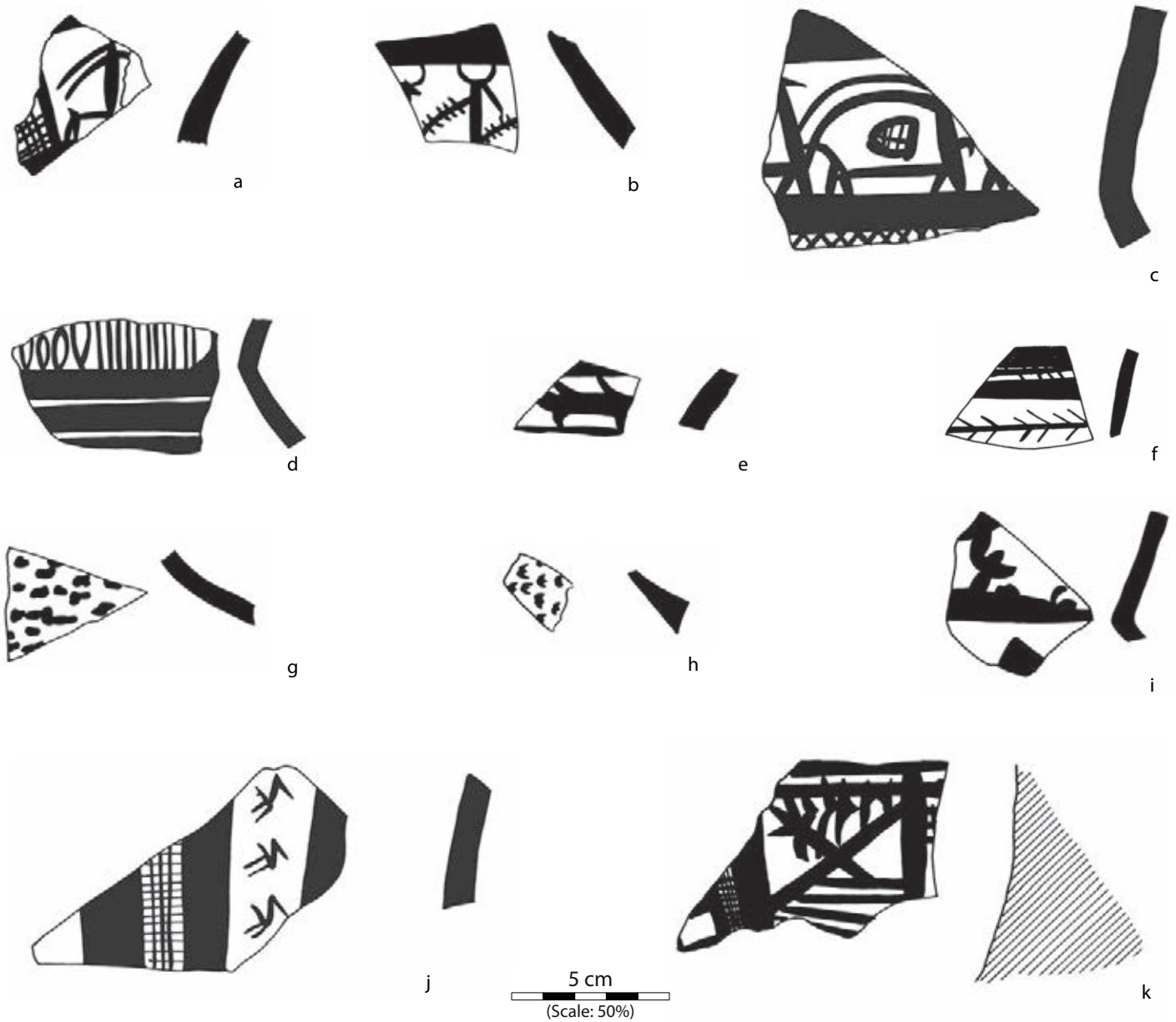


FIG. 4.10	Object no.	MA2 Painted Body Sherds	Level
a	51U:190.02	Clay: green. Temper: veg. Purple paint.	J
b	50T:162.06	Clay: green. Temper: veg. Purple paint.	G
c	51T:147.01	Surface: buff. Clay: pink. Temper: veg. with occasional white grit. Dark red/brown paint.	H
d	51T:147.02	Surface: green. Temper: veg. Purple paint.	H
e	50T:162.05	Surface: cream slip. Clay: pink. Temper: hard veg. Brown paint.	G
f	50U:191.07	Clay: buff. Temper: veg. Purple paint.	I
g	51V:167.04	Clay: green. Temper: veg. Purple paint.	J
h	51T:144.05	Clay: buff/brown. Temper: ? Red paint.	H
i	51V:166.02	Surface: buff/brown. Clay: pink. Temper: white grit. Red/brown paint.	J
j	51T:139.04	Surface: cream slip. Clay: pink. Temper: heavy medium veg. Black paint.	E
k	51T:143.19	Surface: green/yellow. Clay: pink. Purple paint.	E/G

Cups (Figs. 4.8i–l)

Fifteen sherds of cups with painted decoration were found (Fig. 4.18i & j). The paint on many of the examples appeared brittle and overfired and the colour tended to merge with the fabric of the pot itself so that the overall effect is not aesthetically pleasing, especially when compared with the bright purple usually obtained. There were also two painted cups that may be considered miniatures (Fig. 4.18k & l). Painted cups were also present at Tell Fisna (Numoto 2003: fig. 7).

Motifs

Unlike the painted motifs of MA 1, those of MA 2 are applied all over the exterior of the pot. Often a single band of paint is applied over and on the inside of the rim. Paint colour varies from red to brown to purple, but is most often the latter. The motifs may be either naturalistic or geometric and both may be combined in the same design.

Animals, birds and fish are all represented in the naturalistic designs. Cattle(?) are shown with elongated necks and lunate horns (Fig. 4.9g). Other animals, perhaps gazelle, are depicted with long horns curving back beyond the tail of the animal (Fig. 4.10c).

Birds are shown swimming or waddling (Fig. 4.10j) and flying (Fig. 4.7c). Fish are depicted with some attention to the details of their fins, although whether different species are intended is not clear (Fig. 4.8i).

Common geometric elements include hatched and cross-hatched diamonds (Figs. 4.8d & 4.9k), cross-hatched panels (Fig. 4.9h), chequer-board, ladders (Fig. 4.8c) and hatched triangles (Fig. 4.8f).

Plain Fine Ware

The distinctive Ninevite 5 Fine Ware pottery first appears in the MA2 period (Figs. 4.11–14). It is thin walled and fast wheel thrown, with a well-levigated clay which contains few impurities and usually no visible temper. The most common forms are pedestal bowls and small round-bottomed cups. Both these shapes continue in similar ware into MA 3, but there are important differences. In addition, there are some Fine Ware miniatures and perhaps jars.

Jars

Evidence for Plain Fine Ware jars in the MA 2 levels of the Ninevite 5 Sounding is lacking although there are miniature examples (see below). They seem to be relatively scarce in the early part of the Ninevite 5 period. There are no obvious examples from Tell Karrana 3 while the illustrated ones from Tell Kutana are incised (Bachelot 1987: fig.3).

Pedestal Bowls (Fig. 4.11)

There were no profiles from the Ninevite 5 Sounding of pedestal bowls with the pedestal base still attached, although examples occurred in the Cliff Section. It is probable that the bowls illustrated on Figs. 4.11a–f had such bases. All examples were thrown on the fast wheel. Occasionally, some

fine sparse grit and sand was noted as a tempering agent but in most examples there was no visible temper. In profile, some of the examples give an impression of unfamiliarity with the clay or of experimentation with the body, bulging out in an uneven profile (Fig. 4.11b & d).

Pedestal Bases (Fig. 4.12)

The pedestal bases were made separately from the upper part of the vessel and, unlike the rest of the vessel which had very fine or no visible temper, often included vegetal temper.

Cups (Figs. 4.11g–j & Fig. 13)

MA 2 cups were thrown on a fast wheel, have a greenish, yellow or buff clay and surface and are wet smoothed. The majority show a standard rim diameter of 8–10 cm. Sometimes the bottom half below the carination shows a different colour due to differential firing conditions, where cups have been stacked in the kiln. Some of the cups have a grey clay and fabric but this colour does not predominate as in MA 3 Fine Ware. The shapes parallel the pedestal bowls with noticeable carination and a tendency towards an elongated, conical-shaped base. In throwing, the bottoms were often pushed down quite hard by the thumbs resulting in an uneven thickness of clay at the base. As noted at Telul eth-Thalathat (Fukai et al. 1974: 29), the cups were thrown on the wheel and then turned over and the base pared down by hand; the marks of the scraping tool are quite clear on many of the pots.

Both pedestal bowls and cups display a variety of ribbing /layering that is usually confined to above the carination (Fig. 4.13). This variation is difficult to bring out adequately in the drawings. Some of the ribbing may be little more than ripples in the surface of the clay, while in other cases they may be very deep grooves. There are also variations in the width, number and spacing on a vessel, as well as in rim shape. The most common rim is a beaded one, which is sometimes pulled out a little more.

Miniatures (Figs. 4.11k–n)

There were four miniature jars with lugs. They are probably copies of larger jars, although no such examples were found in excavation. The lugs on these vessels are little more than pierced holes in the clay wall of the pot. Three of the four intact miniatures were found buried in the brickwork of the Level H and I buildings: one in the western wall of Room I2 (Fig. 4.11l); a second in the southwestern corner of the walls of Room H1 (Fig. 4.11k); and the third in the external step of Level H linking the adjoining rooms (Fig. 4.11n). It would seem too much of a coincidence that their deposition within these structures was accidental.

Incised Ware (Fig. 4.14)

Jars, Bowls & Cups

Although the sample of MA2 Incised Ware from the Ninevite 5 Sounding is very small (26 sherds), it suggests that the range of vessel forms mirrored those of the Plain

Fine Ware. There is a jar (Fig. 4.14k), a bowl possibly with a pedestal base (Fig. 4.14j) and cups (Figs. 4.14a & b).

Motifs

MA2 incised sherds have a restricted range of motifs. There are notched bands decorated with a row of incisions (Figs. 4.14a, g–i & k). The incisions may be little more than nicks in the very edge of the band, or they may be cut deeper into it. Where there is more than one band, the bands of notches may slant alternately left and right (Figs. 4.14b & c). In most cases, the bands of notches slanting in different directions are close, creating chevrons with a central horizontal groove (Figs. 4.14a, g–i). Notched bands occur only on Fine Ware vessels except for a single bowl in grit-tempered pink fabric from Level L (Fig. 4.14b), which should not be classified with the other examples. They are found on bowls and cups as well as on a rare example of a Fine Ware jar (Fig. 4.14k), and are most commonly the only motif on the vessel.

Other motifs include vertical feathers (Figs. 4.14i & j), wavy lines (Fig. 4.14h), rows of impressed triangles creating a ‘dog-tooth’ design (Fig. 4.14d), and simple zigzags (Fig. 4.14e).

Common Ware (Figs. 4.15–17)

The Common Ware of MA2 is handmade with a pink, buff or cream surface and vegetal temper. This is in contrast to that of MA1 which was wheelmade and with a grit temper. No complete profiles of either bowls or jars could be restored.

The jars are short-necked, with rounded, beaded or bevelled rims. Like the painted jars, they probably had pedestal or rounded bases. There are no ring-bases. Some Common Ware bowls certainly had pedestal bases (Figs. 4.17d & e). There is no equivalent in Common Ware of the Fine Ware cups.

The assemblage, particularly the short-necked jars and large carinated bowls, is comparable to that from other Ninevite 5 sites in the region such as Tell Kutani (Bachelot 2003: figs. 30–2) and Tell Fisna (Numoto 2003: figs. 13–14).

Cooking Ware & Miscellaneous (Figs. 4.15g–h & Fig. 4.17)

There was a single crescentic lug from a cooking pot similar to examples from MA3 (see Figs. 4.34c & d), but no other diagnostic sherds from these vessels were found in MA2 levels. Two jars with plain rims, one of which was smoke blackened, were also used for cooking (Figs. 4.15g–h).

There was also one disc-shaped lid with a knob, coarsely made with a black core and heavy vegetal temper (Fig. 4.17f). Three other handles may also have come off lids (Figs. 4.17a–c).

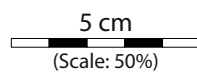
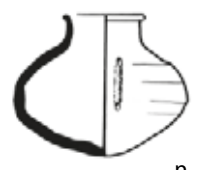
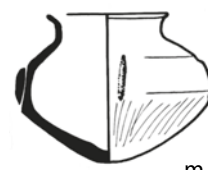
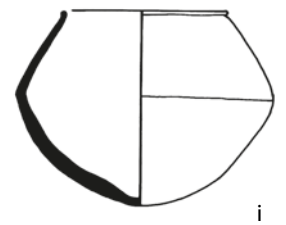
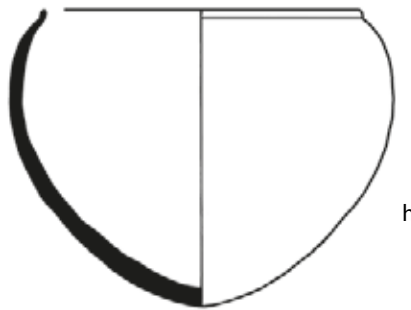
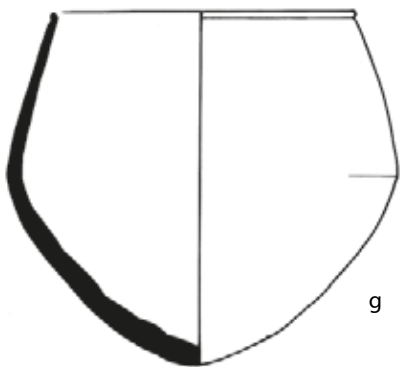
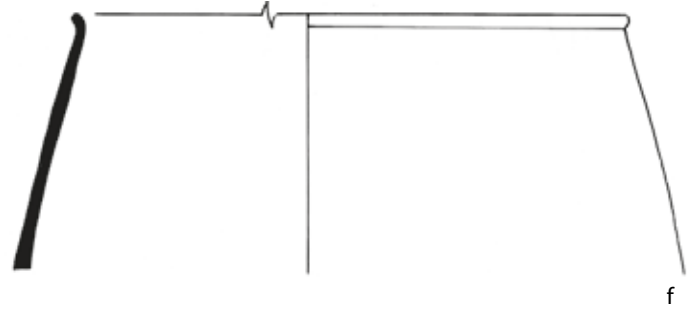
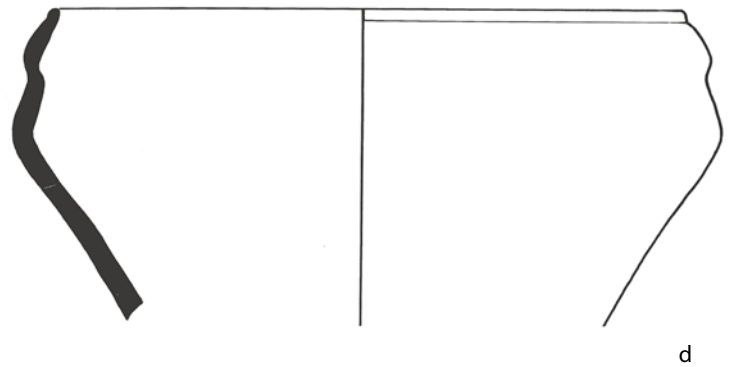
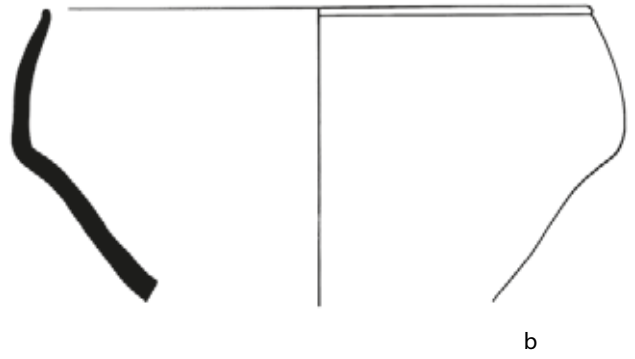
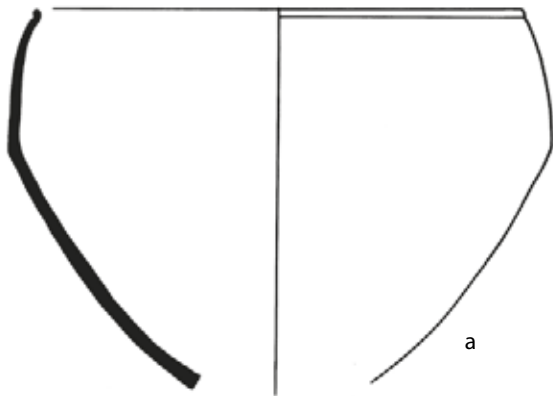


FIG. 4.11	Object no.	MA2 Fine Ware	Level
a	51T:144.02	Clay: grey. Temper: none visible. Rim di. 13.	H
b	51U:170.03	Surface: green. Clay: grey. Temper: fine veg. Rim di. c.14.5.	H
c	50T:170.01	Clay: grey. Temper: none visible. Rim di. 12–13.	H
d	51T:149.01	Surface: green. Clay: green. Temper: veg. Rim di. c.17.	I
e	50T:169.02	Surface: cream. Clay: pink. Temper: fine grit. Rim di. 10–11.	H
f	50U:191.10	Clay: green. Temper: large white grit. Rim di. 17.	I
g	51V:163.04	Clay: green. Temper: none visible. Rim di. 8.1.	I
h	51U:170.02	Clay: green-grey. Temper: none visible. Rim di. 8.	H
i	51V:173.01	Clay: green. Temper: none visible. Rim di. 4.3. Ht. 5.2. Bottom is wet-smoothed.	J
j	51V:173.02	Clay: green. Temper: none visible. Rim di. 4.4–4.9. Ht. 5.5.	J
k	50U:175.01	Clay: grey. Temper: none visible. Rim di. 2.9. Ht. 4.0. Base has been pared down. 4 pierced lugs.	H
l	50U:196.02	Clay: grey. Temper: none visible. Rim di. 5. Ht. 4.4. Base scraped and flattened. 4 pierced lugs.	I
m	50V:133.01	Clay: grey. temper: none visible. Rim di. 3.9. Ht. 4.9. 4 pierced lugs.	I
n	50U:190.02	Clay: grey. Temper: none visible. Rim di. 2. Ht. 3.7. 4 pierced lugs.	H

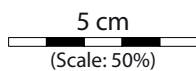


FIG. 4.12	Object no.	MA2 Fine Ware Pedestal Bases	Level
a	50T:162.10	Clay: grey/green. Temper: veg. and grit. Base di. c.6.	G
b	51T:147.05	Clay: grey. Temper: none visible. Base di. 7.	H
c	48V:019.02	Sawn section through base showing join between body and base of jar. Scale approx. 1:1.	CS

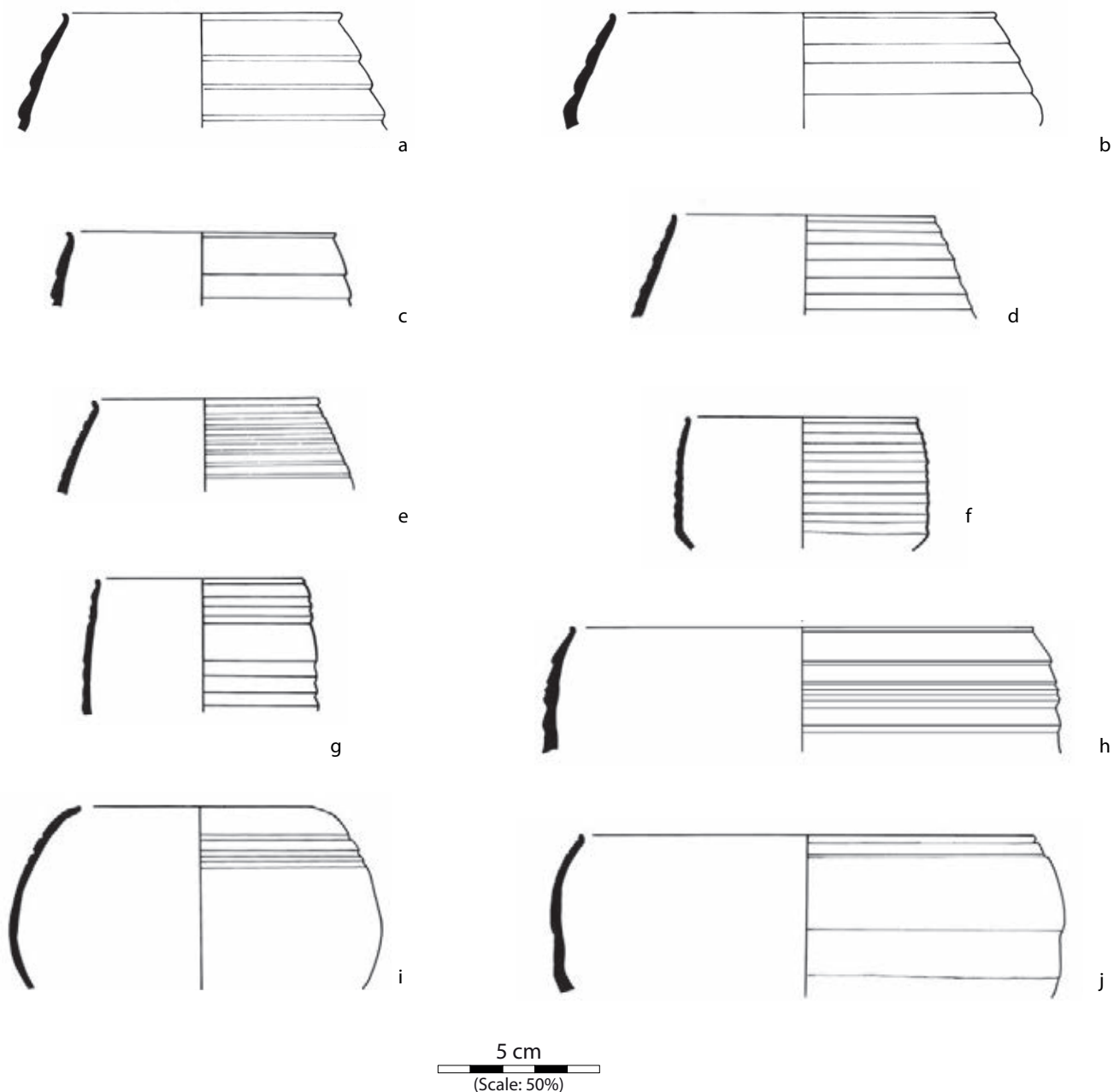


FIG. 4.13	Object no.	MA2 Ribbed/Layered Fine Ware	Level
a	50U:191.05	Clay: green. Temper: none visible. Rim di. 8–9.	I
b	50T:177.03	Clay: green. Temper: none visible. Rim di. 12.	K
c	50V:135.04	Clay: green. Temper: ? Rim di. 8.	J
d	50U:174.01	Clay: grey. Temper: none visible. Rim di. c.8.	H
e	50U:197.07	Clay: green. Temper: none visible. Rim di. 7.	I
f	50V:135.02	Clay: grey. Temper: grit. Rim di. 7.	J
g	51T:144.03	Clay: grey. Temper: none visible. Rim di. 6.5.	H
h	50U:176.02	Clay: grey. Temper: none visible. Rim di. c.13.	G/H
i	51U:169.01	Clay: green. Temper: none visible. Rim di. c.8.	H
j	50T:162.03	Clay: grey. Temper: none visible. Rim di. c.12–14.	G

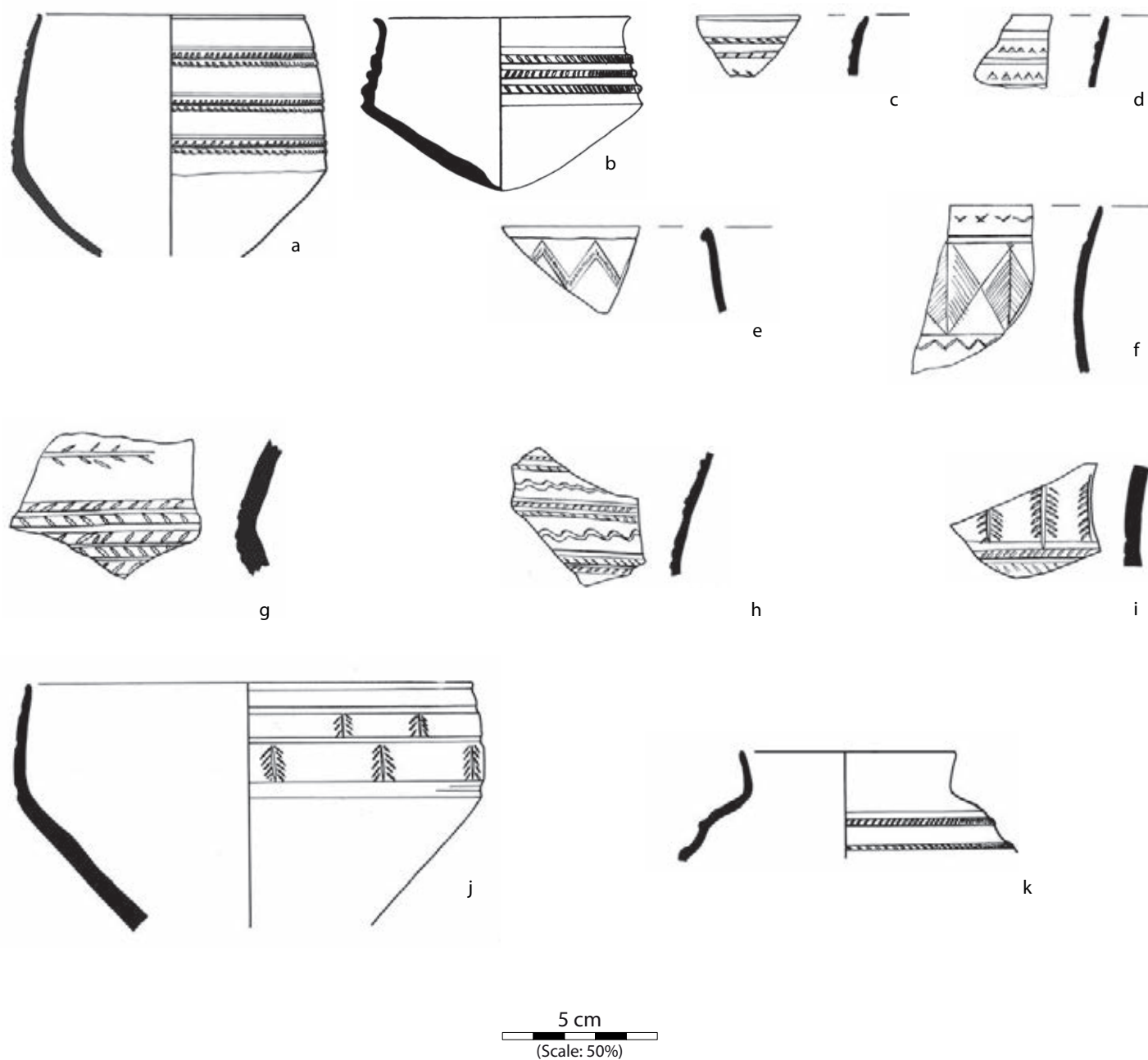


FIG. 4.14	Object no.	MA2 Incised Fine Ware	Level
a	50V:122.01	Clay: pale grey. Temper: none visible. Rim di. 8–9.	E/H
b	50V:138.01	Clay: dark grey. Temper: none visible. Rim di. 9. Ht. 5.5. Base has split where clay was too thin.	K/L
c	51U:193.01	Clay: grey. Temper: none visible. Rim di. 11.	J
d	50U:184.01	Clay: grey. Temper: none visible.	H
e	50T:162.04	Clay: grey. Temper: none visible. Rim di. 11–12.	G
f	50T:169.01	Clay: grey. Temper: none visible. Rim di.. 6.5.	H
g	50T:166.03	Clay: buff with grey core. Temper: some grit.	G
h	50U:176.03	Clay: grey. Temper: none visible. Scraped decoration.	G/H
i	50U:188.01	Clay: dark grey. Temper: none visible.	H
j	63X:026.06	Clay: dark grey. Temper: none visible.	CS
k	51T:142.03	Clay: dark grey. Temper: none visible. Rim di. 7.	E

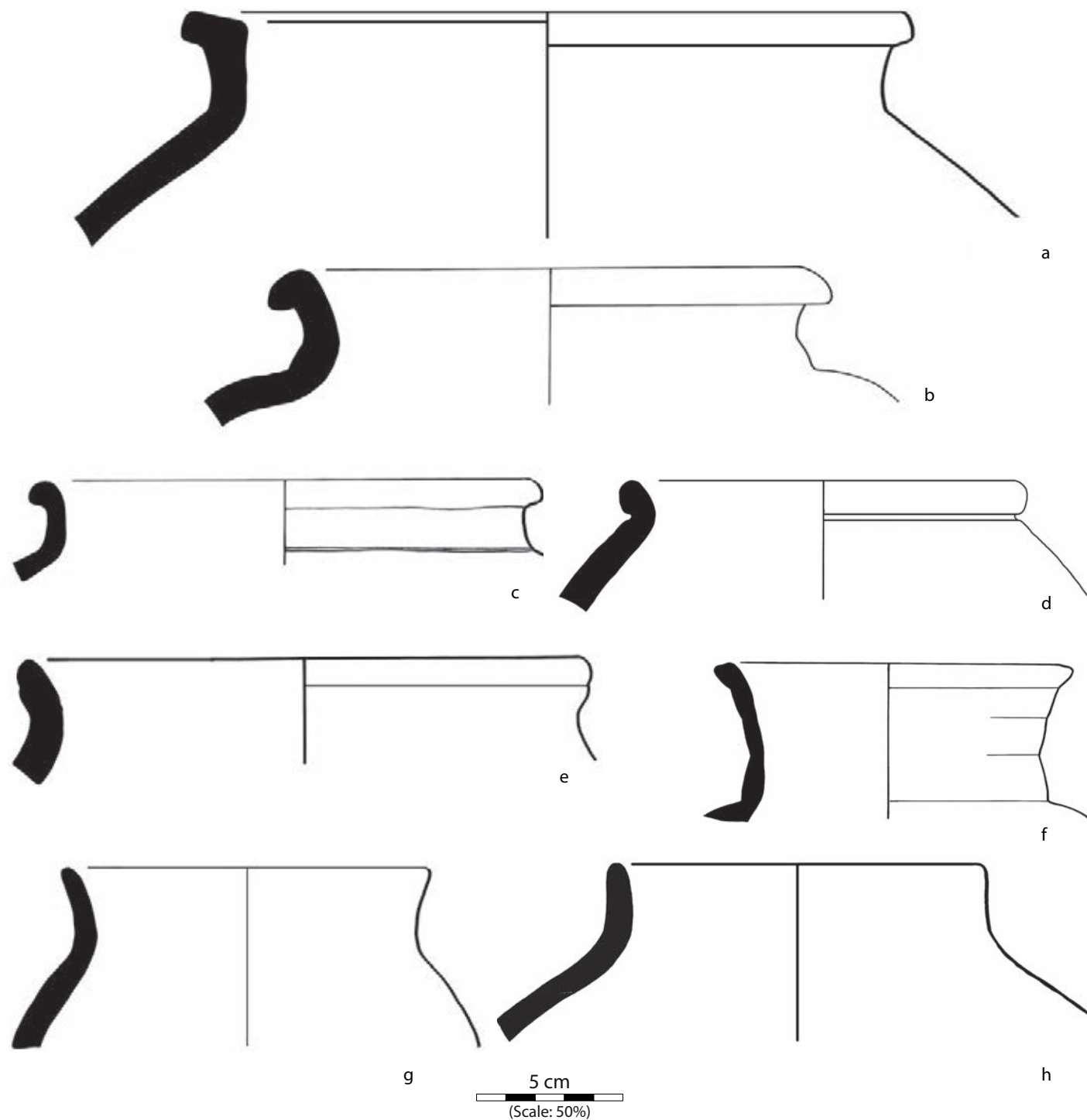


FIG. 4.15	Object no.	MA2 Common Ware & Cooking Ware Jars	Level
a	50T:177.10	Surface: buff. Clay: pink. Temper: heavy grit, fine/medium white grit. Rim di. c.21.	K
b	50T:177.05	Surface: buff. Clay: pink. Temper: white grit. Rim di. c.17. Bitumen splashes inside on neck.	K
c	51U:192.11	Surface: green. Core: black. Temper: white and black grit. Rim di. 17. Overfired.	J
d	51V:149.01	Surface: cream slip. Clay: pink. Temper: coarse veg. Rim di. c.14.	H
e	51T:147.09	Surface: buff/brown. Clay: brown. Temper: fine veg. Rim di. 19.	H
f	51V:163.03	Surface: buff. Clay: pink. Temper: grit. Rim di. 11.	I
g	50T:165.06	Clay: brown. Temper: heavy veg. and white grit. Rim di. 12.	G
h	50T:165.05	Clay: red/brown. Temper: heavy coarse veg. and grit. Rim di. c.12. Blackened on rim.	G

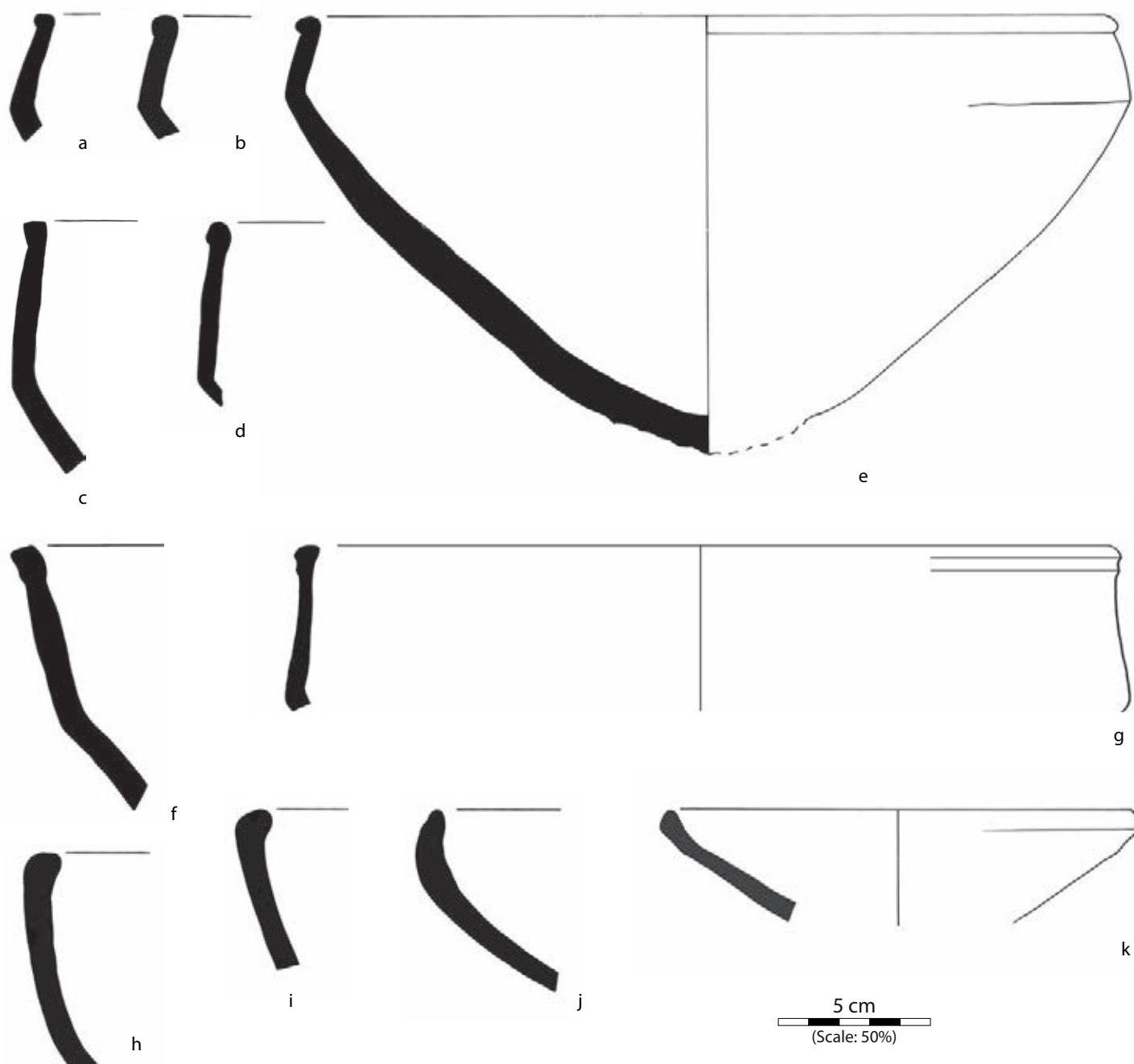


FIG. 4.16	Object no.	MA2 Common Ware Bowls	Level
a	51U:192.05	Surface: buff. Clay: pink. Temper: grit	J
b	50T:169.06	Surface: buff. Clay: pink. Temper: fine grit and veg. Rim di. c.27.	H
c	50T:177.07	Surface: brown/buff. Clay: brown. Temper: fine veg.	K
d	51V:163.06	Clay: buff/brown. Temper: heavy coarse veg. Rim di. c.14–15. Handmade.	I
e	50U:197.05	Surface: buff. Clay: pink. Temper: white grit and veg. Rim di. 26–7. Base missing. Handmade.	I
f	51V:163.05	Surface: buff/brown. Clay: pink. Temper: heavy white grit. Rim di. c.34.	I
g	50U:201.05	Surface: buff/brown. Clay: pink. Temper: white grit, occasional large grit, veg. Rim di. 27.	K
h	50T:165.04	Clay: brown/red with black core. Temper: veg. and grit. Rim di. 33.	G
i	50T:165.03	Surface: brown/red. Temper: veg. Rim di. c.35. Handmade.	G
j	50T:165.02	Clay: buff/brown with black core. Temper heavy veg. and grit. Rim di. 19–21. Handmade.	G
k	50T:162.07	Clay: overfired green. Temper: veg. Rim di. c.15.	G



FIG. 4.17	Object no.	MA2 Miscellaneous	Level
a	50U:194.04	Surface: buff. Clay: pink. Temper: black and white grit. Handle.	H
b	51T:147.12	Surface: brown. Core: black. Temper: veg. Handle.	H
c	51T:147.13	Surface: buff. Clay: pink. Temper: veg. and coarse grit. Handle.	H
d	51T:149.03	Surface: buff. Clay: pink. Temper: grit and heavy veg. Base di. 12-13. Stand/jar base.	I
e	50V:127.01	Clay: yellow. Temper: veg. Base di. c.11. Stand/jar base.	H
f	51U:190.01	Surface: brown. Core: black. Temper: heavy coarse veg. Rim di. c.13.5.	J
g	51T:156.01	Surface: buff/brown. Clay: pink. Temper: white grit and veg. Rim di. c.5.	K
h	51T:156.03	Surface: buff/brown. Clay: pink. Temper: white grit and veg. Base- di. c.5.	K

MA3 POTTERY (LEVELS F–A)

Plain Fine Ware

MA 3 Plain Fine Ware occurs as hemispherical cups and pedestal bowls. No examples of jars were found although there were examples of detached spouts. The ware is predominantly a grey clay and surface with no visible temper, but there are also buff and dark grey/black examples. All the Plain Fine Ware was wheelmade.

Pedestal Bowls (Fig. 4.19)

The pedestal bowls are similar in shape to those of MA 2 but some differences may be noted: the body of the vessel is usually plain and not ribbed/layered as in MA 2 although there were two exceptions from Level E (Figs. 4.19g & h). They tend to be more hemispherical without a sharp carination and are evenly made without the irregularities of the earlier examples. Rims are either plain or beaded. There was usually a ridge where the base was joined to the vessel body. In one example from the top of the sequence, the base was elongated with additional ridges (Fig. 4.19c).

Cups (Figs. 4.20 & 21)

The plain Fine Ware cups of MA 2 continue into MA 3, displaying the same development as the pedestal bowls. They tend to become more hemispherical without any sharp carination, and then shallower as the sequence progresses. In Fig. 4.20 the cups have been placed in chronological sequence, illustrating the predominance of the shallowest examples in uppermost Level A.

The Fine Ware cups were made on the fast wheel with a fine well-levigated clay; the colour was grey or buff and the greenish yellow colour of many of the MA 2 cups was not common. The base of the cup may be pulled out a little and scraped but not as severely as in MA 2 examples. In one case, the bottom was over-thinned and a plug of clay had been inserted inside the base. The vessel walls may be as thin as 2 mm and while the walls of the upper body are regular, the base may be of varying thickness. Some bowls may have a slight carination but usually this was absent. Most of the cups are within a standard size range of 8–10 cm rim diameter.

The most common rim forms are plain rounded, beaded, turned out and internal beaded. These occur with mostly minute variations which seem to have no chronological importance. In several cases the same pot displayed a rim which progressed from being plain rounded to beaded as it went around the pot.

A single example of a Fine Ware pot lid consisted of a hemispherical cup with a knob inserted into the middle (Fig. 4.21i). The maximum diameter of c.6.6 cm suggests that it would have fitted neatly over the mouth of some of the excised four-lugged jars.

Incised Ware

The colour, fabric and method of manufacture of Incised ware was the same as that of the Plain Fine Ware.

Jars (Fig. 4.22)

Incised jars were not common: one complete ring-based jar came from a grave in the Level F cemetery (Fig. 4.22a). Several jar sherds with a rocker pattern were found at the top of the MA 3 sequence (Fig. 4.24), suggesting that this particular decoration may have chronological significance.

Bowls (Figs. 4.23a–g)

There are no complete profiles from the Ninevite 5 Sounding of incised bowls or any with the base attached. One bowl had enough of the profile surviving to show that it had a pedestal base (Fig. 4.23e) and others with similar or wider rim diameters may also have had these bases (Figs. 4.23c & d, for example). Given that detached pedestal bases were common and that there are several plain bowls with such bases, it would seem that many bowls did in fact have such bases. However, there are also round bases with incised decoration (Figs. 4.25a & b).

As with the cups, the decoration is restricted to above the point of maximum width of the vessel. The quality of the incision varies. One example, found in the top level, had much of the incision effaced except for an area of roughly scratched zigzags which had been cut in a rather different fashion from comparable patterns on other vessels (Fig. 4.23g).

Cups (Figs. 4.23h–p & Fig. 26)

Fine Ware cups also occur with incised decoration and with excised decoration. The applied decoration of MA 3 cups is always a geometric design and the range of patterns much greater than in MA 2. The patterns are usually confined to the upper half of the cup, but sometimes may drop a little lower.

A top register of design usually separates the rim from the main register of incision. The most common decorative elements in the top register are a line of small oblique slashes, single-lined zigzags and jabbed gouges.

Decoration below the top register may consist of a single band with one decorative element such as multiple-lined zigzags, cross-hatched diamonds or hatched triangles repeated around the pot. The pattern of the main register is sometimes repeated down the pot. The most common incised pattern in MA 3 was a horizontal zigzag. There could be up to three registers of this pattern on a vessel, with each register separated from the next by grooves or hatched horizontal lines. Hatched triangles are also popular. These may be diagonally hatched in one direction or, alternatively, in opposite directions. Other motifs which are employed repetitively include hatched diamonds, inverted triangles, and vertical zigzags.

Stands (Fig. 4.25c)

One example of an incised Fine Ware stand was found with a simple design of crosses and zigzags.

Excised Ware

Jars (Fig. 4.27)

The most distinctive type of excised jar has four lugs and panelled excision covering the entire body of the vessel below the neck. The order of application of the excision can sometimes be determined (Fig. 4.27a): the potter applied the decoration from the base of the neck down to the middle of the pot, turned the pot over and worked down from the point of the base to the middle again. Both intact vessels were found in Level F graves showing that this most sophisticated form of excision was present from the start of MA3. There were also some excised sherds from more rounded, globular jars (Figs. 4.27d & e). Rows of excised horizontal and vertical grooves, the latter sometimes slanting, were the commonest design element.

Bowls (Fig. 4.28)

There were a few examples of excised bowls, including a carinated, round-bottomed bowl with excision above the carination (Fig. 4.28a). An excised bowl from the Cliff Section had a stepped pattern (Fig. 4.28c). At Tell Arbid in the Upper Khabur, such a pattern is considered to be the most diagnostic element for the very end of the Ninevite 5 period (Smogorzewska 2016: 211).

Cups (Fig. 4.29)

The shapes of excised cups mirror those of the Plain Fine Ware examples. There are hemispherical cups with simple beaded rims (Figs. 4.29a & g) and some cups with carination (Figs. 4.29i & k). Decoration is confined to the upper half of the cup. Below the rim there is usually a horizontal row of tiny impressed dots or slashes above a horizontal band of excised vertical or sloping grooves (Figs. 4.29a–c, e–h). Other examples have 2–3 bands of grooves, sometimes combined with additional incised elements (Figs. 4.29d, i & k; Figs. 4.28d–i). Rim diameter range is in the range of 8 to 10 cm.

Common Ware

Jars (Figs. 4.30 & 31)

The MA3 jars display some variation in rim type from MA2 examples (cf. Fig. 4.15 with 4.31) but in such a small sample it is not clear if this is of any chronological significance. One very large storage jar had a drain hole in the base (Fig. 4.30a). Two globular storage jars had been set within a bench of Level C (Fig. 4.30b). Of the jar rims, there were vessels with short necks and out-turned rims (Fig. 4.31) and a group with more elaborate grooved rims that were all found in Level A (Figs. 4.31g–i).

Bowls (Figs. 4.32 & 33)

The MA3 Common Ware bowl repertoire includes deep bowls with a plain rim (Fig. 4.32d) or an inverted rim (Fig. 4.32g), as well as shallower examples with a plain rim (Figs. 4.32f–h). Some examples are handmade. In contrast to the Fine Wares, the surface and clay is never grey, but displays a variety of colours. Rim diameters on the larger bowls are c.18–22 cm. There are a few examples with carination (Figs. 4.33a–d), all from Level A, the topmost level in the Ninevite 5 Sounding. Although the rim diameter is of the same order as the other bowls the sidewalls of these carinated bowls are thinner and all examples were made on the wheel.

There were very few identifiable base fragments in the MA3 levels. The three complete bowl profiles all have round bottoms. Detached bases include a couple of flat-bottomed examples (Figs. 4.33f & g) but not enough of the profile remains to state that these definitely belong to bowls, and there is a single example of a ring-base (Fig. 4.33i). The logical conclusion, given the general absence of ring- or flat-based sherds, is that both Common Ware bowls and jars were mainly round-bottomed.

Cooking Ware & Miscellaneous (Fig. 4.34)

The MA3 cooking pots were globular jars with crescentic lugs, sometimes with additional plastic decoration such as a false spout (Fig. 4.34a) or small knobs (Fig. 4.34b). Other kitchen utensils include a cylinder sieve (Fig. 4.34f) and a lid with rows of finger-impressed decoration (Fig. 4.34g). With a diameter of 26 cm this seems too large to have fitted snugly over one of the cooking pots which have a rim diameters mostly around 15 cm. A second lid fragment was decorated with an incised circle (Fig. 4.34h). Handles, presumably off lids, came in a variety of shapes (Figs. 4.34i–k).

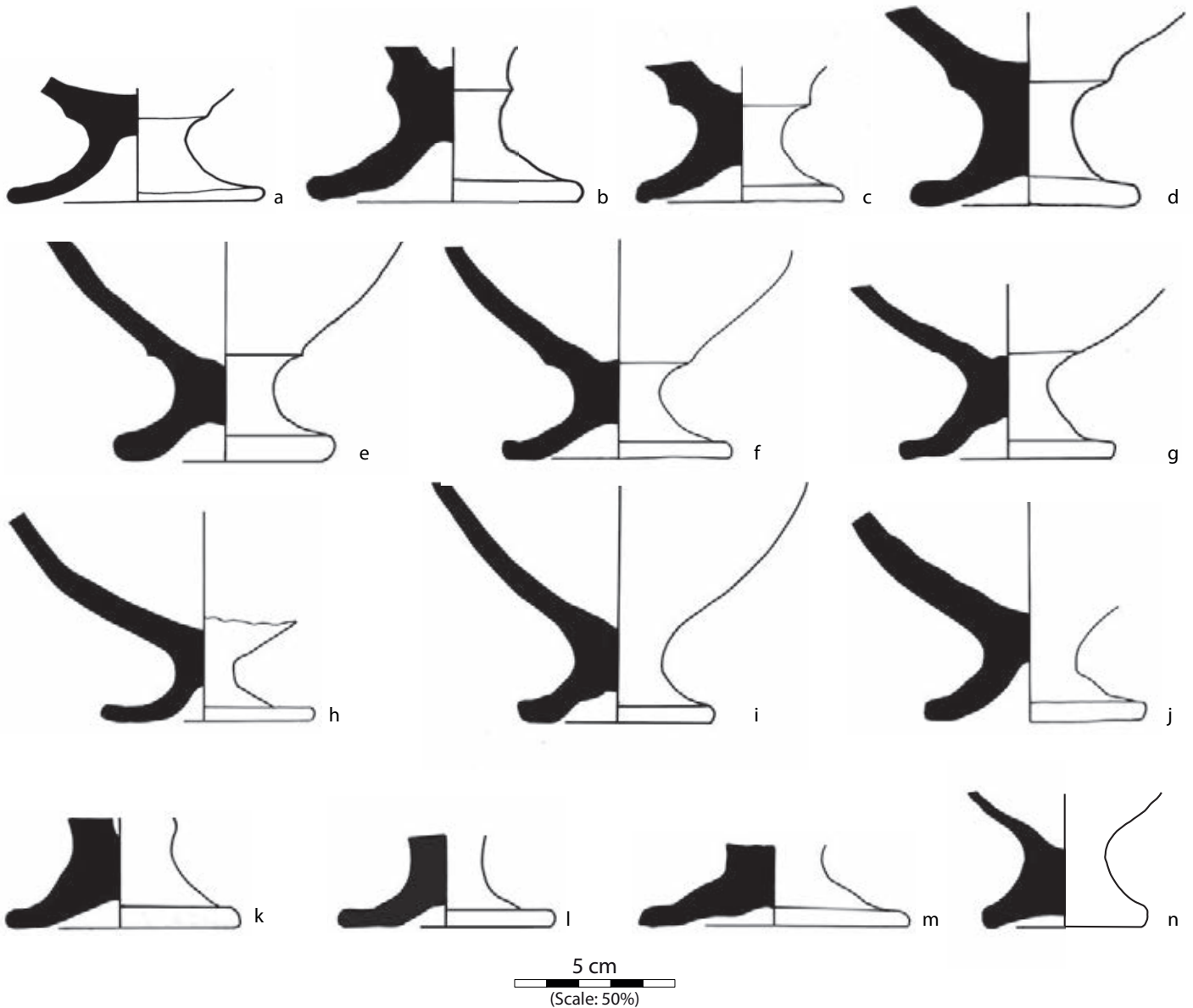
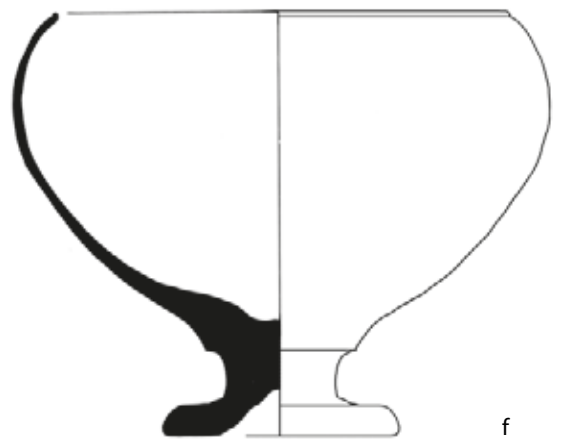
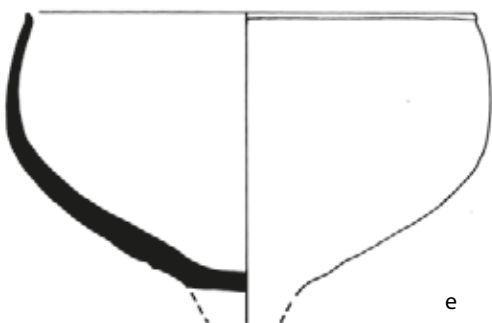
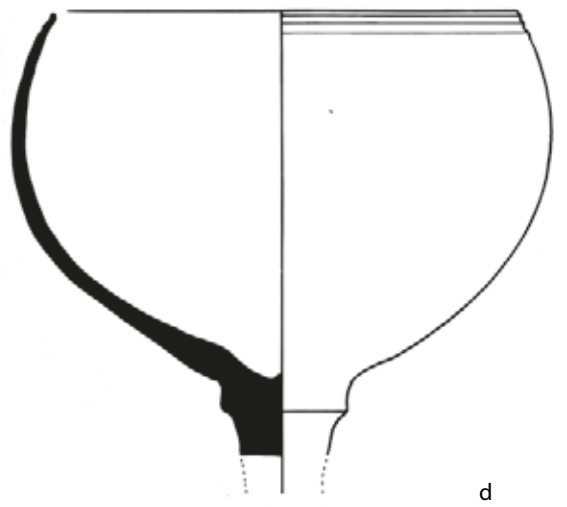
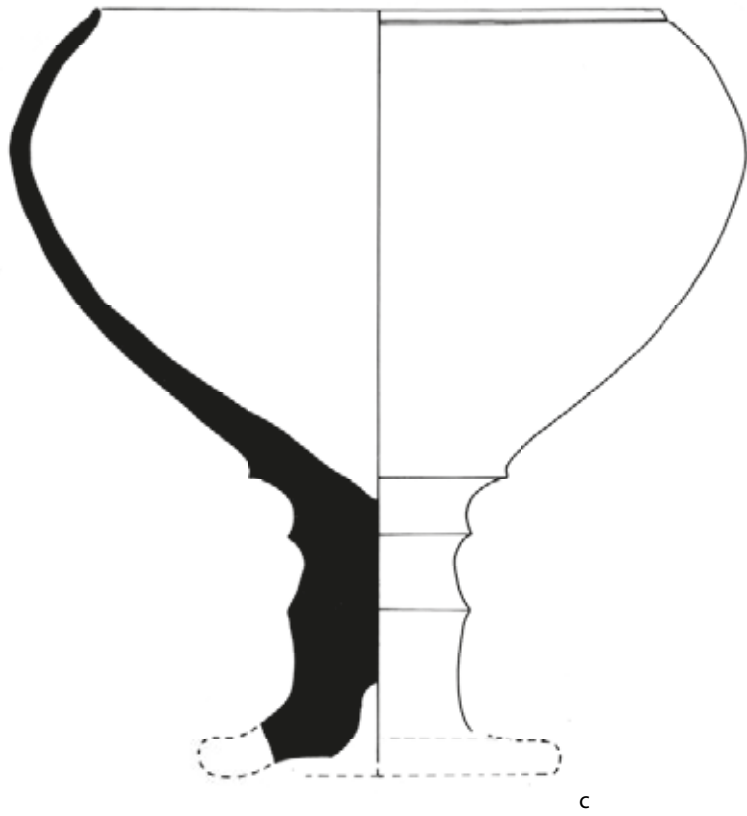
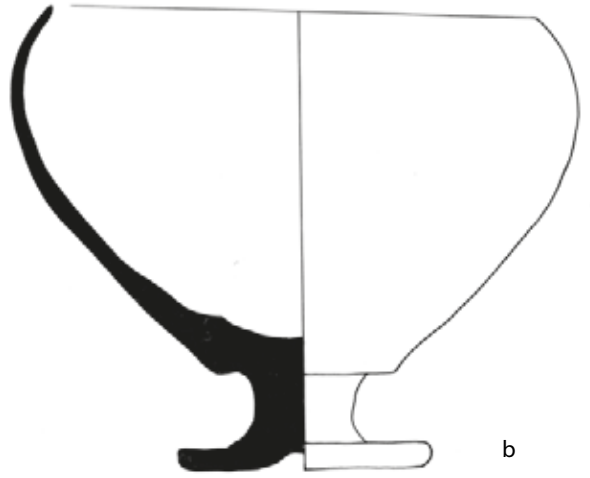
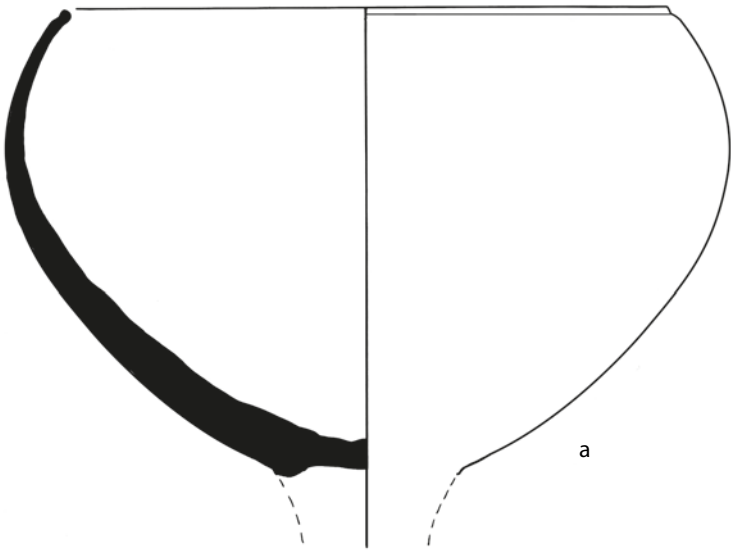


FIG. 4.18	Object no.	MA3 Pedestal Bases	Level
a	51V:105.03	Clay: grey. Temper: veg. Base di. c.8.	A
b	50T:151.25	Clay: green/grey. Temper: veg. Rim di. c.8.5.	D
c	50U:161.04	Clay: grey. Temper: veg. in base. Base di. 6.5.	D
d	50T:151.27	Clay: grey. Temper: sparse veg. mostly inside pedestal at base. Rim di. c.7.	D
e	51T:132.02	Clay: grey. Temper: light veg., more in pedestal. Base di. c.6.1.	E
f	50U:153.01	Clay: pink. Temper: veg. Base di. 7.	B
g	51T:130.01	Clay: grey. Temper: light veg., more in pedestal. Base di. c.6.5.	E
h	50U:101.15	Clay: grey. Temper: none visible. Base di. c.6.5.	A
i	51T:130.05	Clay: grey. Temper: light veg., more in pedestal. Base di. c.5.6.	E
j	50U:107.06	Clay: grey. Temper: none visible. Base di. 6.5-7.	A
k	50T:151.26	Clay: grey. Temper: heavy coarse veg. Rim di. c.7.	D
l	51T:105.07	Clay: grey. Temper: veg. Base di. 7.	A
m	50U:118.11	Clay: grey. Temper: veg. Base di. c.8.5.	A
n	50T:139.01	Clay: grey. Temper: some grit in base. Base di. c.5.	C



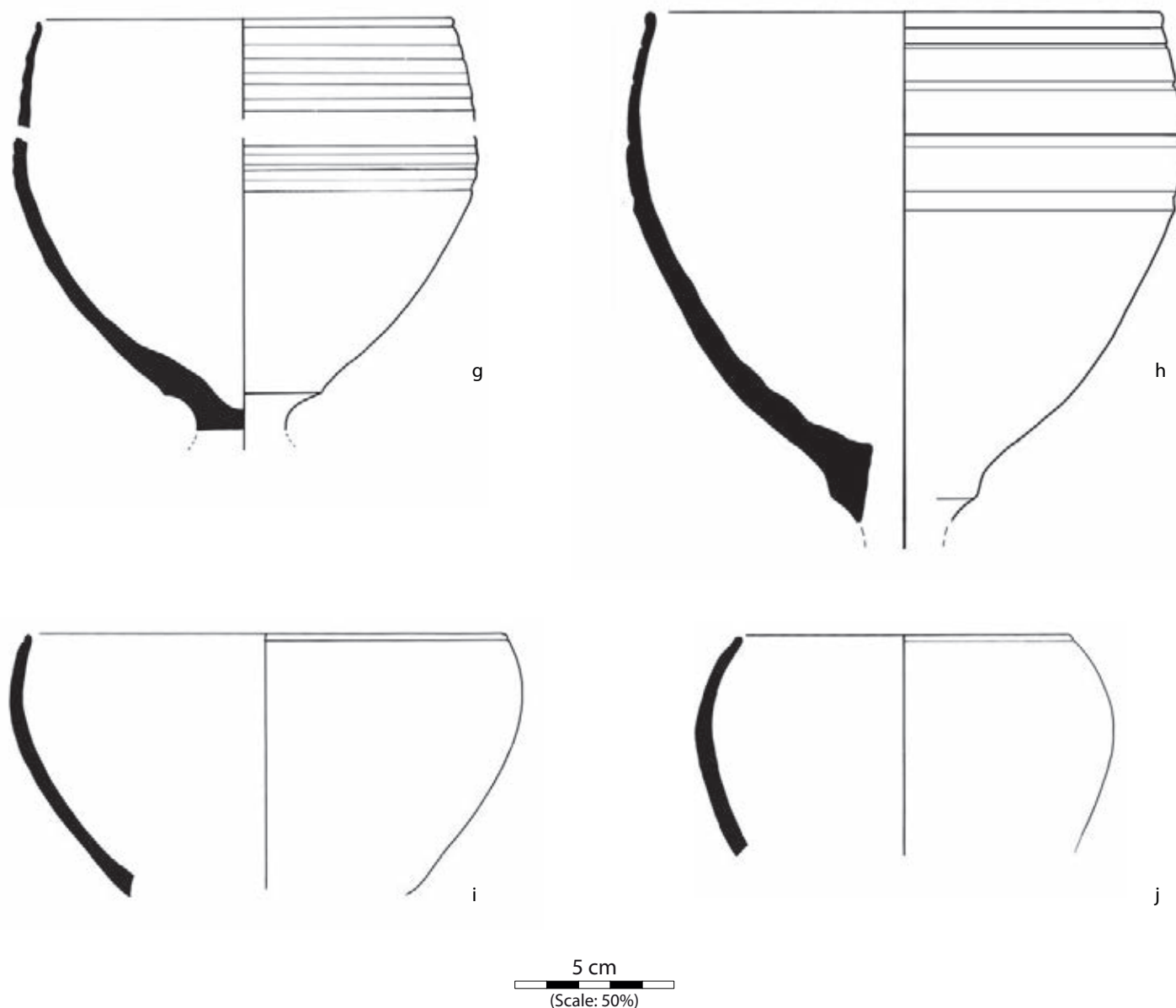
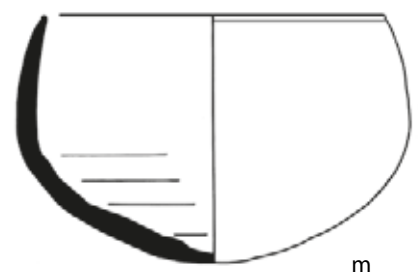
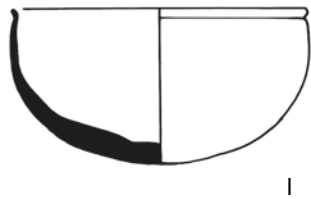
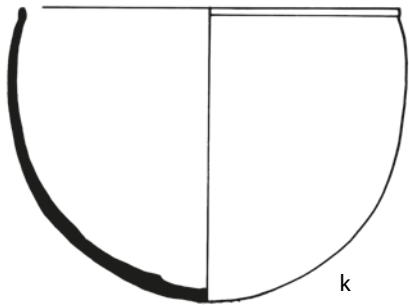
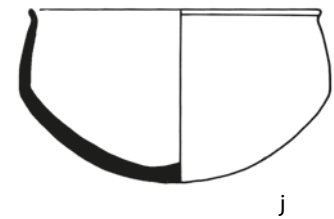
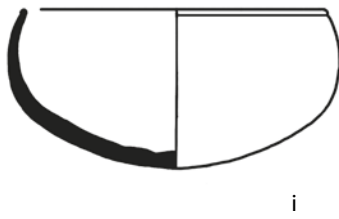
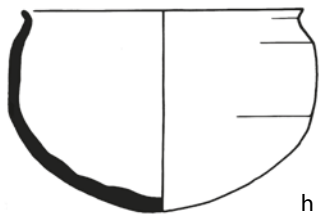
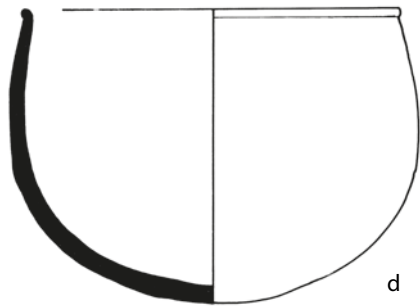
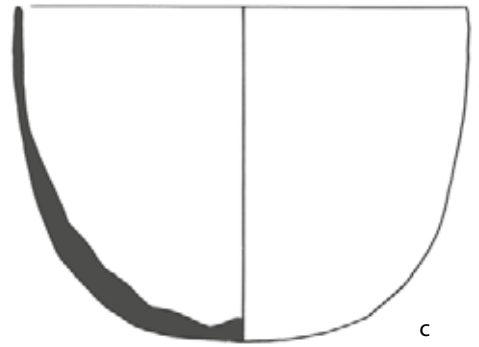
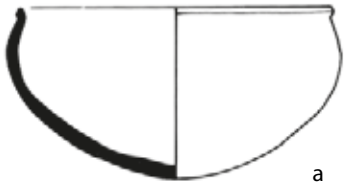


FIG. 4.19	Object no.	MA3 Plain Fine Ware Pedestal Bowls	Level
a	50T:124.05	Clay: grey. Temper: very sparse veg. in base. Rim di. 16. Burnished to black on outer surface. Slightly warped in firing.	B
b	50U:133.01	Clay: grey. Temper: none visible. Rim di. c.13. Ht. 12.4. Fine-walled but poorly finished.	B
c	50U:125.01	Surface: dark grey. Clay: dark grey. Temper: none visible. Rim di. 15. Ext. ht. 20.	A
d	50T:151.23	Clay: grey. Temper: fine veg. Rim di. 12. Burnt, especially inside.	D
e	51T:112.05	Clay: grey. Temper: none visible. Rim di. c.12. Polished on black outer surface. Inner surface rubbed round with veg. Upper surface grey, lower surface black.	B
f	50U:133.02	Surface: buff. Clay: orange. Temper: none visible, but traces of straw on surface, especially around base. Rim di. 12. Ht. 11.2.	B
g	50T:158.11	Surface: black, olive above carination on outside. Clay: black. Temper: none visible. Rim di. 13.	E
h	50U:173.03	Clay: grey. Temper: none visible. Rim di. c.15.	E
i	50U:172.02	Clay: grey. Rim di. 15.	E
j	50U:134.03	Surface: grey. Clay: grey. Temper: none visible. Rim di. 10.5.	B



5 cm
(Scale: 50%)

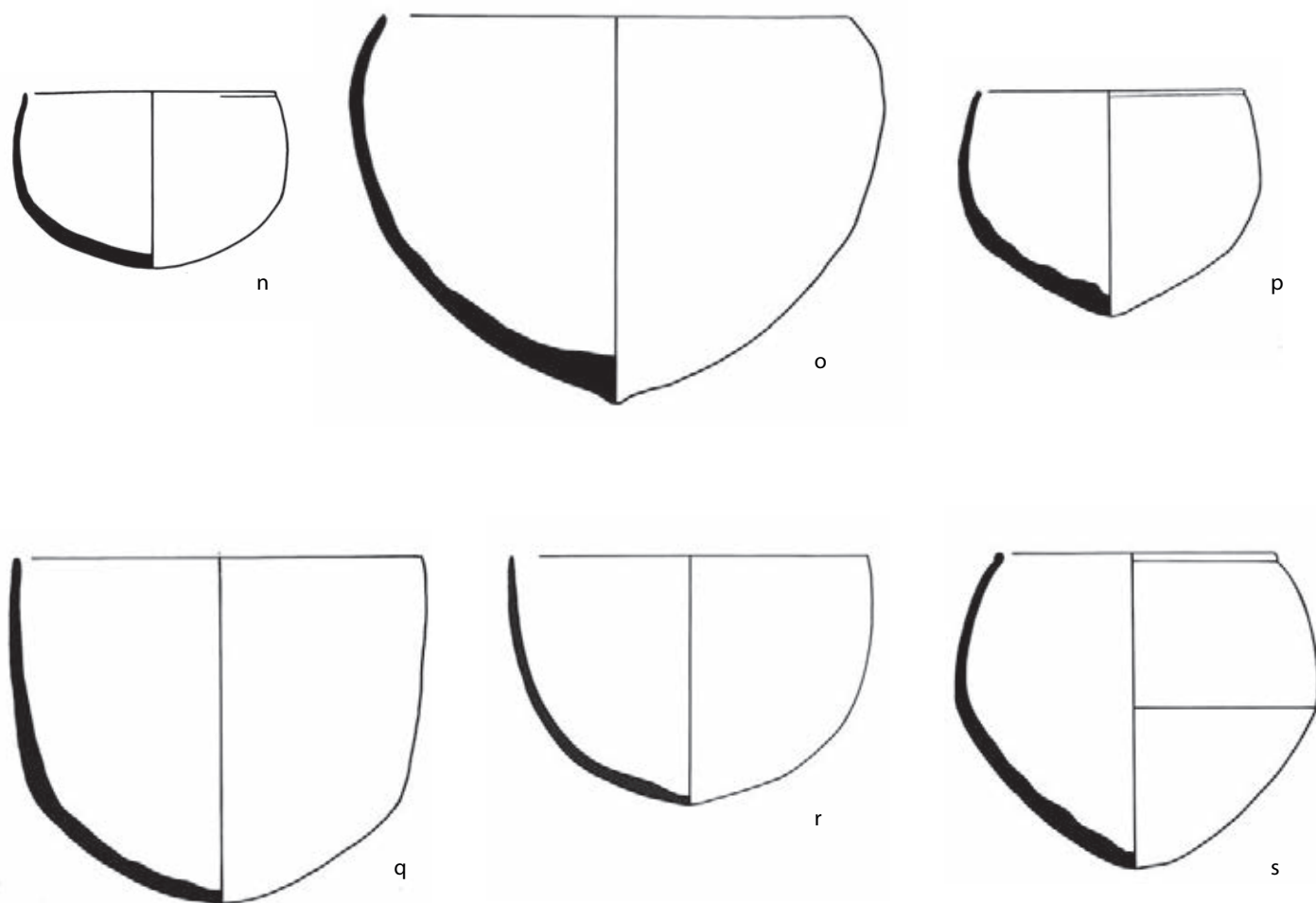


FIG. 4.20	Object no.	MA3 Plain Fine Ware Cups	Level
a	50T:101.02	Clay: green. Temper: none visible. Rim di. 8. Ht. 4.5.	A
b	50T:101.03	Clay: green. Temper: none visible. Rim di. 7.2. Ht. 2.0.	A
c	50T:120.05	Surface: cream out, pink in. Clay: pink. Temper: fine veg. and sparse grit. Rim di. 12. Ht. 8.9.	A
d	50U:101.04	Clay: light green/grey. Temper: none visible. Rim di. 10. Ht. 7.8.	A
e	50U:101.06	Clay: green. Temper: none visible. Rim di. 5–8. Ht.: 3.8.	A
f	50U:109.04	Clay: pink/buff. Temper: none visible. Rim. di. 8. Ht. 4.0.	A
g	50U:109.05	Clay: grey. Temper: fine sparse veg. Rim di. 9. Ht. 3.8.	A
h	50V:103.02	Clay: green. Temper: none visible. Rim di. 7.	A
i	50V:103.06	06 Surface: pink/buff. Clay: pink. Temper: fine grit. Rim di. 8. Interior striped pink and buff.	A
j	51T:105.01	Clay: green. Temper: veg. and sand. Rim di. 7.8.	A
k	51U:102.01	Clay: green. Temper: veg. Rim di. 10.	A
l	51U:108.01	Clay: buff. Temper: grit. Rim di. 8.	A
m	51V:106.03	Clay: grey. Temper: none visible. Rim di. 9.	A
n	51V:107.02	Clay: light green. Temper: sparse veg. Rim di. 7.	A
o	50T:124.08	Clay: fine grey. Temper: sparse veg. Rim di. c.13.	B
p	50U:127.02	Clay: green/buff. Temper: none visible. Rim di. 7.5. Ht. 6.3.	B
q	51T:117.08	Clay: pink. Temper: none visible. Rim di. 11.5.	C
r	51U:141.02	Clay: grey. Temper: none visible. Rim di. 9–10.	C
s	50T:151.20	Clay: grey. Temper: none visible. Rim di. 7.9. Ht.: 8.8.	D

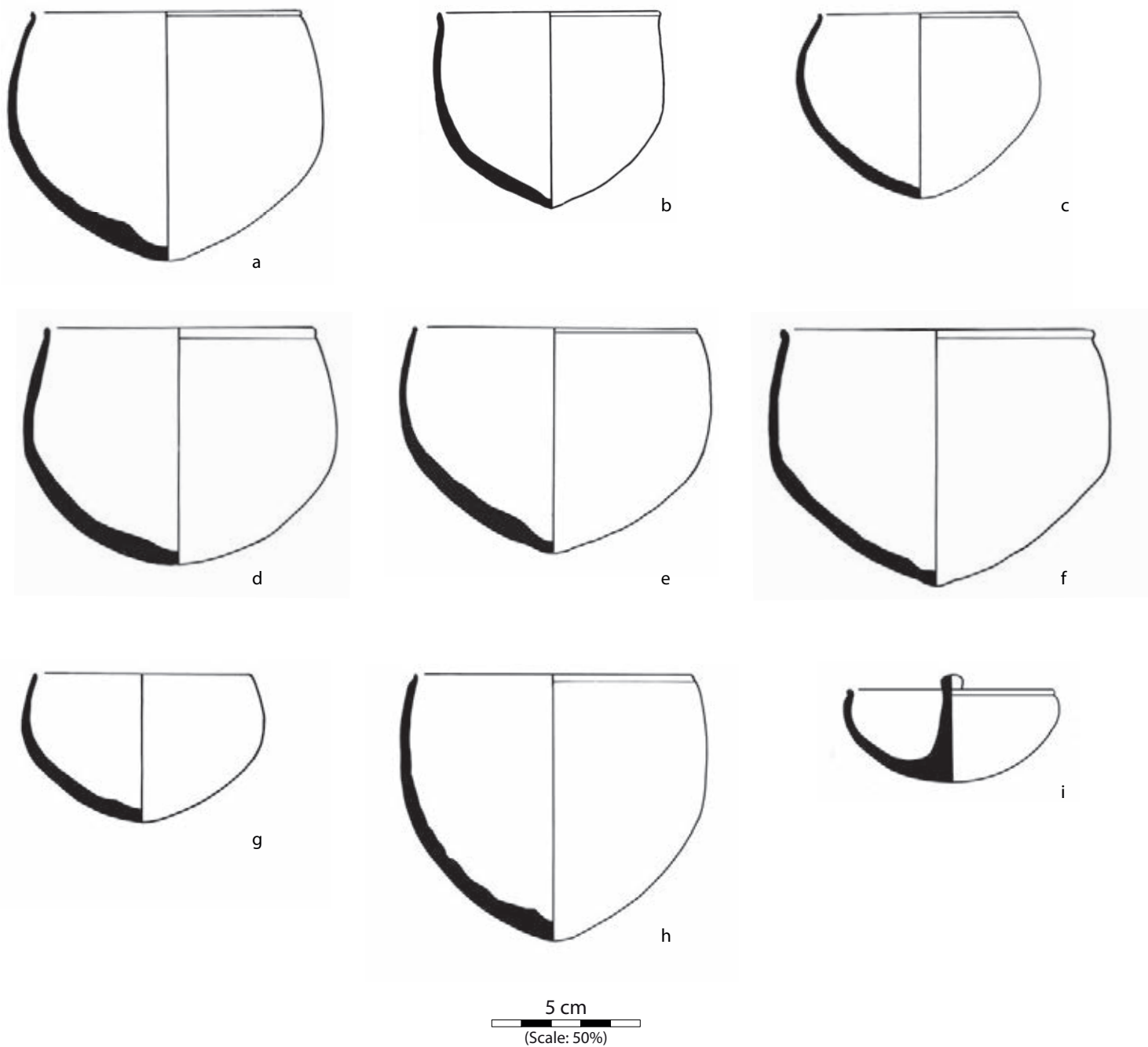


FIG. 4.21	Object no.	MA3 Plain Fine Ware Cups & Lid	Level
a	50T:151.21	Clay: grey. Temper: none visible. Rim di. c.9.	D
b	50T:151.22	Clay: very fine grey. Temper: none visible. Rim di. c.7.5.	D
c	51V:130.05	Clay: grey. Temper: none visible. Rim di. 6.5.	D
d	50T:158.12	Clay: grey. Rim di. c.9. Ht. 8.0.	E
e	50T:158.13	Clay: grey. Temper: none visible. Rim di. c.9. Ht.: 7.6.	E
f	50T:159.03	Clay: pale grey. Temper: ? Rim di. c.10.5. Ht. 8.7.	E
g	50T:159.06	Clay: pale grey. Temper: none visible. Rim di. c.7.5. Ht.: 5.0.	E
h	50T:160.01	Clay: grey. Temper: none visible. Rim di. c.9.5. Ht. 9.0. Base has been pared down.	E
i	50U:168.06	Clay: grey. Temper: veg. Rim di. 7. Max. ht. 3.7. Lid.	E

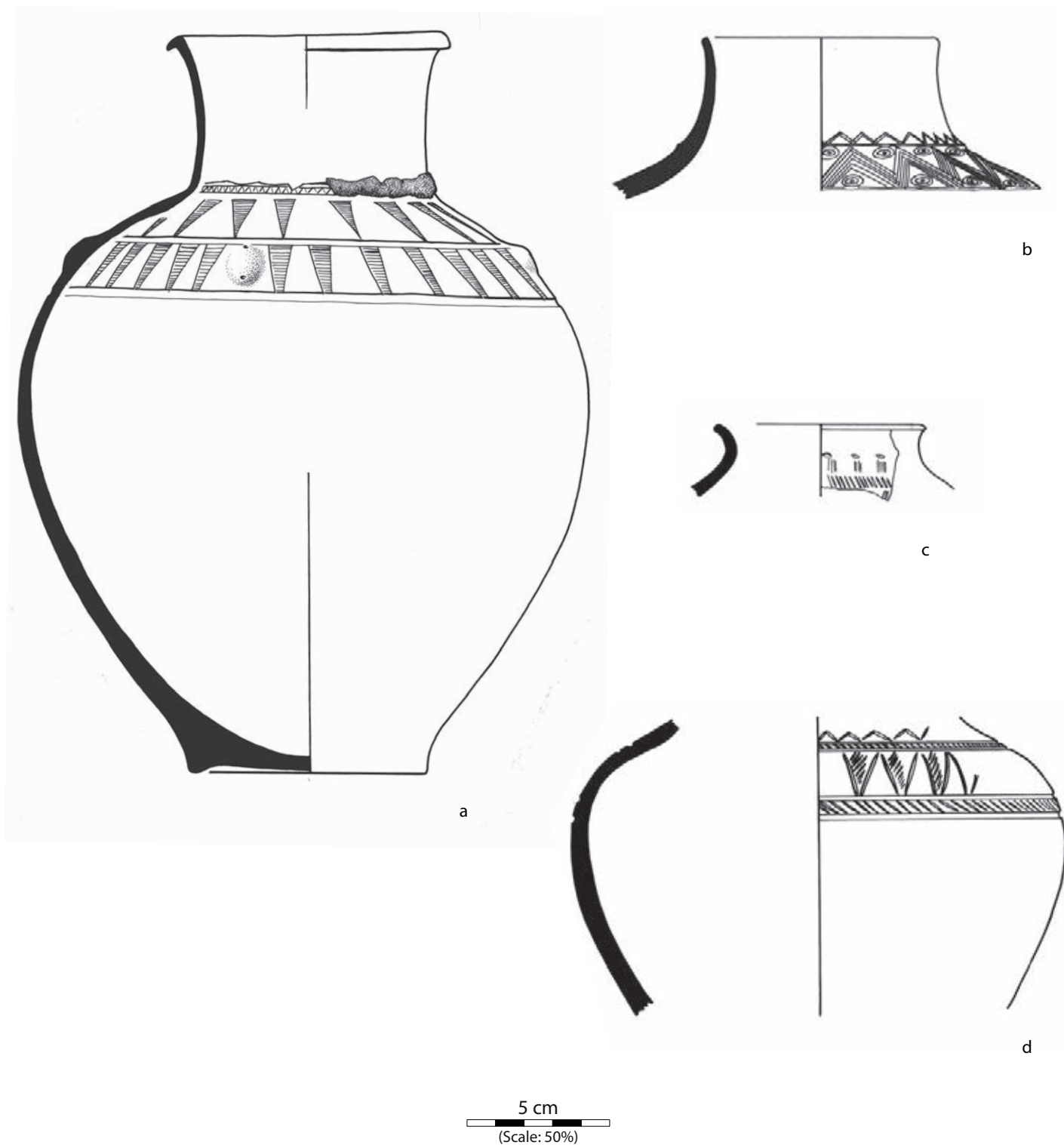
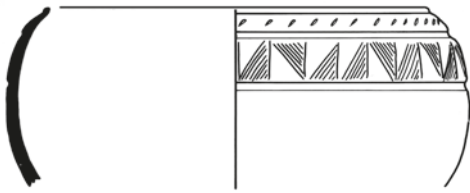
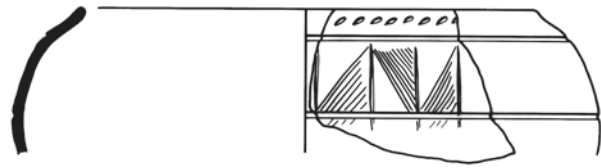


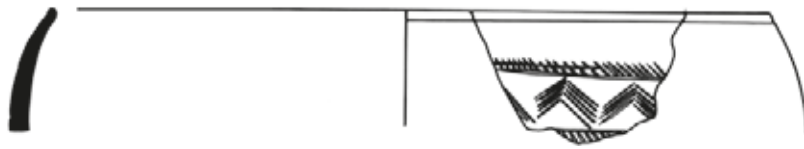
FIG. 4.22	Object no.	MA3 Incised Jars	Level
a	51U:176.01	Clay: grey. Temper: sparse white grit? Ht. 25.8–26.0. Rim di. c.9.5, base di. c.8.5. Four lugs, neck broken and repaired with bitumen.	F
b	51U:173.01	Clay: fine grey. Temper: none visible. Rim di. c.8.	E
c	50T:103.04	Clay: grey. Temper: none visible. Rim di. 7.	A
d	51T:116.09	09 Clay: buff. Temper: sparse hard veg.	C



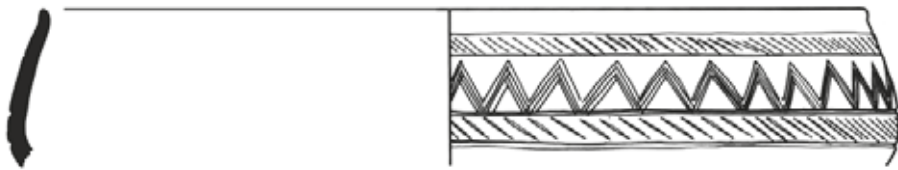
a



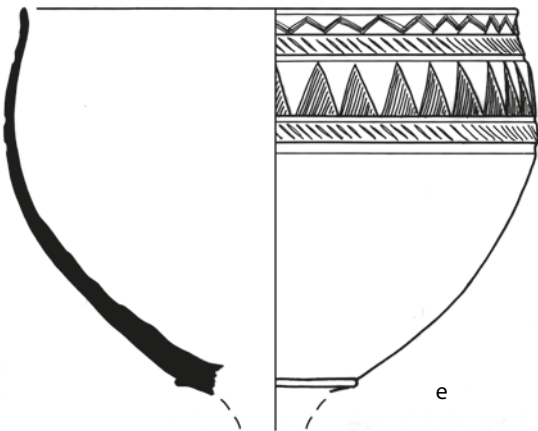
b



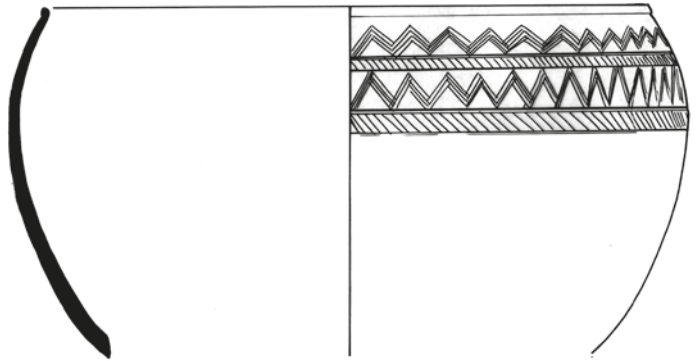
c



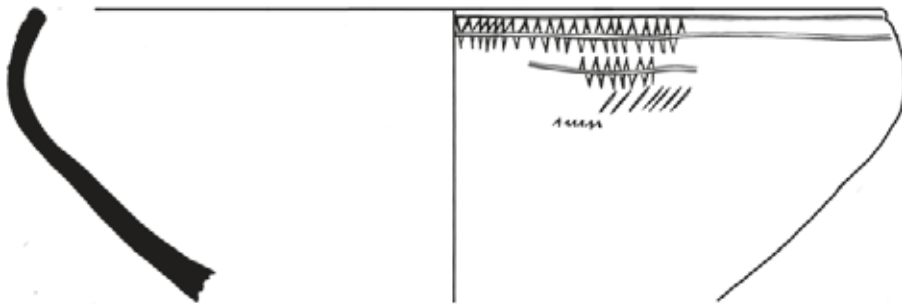
d



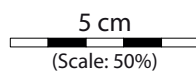
e



f



g



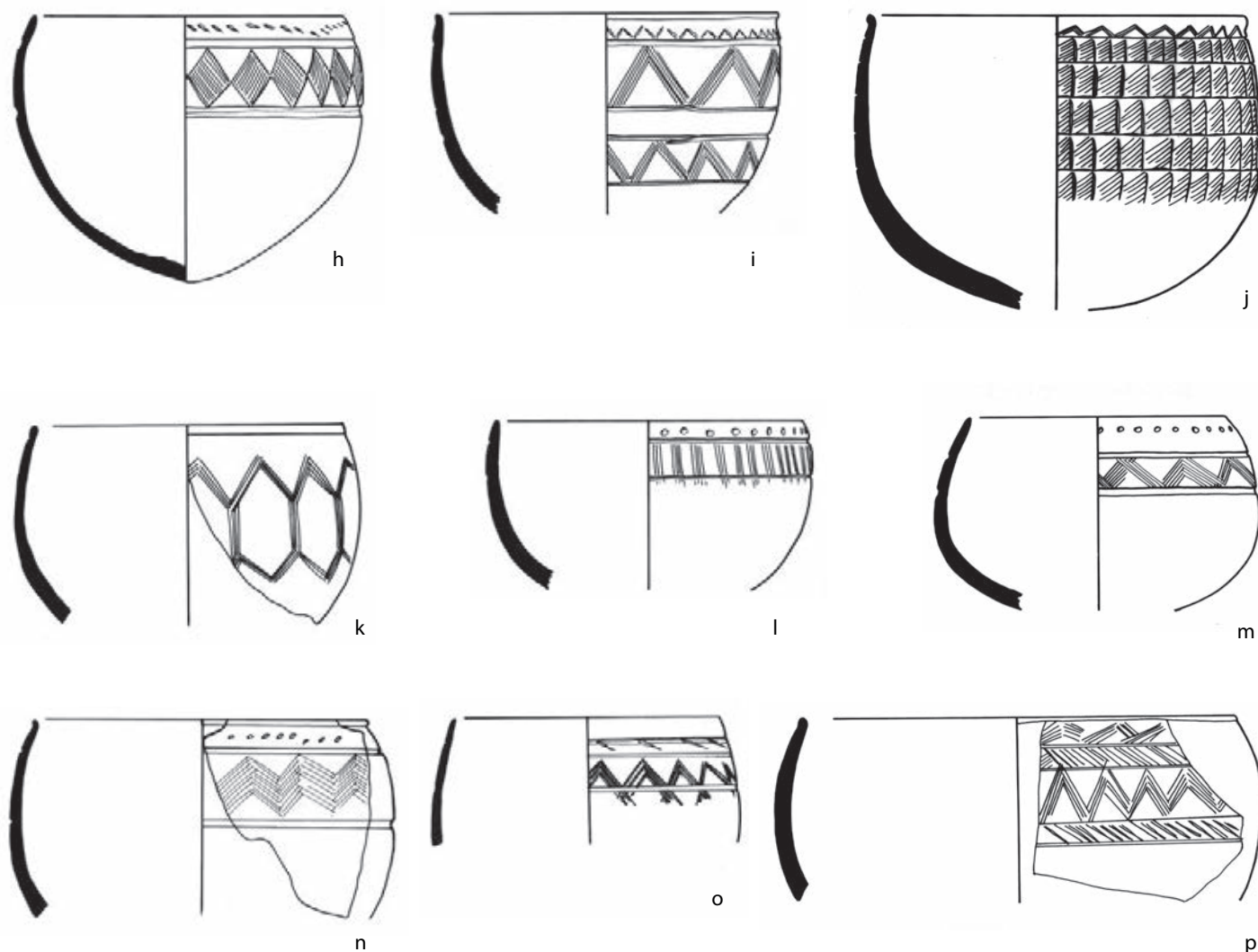


FIG. 4.23	Object no.	MA3 Incised Cups & Bowls	Level
a	50T:151.06	Clay: green/grey. Temper: none visible. Rim di. 10.	D
b	51T:133.04	Clay: grey. Temper: none visible. Rim di. 11–12.	E
c	51U:102.04	Clay: grey. Temper: none visible. Rim di. c.18.	A
d	51T:103.01	Surface: vitrified green. Rim di. 22.	A
e	50U:123.01	Clay: grey. Temper: none visible. Rim di. 13.	A
f	50U:118.07	Surface: grey. Clay: grey. Temper: none visible. Rim di. 16.	A
g	50V:101.02	Clay: green/grey. Temper: none visible. Rim di. c.22.	A
h	50T:159.02	Clay: grey. Temper: none visible. Rim di. c.9. Ht. 7.8.	E
i	50T:151.10	Clay: fine buff. Temper: none visible. Rim di. 9–11.	D
j	51T:108.01	Clay: grey. Temper: none visible. Rim di. 11.	A
k	51T:135.03	Clay: grey. Temper: none visible. Rim di. 8.8.	E
l	50U:138.01	Clay: grey. Temper: none visible. Rim di. 8–9.	B
m	50T:147.02	Clay: grey. Temper: none visible. Rim di. c.7.5.	D
n	51V:130.02	Clay: green. Temper: fine grit. Rim di. c.9–10. Incised decoration.	D
o	51T:119.03	Clay: grey. Temper: sparse veg. Rim di. 8.	D
p	50U:101.03	Clay: grey/green. Temper: none visible. Rim di. 13.	A

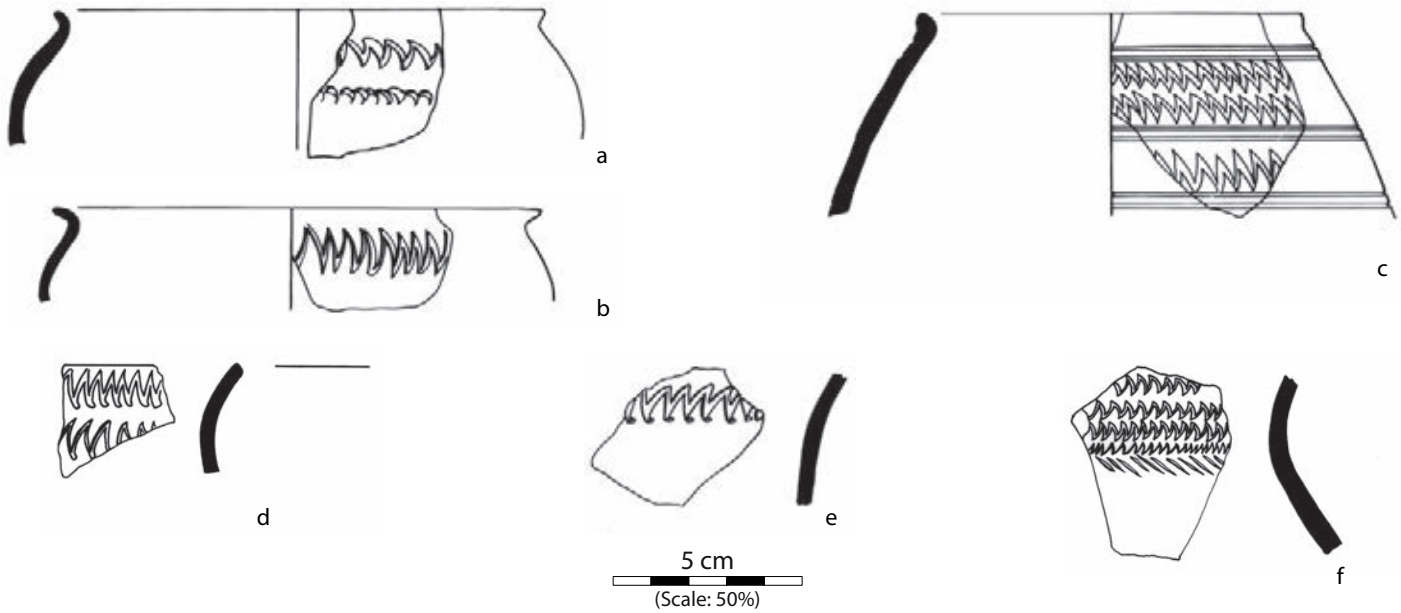


FIG. 4.24	Object no.	MA3 Rocker Pattern	Level
a	51U:101.01	Clay: green. Temper: fine grit. Rim di. 12.	A
b	51U:102.06	Clay: buff. Temper: none visible. Rim di. c.12.	A
c	50T:101.12	Clay: buff. Temper: sparse fine veg. Rim di. c.10.	A
d	50T:103.01	Surface: buff. Clay: brown. Temper: grit. Rim di. c.9.	A
e	50T:103.02	Clay: green. Temper: none visible.	A
f	50T:103.03	Clay: green. Temper: fine sparse veg.	A

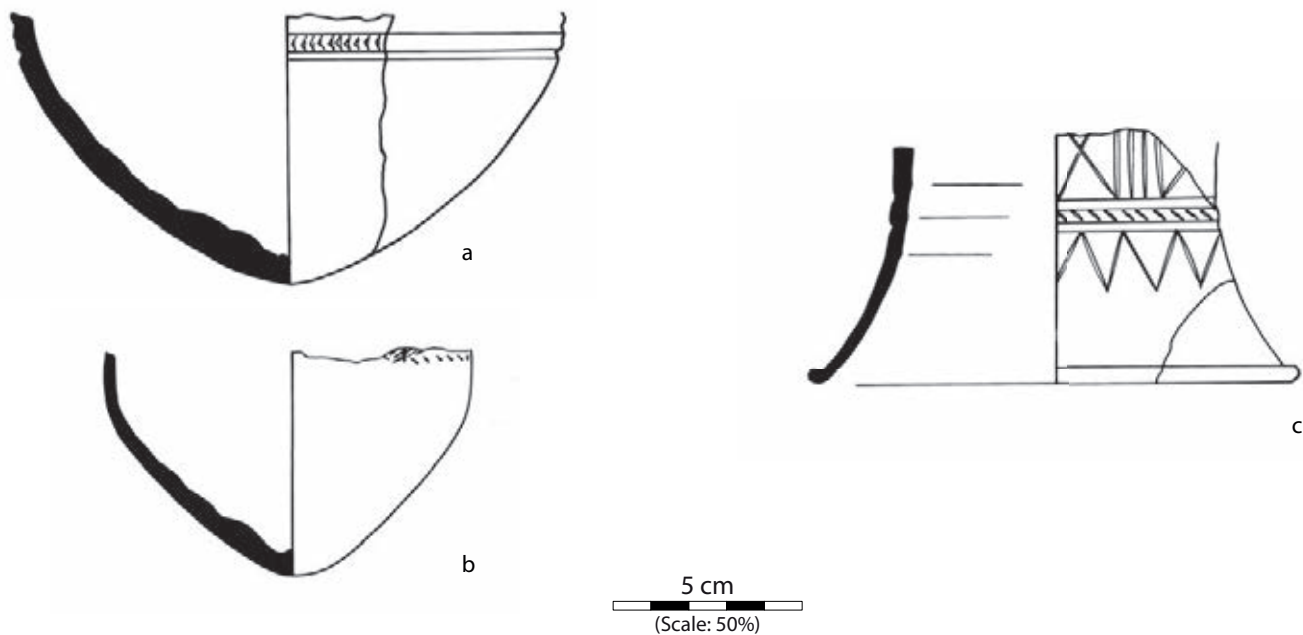
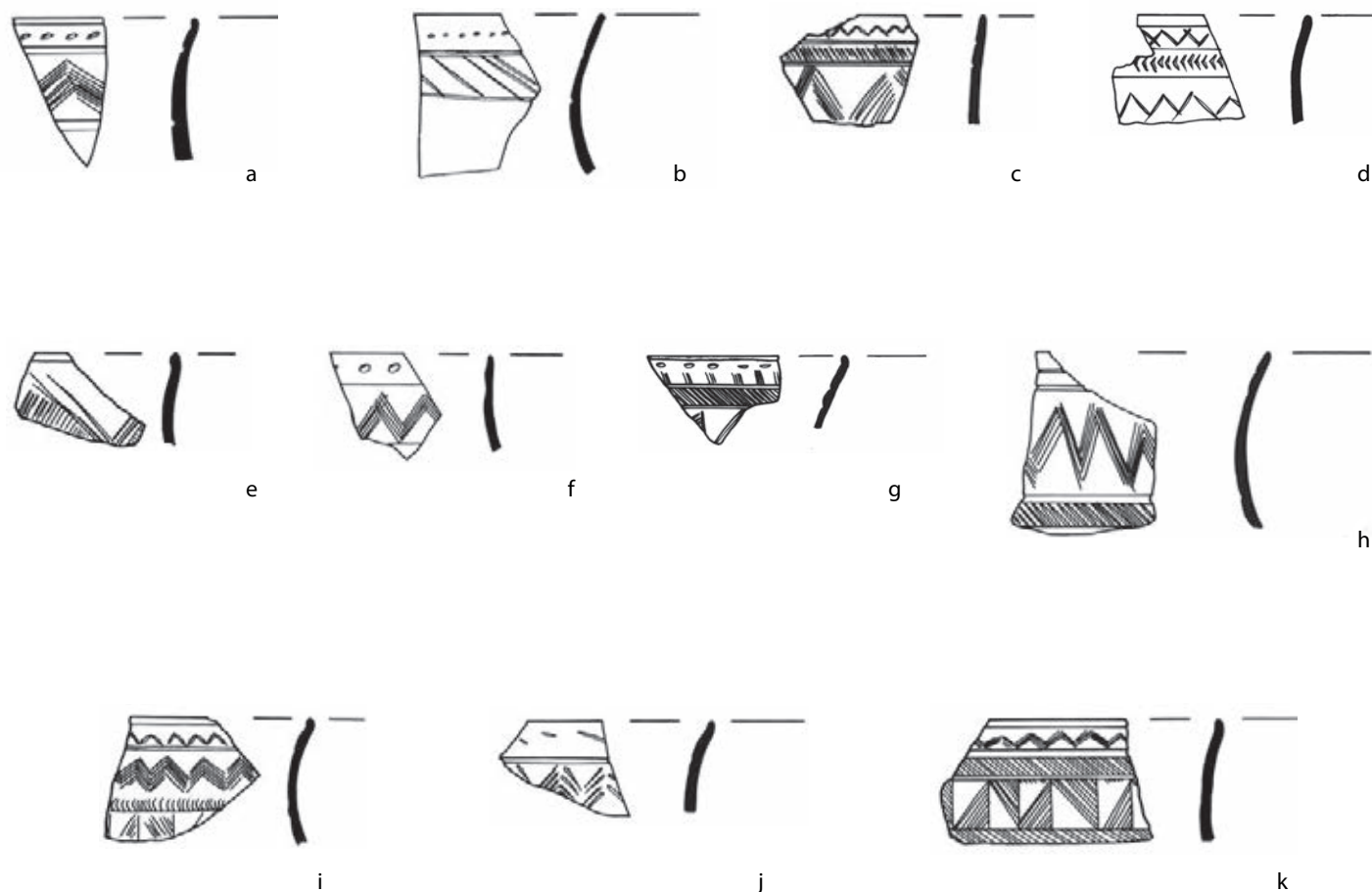


FIG. 4.25	Object no.	MA3 Incised Bases & Potstand	Level
a	51T:133.03	Clay: grey. Temper: none visible.	E
b	51T:135.04	Clay: buff. Temper: veg. Handmade.	E
c	51U:133.08	Clay: dark grey. Temper: none visible. Base di. 13.	C



5 cm
 (Scale: 50%)

FIG. 4.26	Object no.	MA3 Incised Rim Sherds	Level
a	51V:129.02	Clay: grey. Temper: none visible. Rim di. c.8.	D
b	51V:121.03	Clay: grey. Temper: none visible.	C
c	50V:121.03	Clay: grey. Temper: none visible.	E
d	51T:119.08	Clay: grey. Temper: sparse veg.	D
e	51T:128.03	Clay: grey. Temper: none visible.	D
f	50T:142.04	Clay: grey. Temper: none visible. Rim di. 8–9.	C
g	51T:105.06	Surface: grey. Temper: none visible.	A
h	50V:119.01	Clay: grey. Temper: sparse veg., white grit.	C
i	51T:133.07	Clay: buff. Temper: none visible.	E
j	51U:144.06	Clay: grey. Temper: none visible.	C
k	50T:116.01	Clay: grey. Temper: none visible. Rim di. c.18.	A

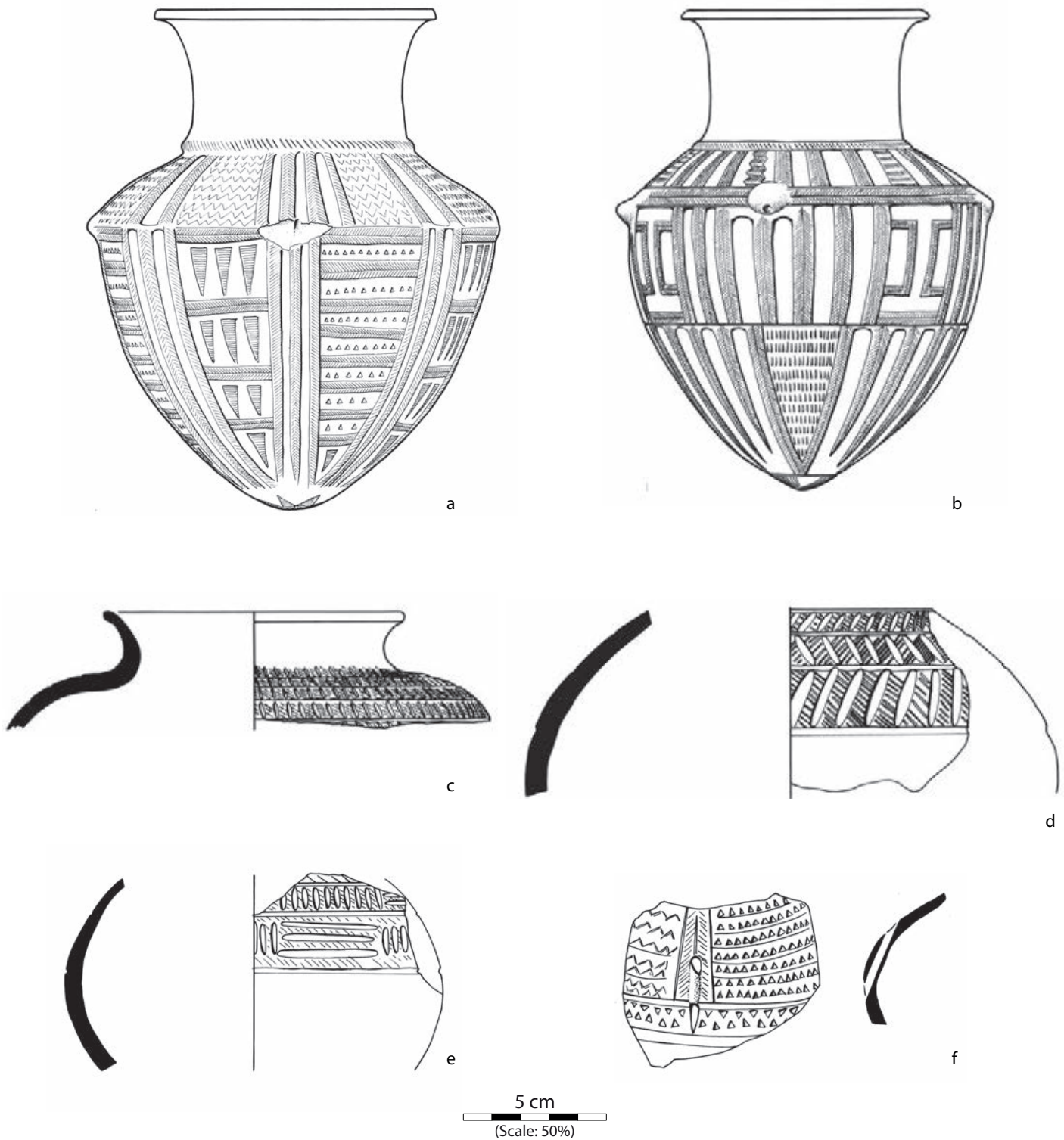


FIG. 4.27	Object no.	MA3 Excised Jars	Level
a	50T:172.03	Clay: grey. Temper: Small inclusions of limestone and mica. Rim di. 9.6. Ht. 17.5. Four lugs, one only intact.	F
b	51U:176.03	Clay: grey. Temper: fine limestone and mica. Rim di. 8.6. Ht. 16.8. Four lugs.	F
c	51T:116.10	Clay: dark grey. Core: red. Temper: occasional white grit. Rim di. 10.5.	C
d	51T:112.02	Clay: grey. Temper: none visible. Burnished outer surface.	B
e	50U:133.03	Clay: grey. Temper: sparse veg. on surface.	B
f	50T:160.02	Clay: grey. Temper: none visible.	E

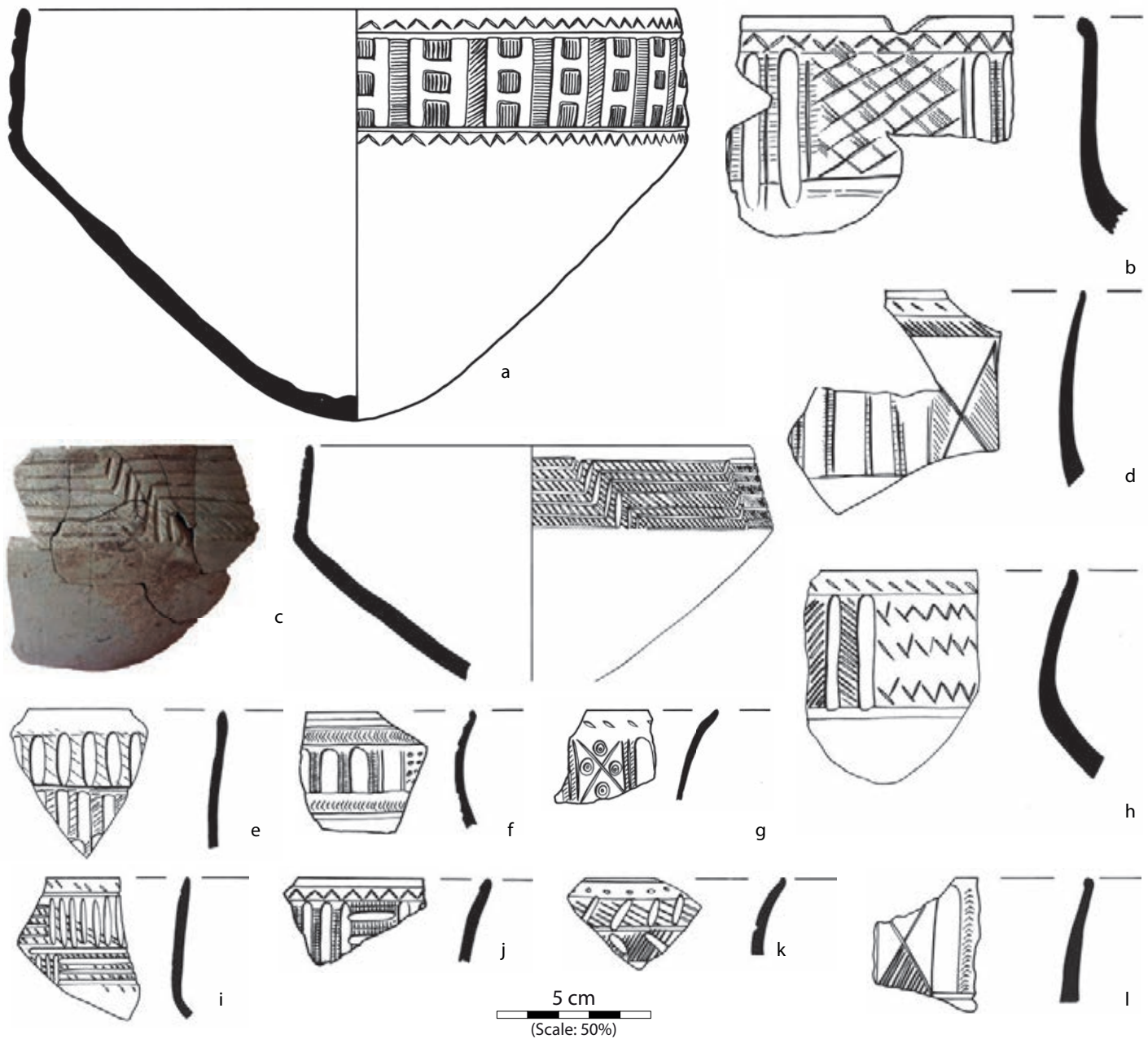


FIG. 4.28	Object no.	MA3 Excised Bowls & Rim Sherds	Level
a	51V:130.03	Clay: grey. Temper: none visible. Rim di. c.22.	D
b	50T:151.12	Surface: grey. Clay: buff. Temper: sparse veg. Rim di. 21-23.	D
c	60W:024.14	Clay: grey. Temper: none visible. Rim di. c.14.	CS
d	50V:113.05	Clay: grey. Temper: sparse veg.	B
e	50T:136.02	Clay: grey. Temper: none visible. Rim di. 9.2.	B
c	50T:158.04	Clay: grey. Temper: fine grit.	E
g	51T:158.06	Clay: grey. Temper: none visible.	E
h	50T:151.15	Clay: grey. Temper: none visible. Scraped below carination.	D
i	51T:112.04	Clay: grey. Temper: none visible. Rim di. 7-10.	B
j	51T:133.05	Clay: dark grey. Temper: none visible.	E
k	51U:145.01	Clay: grey. Temper: very fine sparse veg.	C
l	51U:155.03	Clay: grey. Temper: none visible.	D

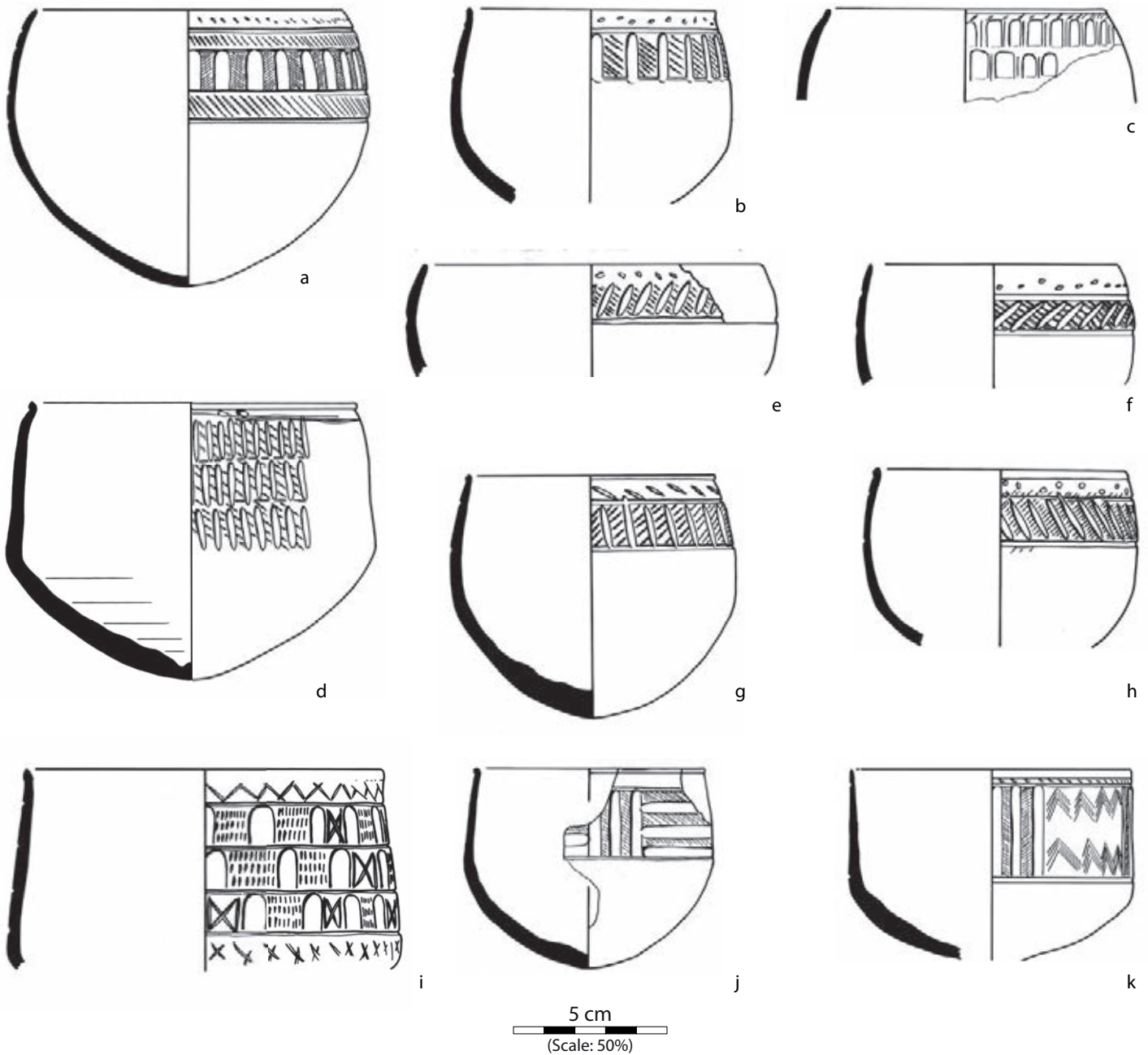


FIG. 4.29	Object no.	MA3 Excised Cups	Level
a	50T:159.01	Clay: grey. Temper: none visible. Rim di. 10. Ht. 9.0.	E
b	50T:151.08	Clay: grey. Temper: sparse veg. Rim di. c.8.	D
c	50T:141.02	Clay: grey. Temper: sparse veg. Rim di. 9.	C
d	50U:125.16	Clay: grey. Temper: none visible. Rim di. 10.5. Ht. 9.1.	A
e	50U:138.02	Clay: grey. Temper: sparse veg. Rim di. 11.	B
f	51U:132.03	Clay: grey. Temper: none visible. Rim di. 8.	B
g	51T:117.14	Clay: grey. Temper: none visible. Rim di. 8.	C
h	51T:128.05	Clay: grey. Temper: light veg. Rim di. 8–9.	D
i	51T:116.05	05 Clay: grey. Temper: sparse veg. Rim di. 11.6.	C
j	50T:143.02	Clay: grey. Rim di. c.7.5.	C
k	50T:136.01	Clay: grey. Temper: none visible. Rim di. 9.2.	B

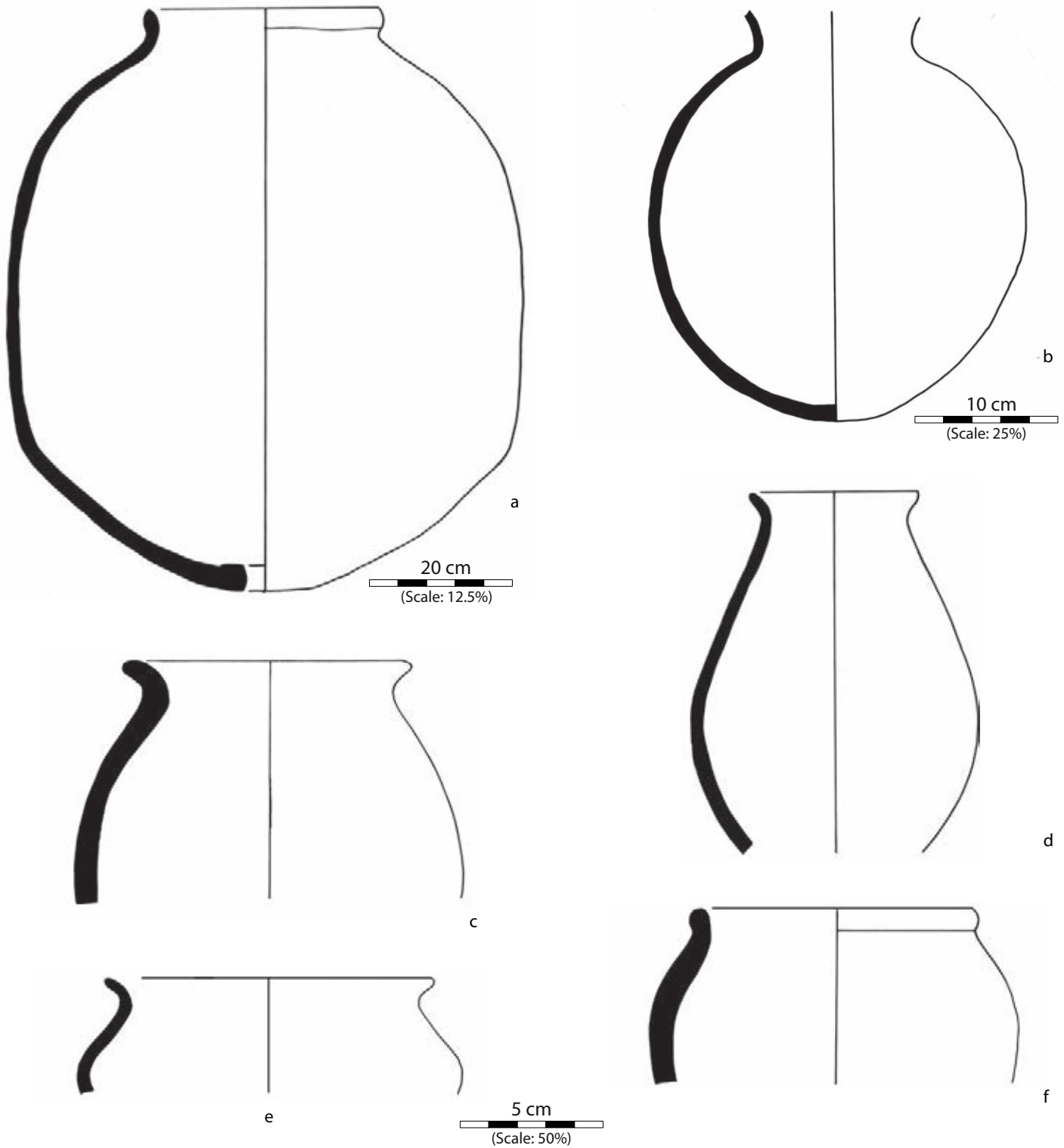


FIG. 4.30	Object no.	MA3 Common Ware Jars	Level
a	51V:111.01	Surface: cream. Clay: pink. Rim di. 32–34. Handmade.	B
b	51V:118.02	Clay: buff. Temper: coarse veg. Handmade. Max di. of body 26–27.	C
c	50U:109.11	Surface: buff/green. Clay: pink. Temper: sparse veg. Rim di. 9. Handmade.	A
d	50T:145.14	Clay: red with black core. Temper: veg. and large grit. Rim di. 6.	E
e	51U:101.02	Surface: buff. Clay: pink. Temper: fine veg. Rim di. 11.	A
f	50U:101.16	Surface: pink/brown. Clay: pink. Temper: sparse fine veg. Rim di. 9.	A

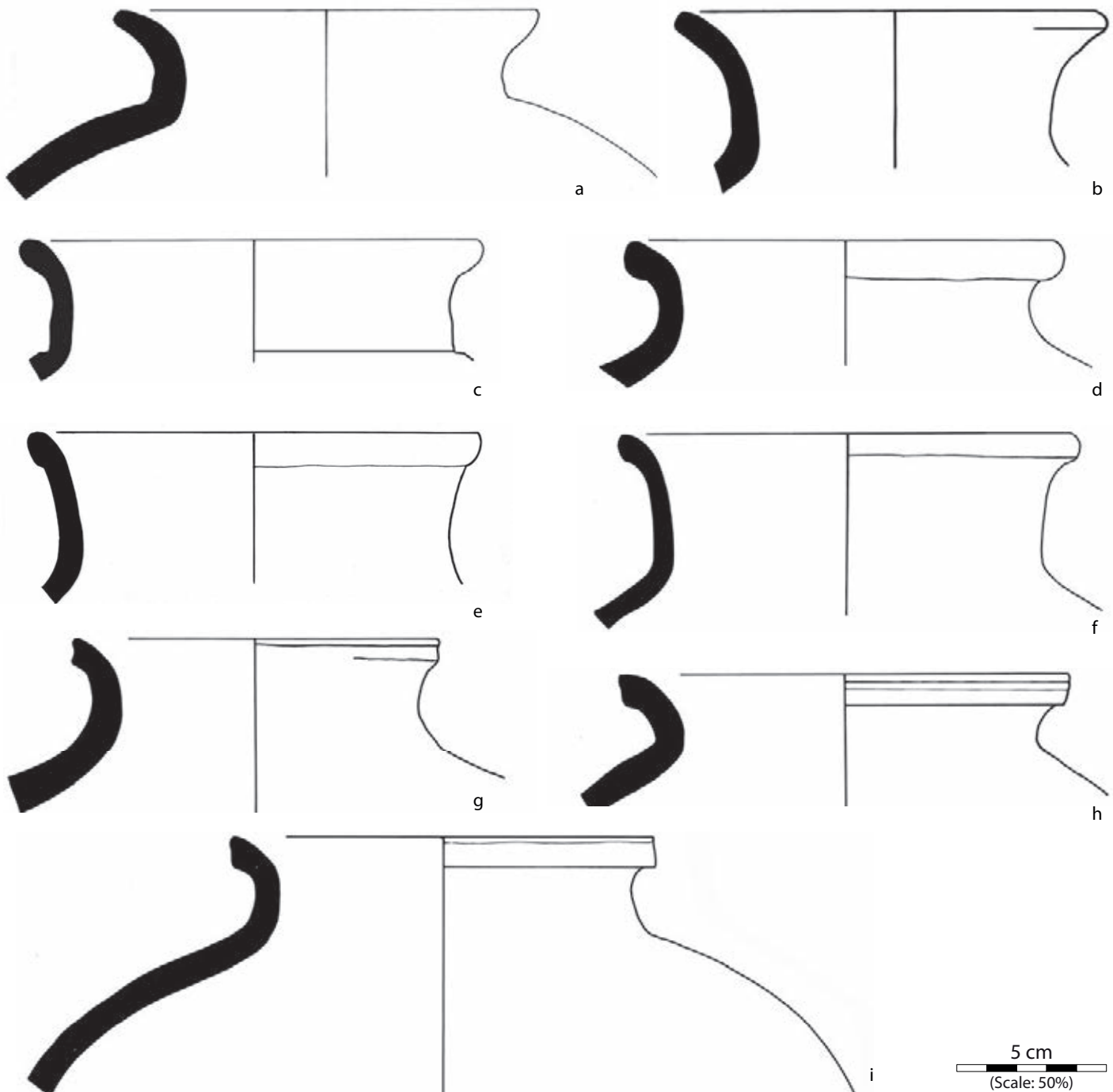


FIG. 4.31	Object no.	MA3 Common Ware Jar Rims	Level
a	50U:137.03	Surface: cream. Clay: pink. Temper: heavy veg. Rim di. 14. Handmade.	B
b	50U:127.01	Clay: pink with green core. Temper: medium veg. Rim di. 14. Handmade.	B
c	51T:112.12	Surface: cream. Clay: pink. Temper: veg. Rim di. 15–16. Handmade.	B
d	51T:105.12	Clay: pink. Temper: veg. white slip.	A
e	50T:143.10	Surface: green. Clay: buff. Temper: veg. Rim di. 15–16. Handmade.	C
f	50T:151.37	Clay: fine buff. Temper: none visible. Rim di. 9–11.	D
g	50U:102.13	Surface: brown. Clay: pink. Temper: fine grit and veg. Rim di. 12.	A
h	50U:102.12	Surface: cream. Clay: buff with grey core. Temper: sparse veg. Rim di. 15.	A
i	50U:101.09	Surface: green. Clay: pink. Temper: fine veg. Rim di. 14.	A

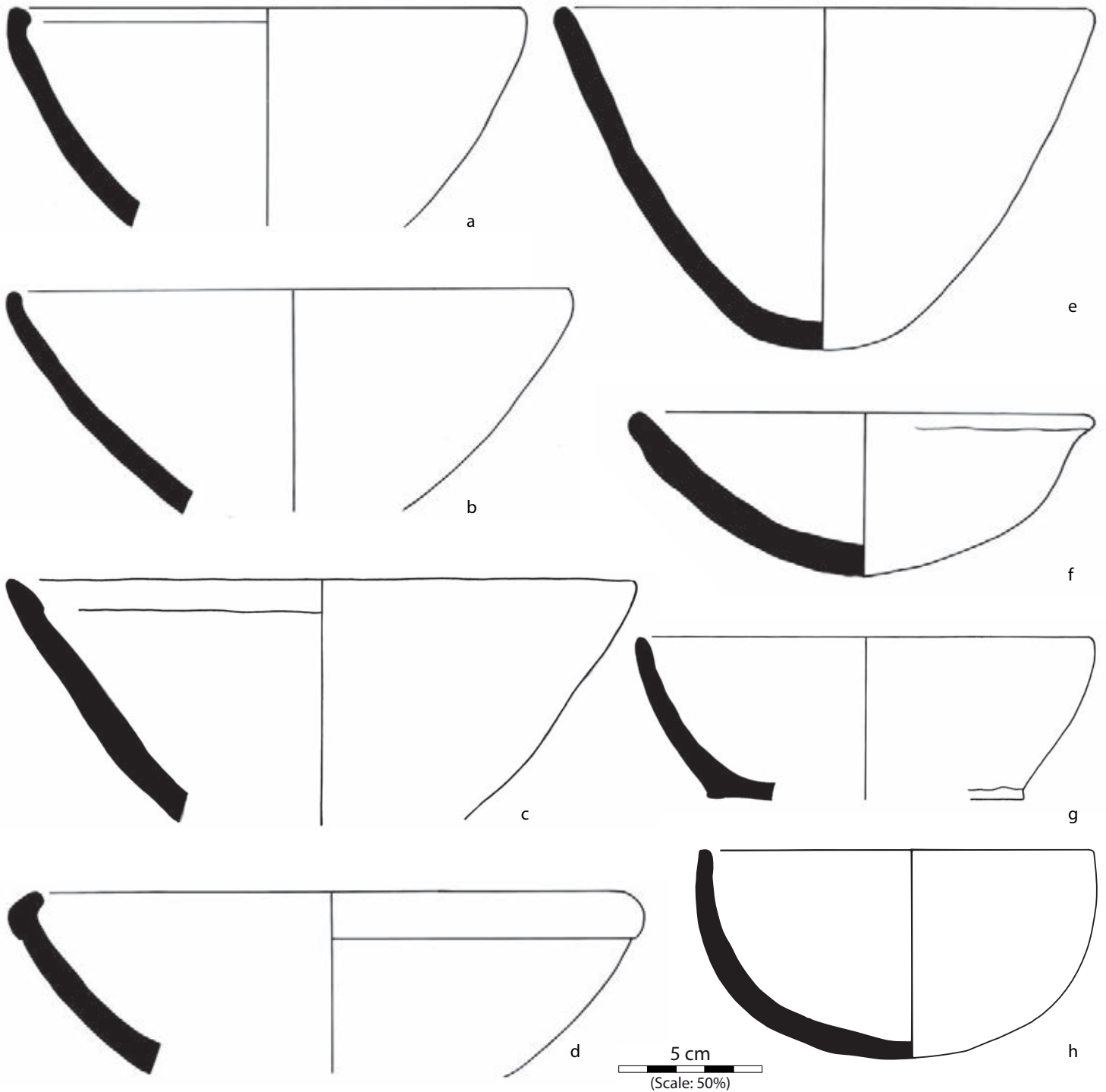


FIG. 4.32	Object no.	MA3 Common Ware Bowls	Level
a	50T:151.32	Clay: yellow/buff, very hard. Temper: medium veg. Rim di. 18. Handmade.	D
b	50U:109.07	Surface: green. Clay: green. Temper: medium veg. Rim di. 19.	A
c	50T:151.28	Surface: pale pink. Clay: pink. Temper: veg. Rim di. 21–23. Crudely handmade.	D
d	51V:105.02	Surface: cream slip. Clay: red. Temper: fine veg. Rim di. 20–22.	A
e	50V:103.11	Surface: green slip. Clay: pink. Temper: veg. and sparse grit. Rim di. 18.	A
f	50V:103.10	Surface: brown/black. Clay: brown. Temper: coarse straw. Rim di. c.16.	A
g	50T:101.08	Surface: green. Clay: pink. Temper: veg. Rim di. c.11. Handmade	A
h	51V:128.02	Surface: cream. Clay: pink. Temper: rough veg. Rim di. c.10.	B

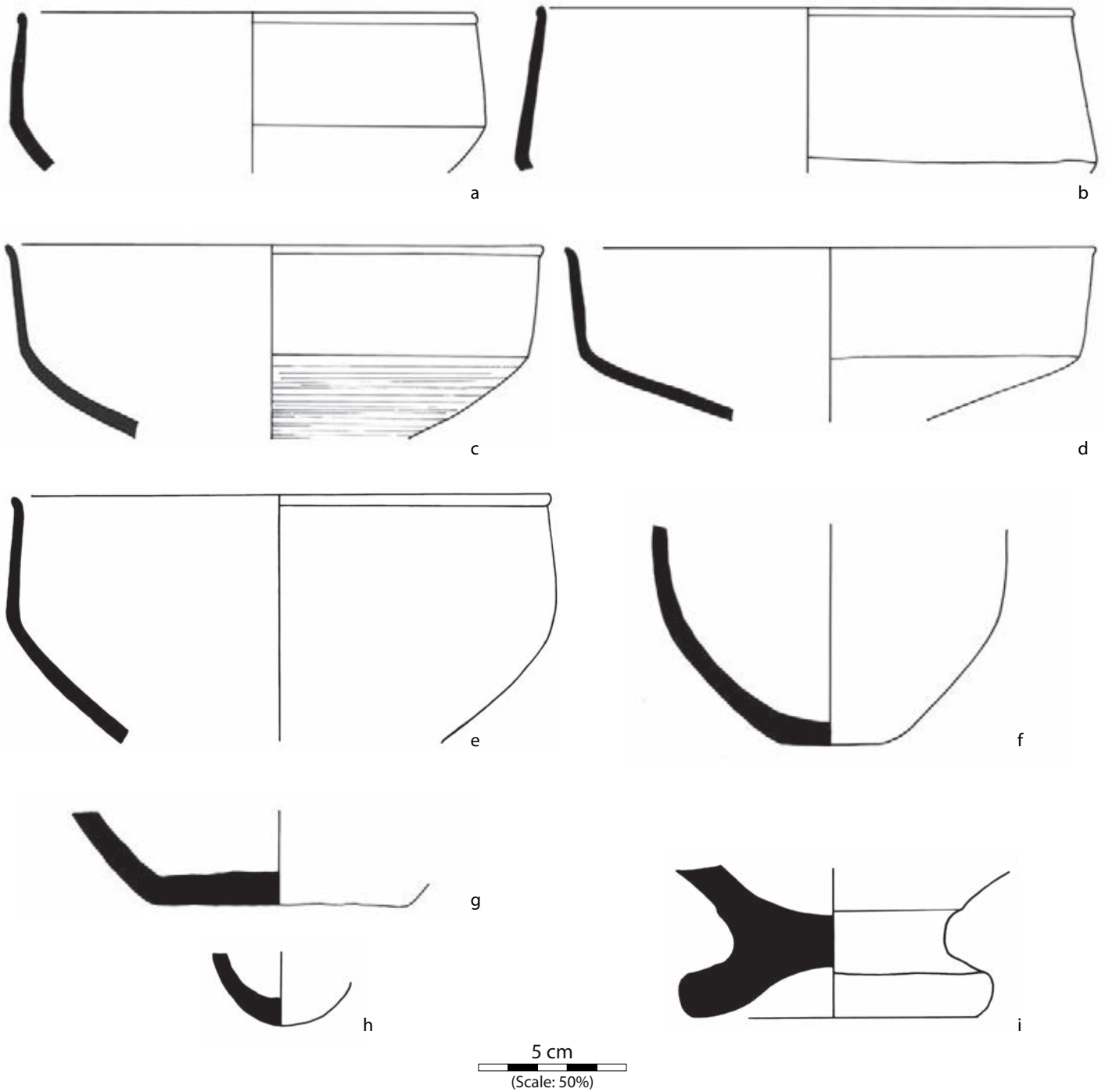


FIG. 4.33	Object no.	MA3 Common Ware Carinated Bowls & Bases	Level
a	50T:101.06	Surface: buff/brown. Clay: pink. Temper: sparse fine grit. Rim di. c.15.5.	A
b	50T:103.11	Surface: green/buff slip. Clay: pink. Temper: fine veg. Rim di. 12.	A
c	51T:105.02	Surface: red/brown. Temper: fine veg. Rim di. 18. Lower body wheel scored.	A
d	50T:103.08	Clay: green. Temper: none visible. Rim di. 18.	A
e	51U:101.03	Clay: brown. Temper: fine grit/sand. Rim di. 18.	A
f	51V:125.01	Surface: cream. Clay: pink. Temper: medium veg. Base di. c.4. Handmade.	C
g	51V:123.03	Clay: buff. Temper: veg. Rim di. c.8-9. Handmade.	B
h	51V:138.01	Clay: brown. Temper: grog. Handmade.	D
i	51V:128.03	Clay: green. Temper: veg. Base di. 8.4. Handmade.	B

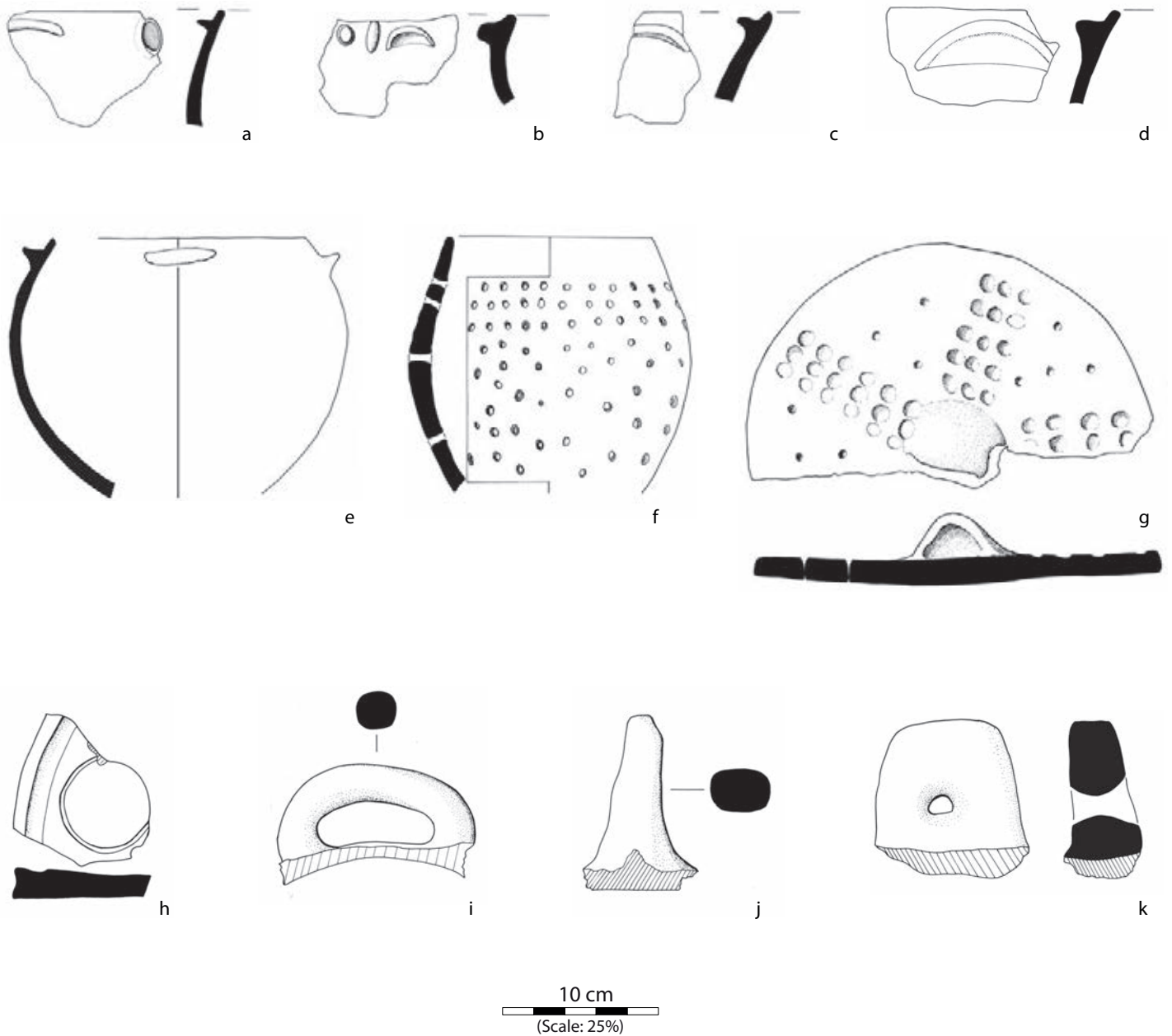


FIG. 4.34	Object no.	MA3 Cooking Ware & Miscellaneous	Level
a	50T:151.39	Clay: dark red/black. Temper: grog and mica. Rim di. c.17 . Burnt. Handmade.	D
b	50T:126.15	Clay: pink. Temper: grog. Rim di. 12-13 . Handmade. Applied decoration.	B
c	51T:110.14	Surface: brown. Clay: black. Temper: medium veg. Handmade, polished outer surface.	B
d	50V:113.15	Surface: brown. Core: black. Temper: large grit. Handmade.	B
e	51T:102.01	Surface: brown. Core: black. Rim di. 15.5 . Handmade, 4 attached lugs, upper body burnished.	A
f	50T:126.10	Clay: pink. Core: burnt black. Rim di. 13-14 . Very crudely handmade; other fragments suggest this sieve had a thick round base.	B
g	50T:103.16	Clay: pink. Temper: veg. Lid di. 26.1.	A
h	51U:116.07	Surface: buff. Clay: brown. Temper: heavy veg.	A
i	51V:128.04	Surface: brown. Core: black. Temper: veg.	B
j	51T:110.05	05 Surface: brown. Core: black. Temper: veg.	B
k	51U:122.06	06 Surface: red. Core: black. Temper: veg. Handle.	B

SUMMARY

The publication of preliminary reports on the excavations along the Cliff Section described in broad outline the stratigraphic and pottery sequence at Tell Mohammed Arab (Roaf 1983, 1984). A more detailed analysis of the pottery sequence from the Ninevite 5 Sounding was subsequently published and correlated with those from other Ninevite 5 sites known at the time to propose an overarching chronological scheme for the various decorated styles (Roaf and Killick 1987). A fourth article dealt with an early group of “Late Uruk” pottery (Roaf 1998) and, finally, a paper completed in 1989 and published in 2003 examined the relative chronology of Ninevite 5 sites in the Tigris region (Killick and Roaf 2003).

The sequence established by the excavations at Tell Mohammed Arab has so far withstood the test of time, albeit further refined and enhanced by research on and subsequent publication of material from other sites. In particular, publications on Tell Karrana 3 (Rova 1993) and Tell Fisna (Numoto 1994) have filled in the gap between MA1 and MA2 with a transitional pottery style and period, although the re-analysis of this style in the following chapter questions the validity of this distinction. At the other end of the sequence, a later post-MA3 terminal phase of Ninevite 5 pottery has been identified at Tell Arbid in the Upper Khabur (Smogorzewska 2016). Most recently, the ARCANÉ project synthesized the available Ninevite 5 data in a single volume and proposed a new classification system for northern Mesopotamian (Rova 2019). In that work, periods designated ETG 1 to 4 (Early Tigridian) replace the previous style-based designations of “Late Uruk”, Early Ninevite 5 Incised and so on. As the following discussion is principally concerned with pottery styles, the original labels have been retained in the discussion below.

The sequence from the Ninevite 5 Sounding remains the same in this volume as published in the original article (Roaf and Killick 1987). The table in that article showing the percentages of the different styles in each level of the Ninevite 5 Sounding is reproduced here (Table 4.1). The only difference is that MA3 has been subdivided into MA3a (the cemetery) and MA3b (reappearance of buildings). The ARCANÉ periodisation has also been added in the left-hand column and is discussed further in the next chapter.

The assemblage from MA1 was originally labelled “Late Uruk”, within quotation marks because it was seen as closely related to, but not identical with classic “Late Uruk” assemblages (Roaf 1998: 131). That designation has been retained here (but see below p. 102 for a suggested acronym for this style). The key diagnostic type for MA1 Painted Ware is a carinated bowl, wheel-made, in a buff/pink clay and surface, with grit temper, and a ring- or round base (Figs. 4.2 & 3). The commonest painted design is a row of cross-hatched triangles in red paint applied to the upper body of the pot, but there is also some variation: vertical bands of hatching (Fig. 4.2f), concentric loops below the carination (Fig. 4.3k), and a bird (Fig. 4.3h). At Tell Karrana

3, these last three motifs are dated to the Transitional Period (Rova 1993: 46–7: nos. 7, 17 & 23).

Only a few “Late Uruk” Incised Ware sherds were recovered from the Ninevite 5 Sounding. They included a sherd of a four-lugged jar typical of the “Late Uruk” style (Fig. 4.4b). There are, however, more examples from the Cliff Section (Roaf 1983: fig. 2).

When Tell Mohammed Arab was reoccupied (MA2), Painted Ninevite 5 had become the dominant decorated pottery style (Figs. 4.7–10). Jars and bowls with pedestal bases, purple paint, and a vegetal temper are *inter alia* defining characteristics of this well-known pottery. The style persisted through five building levels (K–G) and seems to be homogenous in that it was not possible to identify any developments within the sequence.

A Plain Fine Ware also makes its appearance (Fig. 4.11). In the Ninevite 5 Sounding decorated examples of Fine Ware were infrequent. A ribbed or layered body above the carination was the commonest surface treatment (Fig. 4.13), followed by notched bands and a few sherds with a restricted range of simple incised designs such as a vertical feather pattern (Fig. 4.14). The incised design repertoire associated with Early Incised Ninevite 5 has subsequently proven to be more varied than that suggested by the relatively small sample from the Ninevite 5 Sounding (see Numoto 1993: fig. 1).

The distinctive Late Excised Ninevite 5 style makes its first appearance in Level F (MA3a) together with a single example of a Late Incised jar (Fig. 4.22a). MA3a marks the re-use of the central area of the mound as a cemetery. The transition in pottery styles between MA2 and MA3a is abrupt. The highly-decorated four-lugged jars found in the graves represent the most elaborate form of the Late Excised style (Figs. 4.27a & b). This suggests that part of the Ninevite 5 pottery sequence containing less elaborate forms of Excised Ware is missing at Tell Mohammed Arab, both in the Cliff Section and in the Ninevite 5 Sounding. This missing style was originally labelled ‘Early Excised Ninevite 5’, with its type fossil represented by a panel of simple excised vertical grooves in fine grey ware (Roaf and Killick 1987: 222). This Early Excised style has subsequently been recognised at other sites and the range of associated designs expanded (Numoto 1993: fig. 2). However, its chronological relationship to Late Excised remains unclear.

On Table 4.1, the division between MA3a and MA3b represents a change in the use of the area, with the reappearance of buildings. If it also represents a chronological gap, of unknown duration, then it is one that is unlikely to show up in the ceramic record, given that there are only four pots from the MA3a cemetery in the Ninevite 5 Sounding and that two of these are already in the Late Excised style.

The decorated pottery of MA3b reflects the classic Late Incised and Late Excised repertoire: Fine Ware cups and bowls with the upper body covered in a range of incised and excised patterns (Figs. 4.23–9). Jars in these styles were far less frequent in the Ninevite 5 Sounding (Figs. 4.22 &

ARCANE Periodisation	Style Names	MA Period	Sounding Level	Excised	Incised	Notched bands	Ribbed/layered	Painted	Total
End of Ninevite 5 settlement									
ETG 4	Late Incised & Excised Ninevite 5	MA3b	A	10 (22.7)	30 (68.2)	3 (6.8)		1 (2.3)	44
			B	54 (50.9)	33 (31.1)	3 (2.8)	12 (11.3)	4 (3.8)	106
			C	21 (42.0)	12 (24.0)	1 (2.0)	10 (20.0)	6 (12.0)	50
			D	41 (53.2)	21 (27.3)	2 (2.6)	6 (7.8)	24 (11.1)	77
			E	37 (17.1)	109 (50.5)	7 (3.2)	39 (18.1)	24 (11.1)	216
Change of use: reappearance of buildings									
ETG 4	Late Incised & Excised Ninevite 5	MA3a cemetery	F	2 (66.7)	1 (33.3)				3
Break in stratigraphic and pottery sequence									
ETG 3	Painted & Early Incised Ninevite 5	MA2	G		5 (14.3)	1 (2.9)	7 (20.0)	22 (62.3)	35
			H		7 (5.0)	12 (8.6)	33 (21.6)	87 (62.6)	139
			I				6 (14.0)	37 (86.0)	43
			J			1 (3.7)	1 (3.7)	25 (92.6)	27
			K					3 (11.5)	23 (88.5)
ETG 2			Break in stratigraphic and pottery sequence						
ETG 1	"Late Uruk" aka Terminal Uruk	MA1	L			1 (50)		1 (50)	2
			M						0
								TOTAL	768

TABLE 4.1. Sherd count of decorated Ninevite 5 sherds from the Ninevite 5 Sounding at Tell Mohammed Arab (omitting painted and incised "Late Uruk" pottery). Figures in brackets are percentages of the number of decorated sherds in each level.

4.27). The range of motifs on this pottery has also been fully explored elsewhere (Numoto 1993: fig. 3).

For the decorated styles, it is difficult to see any internal development within MA3b, with the possible exception of a group of sherds with horizontal rows of rocker pattern (Fig. 4.24). These were all from Level A and it has previously been suggested that they might appear late in the Ninevite 5 sequence (Killick and Roaf 2003: 76). This suggestion has received support from subsequent work in the Upper Khabur where rocker pattern is now thought to be distinctive of the final EJZ 2 period, i.e. towards the end of the Ninevite 5 pottery sequence (Smogorzewska 2016: 208). The only other possible chronological development is in the cups of the Plain Fine Ware. Comparing the cups of Level E with those of Level A (Figs. 20 & 21), it would seem that they become shallower as MA3 progresses. Numbers are small, however, and this suggestion requires validating with a larger sample.

At the end of MA3, Tell Mohammed Arab was abandoned. In northern Iraq, there is also a break in the general sequence separating the end of the Ninevite 5 pottery styles from the

pottery of Taya IX. The situation is different in the Upper Khabur where elements of the Late Excised style survived and evolved on new shapes such as flat-bottomed bowls (Smogorzewska 2016: 211 & fig. 8). This has led to the suggestion that the same might be true in northern Iraq, namely that there is yet another transitional pottery style—a missing link—which is as yet only hinted at in the excavation record (Arrivabeni 2019: 64).

5. Discussion

INTRODUCTION

In the previous chapters the evidence from the excavation of the Ninevite 5 Sounding at Tell Mohammed Arab has been presented. For the most part, this has not relied on evidence from other excavations but has been treated independently. In this chapter we will attempt to place this evidence in a wider context. The most important contribution of the excavation of the Ninevite 5 Sounding at Tell Mohammed Arab was the elucidation of the pottery sequence of the first half of the third millennium in northern Mesopotamia. In addition, it provided for the first time substantial evidence of the architecture of the period.

The early history of research into Ninevite 5 has been described in several studies (Roaf and Killick 1987; Rova 1988: 5–10; Grossman 2014: 83–5) and there is no need to repeat it here. There have also been several studies of Ninevite 5 since the excavations at Tell Mohammed Arab came to an end. These include Rova 1988, Gut 1995, Roaf 2000, Rova and Weiss 2003 (the partly updated proceedings of the conference entitled ‘The Origins of North Mesopotamian Civilization: Ninevite 5 Chronology, Economy, Society’ that took place in Yale University in December 1988), and various articles in *ARCANE 1* and *V* (Lebeau (ed.) 2011; Rova (ed.) 2019).

Ever since the excavation of the Deep Pit in Nineveh, it has been accepted that there is an entity which could be called Ninevite 5. The use of the term, however, has been varied and at times unsatisfactory. Devised to describe a ‘level’ in the Deep Pit, it has been transferred to the pottery recovered from that level. In order to avoid confusion, this level is now called Level V by most scholars, with the term Ninevite 5 being used with a wider meaning. It was assumed that the remains recovered from Level V at Nineveh belonged to a single culture whose most obvious diagnostic feature was painted and incised pottery. Before the excavations in the Saddam Dam Salvage Project, the stratigraphy of Operation 1 at Tell Leilan excavated in 1979 and 1980 was interpreted as evidence that painted and incised pottery were contemporary throughout the period of their use (Schwartz 1982, 1985). It

is now clear that both the painted and the incised pottery from Level V at Nineveh belonged to several different styles. As described in the previous chapter, the excavations at Tell Mohammed Arab showed that there were periods when painted pottery was in use without incised pottery, when both painted and incised pottery were present, and when incised pottery was in use but not painted.

POTTERY SEQUENCE

In Chapter 4 the pottery was presented by stratigraphic period (MA1 to MA3), within which wares (Painted, Incised, Plain Fine, Incised Fine, Excised Fine, Common, and Cooking Ware) were discussed, organised by form. This presentation was based on the excavated material, and no attempt was made to classify the pottery from the Ninevite 5 Sounding according to the various typologies for shapes, motifs, and designs suggested by other scholars (e.g. Rova 1988, 2003a, Numoto 1989, 1991, 1992b, 1993, and 1994; Rova 2011; Grossman 2014; Arrivabeni 2019).

The decision to divide the material according to the separate periods of occupation was pragmatic: it was easy to distinguish the three periods, and, since the assemblages from each period for the most part consisted of different types, residual sherds from earlier periods could be recognised. There was not sufficient material in each building level to give a representative view of the range of the associated assemblage, so it was sensible to treat the material from all the levels in each period as a unit. Furthermore, apart from the graves and two jar bases in a Level C bench, there were no primary contexts with pots found *in situ*. The rest of the ceramic assemblages were in the form of sherds, with the likelihood that many of the sherds in one level had belonged to earlier levels.

Presenting the material from the different building levels together can give the misleading impression that the pottery within each period represents a single uniform assemblage and has the disadvantage of obscuring internal developments within each period. Some possible changes, however, can be recognised. Thus, there may have been an earlier phase

Stage	BRB	Painted		Fine Grey ware	Notched bands	Incised			Excised		Tell Mohammed Arab sequence	
		"Late Uruk"	Ninevite 5			Early	Late	Rocker	Early	Late		
11				x			x	x		x	A	MA3b
10b				x			x			x	B-E	MA3b
10a				x			x			x	F	MA3a
9			?	x	?	?	x		x	x	gap	
8			x	x	x	x	?		x	?	gap	
7			x	x	x	x	?		?		gap	
6			x	x	x	x					G-H	MA2
5			x	x	?						I-K	MA2
4		?	x	x	?						gap	
3		x	?	?							gap	
2		x									L-M	MA1
1	x	?										MA1

TABLE 5.1. The possible succession of pottery styles based on the evidence from Tell Mohammed Arab. The stages represented in the Ninevite 5 Sounding are in red. Early Incised does not include notched bands, which probably started in Stage 4 and probably continued to Stage 7 or 8 (modified from Killick and Roaf 2003: Chart 1).

with Bevelled Rim Bowls (BRB) but without painted ware, attested in 65X:09 in the Cliff Section (Roaf 1998), and a later phase with painted ware but without Bevelled Rim Bowls (BRB) found in the Sounding. Barbara Helwing (2014: 37) in her study of Bevelled Rim Bowls, which included those from Tell Mohammed Arab, concluded that they 'went out of use around the mid-4th millennium. Within the ARCANÉ corpus most BRBs appear in artificial inventories and have been judged to be secondary material with no dating value.' She also suggested that their disappearance marked 'the transition from LC5 [i.e. Late Uruk] to the Early Bronze Age' along the Euphrates in northern Syria. This view was contradicted by Elena Rova in the same volume (2014: 2–3 and 19) who considered that they dated to the post-LC5 Terminal Uruk period (ETG 1). Given the absence of any other indication of an earlier Late Uruk occupation at Tell Mohammed Arab or of a period of abandonment, we consider 65X:09 to be an early phase of the MA1 period.

Within MA2 there seems to be an earlier phase (Levels K to I) with Fine Ware but no incised ware except for notched bands and a later phase (Levels H and G) with simple incised designs. Also, as mentioned in Chapter 4, there is a gradual development in the shape of the Fine Ware cups from a pointed to a rounded base. In MA3 the form of the Fine Ware cups continued to develop from a hemispherical to a shallower shape, and there are particular forms of incised decoration (such as rocker patterns) that seem to be restricted to the latest levels of MA3.

In 1988 (published in 2003) we suggested a tentative scheme of the possible succession of Ninevite 5 decorated pottery styles based on their presence in the stratigraphic sequence at Tell Mohammed Arab. In Table 5.1 we have extended this scheme to include the MA1 levels.

The stages in this chart that are not attested at Tell Mohammed Arab are conjectural, as the presence of question marks is intended to indicate. In most cases, one stage is distinguished from the next by the introduction of new types, but the transitions are not clearly marked and the sequence as a whole shows continuity, exhibiting a gradual development.

The pottery assemblages immediately before or after MA1, MA2, and MA3 were probably very similar to the earlier and later levels of those periods at Tell Mohammed Arab. There is no reason to assume that the clear stratigraphic breaks at Tell Mohammed Arab were also present in other sites and indeed no gaps were observed in the sequences excavated at Tell Jikan (Jigan) and Tell Thuwajj (Dhuwajj).

In Table 5.1, Transitional Ninevite 5 and Intermediate Ninevite 5 styles are not listed separately because it is often difficult to tell if sherds belonged to these styles or to the Painted Ninevite 5 style, so all are included in the Painted Ninevite 5 column.

Additionally, in the table Early Excised (also called Grooved Ware) is restricted to Fine Ware bowls with shallow vertical excisions, sometimes in groups of between three and five (Numoto 1993: 75, Group 5 and fig. 2; Killick and Roaf 2003: 76). This motif does not occur in Tell Mohammed Arab. The example cited by Arrivabeni (2019: 10, pl. 3.10), which equals Killick and Roaf 2003: fig. 1.3, is from Tell Brak not Tell Mohammed Arab.

Stage 3 might correspond to Rova's Transitional Ninevite 5 and Stage 4 to Numoto's Intermediate Ninevite 5 (see below for further discussion). Stages 7, 8, and 9 are largely conjectural. Telul eth-Thalathat V probably included Stage 7 (Numoto 1997) and Tell Thuwajj and Tell Jikan were probably occupied throughout these stages, though too little material

	Number of sherds	% of sherds
Early Iron Age	20,622	47.4%
Late Bronze Age	10,212	23.5%
Middle Bronze Age	6,061	13.9%
Early Bronze Age	2,521	5.8%
Unidentified	4,068	9.4%
Total	42,466	100.0%

TABLE 5.2. Numbers and percentages of sherds from different periods found in the Early Iron Age levels at Norşuntepe (after Bartl 2001: 286, n.7).

was recovered to give a representative sample. In Tell Thuwajj Trench C, Early Excised is present in Levels 7 and 8 without any Late Excised, suggesting that its introduction is earlier than that of Late Excised (Numoto 1996: 99). In Syria, Tell Leilan was probably occupied throughout Stages 7 to 9. Pit 1 in Stratum 19 could represent Stage 8 as it contained examples of Painted Ninevite 5 vessels as well as both Early Incised and Early Excised bowls. The early levels in Tell Arbid and those in Trench HS4 at Tell Brak may have dated to Stages 8 or 9, but too little stratified diagnostic material was recovered to give more than an indication of the probable date (Baka and Hamburg 2013; Matthews 2003: 107–8).

Stages 10a and 10b represent a single stage and have only been separated because of the change in the nature of the occupation in the Ninevite 5 Sounding. Stage 11 is distinguished by the introduction of rocker patterns which are typical of the latest Ninevite 5 assemblages in Syria.

A further stage, which could be called Stage 12, has only been recognised in Syria. We call this phase Syrian Late Excised. It is found in Tell Arbid Area D Phases C–D (Strata 3–6) and represents a very late stage of the Ninevite 5 period with both Incised and Excised Ninevite 5 sherds, including designs not found in Tell Mohammed Arab. Other new types include Fine Ware forms such as straight sided bowls, flat based bowls, and spouted jars, as well as wares such as Metallic Ware, Jezirah Bichrome Ware, and Jezirah Burnished Ware (Smogorzewska 2016). The pottery assemblages from Level IIIId (previously IIa) at Tell Leilan and from HS4 Level 4 (and perhaps also Level 5) at Tell Brak are probably of the same date. A very few unpublished sherds (such as Fine Ware flat based bowls, a Jezirah Bichrome sherd, and a possible Jezirah Burnished sherd) found in the Middle Assyrian levels at Tell Mohammed Arab suggest that occupation later than the latest Ninevite 5 level in the Ninevite 5 Sounding was present somewhere on the site, but the other new types present in Tell Arbid have not been found in Tell Mohammed Arab.

Some graves at Tell Jikan have been attributed to the post-Ninevite 5 period (Area B Graves 14 and 16, Renette

Period	Level 3a				Level 3b			
	No. of sherds		% of sherds		No. of sherds		% of sherds	
Khabur ware	169	(294)	29.4%	(51.1%)	37	(63)	24.3%	(41.4%)
Late 3rd mill.	276	(401)	48.0%	(69.7%)	85	(111)	55.9%	(73.0%)
Unidentified	125		21.7%		26		17.1%	
Ninevite 5	5		0.9%		4		2.6%	
Total	575		100.0%		152		99.9%	

TABLE 5.3. Numbers and percentages of sherds from different periods found in Levels 3a and 3b in Trench G-4 at Tell Jikan. Numbers and percentages in brackets are calculated assuming that all the Unidentified sherds belonged to that group (after Oguchi 2003: 88, fig. 1).

2019: 26; Ii 2003: 43, 52–5). These do not contain the typical decorated types found in the Syrian Late Excised Ninevite 5 period in Syria, but the undecorated pottery has parallels to some of the pottery from this period in Syria. Numoto (1992a: 139–40) suggested that levels 4 and 5 in Trench G4 in Area C might also be contemporary with the Syrian Late Excised, but the sample is small, and it is possible that there was a gap in the occupation before the graves in Area B and levels 4 and 5 in Area C.

STRATIGRAPHY

The pottery sequence from the Ninevite 5 Sounding is of importance because it is not a theoretical construct based on stylistic observations but one based on the stratigraphy of the site. The sequence of 13 levels, 11 of which were defined by their buildings, is not in doubt, but not all the finds in each level were contemporary with the deposition of the excavation unit in which they were found. Archaeologists like to think that objects found in a particular level were in use at the time they were deposited, and have underestimated just how many finds in a particular level may have been residual.

In the Early Iron Age levels at Norşuntepe, for example, it was possible to quantify the number of residual sherds because 90% of the wares of the different periods could be reliably distinguished (Table 5.2). Less than half of these sherds (47.4%) were dated to the Early Iron Age, while a similar proportion (43.2%) were certainly earlier.

The phenomenon of residual material is particularly acute in sites where the buildings were constructed of mud-bricks, whose raw material was dug up from earlier levels. This is the case for all the sites where Tell Mohammed Arab 'Late Uruk' and Ninevite 5 pottery has been excavated and, therefore, there is a high probability that many of the sherds found in different building levels were residual.

This pattern was also found in Trench G-4 at Tell Jikan excavated in the Saddam Dam Salvage Project (Table 5.3). Ignoring the sherds classified by the author as Unidentified, only c.30% of the sherds were contemporary with the date

of the levels (30.7% in Level 3a and 29.4% in Level 3b). Since, according to the author, the Unidentified sherds dated either to the Khabur ware period or to the Late 3rd millennium, this would rise to over 70% if they were all from the third millennium.

The quantity of the residual decorated pottery (notched bands, ribbed and layered sherds, and painted ware) recovered from MA3 (Table 4.1) reached over 30% of the decorated pottery in some levels. In Chapter 4, the residual sherds from earlier periods, when recognised, were not included in the presentation. Since the material is not presented by building level, residual sherds from earlier levels in later levels within each period do not affect the description of the pottery of that period. Drawings of the sherds found in each excavation unit are included in Appendix 6.

PERIODISATION

Despite the name of the Ninevite 5 Sounding, the occupation included earlier levels that we called 'Late Uruk' (in inverted commas). This period has since been given various names most commonly Terminal Uruk. The name 'Late Uruk' was criticised by Renate Gut (1995: 266) who preferred the name 'Tell Mohammed Arab Late Uruk' in English. She was undoubtedly correct, as the assemblage from Tell Mohammed Arab, despite having some features reminiscent of types found in Late Uruk sites such as Habuba Kebira, does not have other typical types, and includes types not found in classic Late Uruk sites. Terminal Uruk and Gut's alternative *Enduruk* in German, however, lack specificity and suggest a single uniform phase that was present in different regions where very different assemblages followed the more widespread classic Late Uruk phenomenon. We are happy to replace our previous terminology of 'Late Uruk' with MALU, the acronym of Tell Mohammed Arab 'Late Uruk'.

The Ninevite 5 pottery sequence is one of gradual changes in the assemblage throughout the period. It is characterised by the introduction, increase in frequency, and subsequent decline of different recognisable styles of pottery and by the relative proportions of different styles in different phases. The divisions within the sequence are to a certain extent arbitrary and have often been dependent on the particular sequences of the sites most familiar to the researcher. Thus, Max Mallowan did not distinguish any stratigraphic change within Level V of the Prehistoric Pit in Nineveh and therefore did not distinguish the various sorts of decorated pottery found in this level. If he had excavated a different sequence like that at Tell Billa or Tell Mohammed Arab in which the painted and incised pottery were found in different levels, he might have given different names to these periods. In our analysis we were heavily influenced by the sequence in Tell Mohammed Arab, while Glenn Schwartz (1985, 1988) based his analysis on his interpretation of the evidence of the excavations at Tell Leilan, and Elena Rova emphasized the importance of the excavations at Karrana 3. Similarly,

Hirotoishi Numoto was influenced by the excavations undertaken at Tell Thuwaij, Tell Fisna, and Tell Jikan.

The realisation that there was a hiatus between MA1 and MA2 led us to search for material that might fit into this gap. We identified pottery vessels from the Nineveh Deep Pit, from Chagar Bazaar, and from Tell Brak that combined MALU and Ninevite 5 features which we called Painted Transitional 'Late Uruk'/Ninevite 5 (Roaf and Killick 1987: 222–3). Similar vessels were excavated at Tell Karrana 3, Tell Jessary, and Tell Fisna in the Saddam Dam Salvage Project.

The excavators of Karrana 3 concluded that 'the bulk of the Karrana ceramic repertoire covers the interval between the "Late Uruk" and the beginning of the Ninevite 5 period' (Zaccagnini 1993a: 17). In her study of the ceramics, Elena Rova recognised three styles of painted pottery: 'Late Uruk', 'Transitional' and Ninevite 5. The Transitional style differed from our proposed Painted Transitional 'Late Uruk'/Ninevite 5 style. It was defined by other criteria, including the ware and colour of paint, which Rova saw as different from both those of MA1 and of MA2 (Rova 1993: 43 = 2003b: 13). Numoto (1991: 92–105) provided a detailed analysis of the shapes, motifs and designs of what he called Ninevite 5 Transitional pottery. Rova assumed that there was a Transitional Period and proposed that Levels 3 and 2 at Karrana 3 belonged to this period (Rova 1993: 43).

Numoto (1991: 108–16) also suggested, on the basis of the excavations at Tell Fisna, an additional phase between the Transitional and MA2 that he called Intermediate and identified specific features of the pottery that he thought were typical of this style. Three years later, after the report on Karrana 3 had been published, Numoto (1994: 1–2) revisited the Intermediate Period, accepted Rova's proposal that Karrana 3 Levels 3 and 2 belonged to the Transitional Period, but suggested that Karrana 3 Level 1 and Tell Fisna Floors B and A belonged to the Intermediate Period.

It is difficult to justify these proposals on the basis of the published distribution of the different pottery types.

In Tables 5.4a, 5.4b, and 5.4c the numbers of sherds of different decorated types in different levels at Karrana 3 are taken from Rova 1993: Tables 1, 2, 5, 9 and 10. Only the numbers for the sherds assigned to a particular level are included. There is no information as to what proportion of the 'Late Uruk and unclassified Incised' belonged to which category, but to judge from the illustrated pottery, the majority were 'Late Uruk Incised'. In these tables, Ninevite 5 Grooved corresponds to ribbed/layered at Tell Mohammed Arab. Fine Ware a3 and a4 probably correspond to Ninevite 5 Fine Ware. The counts for the Fine Ware and the total number of sherds are those from the 1986 season. In that season approximately the same numbers of sherds were collected from Levels 2 and 3 while about half that number were collected from Level 1 and about one tenth from Level 4. Rova (1993: 37) suggested that the proportions for each level were probably similar in the earlier seasons when the wares and sherd totals were not counted. The small number of sherds from Level 4 means that the statistics for this level

	Surface		Level 1		Level 2		Level 3		Level 4		Totals	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Late Uruk and unclassified Incised	30	5.76	24	2.76	56	3.30	89	5.70	12	7.10	181	4.21
Late Uruk Painted	5	0.96	20	2.30	28	1.65	43	2.76	1	0.59		2.14
Transitional Painted	22	4.22	75	8.63	77	4.53	14	0.90	0	0	92	3.86
Ninevite 5 Painted	34	6.53	100	11.51	70	4.12	16	1.02	0	0		4.33
Ninevite 5 Incised	4	0.77	8	0.92	3	0.18	0	0	0	0	166	0.26
Ninevite 5 Grooved (=ribbed/layered)	7	1.34	21	2.42	26	1.53	1	0.06	0	0		1.12
Total no. of decorated sherds	102	19.57	248	28.54	260	15.30	163	10.44	13	7.69	186	15.91
Fine Ware a3 and a4 (1986)	25	4.80	43	4.95	108	6.36	21	1.35	1	0.59	173	4.03
Total no. of sherds (1986)	521		869		1699		1561		169		4298	

TABLE 5.4a. Numbers and percentages of total sherds counted in 1986 in each level at Karrana 3.

	Surface		Level 1		Level 2		Level 3		Level 4		Totals	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Late Uruk and unclassified Incised	30	29.41	24	9.68	56	21.54	89	54.60	12	92.31	181	26.46
Late Uruk Painted	5	4.90	20	8.06	28	10.77	43	26.38	1	7.69		13.45
Transitional Painted	22	21.57	75	30.24	77	29.62	14	8.59	0	0	92	24.27
Ninevite 5 Painted	34	33.33	100	40.32	70	26.92	16	9.82	0	0		27.19
Ninevite 5 Incised	4	3.92	8	3.23	3	1.15	0	0	0	0	166	1.61
Ninevite 5 Grooved (=ribbed/layered)	7	6.86	21	8.47	26	10.00	1	0.51	0	0		7.02
Total no. of decorated sherds	102	99.99	248	100	260	100	163	99.9	13	100	186	100
Fine Ware a3 and a4 (1986)	25	24.51	43	17.34	108	41.54	21	12.88	1	7.69	173	25.29
Total no. of sherds (1986)	521		869		1699		1561		169		4298	

TABLE 5.4b. Numbers and percentages of total number of decorated sherds in each level at Karrana 3.

	Surface		Level 1		Level 2		Level 3		Level 4		Totals	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Late Uruk and unclassified Incised	30		24	13.26	56	30.94	89	49.17	12	6.63	181	100
Late Uruk Painted	5		20	21.74	28	30.43	43	46.74	1	1.09		100
Transitional Painted	22		75	45.18	77	46.39	14	8.43	0	0	92	100
Ninevite 5 Painted	34		100	53.76	70	37.63	16	8.60	0	0		99.99
Ninevite 5 Incised	4		8	72.73	3	27.27	0	0	0	0	166	100
Ninevite 5 Grooved(=ribbed/layered)	7		21	43.75	26	54.17	1	2.08	0	0		100
Total no. of decorated sherds	102		248	36.26	260	38.01	163	23.83	13	1.90	186	100
Fine Ware a3 and a4 (1986)	25		43	24.86	108	62.43	21	12.14	1	0.58	173	100.01
Total no. of sherds (1986)	521		869	20.22	1699	39.53	1561	36.32	169	3.93	4298	100

TABLE 5.4c. Numbers and percentages of total number of different types of decoration not including sherds from Surface.

are particularly unreliable, and one might think that the single sherd of Fine Ware a3 found in 1986 was intrusive. Similarly, the single Ninevite 5 Grooved (=ribbed/layered) sherd from Level 3 might be intrusive.

The percentages for each type of decoration of the total number of sherds counted in 1986 in each level are given in Table 5.4a. The percentages of the total number of decorated sherds in each level are given in Table 5.4b, and of the total number of sherds of each decorated type in Table 5.4c.

Most scholars, starting with Roaf and Killick (1987: 222, fig. 11) and repeated, for example, by Arrivabeni (2019: 54), have assumed that the Transitional Painted pottery was in use before Ninevite 5 Painted pottery. This sequence is not supported by the distribution of these styles in Karrana 3, since both 'Transitional Painted' and 'Ninevite 5 Painted' pottery were already present in Level 3. It is unclear whether the numerous 'Late Uruk Painted' and 'Late Uruk and unclassified Incised' pottery sherds found in this level were contemporary with 'Transitional Painted' and 'Ninevite 5 Painted' pottery or whether they were residual. There is also the possibility that the 30 'Transitional Painted' and 'Ninevite 5 Painted' pottery sherds were intrusive into Level 3 (perhaps in pits which were not recognised), just as the Fine Ware sherd might have been intrusive in Level 4.

Since each level should be dated by the latest object found in that level, we should look at the pottery that is thought to have been introduced at the same time or later than the 'Transitional Painted' and 'Ninevite 5 Painted', namely the Ninevite 5 Fine Ware. The single example in Level 4 may have been intrusive but already in Level 3, the number of Fine Ware sherds is more than 10% of the number of decorated sherds, with one ribbed/layered sherd. In Level 2 the number of Fine Ware sherds increases to over 40% and the number of ribbed/layered to almost 10%. Three Fine Ware sherds in Level 2 were classified as incised: 1 notched band (no. 196) and two Early Incised (nos. 200 and 202) similar to sherds found in MA2 levels G and H. The ten incised sherds in Level 1 included 1 notched band (no. 197), 1 Early Incised (no. 199), 1 Early Excised (no. 198), and 2 Late Excised (nos. 205 and 206). These Excised sherds were thought to be intrusive by Rova. If the Early Incised sherds in Level 2 were not intrusive then this level should be roughly contemporary with MA2. Level G and Level 3 should be later than MA2, thus much later than Numoto's Intermediate period. The painted Ninevite 5 sherds from Level 1 that Numoto identified as Intermediate, as well as the Transitional sherds, would then have been residual like the 'Late Uruk Incised' and the 'Late Uruk Painted' sherds.

The distribution of sherds of different styles at Karrana 3 is probably to be explained by either a combination of residual and intrusive sherds or an incorrect interpretation of the stratigraphy, or both. These are more plausible explanations than the suggestion by Rova (1993: 43) that the fact that the 'Late Uruk Painted' and 'Ninevite 5 Painted' sherds 'were not stratigraphically divided, but were often present side-by-side, points 'to a gradual evolution from one to the other one.'

There is thus considerable uncertainty in the dating of the levels at Karrana 3 and hence one may question whether the sequence of a Transitional phase followed by an Intermediate phase for the period between MA1 and MA2 is correct.

The excavations at Tell Mohammed Arab cannot resolve this question, but the presence of 'Ninevite 5 Painted' pottery being present in Karrana 3 at the same time as 'Transitional Painted' and the similarity of Intermediate Ninevite 5 Painted pottery to typical Ninevite 5 Painted pottery found in Tell Mohammed Arab suggest that these should both be considered as early phases of the Ninevite 5 Painted period. As Elena Rova (1993: 43) had previously stressed: 'the difference between the Ninevite 5 and the "Transitional" painted pottery is indeed a rather slight one,' and 'the "Transitional" style (contrary to the "Late Uruk" one) simply represents a very early stage of Ninevite 5.'

The next major change in the pottery sequence was the introduction of Incised Ninevite 5 pottery. Ninevite 5 Fine Ware was present in the earliest levels of MA2 and at Karrana 3 in the same levels as Transitional and classic Ninevite 5 Painted wares. Incised Fine Ware is found in MA2. Notched bands were the most frequent motif, and they were present earlier than the more elaborate Incised Ninevite 5 designs. Notched bands occur on a Fine Ware cup in the grave in sounding S-2 at Tell Rijim together with two Ninevite 5 painted vessels, 1 large common ware pedestal bowl, 1 Fine Ware footed bowl, 2 Fine Ware ribbed/layered pedestal bowls and another 24 Fine Ware bowls (9 plain, 15 ribbed/layered) (Bielinski 2003: 493–4 and 504, fig. 9.6).

Incised Fine Ware (other than notched bands) marks the difference between the Painted Ninevite 5 period and the Painted and Incised Ninevite 5 period. The small number of incised sherds in the latest levels of MA2 suggest that these levels belong to the transition into the fully developed Painted and Incised period found in other sites such as Tell Thalathat V, Tell Kutan, and Tell Leilan. Painted and Incised Ninevite 5 assemblages are found widely in north-eastern Syria as well as in northern Iraq.

The sequence at Tell Leilan (Fig. 5.1) has been the subject of debate (Killick and Roaf 2003: 77–78). Our view in 1987 (Roaf and Killick 1987: 225, fig. 12) was that Leilan IIIa to IIIc in Operation 1 began in the gap between MA2 and overlapped MA3. Reinvestigation of the sequence in 1987 (Mayo and Weiss 2003) showed that a pit and a burial dug from Stratum 35 in Leilan IIIb had not been recognised and had contaminated the material from Strata 37, 38, and 39 and that Strata 35 and 36 should be assigned to Level IIIb not IIIa. The presence of Ninevite 5 Painted sherds in Strata 40 and 39 suggest that these should be dated to Level IIIa and may be contemporary with MA2. Level IIIb (now Strata 36 to 21) can be attributed to the Painted and Early Incised Ninevite 5 period.

The same reinvestigation in 1987 (Calderone and Weiss 2003) led to the excavators moving Stratum 15 from Leilan II earlier and Strata 16 and 17 (with no diagnostic sherds) from Leilan IIIc to a new period Leilan IIId, late in the Ninevite 5 period (Calderone and Weiss 2003: 193). They did not discuss

Leilan 1979–1980			Roaf and Killick 1987		Leilan 1987			This volume									
Op. 1	57F02	Period	Op. 1	Period	Op. 1	44W/X12	Period	Op. 1	Period								
13–15	2–3	II later	13–15	Post N5	13–15		IIb	13–15	Post N5								
gap	4–7	II earlier	gap		gap	13–14*	IIa	gap									
16–18				IIIc	gap	Late N5	15*	IIIId	16–17	SLE							
19–20	16–18	16–17			16–17*		16–17		LI+LE								
21–24	19–40	Early N5			19–40	Early N5	21–36		IIIb	gap	19	P+EI+EE					
25–31								IIIb		IIIa	IIIa	IIIa	40–37	P			
32–34															IIIa	IIIa/IV‡	
35–38																	IV
39–40															gap	MALU	
41–42								41–42		Late Uruk	41–42	IV	41–42	Late Uruk			

FIG. 5.1. Periodisation of the strata excavated at Tell Leilan in 1979–80 and 1987.

Supposedly unattested phases are shaded. The heights of the cells do not indicate their duration.

N5 – Ninevite 5; P – Painted Ninevite 5; EI – Early Incised Ninevite 5; EE – Early Excised Ninevite 5; LI – Late Incised Ninevite 5; LE – Late Excised Ninevite 5; SLE – Syrian Late Excised Ninevite 5.

* Strata 16 and 17 in Op. 44W/X12 correspond to Strata 16 and 17 in Op. 1, but Strata 13–15 do not correspond to Strata 13–15 in Op. 1.

† In 1979–1980, Strata 37–39 were contaminated by a burial (Stratum 36) and a pit both dug from Stratum 35.

‡ Stratum 40 contained types characteristic of Leilan IIIa as well as types characteristic of Leilan IV. Since the date of a deposit should be no earlier than the latest object found in that deposit, Stratum 40 should be dated to Level IIIa and not to the transition from IV to IIIa.

(After Schwartz 1982, Roaf and Killick 1987, Mayo and Weiss 2003, Calderone and Weiss 2003).

the dating of Stratum 18 with only 23 diagnostic sherds. At the same time elsewhere on the site, loci dating to the earlier part of what had previously been called Level II earlier were reassigned to Level IIIId.

Level IIIc is now said to consist of Strata 19 and 20. Stratum 20 (with only 36 diagnostic sherds) was joined with Stratum 19 ‘to provide chronological units with comparable sample sizes’ (Schwartz 1982: 103): in fact, adding Stratum 20 to Strata 21–24 would have made the sample sizes more balanced and, although treated as belonging to a different level in the southern part of the trench (Schwartz 1982: 106, 36–37 and fig. 21 on p. 64), the north section shows that Stratum 20 belongs with Stratum 21 as they both run up to Wall 13 (Mayo and Weiss 2003: 30, fig. 1). This leaves Level IIIc consisting only of Stratum 19 ‘a relatively thick layer of occupational debris up to one meter of fill’ with ‘no architecture associated with it’ (Schwartz 1982: 37) ‘The one feature recovered from this stratum was a pit filled with pottery, in apparent association with a burial pit adjacent to it’. The 32 complete pots in Pit 1 consisted of 2 common ware bowls, 3 common ware jars, 13 Incised bowls, 5 Early Excised bowls, 4 Incised jars, 2 Painted bowls and 3 Painted jars. The excavators thought that the vessels in Pit 1 belonged to the Late Incised and Late Excised Ninevite 5 phase and

that the painted vessels were later, archaising imitations of earlier types, but the styles of the incision and excision of the vessels in Pit 1 are Early Incised and Early Excised and not the types of incision and excision found in MA3. It is more plausible that Painted Ninevite 5 was contemporary not only with Early Incised but also with Early Excised Ninevite 5, at least in the Khabur region. Since the published pottery from Stratum 19 only includes examples with Early Incised and Early Excised motifs, it is probable that Stratum 19 did not belong to the Late Incised and Late Excised period and there was a gap after Stratum 19 in Operation 1. The extensive Leilan IIIId building activities may have removed levels above Stratum 19, as happened to the transitional levels between the Early Dynastic III and the Akkadian levels in the WF sounding in Nippur (Roaf 2001), but examination of the published sections suggests that a gap in the sequence in Operation 1 is more likely. Whether there was occupation elsewhere on the site during the Late Incised and Excised Ninevite 5 phase is uncertain.

The number of Early Incised Ninevite 5 motifs in Tell Mohammed Arab was very limited. Numoto (1993) extended this range and has been followed by Baka and Hamburg (2013). The transition from Early Incised to Late Incised is still not well understood.

	EJZ		ETG		Description	Tell Mohammed Arab
U	14	EJZ 0	15	ETG 1	Painted Terminal Uruk decoration	Painted "Late Uruk"
Tr	15	EJZ 0-1	18	ETG 2a	Painted Transitional Ninevite 5 decoration	Painted Ninevite 5
Int			23	ETG 2b	Painted Intermediate Ninevite 5 decoration	
Ptd	28	EJZ 1	47	ETG3	Painted Ninevite 5 decoration	
Inc	30	EJZ 1-2	48	ETG 3-4	Incised Ninevite 5 decoration	Incised Ninevite 5
Exc	47	EJZ 1-3	59	ETG 4	Excised Ninevite 5 decoration	Excised Ninevite 5
R/L	29	EJZ 0-1	46	ETG 2b-4	Corrugated (JZ)/Ribbed decoration (TG)	Ribbed/layered

TABLE 5.5. Decorative types in ARCANE I and V and their correlation with those of Tell Mohammed Arab.

ETG period	Total no. of types	only in this period	overlap with previous	overlap with following
ETG 1	16	11		5
ETG 2	13	6	5	4
ETG 3	28	16	6	10
ETG 4	18	9	9	0

TABLE 5.6. The numbers of ARCANE V types present in periods ETG 1 to ETG 4 according to Arrivabeni 2019 Table 3.1a. Attestations said to be rare or uncertain are not included.

Numoto (1993: 75–80) proposed that an Early Excised period between the Painted and Early Incised period and the Late Incised and Excised period began with the introduction of the Early Excised bowls decorated with groups of shallow vertical excised grooves and that an elongated triangle motif was associated with this development. But this overemphasises the significance of these motifs. It is still uncertain whether Early Excised bowls were in use at the same time as Late Excised pottery.

In conclusion, a reasonable periodisation of the first half of the third millennium in north-western Iraq would consist of four major periods: MALU, Painted Ninevite 5, Painted and (Early) Incised Ninevite 5, and Late Incised and Excised Ninevite 5. The sequence and periodisation in north-eastern Syria show some differences: in the earlier part of the sequence, sherds of the MALU period and the earlier part of the Painted Ninevite 5 period are only rarely attested and the scheme could be extended by a final Ninevite 5 phase (Syrian Late Excised) found in Leilan IIIId, Tell Arbid, and other Syrian sites which has not been recognised in Iraq.

ARCANE AND TELL MOHAMMED ARAB

The recently published volumes of the ARCANE (Associated Regional Chronologies for the Ancient Near East and the Eastern Mediterranean) project have investigated in considerable detail the archaeology of the third millennium in the Ancient Near East including the periods attested in Tell Mohammed Arab. One volume examines the evidence from the Tigridian Region and another that from the Jezirah. A further volume covers the ceramics. It is not our intention

to review these important volumes, but to consider how far the evidence from Tell Mohammed Arab is compatible with the ARCANE periodisations.

The ARCANE volumes deal with the western and eastern parts of the region in which Ninevite 5 pottery is found separately, and each volume also covers regions where Ninevite 5 material is either absent or makes only a small contribution to the assemblage. The resultant periodisations have had to accommodate the various sequences in all these areas.

In the ARCANE volumes, the MALU and Ninevite 5 periods are divided into three periods in the Jezirah (EJZ 0–EJZ 2) and four in the Tigridian Region, with EJZ 0 the equivalent of ETG 1 and ETG 2. Otherwise, the sequences are very similar. It should be noted that these periods are purely chronological intervals and, although they may share aspects of material culture, this is not always the case.

Peter Pfälzner and Hasan Qasim (2017: 25, n.20), excavating Bassetki just to the north of the Saddam Dam Salvage Project, used the ARCANE Early Jezirah periodisation with Roman not Arabic numerals, 'because the Early Bronze Age pottery of the Duhok Region closely resembles that of northern Iraq and north-eastern Syria' and 'the Early Tigridian chronology subdivided in phases ETG 1–ETG 9 (see: Arrivabeni, in print) has until now relied on very weak material and stratigraphic evidence, so that it is not easily applicable.' This is true of the second half of the third millennium, but the reverse is true for the first half. In the following year they introduced the nomenclature EMT (Early Middle Tigris), using Roman numerals without defining the different periods, which are not identical with those of the EJZ or of the ETG, but promising that Pfälzner 'will present

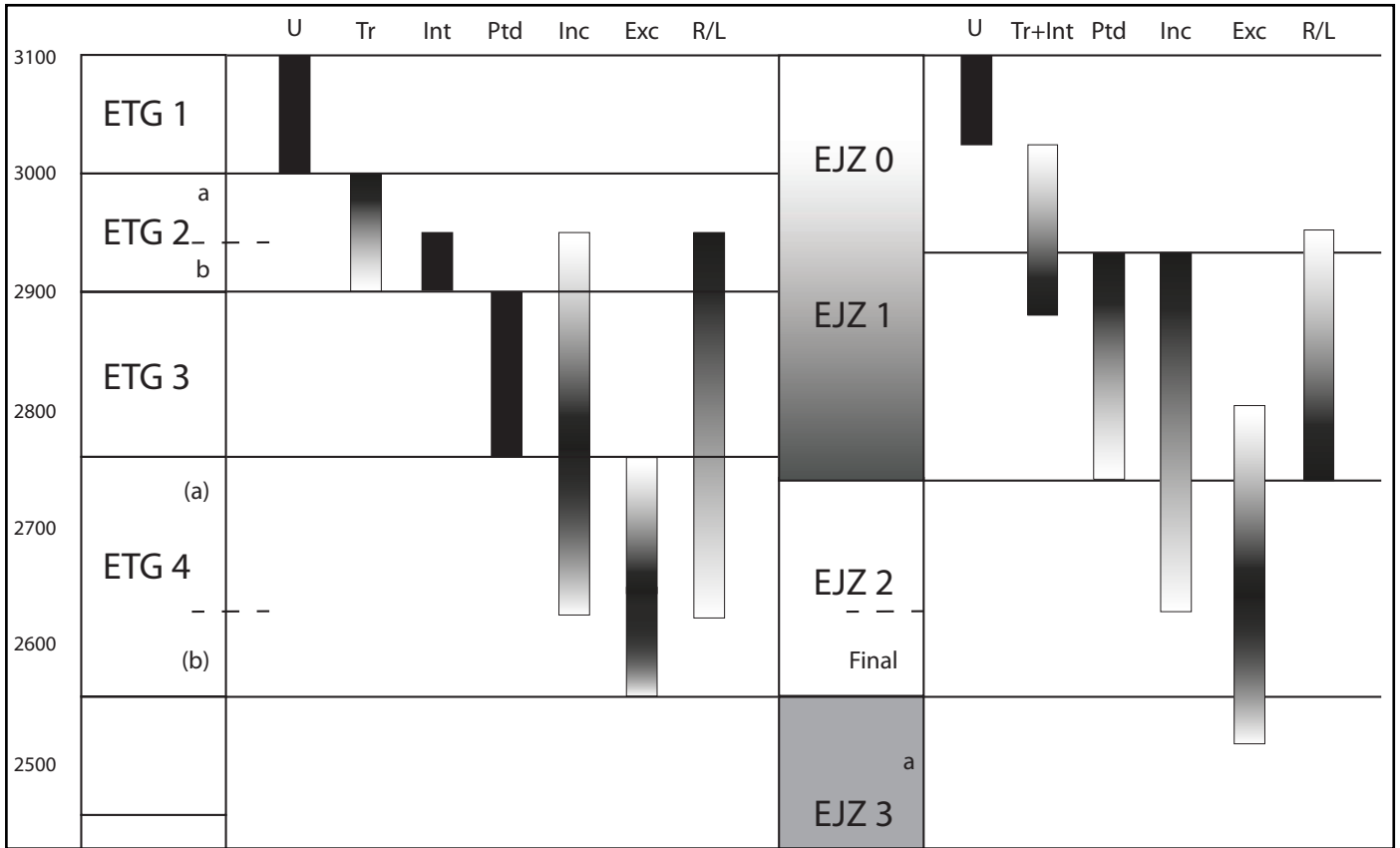


FIG. 5.2. The duration of the principal styles of decoration according to ARCANE V and I. For the abbreviations see Table 5.5.

ARCANE Periodisation				Karrana 3 TG005	Mohammed Arab TG003	Early Tigridian sequence	Cal. BC			
Region	JZ	TG		Field Phasing	Periods	Field Phasing				
Cal. BC						Main Sounding	Cliff edge Excavation			
3100	LC5	LC5	The Ninevite 5 Horizon			Virgin soil		LC5	3100	
3000	EJZ0	ETG1		4	MA1	M		1	3000	
2900		ETG2 ^a		3		L				
2800	EJZ1	ETG3		2				2 ^a	2900	
2700		ETG4 ^a		1			Z?			
2600	EJZ2	ETG4 ^a			MA2	K J I H G	Y X W V U		3	2800
2500		Final			MA3	F E D C B A	R Q P O N		4 ^a	2700
										2600
										2500

FIG. 5.3. ARCANE nomenclatures for the Jazira and the Tigridian Region (after Grossman 2014) and the suggested relationship to the levels at Tell Mohammed Arab and Karrana 3 (after Renette 2019).

this new chronology proposed here for the first time in a more detailed and comprehensive way in a future study in preparation' (Pfälzner and Qasim 2018: 70, n. 111). The EMT terminology with Arabic not Roman numerals has been followed by Daniele Morandi Bonacossi et al. (2023: 144).

The methodology of the ARCANÉ projects was to establish inventories for each site. These inventories ideally consisted of 'stratigraphically safe contexts and sealed assemblages (e.g. *in situ* material on floors, material inside a room sealed by the collapse of the roof, undisturbed, not reused graves)' (ARCANE 2021) and included complete pottery vessels not sherds. Unfortunately, in the first half of the third millennium in north-western Iraq and north-eastern Syria, there are no destruction levels, and graves containing more than a couple of vessels are not common. So, the relevant inventories in the ARCANÉ database are less than ideal.

Most studies of Ninevite 5 pottery have created shape or motif typologies but these have seldom been tested by comparing them with the evidence from stratigraphic excavations. The pottery studies in ARCANÉ I (EJZ 0–EJZ 2) and ARCANÉ V (ETG 1–ETG 3) identified respectively 48 and 59 pottery types considered characteristic of the first half of the third millennium. Most of these are pottery shapes, though some combine shape and decoration. Wares such as Metallic Ware are also included as well as styles of decoration. The types of decoration are essentially the same in both regions and correspond closely to the styles proposed in this volume (Table 5.5).

A series of graphs indicate the suggested durations of the various types (Fig. 5.2). These reveal that the authors saw the various painted styles, called Terminal Uruk, Transitional, Intermediate and (Later) Ninevite 5, as replacing each other with minimal overlap (except for Transitional/Intermediate and (Later) Ninevite 5 in the Jezirah) and Incised Ninevite 5 ceasing before Excised, perhaps because of the incorrect belief that after the beginning of Period EJZ 2 'incised designs are only to be found as a complement to excised' (Rova 2011: 69). Furthermore, these graphs suggest that numerous types were introduced or ceased at the beginning and end of ETG 2 and EJZ 1, indicating that there was discontinuity not continuity.

In ARCANÉ V (Fig. 5.3) MA1 is equated with the whole of ETG 1 and MA2 with most of ETG 3, leaving a small hiatus before the beginning of MA3 which is equated with ETG 4. This proposal is unrealistic. As the excavators of Tell Mohammed Arab, we are flattered that its sequence has been selected to define the periodisation of the Tigridian Region (and indirectly that of the Jezirah), but there is no evidence to suggest that the breaks in occupation at Tell Mohammed Arab occurred at significant changes in the pottery assemblages or that they coincided with similar gaps in occupation at other sites. The average duration of the numerous building levels in MA2 and MA3 when compared with those in Karrana 3 suggests that the lengths assigned to ETG 1 and 2 are too long given the number of levels attributed to these periods. A longer gap between

MA2 and MA3 is expected because of the major changes in the ceramic assemblages between these two periods.

Monica Arrivabeni (2019: 49–60 and Tables 3.1a–3.5b) identified the types that she considered characteristic of the different ETG periods. She found no overlap of types from the first half of the third millennium with those of the second half. Because of the methodology of the ARCANÉ project, most of the types are complete profiles. She recorded 10 types that were restricted to ETG 1, 6 to ETG 2 (though half of these are either restricted to ETG 2a or to ETG 2b), 14 to ETG 3 and 9 to ETG 4; of which 6 are not attested in ETG 4b (Table 5.6).

According to this analysis, most of the types in Table 3.1a are restricted to one of the ETG phases. This is at odds with the proposal that there was gradual change in the pottery assemblage from the beginning to the middle of the third millennium and is the result of equating ETG 1 with MA1, ETG 3 with MA2 and ETG 4 with MA3, ignoring the hiatus between MA2 and MA3. As discussed above, ETG 2 as defined in ARCANÉ V is largely fictitious, arising from an incorrect interpretation of the stratigraphy of Karrana 3. Between MA1 and MA2, a phase is to be expected in which there is an overlap between types characteristic of the MALU and those of the Painted Ninevite 5 assemblages as well as the so-called Transitional 'Late Uruk'/Painted Ninevite 5 types.

CHRONOLOGY

The excavations at Tell Mohammed Arab have provided no direct evidence for the absolute chronology of the period. The limited number of relevant radiocarbon determinations from northern Iraq were discussed by Elisabetta Boaretto and Elena Rova (2019: 355–60) and the more numerous determinations from the Jezirah by Lauren Ristvet (2011: 301–26). Only five samples from Karrana 3 were available for dating ETG 1 and none for dating EJZ 0. Boaretto and Rova (2019: 359 and fig. 11.3) estimated that the beginning of ETG 1 could be dated to the range 3500 to 3030 $\pm 2\sigma$. The long range is not only due to the small number of determinations but also because the beginning of ETG 1 falls into the long calibration plateau between 3360 and 2920 BC. A second plateau from c.2880 to 2600 BC means that determinations in the second half of the Ninevite 5 period are less precise than one might hope.

More radiocarbon determinations are now available from the 2015 excavation season at Tell Muqable III about 30 km north-north-west of Tell Mohammed Arab. In a 1.5 m wide step trench, according to the over-optimistic excavators, 'a continuous sequence of eight phases dating from the Late Chalcolithic 5 to the Early Ninevite V period was discovered (Phases 9–16)' (Pfälzner, Qasim et al. 2017: 82). They divided these phases into two periods, Phases 9 to 11, which they called the L(ate)C(halcolithic)–E(arly)B(ronze) Transitional, and Phases 12 to 14, which they called Early Ninevite V. According to the descriptions and illustrations of the pottery,

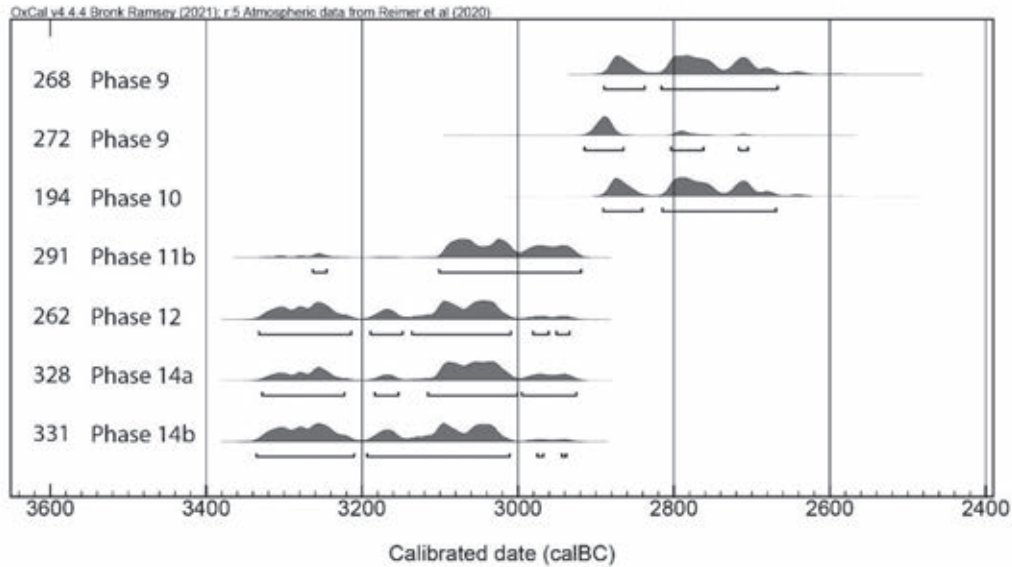


FIG. 5.4. Radiocarbon determinations from Tell Muqable III. The lines under the curves indicate the range of the 95.4% probability ($\pm 2\sigma$) (revision of Pfälzner, Qasim et al. 2017: 82, fig. 40).

Phase	Sample	C14 age [BP]	Calibrated date $\pm 2\sigma$ (BC)
9	268	4188 \pm 29	2890 (23.5%) 2838 2817 (71.9%) 2668
9	272	4251 \pm 29	2915 (77.7%) 2865 2804 (15.8%) 2763 2717 (2.0%) 2706
10	194	4193 \pm 29	2891 (24.6%) 2841 2815 (70.8%) 2670
11b	291	4410 \pm 24	3264 (2.4%) 3246 3102 (93.1%) 2920
12	262	4445 \pm 29	3333 (37.7%) 3215 3190 (8.7%) 3149 3137 (45.6%) 3010 2981 (1.9%) 2961 2951 (1.6%) 2935
14a	328	4432 \pm 29	3329 (25.2%) 3223 3184 (4.6%) 3154 3116 (53.2%) 3001 2996 (12.4%) 2926
14b	331	4451 \pm 29	3336 (42.3%) 3211 3194 (52.2%) 3011 2976 (0.5%) 2968 2944 (0.4%) 2939

TABLE 5.7. Conventional radiocarbon ages and calibrated dates, using OxCal 4.4.4, of samples from Muqable III. The prefix has been omitted from the sample names, thus the full sample name for sample 268 is MUC15A-q0268 (revision of Pfälzner, Qasim et al. 2017: 82, Table 3).

Phases 9 to 11 date to the Painted and Early Incised period contemporary with Levels G and H in the later part of MA2 (Sconzo 2017: 69–70 and 93–4, pls. 5–6) and Phases 12 to 14 to the MALU period contemporary with levels L and M in MA1 (Sconzo 2017: 70–4 and 95–6, pls. 7–8), with a hiatus between the two periods.

Eleven samples from the lower part of the step trench were selected for radiocarbon analysis of which four ‘gave a geological age’ (Table 5.7). From the Painted and Early Incised levels came two samples from the Phase 9 pit, one from the Phase 10 pit, and one from the earlier part of Phase 11 in association with mud-brick architecture. From the MALU levels came one sample from Phase 12 and two from Phase 14. The three earliest samples are consistent (Fig. 5.4) but hit a plateau in the calibration curve: the distribution suggests that the date should be either between 3340 and 3230 or between 3100 and 3020. Since the end of the classic Late Uruk period is thought to have been c.3100, the MALU period is likely to have included a date between 3100 and 3020 BC.

Two of the determinations from Phases 9 and 10 are also consistent but hit a second plateau in the calibration curve from c.2890 to 2670 BC. One sample from Phase 9 is slightly earlier than these, lying between the two plateaus, with its highest probability between 2915 and 2865. This might be interpreted as evidence that Painted and Early Incised period began c.2890 BC, that the true date lay in the c.20% region later than 2865 BC, or that the sample was older than the date when the Phase 9 pit was filled.

The date of the sample from Phase 11b is significantly earlier than the other samples from the Painted and Early Incised levels and overlaps the determinations from Phases 12 to 14. The authors of the report suggest this sample of wood charcoal might have been older than the context in which it was found. Sconzo (2017: 70) suggested that the pottery from Phase 11 might have been different from that of Phases 9 and 10, but there was insufficient pottery to establish this. If there were no notched bands or early incised sherds in Phase 11, then the seemingly anomalous

	Occupation periods at Tell Mohammed Arab			Period	
	Average 20 years	Average 30 years	Average 40 years		
hiatus	35 years	30 years	25 years	MALU (Mohammed Arab Late Uruk)	3100–3000
MA1	30 years 3065–3035	40 years 3070–3030	50 years 3075–3010		
hiatus	85 years	55 years	10 years	Painted Ninevite 5	3000–2900
MA2	100 years 2950–2850	150 years 2975–2795	200 years 3000–2800		
hiatus	130 years	65 years	20 years	Painted and Early Incised Ninevite 5	2900–2800
MA3	110 years 2730–2620	160 years 2755–2595	210 years 2780–2570		
hiatus	70 years	45 years	20 years	Late Incised and Excised Ninevite 5	2800–2550

TABLE 5.8. Suggested approximate durations and dates of occupation periods at Tell Mohammed Arab for different average durations of building levels and the duration of the main periods.

radiocarbon determination might indicate that the Painted Ninevite 5 period included a date between 3100 and 2920 BC.

The authors wrongly assumed that there was ‘a continuous stratigraphic sequence from the late 4th to the early 3rd millennium BC at Muqable III’ (Pfälzner, Qasim et al. 2017: 82) and therefore thought that the end of what they called ‘the LC–EB Transitional period’ was the same as the beginning of ‘the Early Ninevite V period.’ They also proposed that each period included the whole of the likely range of the radiocarbon determinations from that period and therefore claimed that the radiocarbon dates support a dating of the earlier period to between 3100 and 2950 BC and of the Early Ninevite V period to between 2950 and 2800 BC (Pfälzner, Qasim et al. 2017: 82). There is, however, no reason to assume that the range of the radiocarbon determinations of the samples from Phases 9 and 10 equalled the duration of the Painted and Incised Ninevite 5 period. Allowing for the hiatus between these periods and using the revised IntCal 20 calibration curve (Table 5.8 and Fig. 5.4), the most one can say is that the part of the Painted and Incised period attested in Muqable III probably included a date between 2890 and 2670 BC. Similarly, that part of the MALU period attested in Muqable III probably included a date between 3330 and 3010 BC.

There are no radiocarbon determinations for the end of ETG 4 but there are many for the end of EJZ 2 and the beginning of EJZ 3. Lauren Ristvet (2011: 322, Table 2) using three different models estimated various very similar dates for the boundary between EJZ 2 and EJZ 3 with the range 2616–2507±2σ.

These models also led Ristvet (2011: 322) to the conclusion that:

One of the surprising aspects of this exercise has been how short the modelled phase EJZ 2 is. At Beydar, this phase appears to last approximately 90 years, ... When the dates from other sites in the JZ are added (Leilan IIIc–IIIId, Brak J–K, and Raqa’i), the estimated range is shortened to 40–45 years from approximately 2626–2576 in Model A, 2621–2578 BC in Model B and 2624–2578 BC in Model C).

MA3 with a burial phase and five building levels is according to the pottery assemblage contemporary with EJZ 2, and such a short duration for EJZ 2 (corresponding to ETG 4) would suggest that each building level lasted less than ten years.

In most levels of MA3 changes were made to the architecture: for example, rooms were divided, benches were added, and bins were replaced. There were 14 separate plasterings of the floors in Level I, 8 in Level H, more than 10 in Level D, 6 in Level C, and 7 in Level B. It is impossible to know how long each building was occupied but ten years seems much too short a time. The eroded state of some of the walls suggests that sometimes when a house was abandoned, after the beams had been removed for re-use, it was left to decay and not immediately rebuilt. The fragmentary survival of the walls in Level J and the subsequent use of the area for graves suggests that some time elapsed between the abandonment of the building in Level J and the construction of the Level I structures.

The reasons why a building fell out of use are unknown. An old house might have been vacated because the structure became dangerous, or the house was infested with pests, or there may have been social considerations such as the death of the head of the household. A new house might have been constructed to replace the old house or to provide a residence for a newly established independent family.

An estimate of between twenty and forty years for the duration of each building level would seem reasonable. Table 5.8 gives three sets of possible dates for the occupation periods at Tell Mohammed Arab assuming that an average each building level lasted 20, 30 and 40 years. An allowance of 10 years is given for the duration of Level M and of the cemetery Level F, perhaps an underestimate. Furthermore, it may be that the average duration of building levels in MA2 was not the same as in MA3.

The beginning of the MALU period is set at 3100 BC and the end of the Late Incised and Excised Ninevite 5 at 2550 BC, based on the current assessment of the radiocarbon dates. The latter date would be later than the end of MA3 as allowance should be made for the final phase of the Ninevite

5 period attested in Syria. The dates given in the final column for the four main different periods (except for the final date) have been rounded to the nearest century.

In this table the dates for the four main periods are calculated to fit evidence from Tell Mohammed Arab but are approximate, as is indicated in the dates (except for the final date) beginning and ending at the beginning of a century.

Despite all the uncertainties, the scheme with the average duration of a building level lasting 30 years fits best with the evidence from Tell Mohammed Arab. According to this scheme MA1 lasted approximately 40 years from 3070 to 3030 BC, MA2 approximately 150 years from 2975 to 2795 BC, and MA3 approximately 160 years from 2755–2595 BC. The corresponding approximate dates for the main periods are for the MALU period 3100–3000 BC, for the Painted Ninevite 5 period 3000–2900 BC, for the Painted and Early Incised Ninevite 5 2900–2800 BC, and for the Late Incised and Excised Ninevite 5 period 2800–2550 BC. Needless to say, these are liable to change in the light of new information.

IDENTIFICATION OF NINEVITE 5 SITES

Often in survey or in excavation, archaeologists wanting a suitable label to describe a level or a site have called it Ninevite 5 because of the presence of a few decorated or undecorated Ninevite 5 sherds, but caution is needed. Occasional occurrences of decorated Ninevite 5 sherds, for example in Mari, Tell Khuera, and Tell Mozan, are not sufficient to justify calling such sites Ninevite 5. The overoptimistic classification of some types as Ninevite 5 has led to misleading assertions about the distribution of Ninevite 5 pottery (e.g. Behm-Blanke 1988, modified in Behm-Blanke 2003).

Furthermore, archaeologists have often called sites Ninevite 5 when the majority of sherds belong to other styles. This is the case with the sites in the Ilisu Dam Salvage Project in Turkey (Renette 2019: 43, Table 2.4). Similarly, the early third millennium sites on the Middle Khabur south of Hassake in Syria, namely Atij, Bderi, Gudeda, Kerma, Kneidij, Mashnaqa, Melebiya, Mulla Matar, Rad Shaqrah, Raqa'i, Zaghan, and Ziyadeh have been identified as Ninevite 5 even though their pottery assemblages contain few decorated Ninevite 5 sherds. Five of these are said to have been 'occupied for the duration of the Ninevite 5 period' (Akkermans and Schwartz 2003: 238).

Some of these sites raise a further challenge as they contain numerous examples of Ninevite 5 Incised and Excised sherds but only in the later levels. For example, Levels 5 and 4 in Tell Raqa'i are compared to levels at Leilan dated to the Painted and the Painted and Incised Ninevite 5 periods respectively (Schwartz and Chomowicz 2015: 235–6, Tables 4.37–8), but only two sherds were identified as Painted Ninevite 5, one from level 4 and one from Level 5 (Schwartz and Chomowicz 2015: figs. 4.22: 9 and 4.17: 4). These were presumably imports, and their presence is hardly enough to attribute these levels to a Painted Ninevite

5 horizon even if the levels might be contemporary with occupation at Tell Mohammed Arab. In Level 3 at Tell Raqa'i, there are many Incised Ninevite 5 sherds of types that are late in the sequence, such as 'panels (excised)' (Schwartz and Chomowicz 2015, Type 606) and 'hatched "step"/zigzag pattern (excised)' (Schwartz and Chomowicz 2015, Type 604, called horizontal-lined zigzag in Killick and Roaf 2003: 80–1 and fig. 1). The presence of two Type 604 sherds in Level 4 and one in Level 5 (Schwartz and Chomowicz 2015: 227, Table 4.24) were probably intrusive, as suggested by Schwartz and Chomowicz (2015: 233; 292 n. 13) for the sherd from Level 5 rather than dating these levels to the end of the Ninevite 5 period. The three Type 606 sherds in Level 4 may also be intrusive. Other types from Level 3 not found at Tell Mohammed Arab are flat bases, straight sided bowls, and Metallic Ware (Schwartz and Chomowicz (2015: 234).

Similar assemblages are frequently found on other sites in the Khabur region such as Tell Arbid (Area D, Phase D Strata 4–6) (Smogorzewska 2016), Tell Barri (Area G, Strata 44–40) (Valentini 2008), Tell Brak (HS4 Level 4 and perhaps also Level 5) (Matthews 2003: 109–16), Tell Leilan Level IIId (Calderone and Weiss 2003), Tell Mohammed Diyab (MD XIII) (Quenet 2011: 36, 46), and Hamoukar (Ur 2010: 105). Very common are examples of horizontal-lined zigzag sherds (Type 604). Other Fine Ware types include straight sided bowls, flat based bowls, and spouted jars, as well as wares such as Metallic Ware, Jezirah Bichrome Ware, and Jezirah Burnished Ware (Smogorzewska 2016). Given the presence of the Incised and Excised sherds these levels could certainly be called Ninevite 5, but the presence of the other wares, the different architectural forms, and the vast increase in the size of the settlements suggest that they are very different to earlier Ninevite 5 settlements (see below).

Perhaps at a minimum, an assemblage should only be called Ninevite 5 if the majority of the decorated sherds can be identified as Ninevite 5. In some cases, sites or levels have been called Ninevite 5 because of the presence of other wares or types thought to be typical of the Ninevite 5 period, such as Fine Grey Ware, Pedestal or Footed Bases, and Flat Lids. Rather than accepting unconditionally that such diagnostic sherds defined the site or level as Ninevite 5, it would be sensible to reserve judgement and not to assume that other aspects of their material culture were typical of Ninevite 5 communities. Too often, both in excavation and survey reports, pottery is simply labelled as Ninevite 5 leaving the reader uncertain about what exactly is meant (for example, Campbell 2003b: 126, 133–7; Pfälzner and Sconzo 2016: 26; Koliński 2018: 17).

DISTRIBUTION OF NINEVITE 5 SITES

The most recent work on the distribution of Ninevite 5 settlements is a doctoral thesis that includes a catalogue of Ninevite 5 sites (Garcia-Ramis 2024: 247–715). It has been described as 'a comprehensive catalogue of sites, comprising more than 600 entries', which 'contain all the available

information about each site' (Soriano-Elias et al. 2025: 3). Unfortunately, this is not quite correct. The catalogue has entries for only about 380 sites and not all of these sites have a recognisable link with Ninevite 5. Furthermore, it contains only minimal information about each site and details of the finds, stratigraphy, and architecture of excavated sites are almost completely missing. Furthermore, no distinction is made between sites that were occupied throughout the Ninevite 5 period and those that were only occupied for a shorter part of the period. Most of the information in the catalogue is derived from surveys of varying extent and quality. These include the survey in the Khabur by Max Mallowan (1936, 1937), in the Sinjar Province by Seton Lloyd (1938) and those throughout Iraq in the 1940s. which provided the information later published in the two volumes of the *Atlas of Archaeological Sites in Iraq* (Directorate General of Antiquities 1970, 1976).

Unlike Syria where there have been numerous excavations investigating the first half of the third millennium, very few sites of this period have been excavated in northern Iraq since the end of the Saddam Dam Salvage Project. On the other hand, there have been several large-scale survey projects starting with *The North Jezirah Survey* (NSJ) between 1986 and 1990 (Wilkinson and Tucker 1995) and then, after a gap of almost twenty years, surveys throughout most of northern Iraq, which offer the opportunity to examine the distribution of Ninevite 5 pottery in this region. These include the *Eastern Habur Archaeological Survey Project* (EHAS) (Pfälzner and Sconzo 2016), *Land of Nineveh Archaeological Project* (LONAP) (Morandi Bonacossi and Iamoni 2015; Conati Barbaro et al. 2019; Gavagnin 2016; Gavagnin et al. 2016), the *Tell Gomel Archaeological Survey* (Simi 2019), *The Upper Greater Zab Archaeological Reconnaissance* (UGZAR) (Koliński 2024; Ławecka 2018, 2024), *Erbil Plain Archaeological Survey* (EPAS) (Ur and Giraud 2020; Ur et al. 2021), *The Archaeological Survey of Koya* (ASK) (Pappi and Coppini 2024), and *The North Western Sulaymaniyah Survey* (NWSS) (Luciani 2024).

Surveys have also been undertaken in Syria and Turkey. Some of these were in conjunction with the building of dams on the Khabur, the Hassakeh South or Middle Khabur Dam (Monchambert 1983, 1984), and on the Tigris, the Cizre Dam (Algaze et al. 2012) and the Ilisu Dam (Algaze 1989; Ökse et al. 2009).

Others were more extensive, covering north-eastern Syria (Meijer 1986) and the western Khabur (Lyonnet 2000, 2001, Koubková 2015; Koubková and Wagnanska 2018). Surveys have also taken place in the areas around sites being excavated such as Tell Leilan (Stein and Wattenmaker 1990; Ristvet 2005, 2007; Arrivabeni 2010), Tell Brak (Eidem and Warburton 1996; Wright et al. 2006–2007), Tell Beydar (Wilkinson 1997–1998), and Tell Hamoukar (Ur 2010).

Following these surveys and the opening up of archaeological research in Iraq, several early third millennium sites have been excavated. These include Muqable III and Bassetki, less than 20 km to the north-west of the Eski Mosul

Dam Lake. At Muqable III (Pfälzner, Qasim et al. 2017), MALU and Painted and Early Incised levels have been encountered in a sondage (see above for discussion and the radiocarbon determinations). Preliminary investigations at Bassetki have been interpreted as evidence for a fortified settlement during most of the Ninevite 5 period (Pfälzner and Qasim 2018; Pfälzner 2025). Painted Ninevite 5 pottery has been excavated in levels at Bash Tapa south of Erbil (Nicolle et al. 2024), at Gird Lashkir east of Erbil (Molist et al. 2019), and at Tell Bardastee in the Rania Plain. Further afield at Kani Shaie south-west of Sulaymaniyah, Painted Ninevite 5 pottery has been found in conjunction with a number of different styles of decorated pottery (Renette, Catanzariti et al. 2024; Renette, Tomé et al. 2024). Incised and Excised Ninevite 5 sherds are reported from the surface at Bash Tepe but have not been recorded at the other excavated sites east of Erbil.

Only preliminary reports have been published on the more recent surveys and excavations, and statistics about the frequency of different types are not recorded for all surveys. In general, Ninevite 5 is used as a label for sites occupied in the first half of the third millennium, which have one or more sherds that has been identified as belonging to a Ninevite 5 type. The distinctions between the different phases of the Ninevite 5 period have not usually been noted, and distribution maps inevitably show sites that are just dated to the Ninevite 5 Period. These show that the Ninevite 5 sites were fewer and smaller than the sites in the preceding Uruk Period.

Painted Ninevite 5 sherds were identified in all of the recent surveys and excavations in Iraq listed above, though the numbers in the ASK and NWSS surveys are so small that it may be that these areas lie outside the main distribution area of Painted Ninevite 5 pottery. Incised Ninevite 5 pottery is less common than Painted Ninevite 5 pottery, and Excised Ninevite 5 pottery is rare. In the UGZAR and EPAS surveys, Painted Ninevite 5 sherds comprised 38% of the sherds identified as Ninevite 5, while Incised contributed less than 20% and 10% respectively (Ur et al. 2021: 218; Ławecka 2024: 194–5). In the UGZAR and EHAS surveys, Excised sherds form less than 3% of the sherds identified as Ninevite 5 (Ławecka 2024: 194–5; Pfälzner and Sconzo 2016: 134).

It is still too soon to draw definite conclusions from the survey data and the limited excavations undertaken in northern Iraq, but it seems that the distribution of MALU Painted pottery was limited. In addition to Tell Mohammed Arab, Karrana 3, and Nineveh, occasional examples have been found in the North Jazira Survey (Wilkinson and Tucker 1995: 207, fig. 66.17), at Tepe Gawra (Tobler 1950: pl. cxli no.389), at Tell Qarasa in north-eastern Syria (Meijer 1986: fig. 24b) and in the Tell Hamoukar Survey (Ur 2010: fig. C.19 22–25). The suggestion that MALU Painted ware sherds were present at Tell Brak, Arslantepe, and Hassek Höyük (Roaf and Killick 1987: 223, n.105; Oates and Oates 1991: 139) does not now appear to be justified. These sparse attestations are hardly enough to define a distribution extending outside north-western Iraq.

Painted Ninevite 5 has a wider distribution than MALU Painted, being found as far east as the Rania Plain and as far west as Tell Brak. Incised Ninevite 5 does not appear to be present much further east than Erbil, while Excised Ninevite 5 is rare in the Greater Zab and Erbil regions. On the other hand, the very latest Incised and Excised Ninevite 5 pottery is restricted to north-eastern Syria but extends further south to the Middle Khabur and further west to Tell Mozan.

SETTLEMENT PATTERNS

‘Despite its exposure on sites throughout Syria, Iraq, and Turkey, the nature of Ninevite 5 settlement and society remains obscure.’ Notwithstanding much recent research, this statement by Jason Ur (2004: 52) remains largely true. The surveys discussed above have shown that most Ninevite 5 settlements were small and that they were normally situated close to rivers or to wadis. Because most surveys cannot distinguish between different phases of the Ninevite 5 period and because it is difficult to establish the size of the settlements, especially when the Ninevite 5 levels are covered by later levels, attempts to discuss the development of the settlement pattern over time and the hierarchy of settlements are speculative.

An exception is the survey of a 30 x 15 km area around Tell Leilan that has been the subject of four seasons of survey between 1984 and 1997 (Stein and Wattenmaker 1990; Ristvet 2005; Arrivabeni 2010). The exact numbers of sites occupied at a particular period are difficult to establish: there are differences between the list of sites and their periods of occupation (Arrivabeni 2010: fig. 9) and the maps showing the different periods (Arrivabeni 2010: figs. 10–12). Furthermore, there are differences between the studies by Ristvet (2005) and Arrivabeni (2010). In both studies, it was not possible to identify any sites occupied in the Uruk to Ninevite 5 Transitional period (EJZ 0). Although it is possible that during this phase diagnostic pottery types were not recognised, it seems more probable that there was a complete abandonment of the extensive Late Uruk settlements which only revived in a small way in the following Painted Ninevite 5 period (Leilan IIIa). Harvey Weiss (2003: 601) estimated that in the Late Uruk period there were 53 sites with a total area of 167 hectares, while in the Painted Ninevite 5 period there were only five sites with an area of 26 hectares.

In the 1995 survey (Arrivabeni 2010: fig. 10), ten sites are marked on the map of the sites dating to the EJZ 1 period (i.e. the Painted Ninevite 5 period). The largest was Tell Leilan and the other nine were situated on watercourses. There are too few sites to hazard a view of the settlement hierarchy. The number and size of the sites increased in the EJZ 2 period. Most of the sites occupied in EJZ 1 continued to be occupied in EJZ 2, but additional settlements were founded. Eighteen sites are marked on the EJZ 2 map of the 1995 survey (Arrivabeni 2010: 36, fig. 11), not including Tell Dougir and Tell Mohammad Diyab which were occupied during the EJZ 2 period. Ristvet

(2005: 58) claimed that ‘32 new sites were founded during this period, while the number of settled ha [hectares] increased by a factor of 4.5.’ Both Ristvet (2005: 58) and Arrivabeni (2010: 44–5) interpreted the distribution as that of a three-tier hierarchy. At the end of this period, the size of the larger settlements increased enormously, a precursor of what has been called the ‘second urban revolution’ (Akkermans and Schwartz 2003: 233), and simultaneously most of the smaller settlements were abandoned (Ristvet 2005: 58–9; Arrivabeni 2010: 37–8). Wilkinson and Tucker (1995: 50–1) similarly saw a three-tier hierarchy of later Ninevite 5 sites around Tell al-Hawa, which may have increased in size to c.42 ha late in the Ninevite 5 period, but was a much smaller settlement in the earlier part of the period and may not have been occupied in the Painted Ninevite 5 period (Ball and Wilkinson 2003: 340–2). In the North Jazireh Survey, the sizes of the middle tier sites were close to those of the top tier in the Tell Leilan Regional Survey.

The most intensively investigated region for the Ninevite 5 period is the area of the Saddam Dam Salvage Project (Roaf 1997). 149 archaeological sites were identified in the initial survey. A digital version of this map has been prepared by Paola Sconzo and Francesco Simi (2020). Sixty-five sites were excavated, including 23 which were not recorded in the initial survey. Twenty-one sites with Ninevite 5 pottery were excavated.

Lisa Doro (2021–2022) made a special study of the distribution of sites in this project dated to the third millennium BC. One might think that with the large number of excavated sites this would be an ideal data set to investigate the distribution of sites. There are, however, difficulties.

First, the limits of the region are based on the proposed height of the waters of the dam. At the downstream end the area is about 11 km wide, while about 40 km upstream at the Syrian border it is little more than the width of the river itself. The artificial border makes a study of the site distribution unsatisfactory, as no account is taken of the nearby sites that are outside the area of the reservoir but might be important elements in the settlement network.

Second, only excavated sites are included. The choice of sites to be excavated was based on security considerations, so initially excavations were restricted to the southern part of the dam area close to the dam itself. Subsequently, sites on the right bank further upstream were excavated. No sites on the left bank further upstream than Tell Fisna were investigated although many sites were identified in the initial survey (for a map, see now Sconzo et al. 2023: fig. 8). In interpreting the settlement pattern this does not really matter, as ignoring these sites just changes the archaeologically arbitrary limit of the survey area. The initial SOAH survey (Sconzo and Simi 2020) listed four sites as Ninevite 5, of which only Tell Jikan was excavated. The others are Khirbet Karkhush 1 and 2 in the south-eastern part of area of the dam and Khirbet Der Baouth in the northern part upstream from Abu Dahir. Since this survey did not identify any other sites as Ninevite 5, not much faith can be placed on these identifications, and

it is likely that many of the other unexcavated sites were occupied at some point in the Ninevite 5 period.

Third, many excavations were restricted to small sondages, which may have missed Ninevite 5 levels. The Ninevite 5 sherds found on many excavated sites were often out of context and exactly which periods were represented is uncertain. It is also probable that there were gaps in the occupation on most sites as in Tell Mohammed Arab. Given these limitations, Doro treated all sites of the Ninevite 5 period as if they were all occupied simultaneously throughout the first half of the third millennium BC.

Using the sometimes inadequate information in the reports on excavations in Iraq published in the journal *Iraq* (43, 45, and 47) supplemented with al-Dabbagh 1987, Spanos 1988, and Roaf 2003, it is possible to refine the chronological distribution of the early third millennium BC sites. Thirteen sites had Uruk pottery, but in only four sites is it certain that there were MALU occupation levels. Ten sites had probable and four possible Painted Ninevite 5 pottery, eleven sites had probable Painted and Incised Ninevite 5 levels, and ten sites had probable and three possible Incised and Excised Ninevite 5 levels. Only Tell Mohammed Arab had excavated occupation levels of the four principal phases of the first half of the third millennium BC, but this was not a continuous occupation but one with substantial gaps. In each phase, it is to be expected that not all these sites were occupied at the same time. The site density in the earlier third millennium would have been low. Settlement on all these sites probably did not extend later than the Incised and Excised Ninevite 5 period.

Sixteen of the excavated sites had an area of less than 4 ha and half of these 2 ha or less. Three sites might have been larger, Tell Jikan, Tell Selal, and Tell Abu Dhahir, but it is impossible to give an accurate estimate of their size in different phases of the Ninevite 5 period. There is evidence that they may have started as small settlements at the beginning of the Ninevite 5 period and only reached a larger size later. Estimates for the maximum size of Tell Jikan in the Ninevite 5 period vary from 15 to 23 hectares but Garcia-Ramis (2024: 101) suggested that the actual size of the Ninevite 5 settlement was restricted to a small percentage of the total settled area of the site. Thus, in the MALU and early Painted Ninevite 5 periods there may only have been small settlements. Nevertheless, it appears that, at least later in the Ninevite 5 period, there was a two-rank hierarchy within the Saddam Dam Salvage Project (Doro 2021–2022: 25), which might have extended to a three-rank hierarchy at the end of the Ninevite 5 period if larger sites outside the area of the dam basin were part of the settlement pattern.

ARCHITECTURE

The pottery sequence revealed at Tell Mohammed Arab has attracted most attention and has changed the perception of the development and periodisation of the Ninevite 5 period. The architectural remains were also of importance because no substantial architectural remains belonging to this period

were known before the excavations of the Saddam Dam Salvage Project. A detailed review of the architecture of sites with substantial quantities of decorated Ninevite 5 pottery was published in 2003 (Roaf 2003: 311–34). This included the published information up to 1988 with a short addendum written in 2002. This article included plans of the remains in the Ninevite 5 Sounding omitting Level J with two of the plans incorrectly labelled (Fig. 14 J = Level L and Fig. 14 L = Level K).

While the pottery sequence from Tell Mohammed Arab exhibits some clear gaps, the architectural remains in the Sounding represent a continuity of building practice that survived at least one episode of abandonment within the Ninevite 5 levels between MA2 and MA3b, and a second if the building of Level L is considered a MALU precursor of the Ninevite 5 buildings.

The Ninevite 5 buildings at Tell Mohammed Arab clearly follow a pattern, best typified by the single-room units of Levels I to G. This appears to have antecedents in the previous period as shown by the admittedly fragmentary building in MA1 Level L. It is not surprising that this might be the case with Ninevite 5 architecture, given that Ninevite 5 pottery also had its origins in the earlier period. At nearby Tell Kutani at least two similar village houses were found with rectangular hearths and platforms probably dating to the Painted and Incised Ninevite 5 period (Bachelot 2003: 153 and fig. 8). Rectangular buildings with external buttresses and rectangular hearths and platforms probably dating to the Incised and Excised Ninevite 5 period are also reported to have been excavated at Tell Selal 25 km north-west of Tell Mohammed Arab (Roaf 2003: 320). Such plans can be considered typical of Ninevite 5 vernacular domestic buildings in this region.

When the Ninevite 5 Sounding was excavated, there was little evidence for any other Ninevite 5 architecture. The main exceptions were buildings at Chagar Bazaar and a large grain storage facility at Tell Thalathat V. This situation has not changed in Iraq until recently (Ławecka 2019: 139–45; Pfälzner 2025). In Syria, however, excavations have revealed striking architectural remains which have been attributed to the Ninevite 5 period. These include Raqa'i, Atij, Kashakashok III, Kneidij, and Rad Shaqra, with evidence for city walls, domestic houses, massive grain storage facilities, and possible temples (Pfälzner 2011). The scarcity of Ninevite 5 sherds from the earlier levels at these sites suggests that although they may be contemporary with the Ninevite 5 period, they should not be classified as Ninevite 5 sites. This is confirmed by other aspects of the material culture, including the architecture, which are not typical of sites in which Ninevite 5 pottery predominates.

The architectural remains at three sites in Syria, however, are associated with substantial amounts of Incised and Excised Ninevite 5 pottery. In Level IIIId at Leilan the settlement expanded into the lower town, a fortification wall was built on the acropolis, and a many-roomed house with a possible courtyard was constructed. In Phases C and

D at Tell Arbid, courtyard houses and two possible one-room temples have been identified (Smogorzewska 2019, 2020). In HS4 and HS5 at Tell Brak two building levels of a possible one room temple have been excavated (Matthews 2003: 109–16). All of these appear to date to the latest phases of the Ninevite 5 period. The associated ceramic assemblages include, as well as late Ninevite 5 types not represented at Tell Mohammed Arab, ceramic types such as Metallic Ware that continue into the post-Ninevite 5 period. The architecture of these final Ninevite 5 sites and other aspects of their material culture such as cylinder seals (McCarthy 2011) have more in common with the following levels than with the preceding ones. In *ARCANE I* this phase is normally treated as final EJZ 2 but sometimes it is said to extend into EJZ3a.

More recently a step trench in Area A at Bassetki has been excavated. According to the short account on the Internet (Pfälzner 2025), a town wall was constructed in the ‘Early Ninevite V’ period and rebuilt several times, with the latest phase belonging to the Late Incised and Excised Ninevite 5 period. Substantial buildings were erected adjacent to the city wall, which were apparently used for communal food storage and food production.

These discoveries appear quite different from those from the excavations in the Saddam Dam Salvage Project and other previously excavated sites that were occupied before the final phase of the Ninevite 5 period in Syria. This may be because those excavations were of small village sites or were only small sondages on larger sites. More extensive excavations on larger potentially urban Ninevite 5 sites, such as Nineveh, Bassetki, Tell al-Hawa, Tell Leilan, and Tell Brak, might radically change our view of the nature of settlement in the Ninevite 5 period.

ECONOMY AND DAILY LIFE

It is difficult to say much more about the nature of the Ninevite 5 settlement at Tell Mohammed Arab, given the restricted nature of our excavations. Clearly, we are dealing with a small rural settlement similar in size and function to many others in the area, such as Tell Kutani and Tell Rijim. These were part of a settlement hierarchy that included Tell Jikan, estimated to be about 20 ha in size at this time (Numoto 2003: 44), although for obvious reasons there was no significant exposure of Ninevite 5 levels at that site.

Dental pathology from the MA3a grave skeletons suggests that the inhabitants of our village were heavily engaged in manual labour, enjoying a balanced diet that was not predominantly skewed to either vegetable or animal products (Bolt, this vol.).

The most common cereals cultivated were glume wheats (mainly emmer but also einkorn), followed by two-row hulled barley and less commonly free-threshing wheats (macaroni and bread wheat). These were sown in the autumn and harvested in the late spring or early summer (Kim 2019: 235–7).

The regime was of low intensity, without irrigation or much manuring. Cultivated pulses included lentil, grass pea, chickpea, and bitter vetch. A sample from MA1 contained safflower seeds, which might have been used for producing oil. Figs were also attested.

No evidence of communal grain storage was recovered but this does not mean there was none. The storage bins present in the courtyard in Levels D and C indicate that some commodities were stored at household level, while the possible threshing floor of Level G again suggests localised food processing. An installation with three parallel walls that was probably connected with grain storage was found along the Cliff Section, but this was in the MALU levels (Roaf 1984: 155; see Zaccagnini (1993b: 28) for discussion of these parallel wall structures). Given that grain harvesting should have been a major activity, the almost complete absence of chipped stone, particularly sickle blades, is unexpected. This is in marked contrast to the assemblage from nearby Tell Karrana 3 where over thirteen hundred stratified pieces of local flint were recorded (Brautlecht 1993: 150). The lithic material including 47 cores and 647 unmodified flakes indicates that Karrana 3 was a production centre for long and broad blades used in the manufacture of segments for composite sickles. artefacts. More than 200 such segments marked with sickle sheen and with traces of bitumen showed that they had actually been used for reaping of cereals or reeds. The small number (4) of such segments at Tell Mohammed Arab might suggest that the grain was harvested by uprooting rather than reaping, but the rarity of basal culm material (from the bottom of the stalk) and of remains of low-growing weeds amongst the botanical remains analysed suggest that the cereals at Tell Mohammed Arab were reaped not uprooted (Kim 2019: 242). The paucity of sickle elements may be due to the fact that when a building was abandoned, all the valuable objects were removed. If obsidian had been used in Tell Mohammed Arab, which is likely as 40 pieces were found at Karrana 3, none was left in the buildings for the archaeologists to find.

Neutron activation analysis of 23 sherds from Tell Mohammed Arab has shown that the majority of sherds analysed, including sherds of the different styles of decorated Ninevite 5 pottery, painted, incised, and excised, as well as plain fine grey ware, had similar compositions. However, these were different from the compositions typical of pottery from Nineveh, Telul eth-Thalathat, and Qaratepe (near Tel Afar). This suggests that these sherds from Tell Mohammed Arab were made out of clay from the local region (Campbell 2003a). It is perhaps surprising that the very fine grey ware sherds had similar compositions to the superficially very different fabric of the painted sherds. It suggests the presence of highly skilled potters working in or close to the area of the Eski Mosul Dam Salvage Project. There is, however, no evidence that pottery was manufactured in the village of Tell Mohammed Arab. Two painted sherds and one sherd with notched bands had a different composition and may indicate that

they were imported from outside the immediate region. A more extensive programme of neutron activation analysis including samples from other sites in the Eski Mosul Dam Salvage Project and elsewhere would produce a clearer picture of the manufacture and distribution of pottery in this period.

The number of copper alloy objects from Tell Mohammed Arab is small (13 items), but the distribution (11 from MA3, only 2 from MA2, and one from MA1) hints at the metal becoming more readily available towards the end of the Ninevite 5 period. There is no indication that metalworking in any form was taking place in the village and its scarcity supports the observation that there was no significant trade in this commodity at this time (Muhly and Stech 2003: 422).

The occupation levels investigated in the Ninevite 5 Sounding were those of an agricultural village. There was no sign of any industrial activity, making goods that were not locally consumed. Spindle whorls attest to the production of thread (perhaps from wool or from flax) and, although no other equipment such as loom weights for making textiles were found, it is likely that weaving was undertaken in the village. Reed matting, found in some of the graves, may also have been locally made. Pottery, seals, jewellery, flint stone tools, metal tools and weapons, and other materials, such as bitumen and salt, were not produced in the village as far as we know and were presumably acquired in exchange for agricultural products. The few marine shells found in the Ninevite 5 Sounding included tusk shells (*dentalium*) and striped engina (bumble bee snail). The latter came from the Persian Gulf and the former might have come from either the Mediterranean or the Persian Gulf. There is no reason to assume that these were imported during the Ninevite 5 period, and they might have been heirlooms imported at an earlier period and acquired locally at a later period.

NINEVITE 5 CULTURE

Is there such a thing as a Ninevite 5 culture or period and, if so, what defines them? The period during which one or another of the various Ninevite 5 pottery styles was in use lasted perhaps half a millennium. During that time, gradual changes in the decorated pottery styles have been noted. While these changes may have been incremental, by the end of the period the pottery is completely different from that at the start. Additionally, the distribution of these pottery styles does not remain the same throughout the period and there are significant differences in the way they develop between sites in northern Iraq and north-eastern Syria.

Painted Ninevite 5 pottery is much less common on Syrian sites than on sites in Iraq, while the final phase of Ninevite 5 pottery (Syrian Late Excised Ninevite 5) has only been found in north-eastern Syria. In that region, it is sometimes present on sites where earlier diagnostic Ninevite 5 pottery was rare or absent. At this time in north-eastern Syria, there was an increase in the size of settlements to urban proportions as

well as the construction of city walls. Tell Leilan expanded to 90 ha, Hamoukar to 98 ha and Tell Mohammed Diyab to 55 ha, a great contrast to the majority of sites in the earlier periods which were seldom more than 5 ha in area. Sites such as Nineveh, Tell Jikan, Bassetki, Tell Hawa, and Tell Brak may have been substantial towns earlier, but the rapid growth of the Syrian sites suggests a very different cultural dynamic to that of the earlier period.

Apart from the pottery which changed over time, there are few other shared features that might represent aspects of 'Ninevite 5 Culture'. Burial practises might seem an obvious place to start. At Tell Mohammed Arab, burial customs remain the same in the Painted and Early Incised Period (MA2) and in the Late Incised and Excised Period (MA3). They consisted of a vertical shaft with a chamber cut into the side, in which the body was placed. The body was separated from the shaft by the construction of a mud-brick wall. Sometimes there was no separate chamber and exceptionally such graves were covered by large stones.

Similar forms of burial have been excavated in other Ninevite 5 sites (Green and Bolt 2003) and there is some evidence that infant pot burials were also common. However, while the burial customs in Ninevite 5 sites manifest shared practices and continuity, the types of burial are not specific to the period and are commonly found in other regions and periods, for example in the Ubaid cemetery of Tell Kashkashok II (Matsutani 1991).

A similar lack of distinctiveness is found in other aspects of the material culture of the Ninevite 5 period. Jewellery, chipped stone, ground stone objects, seals and seal impressions, metalwork, figurines, and other types of small finds are of types with wide distribution outside the region where Ninevite 5 pottery was in use. The only possible exceptions are the clay stamps from Tell Mohammed Arab, Tell Billa (Speiser 1931: 12), and Tell Durdara (Spanos 1988: 69 and Abb. 9.1) which may be restricted to Ninevite 5 sites, but they are so uncommon that they cannot be considered essential characteristics of Ninevite 5 culture.

The problem of the definition of a Ninevite 5 Culture has previously been pointed out (Roaf 2003: 333; Ławecka 2016: 186). Unfortunately, the recommendation to avoid the term has not been followed by most scholars. The titles of not only older publications but also many recent publications include the phrase (for example, Rova 2017; Garcia-Ramis 2024; Soriano-Elias et al. 2025). Another recent article (Nicolle et al. 2024: 132-3) contains a concluding section called 'Reconsidering the Ninevite 5 Culture', which curiously suggests that the construction of terraces is a characteristic feature of 'the Ninevite 5 Culture', even though it is only attested in four sites dating to different phases of the Ninevite 5 Pottery Period.

No doubt the phrase 'Ninevite 5 Culture' will continue to be used in future publications, despite the fact that the term may refer to very dissimilar assemblages of material remains and to different social practices from diverse societies. It would be good if it were otherwise.

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DIANNA BOLT

Appendix 1: Skeletal Remains

The Mohammed Arab human skeletal material was excavated over a period of some three years from 1983 to 1985. A few of the skeletons were excavated by myself or by colleagues while I was in the field (winter 1985), but most were taken from labelled bags and boxes kept in storage and examined in the winter and spring of 1985 and reexamined during the summer of 1987 and the winter and spring of 1988. Examination consisted of cleaning, doing what reconstruction was possible, sexing and aging the bones, taking measurements and noting nonmetric traits where possible, and looking for signs of disease affecting the bones and teeth.

METHODOLOGY

A variety of techniques were used in sexing and aging the bones. For sexing, the pelvic bone morphology is by far the most reliable indicator, and the methods found in Phenice (1969) and Bass (1979) were followed. Failing adequate remains of the pelvis, both skull morphology and long bone measurement were used. Several sources list significant traits for the former including Anderson (1969), Bass (1979), and Brothwell (1981); for the latter the chief source was Dittrick and Suchey (1986). The preceding lists refer to techniques for sexing adult bones (sometimes applicable to late adolescents). However, if relevant parts of the pelvic bones of subadults survive, the sex of the individual can often be judged with some degree of confidence, providing that one is familiar with the characteristics of a large enough population, or at least with those of other skeletal material from the same period and region. The former criterion is fulfilled here and methods found in Boucher (1957), Sundick (1977), and Weaver (1980) were all used in conjunction.

In the matter of aging, recent advances in this area have rendered estimates far more precise than in the past. While Rathbun (1975), dealing with material from Kish, was obliged to put individuals into categories with ranges of ten years and to lump all those older than 35 years of age into one category, in the present study adults are put

into five year range categories and are aged with a fair degree of confidence up to 50 years. Subadults using dental development (Ubelaker 1978) an epiphyseal (Bass 1979) can be aged even more precisely. In this study they are put in categories ranging from six months, for infants, to three years, for adolescents. Factors used in aging adults were: dental wear (Brothwell 1981), skull suture closure (Meindl and Lovejoy 1985), the Suchey-Brooks phase system for aging the male pubic symphysis (Katz and Suchey 1986), sternal ends of the ribs (Iskan, Loth, and Wright 1984, 1985), and auricular surface of the ilium (Lovejoy et al. 1985). Note that in the case of dental wear, it is not so much the absolute amount of wear as the relative wear between the 1st 2nd and 3rd molars. Since these teeth erupt six years apart, an estimate of the rate of wear from an individual's diet can be made, and this may then be used to estimate the age by the amount of wear on the 3rd molar.

Measurements taken were those for the cranium found in Bass (1979) and for the postcranial skeleton found in Bass (1979) and Dittrick and Suchey (1986). For nonmetric traits (small 'quirks' in the bone shared by those genetically related to each other), the cranial traits noted were those found in Bass (1979) and Brothwell (1981); the list of postcranial traits was taken from Finnegan (1978) and from Bass (1979). Note that many of the skeletons were incomplete and the bones too fragmentary to allow for measurement or the survival of nonmetric traits.

Paleopathology is a very large subfield unto itself. Included in it are many studies of the affect of diet on teeth and bone. The basic sources for paleopathology are Ortner and Putschar (1985) and Steinbock (1976). In addition, other sources deal more fully with arthritis (Rogers, et al. 1987), cribra orbitalia (Huss-Ashmore, Goodman, and Armelagos 1982; Nathan and Haas 1966), and various dental diseases (Bullion 1986, Cook 1981; Dobney and Brothwell 1987; Hillson 1979; and Lipsinic, et al. 1986). The latter two conditions are most relevant to the interpretation of diet, both of the population as a whole, and for comparison

between different subgroups, such as men and women, children and adults, wealthy and poor (qualities assigned on the basis of grave construction and grave goods), etc.

POPULATION SUMMARY

The excavated Level F cemetery contained six individuals: three adults, all female, one adolescent, one child, and one infant. The child was female, the adolescent male. The male:female ratio is somewhat unbalanced here, but with such a small sample, no significant conclusion can be drawn from this. Ages range from a three month old infant of unknown sex, to a woman of some 65 years with arthritis and osteoporosis.

The earlier population is unbalanced in terms of age. There are one adult, a male, three children and three foeti. If these individuals were buried under house floors or in courtyards, this could follow a very common pattern of giving subadults who were not fully fledged members of the society quick and relatively quiet burial within the living areas, and giving adults burial in a separate cemetery. The somewhat elderly (45–50) man is obviously an exception to this pattern, but he could have been exceptional in many ways: as a personality, in the manner of his death, in his position in society, etc.

In general, both groups make up a population of robust people who were involved in manual labour for much of their lives. Their diet was gritty and the adults' teeth tended to be quite worn. Most calculus, or tartar, deposits on the teeth were slight, and cavities were fairly common, an indication that the diet was not heavily slanted to either animal or vegetable products. That is, protein in the diet was probably obtained from grains, legumes, meat, and dairy products without any heavy emphasis on one category. There are two diseases, or symptoms of diseases, noted below which are connected with malnutrition in childhood: cribra orbitalia and linear enamel hypoplasia. The first is a pitting in the roof of the eye orbits; its cause is unknown but most researchers feel that it is connected in some way with dietary insufficiency, perhaps of iron, (Ortner and Putschar 1985: 258). The former are ridges in the crown surfaces of the teeth caused by temporary arrests in a child's growth. These stoppages need not be caused by complete starvation, but rather a fairly large reduction in the amount of energy available from the diet, causing any energy obtained to be spent on maintenance of life in preference to growth (Huss-Ashmore, Goodman and Armelagos 1982). Incidence of both of these symptoms is found in this population, but the sample is too small, even combined, to detect any pattern.

The two older people, the 65 year old woman from the Level F cemetery and the 45–50 year old man from the earlier group both have the form of arthritis known as degenerative joint disease, but only slight degrees of this. This is somewhat surprising, considering their relatively advanced ages and may indicate that older people were not

expected to do much in the way of hard manual labour. The osteoporosis of the old woman may also be an indication of this. This woman was otherwise quite large for a woman and had probably been quite robust in her youth.

INDIVIDUAL SUMMARIES

For each skeleton the following observations are provided:

Sex	basis for decision
Age group	basis for estimate
Cribra orbitalia	present, absent or non-observable due to missing bone
Degenerative joint disease	present, absent or non-observable, and degree of severity if present
Linear enamel hypoplasia	present, absent, or non-observable due to missing or severely worn teeth, and degree of severity if present

MA1 Level L Grave

50V:140.02

Sex unknown.

3.5–4.5 years old: dental development and epiphyseal fusion.

Cribra orbitalia: present.

Degenerative joint disease: none.

linear enamel hypoplasia: present, slight.

This child had very slight calculus deposits on its deciduous teeth.

MA2 Level J Cemetery (?)

51U:206.01 & 02

Sex unknown.

5–7 month foeti: dental development.

These two foeti were found wrapped together in matting. Given this circumstance, they were probably twins, but indications are that they were not identical twins. There was some difference in the shape of two of the cranial bones and the bones of 206.02 were on the whole very slightly larger than those of 206.01.

51U:206.06

Female: pelvic bone morphology.

3–5 month foetus: dental development and size of bones.

This foetus may have been related to 51U:206.01 and 206.02 above, but the relationship is impossible to prove at this point.

51V:168.04

Female: pelvic bone morphology.

5–7 years old: dental development and epiphyseal fusion.

Cribra orbitalia: present.

Degenerative joint disease: none.

Linear enamel hypoplasia: present, moderate.
The deciduous teeth of this little girl had slight calculus deposits and one of the deciduous molars had a small cavity.

51V:173.05

Female: pelvic bone morphology.
2.5–3.5 years old: dental development and epiphyseal fusion.
Cribra orbitalia: absent.
Degenerative joint disease: none.
Linear enamel hypoplasia: absent.
Only slight calculus deposits were found on the front deciduous teeth.

MA3a Level F Cemetery

50T:172.01

Female: skull and pelvic bone morphology.
20–24 years old: dental wear, auricular surface, ribs.
Cribra orbitalia: absent.
Degenerative joint disease: none.
Linear enamel hypoplasia: present, slight.
This woman had suffered a head injury, perhaps a blow to the back of her skull or perhaps the result of a fall, some considerable time prior to her death. The injury had healed normally, but traces were still to be seen on the internal table of her skull. Her teeth had slight calculus deposits and eight of them had small or very small cavities, seemingly due to their very chipped state. Large enough chips of enamel had been knocked off in some cases to expose the underlying dentin, leading to subsequent infection.

50T:172.02

Female: pelvic bone morphology.
8–10 years old: dental development and epiphyseal fusion.
Cribra orbitalia: absent.
Degenerative joint disease: none.
Linear enamel hypoplasia: non-observable.
This girl may have been related to 50T:172:01 above, they both share a few relatively rare nonmetric traits. However, this is only probable and not certain.

50T:173.01

Sex unknown.
2–4 months old - dental development.
Cribra orbitalia: absent.
Degenerative joint disease: none.
Linear enamel hypoplasia: non-observable
No calculus deposits were seen on the teeth, not surprisingly since none of them had yet erupted prior to death.

50U:180.03

Male: pelvic bone morphology.
13–15 years old: dental development and epiphyseal fusion.
Cribra orbitalia: present.
Degenerative joint disease: none.
Linear enamel hypoplasia: present, slight.

Slight calculus deposits were seen on the teeth generally, swelling to moderate deposits on the lower front teeth.

50V:123.02

Female: pelvic bone morphology and long bone measurement.
20–24 years old: dental wear, skull sutures, auricular surface, ribs.
Cribra orbitalia: present.
Degenerative joint disease: none.
Linear enamel hypoplasia absent.
This woman had slight to moderate calculus deposits, a bit heavier on her front teeth. Her upper and lower jaws were infected with periodontitis and at least six of her teeth and small over very small cavities. Some time prior to her death she had suffered a fractured rib, mid chest on the right side. She also had a slight abnormality in four of her wrist and hand bones, bisymmetrical and thus probably generic. This abnormality seems to have had little or no affect on the right wrist, but the left wrist had developed a bit of traumatic arthritis. Since, on the whole, her left arm bones were thicker and heavier than those of her right arm, she was probably left handed.

51U:176.05

Female: pelvic bone morphology.
60–70 years old: auricular surface, ribs.
Cribra orbitalia absent.
Degenerative joint disease: present, slight.
Linear enamel hypoplasia: absent.
This woman the oldest person in the entire Mohammed Arab skeletal population had only slight degenerative joint disease affecting her shoulders, elbows, wrists, hands, hips, knees and feet. However she had moderate to severe arthritis in the form of vertebral osteophytosis affecting her entire spine, which probably made bending very difficult for her. She also had moderate to severe osteoporosis, thinned and lightened bone due to loss of calcium, affecting her entire skeleton. She had suffered a fractured left rib, broken near the breast bone some time prior to her death. This may have been due to even a slight blow, after the osteoporosis was well advanced. As was expected, she had lost most of her teeth prior to her death. The few left were quite worn, but no cavities were seen, and there were only slight calculus deposits.

MA3 Level B Grave

50U:133.03

Male: skull and pelvic bone morphology, long bone measurement.
45–50 years old: dental wear and arthritis.
Cribra orbitalia: present.
Degenerative joint disease: present, slight.
Linear enamel hypoplasia: non-observable.
This man's teeth were quite worn and several of them had been lost prior to his death. The bone surrounding his

teeth had moderate periodontitis. He had three teeth with cavities and only slight calculus deposits on his front teeth. Degenerative joint disease has found only at his hips and right wrist. This last may indicate that he was right handed. His lower back vertebrae had the form of arthritis known as osteophytosis, to a moderate degree.

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Appendix 2: Excavation Units by Level

Details of each excavation unit/context were recorded on standard printed sheets, which now form part of the excavation archive. The units in the list below are ordered by level, and within that by square and unit number. A brief description of each unit is also provided.

A	50T:101	Ninevite 5 mound surface	A	50U:116	stones
A	50T:102	stone foundations	A	50U:117	pit
A	50T:103	ashy deposit	A	50U:118	grey deposit
A	50T:104	burnt surface	A	50U:119	wall foundation
A	50T:105	pit	A	50U:120	stones
A	50T:106	wall foundation	A	50U:121	stones
A	50T:107	wall foundation	A	50U:124	grey deposit
A	50T:108	wall foundation	A	50U:128	wall
A	50T:109	wall foundation	A	50U:131	wall foundation
A	50T:110	wall foundation	A	50V:101	Ninevite 5 mound surface
A	50T:111	stones	A	50V:102	brick tumble
A	50T:112	wall foundation	A	50V:103	pit
A	50T:113	wall	A	50V:104	deposit
A	50T:114	stones	A	50V:105	grey/green deposit
A	50T:119	stone foundations	A	50V:106	brown deposit
A	50T:120	decayed mud-brick	A	50V:107	grey layer
A	50T:121	ashy material	A	50V:108	burnt surface
A	50T:122	wall foundation	A	50V:117	pit
A	50U:101	Ninevite 5 mound surface	A	51T:102	brick tumble
A	50U:102	grey/brown deposit	A	51T:103	brick tumble
A	50U:103	crumbly brown deposit	A	51T:104	stones
A	50U:104	grey deposit	A	51T:105	clay courtyard surface
A	50U:105	wall	A	51T:106	hearth
A	50U:106	wall foundation	A	51T:107	wall
A	50U:107	stones	A	51T:108	wall foundation
A	50U:108	wall	A	51T:109	pit
A	50U:109	blue/grey deposit	A	51T:111	pit
A	50U:110	stones	A	51U:101	Ninevite 5 mound surface
A	50U:111	wall foundation	A	51U:102	brick tumble
A	50U:112	wall foundation	A	51U:103	ashy layer
A	50U:113	stone footings	A	51U:104	wall
A	50U:114	stones	A	51U:105	plaster floor
A	50U:115	wall foundation	A	51U:106	wall
			A	51U:107	stones in wall
			A	51U:108	brick tumble
			A	51U:109	wall
			A	51U:110	hearth
			A	51U:111	clay & stones
			A	51U:113	stones

A	51U:114	stones	B	50U:146	stones
A	51U:115	wall foundation	B	50U:148	wall
A	51U:116	courtyard surface	B	50U:153	deposit
A	51U:117	fill of doorway in Wall 106	B	50U:154	external yellow surface
A	51U:125	clay layers	B	50U:156	wall foundation
A	51U:129	wall foundation	B	50V:109	grey & brown deposit
A	51V:101	Ninevite 5 mound surface	B	50V:110	grey deposit
A	51V:102	brick tumble	B	50V:111	wall
A	51V:103	wall	B	50V:112	wall foundation
A	51V:104	wall	B	50V:115	wall foundation
A	51V:105	ashy grey	B	50V:118	wall foundation
A	51V:106	bricky brown	B	51T:110	brick tumble
A	51V:107	plaster floor	B	51T:112	pebble courtyard surface
A	51V:108	between stones	B	51T:113	wall
A	52V:101	eroded Ninevite 5 mound surface	B	51T:114	wall
A	52V:102	eroded Ninevite 5 mound surface	B	51T:115	ashy courtyard deposit
A	52V:103	grey and green silty.	B	51T:122	plaster floor
A	52V:104	wall	B	51T:127	wall
A	52V:105	layer running up to 52V:104	B	51U:112	wall
A	52V:106	burnt brick bin/hearth?	B	51U:118	room deposit
A/	50T:115	deposit	B	51U:119	wall
A/B	50T:116	brown bricky deposit	B	51U:120	ashy floor
A/B	50T:117	contaminated by pit	B	51U:121	pit
A/B	50T:118	brown deposit	B	51U:122	plaster floor
A/B	50U:123	brown deposit	B	51U:126	pit
A/B	50U:125	grey clayey deposit	B	51U:127	pebbles
A/B	51U:123	stones	B	51U:130	wall
A/B	51U:124	brown clay	B	51U:131	pebble courtyard deposit
A/B	51U:128	brick tumble	B	51U:132	grey ashy courtyard deposit
B	50T:123	plaster floor	B	51U:135	wall
B	50T:124	external green layer	B	51U:139	pit
B	50T:125	dirty external layer	B	51U:140	plaster floor
B	50T:126	banded clay	B	51U:142	wall
B	50T:127	burnt hearth	B	51V:110	wall foundation
B	50T:128	wall	B	51V:111	room deposit
B	50T:129	wall	B	51V:112	brown clay
B	50T:130	wall	B	51V:113	wall
B	50T:131	wall	B	51V:114	ashy floor
B	50T:132	wall	B	51V:115	plaster floor
B	50T:133	wall	B	51V:116	pit
B	50T:134	wall	B	51V:117	pit
B	50T:135	plaster floors	B	51V:120	wall
B	50T:136	yellow external surface	B	51V:123	pit
B	50U:126	pebbles	B	51V:128	pit
B	50U:127	deposit	B	52V:107	brick collapse
B	50U:129	banded grey deposit	B	52V:108	wall
B	50U:130	grey layer & eroded brick	B	52V:109	ash layer
B	50U:132	external greenish layers	B	52V:110	burnt plaster floor.
B	50U:133	grave	B	52V:111	layers of fill
B	50U:134	stones	B	52V:115	plaster floors
B	50U:136	plaster floor	B/C	50U:135	wall
B	50U:137	brown & green deposit	B/C	50V:113	hard brown bricky deposit
B	50U:138	ashy depression	B/C	51V:109	wall
B	50U:139	wall	C	50T:137	ashy external surface
B	50U:144	pebbles	C	50T:138	ashy external surface
B	50U:145	stones	C	50T:139	brown clay

C	50T:140	room deposit	D	50T:154	wall
C	50T:141	plaster floors	D	50T:155	wall
C	50T:142	floors	D	50T:156	grey floor
C	50T:143	dirty external surface	D	50T:157	grey floor
C	50U:140	pot pit	D	50U:143	grey/green deposit
C	50U:141	grey floor	D	50U:161	ashy layer
C	50U:142	wall	D	50U:166	stone paving
C	50U:147	external ashy & green deposits	D	50U:167	wall
C	50U:149	wall	D	50U:171	wall
C	50U:150	whitish floor	D	50V:116	yellow surface
C	50U:151	wall	D	51T:118	pit
C	50U:152	blocked door	D	51T:119	ashy courtyard deposit
C	50U:155	ashy deposit	D	51T:120	mud platform
C	50U:157	drain?	D	51T:121	grey courtyard deposit
C	50U:158	wall	D	51T:123	pit
C	50U:159	ashy layer	D	51T:124	stake hole
C	50U:160	wall foundation	D	51T:125	stake hole
C	50U:162	wall	D	51T:126	brick feature
C	50U:163	pebbles	D	51U:147	hearth
C	50V:114	grey deposit	D	51U:149	bricky deposit
C	51T:116	dirty courtyard deposit	D	51U:150	brick floor
C	51U:133	brown courtyard deposit	D	51U:151	plaster floors
C	51U:134	bins	D	51U:152	hearth
C	51U:136	ashy courtyard deposit	D	51U:153	wall
C	51U:137	fill of doorway in Wall 134	D	51U:156	wall
C	51U:138	plaster floor	D	51U:158	floor packing?
C	51U:141	dirty surface	D	51V:129	brown deposit
C	51V:118	brick box	D	51V:130	surface
C	51V:119	room deposit	D	51V:131	white floor
C	51V:121	white surface	D	51V:132	wall
C	51V:122	wall	D	51V:133	bin
C	51V:124	wall	D	51V:134	brick deposit
C	51V:127	ashy lens	D	51V:135	plaster floor
C	52V:112	ash layer	D	51V:137	mud surface
C	52V:113	compacted brown bricky	D	51V:138	floor packing?
C	52V:114	wall	D/E	50U:170	wall
C	52V:116	ashy line	D/E	50V:120	banded brown clay
C/D	50T:144	wall	D/E	51T:128	brick deposit in courtyard
C/D	50U:164	ashy layers	D/E	51U:155	brick deposit in courtyard
C/D	50V:119	deposit	D/E	51V:139	grey ashy
C/D	51T:117	mud courtyard surface	E	50T:158	green deposit
C/D	51U:143	floors	E	50T:159	pit
C/D	51U:144	courtyard deposits	E	50T:160	grey deposit
C/D	51U:145	green clay courtyard deposit	E	50T:161	brick feature
C/D	51U:157	threshold & entrance	E	50U:165	bricks
C/D	51V:125	plaster floors	E	50U:168	pebble pavement
C/D	51V:126	plaster floors	E	50U:169	thick green deposit
D	50T:145	wall	E	50T:171	?
D	50T:146	wall	E	50U:172	pit
D	50T:147	dirty external strata	E	50U:173	patchy grey surface
D	50T:148	room deposit	E	50V:121	brick tumble
D	50T:149	room deposit	E	51T:129	<i>tannur</i> base
D	50T:150	brown clay	E	51T:130	mud courtyard deposit
D	50T:151	ashy external strata	E	51T:131	worm track
D	50T:152	wall	E	51T:132	ashy courtyard deposit
D	50T:153	wall	E	51T:133	courtyard deposit

E	51T:134	ash & mud courtyard	H	50U:177	burnt debris above floor
E	51T:135	mud courtyard deposit	H	50U:178	stones
E	51T:136	mud platform	H	50U:179	wall
E	51T:137	mud platform	H	50U:181	grey surface
E	51T:138	mud platform	H	50U:182	pot pit
E	51T:139	courtyard deposit	H	50U:183	plaster floor
E	51T:140	wall	H	50U:184	plaster layer in courtyard
E	51T:141	bin	H	50U:185	wall
E	51T:142	grey courtyard deposit	H	50U:188	courtyard deposit
E	51U:160	brick tumble in room	H	50U:190	step
E	51U:161	ashy courtyard deposit	H	50U:193	courtyard deposit
E	51U:162	wall	H	50U:194	courtyard deposit
E	51U:163	occupation in courtyard	H	50U:195	pit
E	51U:164	grey courtyard deposit	H	50V:126	patchy grey surface
E	51U:165	plaster floor	H	50V:127	plaster floor
E	51U:166	mud courtyard deposit	H	50V:128	wall
E	51U:167	brick between floors	H	50V:129	wall
E	51U:168	courtyard deposit	H	50V:130	wall
E	51U:172	mud courtyard deposit	H	51T:146	brown deposit in courtyard
E	51U:174	mud courtyard deposit	H	51T:147	burnt courtyard
E	51V:136	orange deposit	H	51U:169	brick tumble
E	51V:140	wall	H	51U:170	brick collapse
E	51V:141	brick collapse & surface	H	51U:171	plaster floor
E	51V:142	grey mud	H	51U:178	hearth
E	51V:143	brick bin	H	51U:180	fire pit
E	51V:144	plaster floor	H	51U:181	wall
E	51V:145	mud deposit	H	51U:185	brick step
E	51V:147	plaster floor	H	51U:186	bench/step
E/G	51T:143	eroded brown material	H	51U:189	burnt courtyard deposit
E/H	50V:122	brick tumble	H	51V:149	brick collapse
E/H	51U:173	levelling material	H	51V:150	wall
F	50T:172	grave deposit	H	51V:151	brick collapse
F	50T:173	grave	H	51V:153	plaster floor
F	50U:180	grave	H	51V:155	plaster surface
F	50V:123	grave deposit	H	51V:157	hearth
F	51U:176	grave	H	51V:156	brick bench
F	51V:154	rubble	I	50U:189	wall
G	50T:162	brick collapse	I	50U:191	step
G	50T:163	wall	I	50U:192	plaster floor
G	50T:164	bench	I	50U:196	wall
G	50T:165	ashy courtyard layer	I	50U:197	pebble surface
G	50T:166	room deposit	I	50U:198	surface
G	50T:167	wall	I	50U:199	plaster in courtyard
G	50T:168	hearth	I	50V:131	brick tumble in room
G	50U:186	wall	I	50V:132	plaster floor
G	50U:187	plaster floor	I	50V:133	wall
G	50V:124	grey ash	I	50V:134	pit
G	50V:125	wall	I	50V:137	brown deposit
G	51T:144	brown courtyard deposit	I	50V:142	wall foundation
G	51T:145	clay feature in courtyard	I	50V:143	wall/bench?
G	51V:152	ashy occupation	I	50V:144	equals wall 51T:101
G/H	50U:176	brick tumble	I	51T:149	red courtyard
H	50T:169	burnt courtyard layer	I	51U:179	occupation between floors
H	50T:170	grey/brown layer	I	51U:182	plaster floor
H	50U:174	brick tumble	I	51U:183	wall
H	50U:175	wall	I	51U:184	wall

I	51U:187	plaster courtyard deposit	L	50T:181	floor
I	51U:188	step	L	50U:206	crumbly brown layer
I	51U:191	pot pit	L	50U:211	red floor
I	51V:158	occupation above floor	L	50U:212	orange bricky material
I	51V:159	plaster floor	L	50U:213	wall
I	51V:160	wall	L	50U:214	bricky material, incl. wall.
I	51V:161	hearth	L	50V:138	crumbly brown layer
I	51V:162	plaster floor	L	50V:139	grey layer
I	51V:163	wall	L	50V:140	grave
I	51V:164	hearth	L	51T:157	crumbly brown layer
J	50V:135	reddish layer	L	51T:159	wall
J	50V:136	orange layer	L	51T:160	grey courtyard deposit
J	51U:190	courtyard deposit	L	51T:161	bricky material, incl. wall.
J	51U:192	brown/orange layer	L	51U:195	crumbly brown layer
J	51U:193	wall	L	51U:199	mottled layer of fallen brick
J	51U:194	wall	L	51U:200	wall
J	51U:196	wall	L	51U:202	red floor
J	51U:201	wall	L	51U:203	wall
J	51U:206	grave	L	51V:177	brown crumbly layer
J	51V:165	white layer	L	51V:178	red/orange layer
J	51V:167	grey ashy	L	51V:179	grey with some charcoal
J	51V:168	grave	M	50T:182	brown layer and grey lens
J	51V:169	wall	M	50T:183	upper deposit of pit
J	51V:170	wall	M	50T:184	lower deposit of pit
J	51V:171	wall	M	50T:185	brown layer on virgin soil
J	51V:172	grey lens	M	50U:209	grey silty layer
J	51V:173	grave	M	50U:215	layers to virgin soil
J	51V:174	wall	M	50V:141	layers above virgin soil
J	51V:175	wall	M	51T:162	layers above virgin soil
J	51V:180	stone footings	M	51U:204	ash above virgin soil
J/K	51U:197	whitish layer	M	51U:205	layers above virgin soil
K	50T:174	wall	M	51U:207	Virgin soil
K	50T:175	floor	M	51V:181	brown layer above virgin soil
K	50T:176	wall	M	51V:182	ash on virgin soil
K	50U:200	reddish/brown layer	M	51V:183	virgin soil
K	50U:201	burnt thin layer			
K	50U:203	wall			
K	50U:204	hearth			
K	50U:205	kiln refuse			
K	50U:207	brown room deposit			
K	50U:208	black ashy lens			
K	50U:210	wall			
K	51T:150	wall			
K	51T:151	pit			
K	51T:152	stones			
K	51T:153	pit			
K	51T:154	wall			
K	51T:155	floor			
K	51T:156	brown courtyard deposit			
K	51U:198	grey ashy			
K	51V:176	ash layer			
K/L	50V:138	crumbly brown layer			
L	50T:177	crumbly brown layer			
L	50T:178	grey layer, charcoal and ash			
L	50T:179	wall			
L	50T:180	wall			

Appendix 3: Excavation Units by Square

Details of each excavation unit/context were recorded on standard printed sheets, which now form part of the excavation archive. The units in the list below are ordered by square and unit number. The assigned level and a brief description of each unit is also provided.

50T:101	A	Ninevite 5 mound surface	50T:134	B	wall
50T:102	A	stone foundations	50T:135	B	plaster floors
50T:103	A	ashy deposit	50T:136	B	yellow external surface
50T:104	A	burnt surface	50T:137	C	ashy external surface
50T:105	A	pit	50T:138	C	ashy external surface
50T:106	A	wall foundation	50T:139	C	brown clay
50T:107	A	wall foundation	50T:140	C	room deposit
50T:108	A	wall foundation	50T:141	C	plaster floors
50T:109	A	wall foundation	50T:142	C	floors
50T:110	A	wall foundation	50T:143	C	dirty external surface
50T:111	A	stones	50T:144	C/D	wall
50T:112	A	wall foundation	50T:145	D	wall
50T:113	A	wall	50T:146	D	wall
50T:114	A	stones	50T:147	D	dirty external strata
50T:115	A/B	deposit	50T:148	D	room deposit
50T:116	A/B	brown bricky deposit	50T:149	D	room deposit
50T:117	A/B	contaminated by pit	50T:150	D	brown clay
50T:118	A/B	brown deposit	50T:151	D	ashy external strata
50T:119	A	stone foundations	50T:152	D	wall
50T:120	A	decayed mud-brick	50T:153	D	wall
50T:121	A	ashy material	50T:154	D	wall
50T:122	A	wall foundation	50T:155	D	wall
50T:123	B	plaster floor	50T:156	D	grey floor
50T:124	B	external green layer	50T:157	D	grey floor
50T:125	B	dirty external layer	50T:158	E	green deposit
50T:126	B	banded clay	50T:159	E	pit
50T:127	B	burnt hearth	50T:160	E	grey deposit
50T:128	B	wall	50T:161	E	brick feature
50T:129	B	wall	50T:162	G	brick collapse
50T:130	B	wall	50T:163	G	wall
50T:131	B	wall	50T:164	G	bench
50T:132	B	wall	50T:165	G	ashy courtyard layer
50T:133	B	wall	50T:166	G	room deposit
			50T:167	G	wall
			50T:168	G	hearth
			50T:169	H	burnt courtyard layer
			50T:170	H	grey/brown layer
			50T:171	E	?
			50T:172	F	grave deposit

50T:173	F	grave	50U:145	B	stones
50T:174	K	wall	50U:146	B	stones
50T:175	K	floor	50U:147	C	external ashy & green deposits
50T:176	K	wall	50U:148	B	wall
50T:177	L	crumbly brown layer	50U:149	C	wall
50T:178	L	grey layer, charcoal and ash	50U:150	C	whitish floor
50T:179	L	wall	50U:151	C	wall
50T:180	L	wall	50U:152	C	blocked door
50T:181	L	floor	50U:153	B	deposit
50T:182	M	brown layer and grey lens	50U:154	B	external yellow surface
50T:183	M	upper deposit of pit	50U:155	C	ashy deposit
50T:184	M	lower deposit of pit	50U:156	B	wall foundation
50T:185	M	brown layer on virgin soil	50U:157	C	drain?
50U:101	A	Ninevite 5 mound surface	50U:158	C	wall
50U:102	A	grey/brown deposit	50U:159	C	ashy layer
50U:103	A	crumbly brown deposit	50U:160	C	wall foundation
50U:104	A	grey deposit	50U:161	D	ashy layer
50U:105	A	wall	50U:162	C	wall
50U:106	A	wall foundation	50U:163	C	pebbles
50U:107	A	stones	50U:164	C/D	ashy layers
50U:108	A	wall	50U:165	E	bricks
50U:109	A	blue/grey deposit	50U:166	D	stone paving
50U:110	A	stones	50U:167	D	wall
50U:111	A	wall foundation	50U:168	E	pebble pavement
50U:112	A	wall foundation	50U:169	E	thick green deposit
50U:113	A	stone footings	50U:170	D/E	wall
50U:114	A	stones	50U:171	D	wall
50U:115	A	wall foundation	50U:172	E	pit
50U:116	A	stones	50U:173	E	patchy grey surface
50U:117	A	pit	50U:174	H	brick tumble
50U:118	A	grey deposit	50U:175	H	wall
50U:119	A	wall foundation	50U:176	G/H	brick tumble
50U:120	A	stones	50U:177	H	burnt debris above floor
50U:121	A	stones	50U:178	H	stones
50U:123	A/B	brown deposit	50U:179	H	wall
50U:124	A	grey deposit	50U:180	F	grave
50U:125	A/B	grey clayey deposit	50U:181	H	grey surface
50U:126	B	pebbles	50U:182	H	pot pit
50U:127	B	deposit	50U:183	H	plaster floor
50U:128	A	wall	50U:184	H	plaster layer in courtyard
50U:129	B	banded grey deposit	50U:185	H	wall
50U:130	B	grey layer & eroded brick	50U:186	G	wall
50U:131	A	wall foundation	50U:187	G	plaster floor
50U:132	B	external greenish layers	50U:188	H	courtyard deposit
50U:133	B	grave	50U:189	I	wall
50U:134	B	stones	50U:190	H	step
50U:135	B/C	wall	50U:191	I	step
50U:136	B	plaster floor	50U:192	I	plaster floor
50U:137	B	brown & green deposit	50U:193	H	courtyard deposit
50U:138	B	ashy depression	50U:194	H	courtyard deposit
50U:139	B	wall	50U:195	H	pit
50U:140	C	pot pit	50U:196	I	wall
50U:141	C	grey floor	50U:197	I	pebble surface
50U:142	C	wall	50U:198	I	surface
50U:143	D	grey/green deposit	50U:199	I	plaster in courtyard
50U:144	B	pebbles	50U:200	K	reddish/brown layer

50U:201	K	burnt thin layer	50V:143	I	wall/bench?
50U:203	K	wall	50V:144	I	equals wall 51T:101
50U:204	K	hearth	51T:102	A	brick tumble
50U:205	K	kiln refuse	51T:103	A	brick tumble
50U:206	L	crumbly brown layer	51T:104	A	stones
50U:207	K	brown room deposit	51T:105	A	clay courtyard surface
50U:208	K	black ashy lens	51T:106	A	hearth
50U:209	M	grey silty layer	51T:107	A	wall
50U:210	K	wall	51T:108	A	wall foundation
50U:211	L	red floor	51T:109	A	pit
50U:212	L	orange bricky material	51T:110	B	brick tumble
50U:213	L	wall	51T:111	A	pit
50U:214	L	bricky material, incl. wall.	51T:112	B	pebble courtyard surface
50U:215	M	layers to virgin soil	51T:113	B	wall
50V:101	A	Ninevite 5 mound surface	51T:114	B	wall
50V:102	A	brick tumble	51T:115	B	ashy courtyard deposit
50V:103	A	pit	51T:116	C	dirty courtyard deposit
50V:104	A	deposit	51T:117	C/D	mud courtyard surface
50V:105	A	grey/green deposit	51T:118	D	pit
50V:106	A	brown deposit	51T:119	D	ashy courtyard deposit
50V:107	A	grey layer	51T:120	D	mud platform
50V:108	A	burnt surface	51T:121	D	grey courtyard deposit
50V:109	B	grey & brown deposit	51T:122	B	plaster floor
50V:110	B	grey deposit	51T:123	D	pit
50V:111	B	wall	51T:124	D	stake hole
50V:112	B	wall foundation	51T:125	D	stake hole
50V:113	B/C	hard brown bricky deposit	51T:126	D	brick feature
50V:114	C	grey deposit	51T:127	B	wall
50V:115	B	wall foundation	51T:128	D/E	brick deposit in courtyard
50V:116	D	yellow surface	51T:129	E	<i>tannur</i> base
50V:117	A	pit	51T:130	E	mud courtyard deposit
50V:118	B	wall foundation	51T:131	E	worm track
50V:119	C/D	deposit	51T:132	E	ashy courtyard deposit
50V:120	D/E	banded brown clay	51T:133	E	courtyard deposit
50V:121	E	brick tumble	51T:134	E	ash & mud courtyard
50V:122	E/H	brick tumble	51T:135	E	mud courtyard deposit
50V:123	F	grave deposit	51T:136	E	mud platform
50V:124	G	grey ash	51T:137	E	mud platform
50V:125	G	wall	51T:138	E	mud platform
50V:126	H	patchy grey surface	51T:139	E	courtyard deposit
50V:127	H	plaster floor	51T:140	E	wall
50V:128	H	wall	51T:141	E	bin
50V:129	H	wall	51T:142	E	grey courtyard deposit
50V:130	H	wall	51T:143	E/G	eroded brown material
50V:131	I	brick tumble in room	51T:144	G	brown courtyard deposit
50V:132	I	plaster floor	51T:145	G	clay feature in courtyard
50V:133	I	wall	51T:146	H	brown deposit in courtyard
50V:134	I	pit	51T:147	H	burnt courtyard
50V:135	J	reddish layer	51T:149	I	red courtyard
50V:136	J	orange layer	51T:150	K	wall
50V:137	I	brown deposit	51T:151	K	pit
50V:138	L	crumbly brown layer.	51T:152	K	stones
50V:139	L	grey layer	51T:153	K	pit
50V:140	L	grave	51T:154	K	wall
50V:141	M	layers above virgin soil	51T:155	K	floor
50V:142	I	wall foundation	51T:156	K	brown courtyard deposit

51T:157	L	crumbly brown layer	51U:155	D/E	brick deposit in courtyard
51T:159	L	wall	51U:156	D	wall
51T:160	L	grey courtyard deposit	51U:157	C/D	threshold & entrance
51T:161	L	bricky material, incl. wall.	51U:158	D	floor packing?
51T:162	M	layers above virgin soil	51U:160	E	brick tumble in room
51U:101	A	Ninevite 5 mound surface	51U:161	E	ashy courtyard deposit
51U:102	A	brick tumble	51U:162	E	wall
51U:103	A	ashy layer	51U:163	E	occupation in courtyard
51U:104	A	wall	51U:164	E	grey courtyard deposit
51U:105	A	plaster floor	51U:165	E	plaster floor
51U:106	A	wall	51U:166	E	mud courtyard deposit
51U:107	A	stones in wall	51U:167	E	brick between floors
51U:108	A	brick tumble	51U:168	E	courtyard deposit
51U:109	A	wall	51U:169	H	brick tumble
51U:110	A	hearth	51U:170	H	brick collapse
51U:111	A	clay & stones	51U:171	H	plaster floor
51U:112	B	wall	51U:172	E	mud courtyard deposit
51U:113	A	stones	51U:173	E/H	levelling material
51U:114	A	stones	51U:174	E	mud courtyard deposit
51U:115	A	wall foundation	51U:176	F	grave
51U:116	A	courtyard surface	51U:178	H	hearth
51U:117	A	fill of doorway in Wall 106	51U:179	I	occupation between floors
51U:118	B	room deposit	51U:180	H	fire pit
51U:119	B	wall	51U:181	H	wall
51U:120	B	ashy floor	51U:182	I	plaster floor
51U:121	B	pit	51U:183	I	wall
51U:122	B	plaster floor	51U:184	I	wall
51U:123	A/B	stones	51U:185	H	brick step
51U:124	A/B	brown clay	51U:186	H	bench/step
51U:125	A	clay layers	51U:187	I	plaster courtyard deposit
51U:126	B	pit	51U:188	I	step
51U:127	B	pebbles	51U:189	H	burnt courtyard deposit
51U:128	A/B	brick tumble	51U:190	J	courtyard deposit
51U:129	A	wall foundation	51U:191	I	pot pit
51U:130	B	wall	51U:192	J	brown/orange layer
51U:131	B	pebble courtyard deposit	51U:193	J	wall
51U:132	B	grey ashy courtyard deposit	51U:194	J	wall
51U:133	C	brown courtyard deposit	51U:195	L	crumbly brown layer
51U:134	C	bins	51U:196	J	wall
51U:135	B	wall	51U:197	J/K	whitish layer
51U:136	C	ashy courtyard deposit	51U:198	K	grey ashy
51U:137	C	fill of doorway in Wall 134	51U:199	L	mottled layer of fallen brick
51U:138	C	plaster floor	51U:200	L	wall
51U:139	B	pit	51U:201	J	wall
51U:140	B	plaster floor	51U:202	L	red floor
51U:141	C	dirty surface	51U:203	L	wall
51U:142	B	wall	51U:204	M	ash above virgin soil
51U:143	C/D	floors	51U:205	M	layers above virgin soil
51U:144	C/D	courtyard deposits	51U:206	J	grave
51U:145	C/D	green clay courtyard deposit	51U:207	M	Virgin soil
51U:147	D	hearth	51V:101	A	Ninevite 5 mound surface
51U:149	D	bricky deposit	51V:102	A	brick tumble
51U:150	D	brick floor	51V:103	A	wall
51U:151	D	plaster floors	51V:104	A	wall
51U:152	D	hearth	51V:105	A	ashy grey
51U:153	D	wall	51V:106	A	bricky brown

51V:107	A	plaster floor	51V:165	J	white layer
51V:108	A	between stones	51V:167	J	grey ashy
51V:109	B/C	wall	51V:168	J	grave
51V:110	B	wall foundation	51V:169	J	wall
51V:111	B	room deposit	51V:170	J	wall
51V:112	B	brown clay	51V:171	J	wall
51V:113	B	wall	51V:172	J	grey lens
51V:114	B	ashy floor	51V:173	J	grave
51V:115	B	plaster floor	51V:174	J	wall
51V:116	B	pit	51V:175	J	wall
51V:117	B	pit	51V:176	K	ash layer
51V:118	C	brick box	51V:177	L	brown crumbly layer
51V:119	C	room deposit	51V:178	L	red/orange layer
51V:120	B	wall	51V:179	L	grey with some charcoal
51V:121	C	white surface	51V:180	J	stone footings
51V:122	C	wall	51V:181	M	brown layer above virgin soil
51V:123	B	pit	51V:182	M	ash on virgin soil
51V:124	C	wall	51V:183	M	virgin soil
51V:125	C/D	plaster floors	52V:101	A	eroded Ninevite 5 mound surface
51V:126	C/D	plaster floors	52V:102	A	eroded Ninevite 5 mound surface
51V:127	C	ashy lens	52V:103	A	grey and green silty.
51V:128	B	pit	52V:104	A	wall
51V:129	D	brown deposit	52V:105	A	layer running up to 52V:104
51V:130	D	surface	52V:106	A	burnt brick bin/hearth?
51V:131	D	white floor	52V:107	B	brick collapse
51V:132	D	wall	52V:108	B	wall
51V:133	D	bin	52V:109	B	ash layer
51V:134	D	brick deposit	52V:110	B	burnt plaster floor.
51V:135	D	plaster floor	52V:111	B	layers of fill
51V:136	E	orange deposit	52V:115	B	plaster floors
51V:137	D	mud surface	52V:112	C	ash layer
51V:138	D	floor packing?	52V:113	C	compacted brown bricky
51V:139	D/E	grey ashy	52V:114	C	wall
51V:140	E	wall	52V:116	C	ashy line
51V:141	E	brick collapse & surface			
51V:142	E	grey mud			
51V:143	E	brick bin			
51V:144	E	plaster floor			
51V:145	E	mud deposit			
51V:147	E	plaster floor			
51V:149	H	brick collapse			
51V:150	H	wall			
51V:151	H	brick collapse			
51V:152	G	ashy occupation			
51V:153	H	plaster floor			
51V:154	F	rubble			
51V:155	H	plaster surface			
51V:156	H	brick bench			
51V:157	H	hearth			
51V:158	I	occupation above floor			
51V:159	I	plaster floor			
51V:160	I	wall			
51V:161	I	hearth			
51V:162	I	plaster floor			
51V:163	I	wall			
51V:164	I	hearth			

Appendix 4: Concordance of Illustrated Small Finds

BY OBJECT NUMBER

Object No.	Figure No.	Description	MA Level	Page No.	Object No.	Figure No.	Description	MA Level	Page No.
50T:101.01	3.4a	Animal figurine	A	45	50U:169.03	3.7e	Limestone grinder	E	49
50T:120.01	3.1l	Bone toggle	A/B	39	50U:172.01	3.3f	Sealing	E	43
50T:120.03	3.2f	Cu pin	A/B	41	50U:176.01	3.7d	Limestone grinder	G/H	49
50T:124.02	3.5b	Shell bead	B	47	50U:180.02	2.29, 3.1k	Bone needle	F	21,39
50T:124.03	3.3i	Sealing	B	43	50U:191.01	3.6h	Spindle whorl	I	47
50T:125.02	3.2i	Cu pin	B	41	50U:194.01	3.6a	Beads	H	47
50T:126.01	3.4h	Clay disk	B	45	50U:197.01	3.1c	Bone pin	I	39
50T:135.01	37j	Door Socket	B	49	50U:206.01	3.6c	Stone bead	L	47
50T:140.01	3.69	Stone axe	C	47	50V:103.05	3.3c	Stamp impression	A	43
50T:151.01	3.2g	Cu pin	D	41	50V:123.01	2.30, 3.2e	Cu pin	F	21, 41
50T:151.05	3.2c	Cu pin	D	41	51T:110.01	3.7h	Quern stone	C/D	49
50T:158.02	3.3d	Clay stamp	E	43	51T:112.01	3.4d	Clay bead	C/D	45
50T:158.03	3.7f	Limestone grinder	E	49	51T:117.02	3.1f	Bone pin	C/D	39
50T:162.01	3.3a	Sealing	G	43	51T:117.05	3.7b	Stone pounder	C/D	49
50T:172.04	2.27, 3.2d	Cu pin	F	19, 41	51T:117.07	3.2h	Cu pin	C/D	41
50T:172.05	2.27	Natural pebble. Used as jar stopper	F	19	51T:120.01	3.1d	Bone pin	D	39
50U:101.01	3.7a	Stone pounder	A	49	51T:133.01	3.1h	Bone awl	E	39
50U:118.02	3.2a	Cu pin	A	41	51T:133.02	3.4b	Animal figurine	E	45
50U:132.01	3.1a	Bone pin	B	39	51T:139.02	3.3e	Sealing	E	43
50U:143.01	3.1e	Bone pin	D	39	51T:139.03	3.4e	Clay bead	E	45
50U:147.03	3.4g	Round clay ball	C	45	51T:141.02	3.6f	Stone pendant	E	47
50U:148.01	3.5e	Shell bead	B	47	51T:161.01	3.7c	Stone pounder	L	49
50U:154.01	3.5a	Shell bead	B	47	51U:116.01	3.6d	Stone bead	A	47
50U:161.02	3.1j	Bone awl	D	39	51U:120.02	3.1m	Bone disc	B	39
50U:168.03	3.4	Clay spindle	E	45	51U:137.01	3.5d	Shell bead	C	47
50U:168.04	3.2b	Cu pin	E	41	51U:164.01	3.4l	Clay spindle	E	45
50U:169.01	3.1b	Bone pin	E	39	51U:170.01	3.1i	Bone tool	H	39
50U:169.02	3.3h	Sealing	E	43	51U:171.01	3.1o	Bone tool	H	39
					51U:172.01	3.4j	Clay spindle	H	45

Object No.	Figure No.	Description	MA Level	Page No.
51U:179.02	3.3g	Sealing	I	43
51U:192.01	3.6b	Stone bead	J	47
51V:105.01	3.4m	Clay wheel	A	45
51V:107.01	3.6e	Bead?	A	47
51V:119.01	3.4f	Sherd pendant	C	45
51V:119.02	3.7i	Door socket	C	49
51V:129.01	3.2j	Cu arrowhead	D	41
51V:132.01	3.4c	Animal figurine	D	45
51V:136.01	3.4k	Clay spindle	E	45
51V:148.01	3.79	Limestone grinder	E	49
51V:150.02	3.5c	Shell bead	H	47
51V:152.01	3.3b	Seal impression	G	43
51V:168.02	2.14a	Dentalium bead	J	12
51V:168.02	2.14b	Frit (sintered quartz) bead	J	12
51V:168.02	2.14c	Two frit (sintered quartz) beads fused(?) together	J	12
51V:168.02	2.14d	Fused frit (sintered quartz) beads	J	12
51V:168.03	2.14	Polished pebble	J	12
51V:173.03	2.15a, 3.1n	Bone bead	J	13, 39
51V:173.03	2.15b	Frit (sintered quartz) bead	J	13
51V:173.03	2.15c	Dentalium bead	J	13
51V:173.03	2.15d	Fused frit (sintered quartz) beads	J	13
51V:182.01	3.1g	Bone point	M	39

BY LEVEL

MA Level	Object No.	Figure No.	Description	Page No.
A	50T:101.01	3.4a	Animal figurine	45
A	50U:101.01	3.7a	Stone pounder	49
A	50U:118.02	3.2a	Cu pin	41
A	50V:103.05	3.3c	Stamp impression	43
A	51U:116.01	3.6d	Stone bead	47
A	51V:105.01	3.4m	Clay wheel	45
A	51V:107.01	3.6e	Bead?	47
A/B	50T:120.01	3.1l	Bone toggle	39
A/B	50T:120.03	3.2f	Cu pin	41
B	50T:124.02	3.5b	Shell bead	47

MA Level	Object No.	Figure No.	Description	Page No.
B	50T:124.03	3.3i	Sealing	43
B	50T:125.02	3.2i	Cu pin	41
B	50T:126.01	3.4h	Clay disk	45
B	50T:135.01	3.7j	Door Socket	49
B	50U:132.01	3.1a	Bone pin	39
B	50U:148.01	3.5e	Shell bead	47
B	50U:154.01	3.5a	Shell bead	47
B	51U:120.02	3.1m	Bone disc	39
C	50T:140.01	3.69	Stone axe	47
C	50U:147.03	3.4g	Round clay ball	45
C	51U:137.01	3.5d	Shell bead	47
C	51V:119.01	3.4f	Sherd pendant	45
C	51V:119.02	3.7i	Door socket	49
C/D	51T:110.01	3.7h	Quern stone	49
C/D	51T:112.01	3.4d	Clay bead	45
C/D	51T:117.02	3.1f	Bone pin	39
C/D	51T:117.05	3.7b	Stone pounder	49
C/D	51T:117.07	3.2h	Cu pin	41
D	50T:151.01	3.2g	Cu pin	41
D	50T:151.05	3.2ç	Cu pin	41
D	50U:143.01	3.1e	Bone pin	39
D	50U:161.02	3.1j	Bone awl	39
D	51T:120.01	3.1d	Bone pin	39
D	51V:129.01	3.2j	Cu arrowhead	41
D	51V:132.01	3.4c	Animal figurine	45
E	50T:158.02	3.3d	Clay stamp	43
E	50T:158.03	3.7f	Limestone grinder	49
E	50U:168.03	3.4	Clay spindle	45
E	50U:168.04	3.2b	Cu pin	41
E	50U:169.01	3.1b	Bone pin	39
E	50U:169.02	3.3h	Sealing	43
E	50U:169.03	3.7e	Limestone grinder	49
E	50U:172.01	3.3f	Sealing	43
E	51T:133.01	3.1h	Bone awl	39
E	51T:133.02	3.4b	Animal figurine	45
E	51T:139.02	3.3e	Sealing	43
E	51T:139.03	3.4e	Clay bead	45
E	51T:141.02	3.6f	Stone pendant	47
E	51U:164.01	3.4l	Clay spindle	45
E	51V:136.01	3.4k	Clay spindle	45
E	51V:148.01	3.79	Limestone grinder	49
F	50T:172.04	2.27, 3.2d	Cu pin	19, 41
F	50T:172.05	2.27	Natural pebble. Used as jar stopper	19

MA Level	Object No.	Figure No.	Description	Page No.
F	50U:180.02	2.29, 3.1k	Bone needle	21,39
F	50V:123.01	2.30, 3.2e	Cu pin	21, 41
G	50T:162.01	3.3a	Sealing	43
G	51V:152.01	3.3b	Seal impression	43
G/H	50U:176.01	3.7d	Limestone grinder	49
H	50U:194.01	3.6a	Beads	47
H	51U:170.01	3.1i	Bone tool	39
H	51U:171.01	3.1o	Bone tool	39
H	51U:172.01	3:4j	Clay spindle	45
H	51V:150.02	3.5c	Shell bead	47
I	50U:191.01	3.6h	Spindle whorl	47
I	50U:197.01	3.1c	Bone pin	39
I	51U:179.02	3.3g	Sealing	43
J	51U:192.01	3.6b	Stone bead	47
J	51V:168.02	2.14a	Dentalium bead	12
J	51V:168.02	2.14b	Frit (sintered quartz) bead	12
J	51V:168.02	2.14c	Two frit (sintered quartz) beads fused(?) together	12
J	51V:168.02	2.14d	Fused frit (sintered quartz) beads	12
J	51V:168.03	2.14	Polished pebble	12
J	51V:173.03	2.15a, 3.1n	Bone bead	13, 39
J	51V:173.03	2.15b	Frit (sintered quartz) bead	13
J	51V:173.03	2.15c	Dentalium bead	13
J	51V:173.03	2.15d	Fused frit (sintered quartz) beads	13
L	50U:206.01	3.6c	Stone bead	47
L	51T:161.01	3.7c	Stone pounder	49
M	51V:182.01	3.1g	Bone point	39

Appendix 5: Staff List



Back row: Marcus Woodburn, Caroline Davies, Michael Roaf, David Tucker, St John Simpson, Tessa Rickards, Mike Charles
Front row: Susan Gill, Susan Roaf, Gary Evans, Dianna Bolt, Kirsty Norman.

Douglas Baird
Warwick Ball
Jeremy Black
Dianna Bolt
Peter Boorman
Robert Britton

Mike Charles
Tim Clayden
Caroline Davies
Gaynor Duff
Gary Evans

Susan Gill
Anthony Green
Alistair Killick
Robert Killick
Jeremy Marriott

Donald Matthews
Robert Miller
Jane Moon
Kirsty Norman
Tessa Rickards

James Roaf
Michael Roaf
Susan Roaf
Marie Saacke
St John Simpson

Francoise Summers
Geoffrey Summers
David Tucker
Ken Uprichard
Marcus Woodburn

Appendix 6: Pottery and Finds arranged by Level and Excavation Unit

The material presented in this appendix comprises all the drawn pottery sherds and finds from the Ninevite 5 Sounding. They have been arranged by level from bottom to top (Levels M–A), then within each level by square in the order 50T, 50U, 50V, 51T, 51U, 51V, and within each square by unit number from low to high.

All small finds were drawn. All diagnostic sherds were also drawn. For Ninevite 5 decorated pottery, this included painted, incised and excised sherds with a recognisable, intact motif. Fragmentary decorated sherds were counted for each excavation unit and then discarded. All Fine Ware and Common Ware diagnostics were similarly recorded, with fragments counted.

Because of the accident of preservation, and the presence of residual sherds, no great reliability should be placed on the distribution of particular types.

For the sake of completeness, drawings of finds and pottery that appear in chapters 2–4 are also included in this appendix.

All drawings are at 1:2 unless otherwise specified on the illustration.

Abbreviations
Di. diameter
Veg. vegetal (of temper)
Ext. extant
Ht. height
L. length
W. width
Th. thickness
All measurements in centimetres.

Scale 2:1 2 cm
(Scale: 200%)

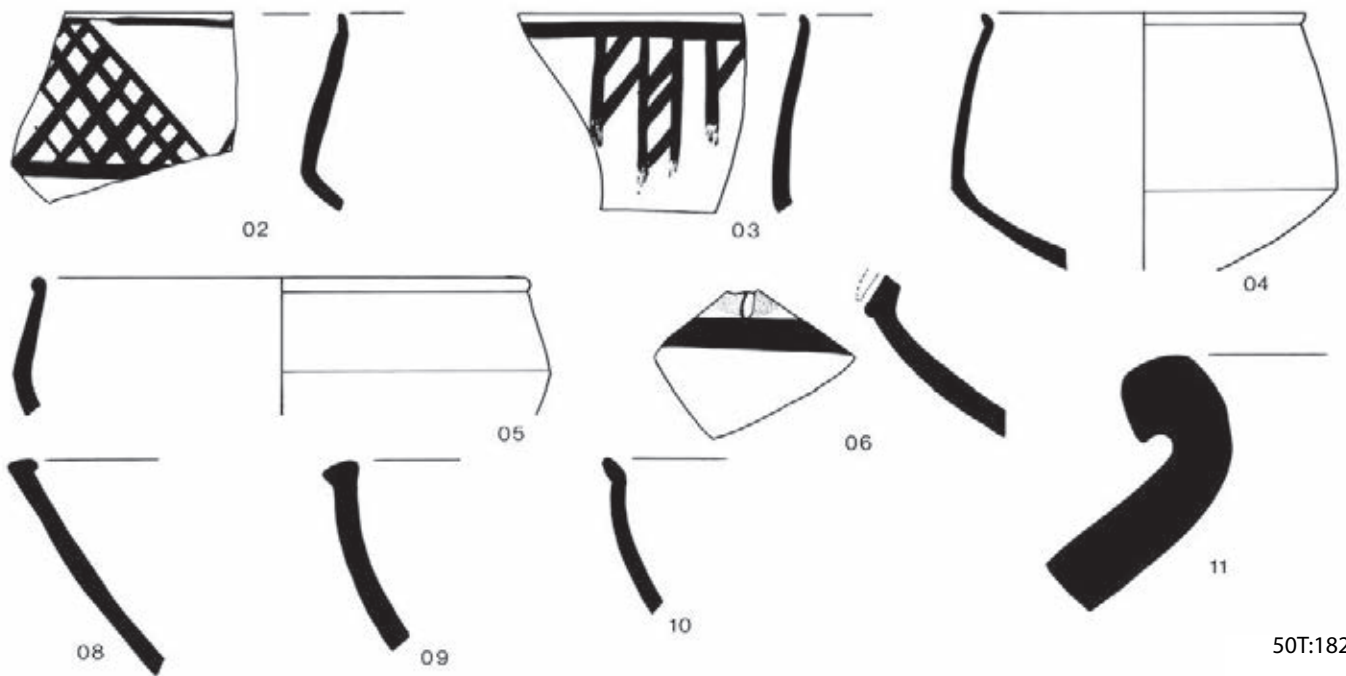
Scale 1:1 5 cm
(Scale: 100%)

Scale 1:2 5 cm
(Scale: 50%)

Scale 1:4 10 cm
(Scale: 25%)

Scale 1:8 20 cm
(Scale: 12.5%)

LEVEL M



50T:182

50T:182 (LEVEL M)

- 01 Bitumen sample.
 02 Surface: buff. Clay: pink. Temper: sparse white grit. Rim di. 7.5.
 03 Clay: pink. Temper: sparse white grit. Rim di. 10. Red/orange paint.
 04 Surface: buff. Clay: pink. Temper: grit. Rim di. 8.5–9.
 05 Surface: buff. Clay: pink. Temper: grit. Rim di. 13.
 06 Surface: buff. Clay: pink. Temper: grit. Red paint, remnant of lug.
 07 Not used.
 08 Surface: buff. Clay: pink. Temper: white grit. Rim di. 21.
 09 Surface: brown. Clay: pink. Temper: grit. Rim di. 23–24.
 10 Surface: buff. Clay: pink. Temper: white grit. Rim di. 17.
 11 Surface: buff. Clay: pink with grey core. Temper: grit & veg.

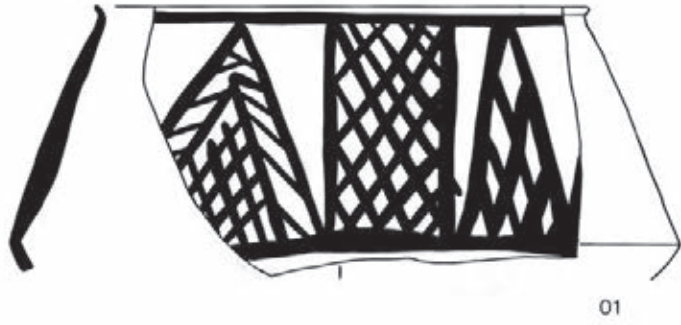
50T:183 (LEVEL M)

- 01 Surface: buff. Clay: pink. Temper: grit. Rim di. 13. Red paint.
 02 Clay: overfired green. Temper: none visible. Rim di. 9–11. Black paint.

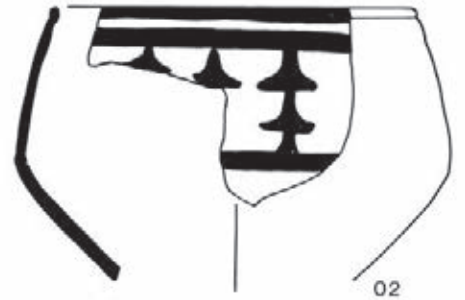
- 03 Surface: buff. Clay: pink. Temper: fine grit, white mica. Rim di. 7.5. Ht. 6.9. Red paint.
 04 Surface: buff/brown. Clay: pink. Temper: ? Rim di. 17. Red paint.
 05 Surface: buff/brown. Core: black. Temper: heavy coarse grit.
 06 Surface: buff. Clay: pink. Temper: white grit. Rim di. 15. Ht. 8.6. Red striations on interior surface.
 07 Clay: buff with grey core. Temper: grog and grit. Rim di. 13. Red paint.
 08 Clay: buff/brown. Temper: sparse grit, some veg. Rim di. 14.
 09 Surface: buff. Clay: pink. Temper: grit. Rim di. c.14.
 10 Surface: buff. Clay: pink. Temper: grit. Scored horizontal lines.

50U:209 (LEVEL M)

- 01 Surface: buff/green. Clay: pink. Temper: grit. Dark brown paint. Three vertical applied ridges.



01



02



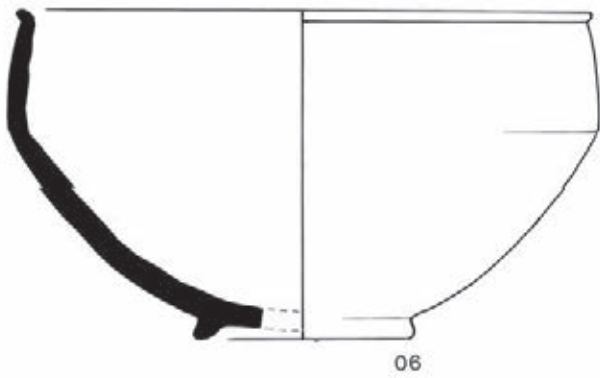
03



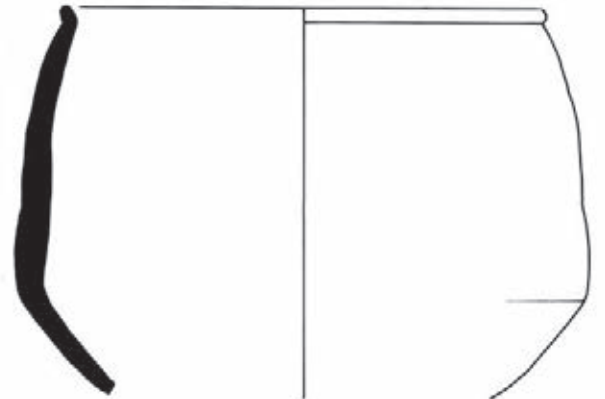
04



05



06



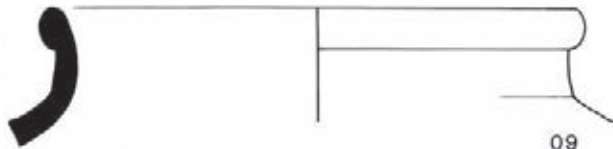
07



08



10



09

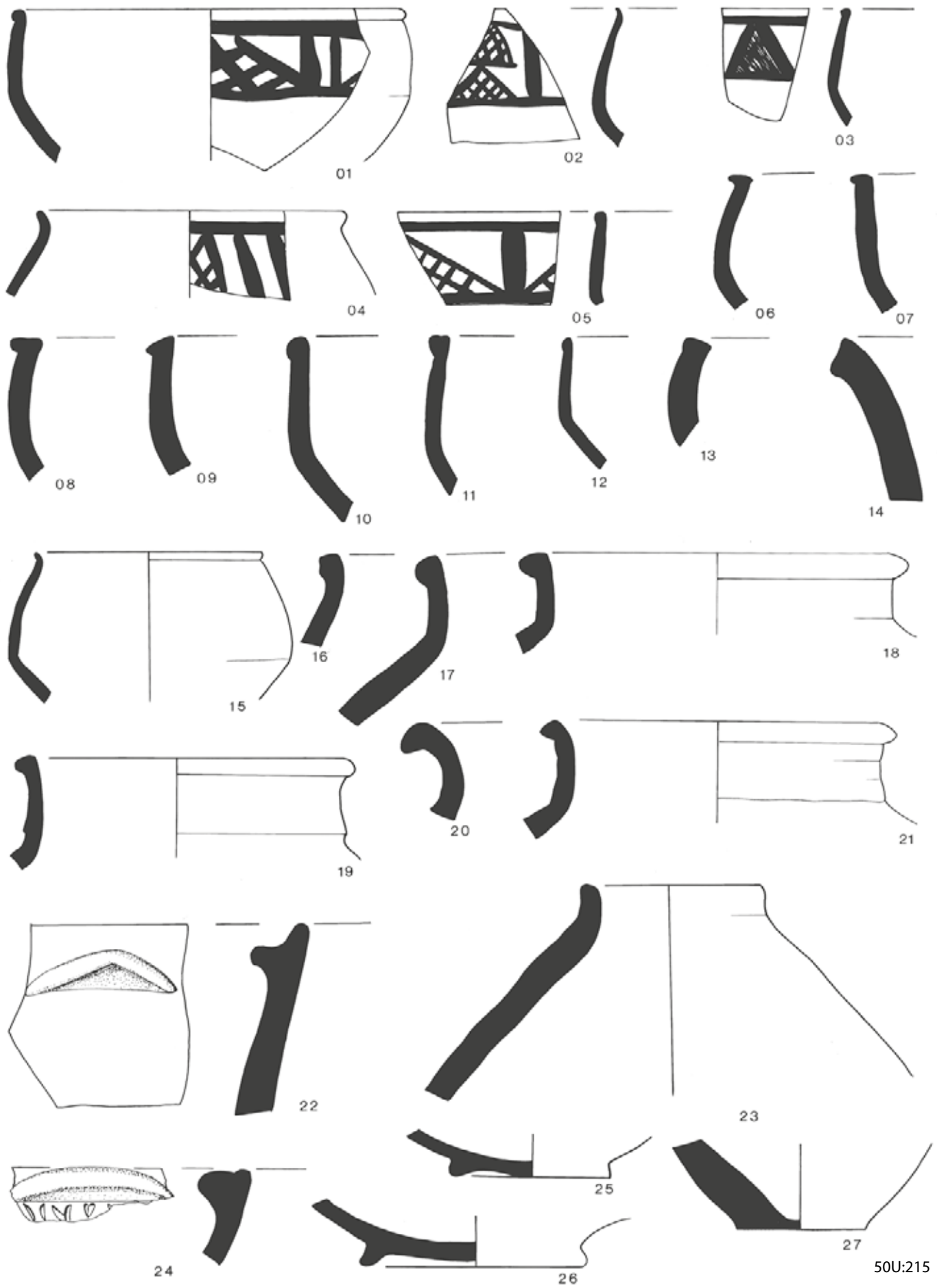
50T:183

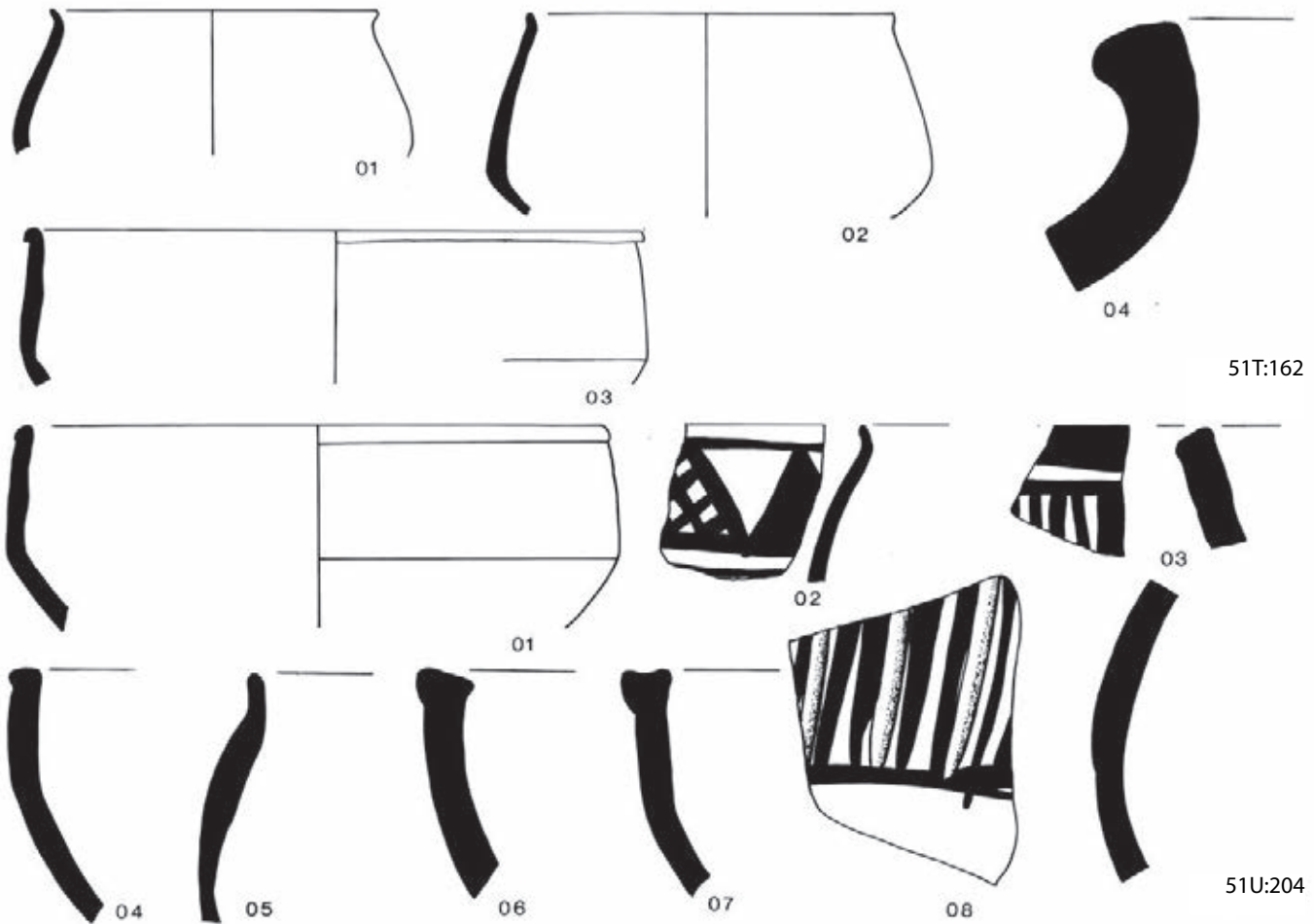


01



50U:209



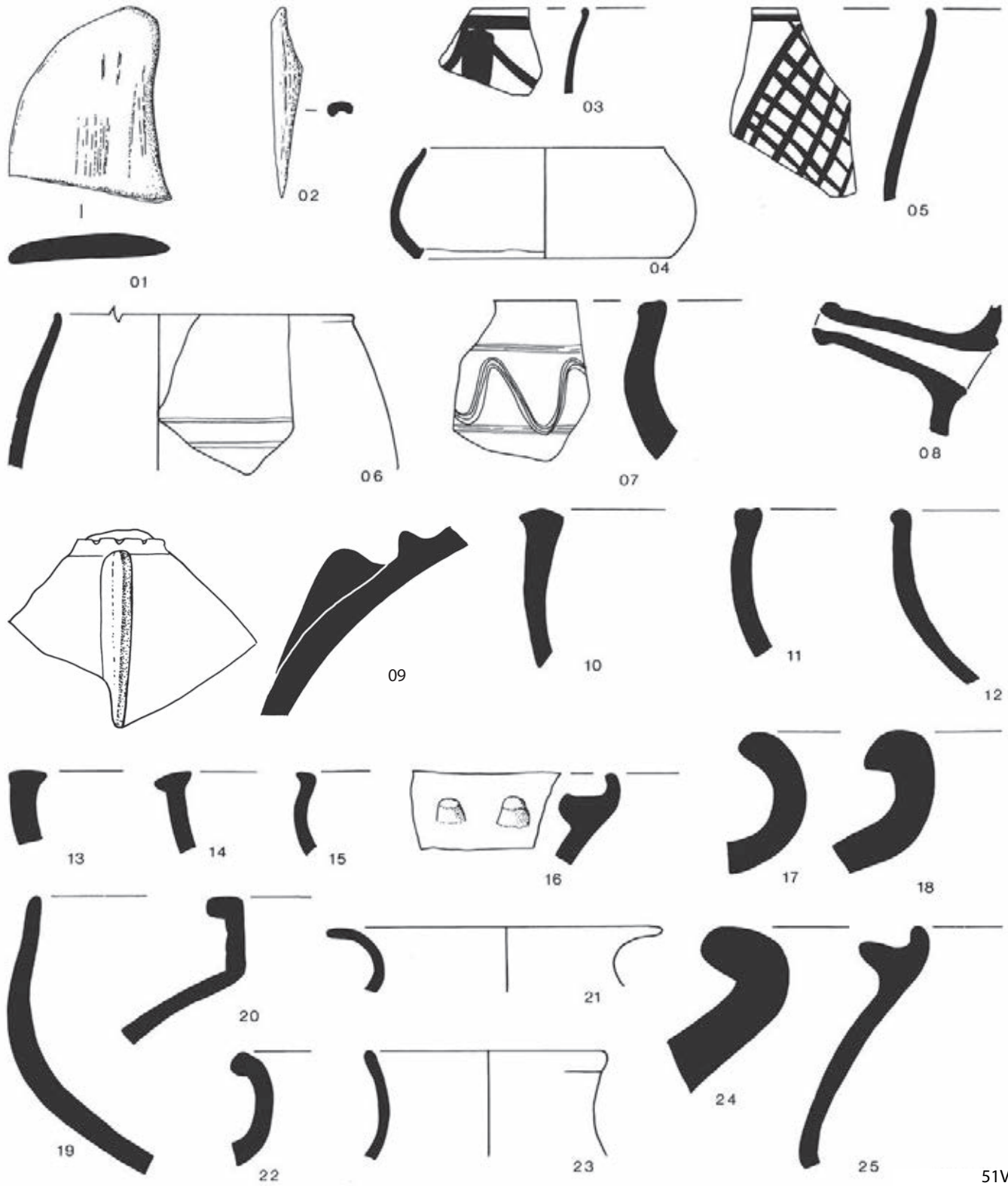


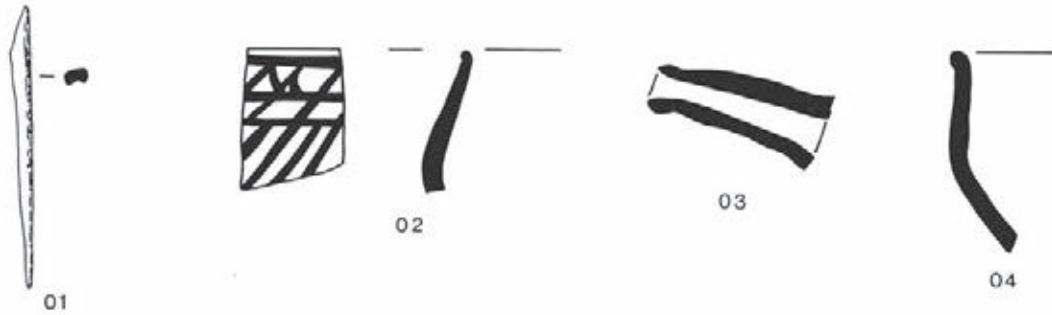
50U:215 (LEVEL M)

- 01 Clay: pink. Temper: grit. Rim di. 15. Paint.
 02 Surface: pink. Clay: buff. Paint.
 03 Surface: brown. Clay: pink. Temper: grit. Rim di. 14. Red paint. Temper: none visible. Rim di. 13.
 04 Surface: buff. Clay: pink. Temper: grit. Rim di. 12. Paint.
 05 Surface: buff/cream. Clay: pink. Temper: grit. Rim di. 19. Red paint.
 06 Surface: buff. Clay: pink. Temper: grit.
 07 Surface: buff/brown. Clay: pink. Temper: grit. Rim di. c.20.
 08 Surface: buff. Clay: pink. Temper: grit. Rim di. 36-38.
 09 Surface: buff. Clay: pink. Temper: grit. Rim di. 35.
 10 Surface: brown. Clay: pink. Core: grey. Temper: heavy white & black grits. Rim di. 28.
 11 Surface: pink/brown. Clay: pink. Core: grey. Temper: heavy veg. & fine white grit. Rim di. 25.
 12 Surface: buff/brown. Clay: pink. Core: grey. Temper: white grit. Rim di. 14.
 13 Surface: buff/brown. Clay: pink. Core: grey. Temper: grit. Rim di. 28.
 14 Clay: green. Temper: Heavy veg.
 15 Surface: buff. Clay: pink. Temper: white grit & some fine veg. Rim di. 9.
 16 Surface: buff. Clay: pink. Temper: heavy medium/coarse grit. Rim di. c.33.
 17 Surface: pink/brown. Clay: pink. Temper: black & white grit. Rim di. 14.
 18 Surface: buff/brown. Clay: pink. Core: grey. Temper: very heavy white grit & some veg. Rim di. 14.
 19 Surface: green. Clay: pink. Temper: fine veg. & some grit. Rim di. 13.

- 20 Surface: buff. Clay: pink. Core: grey. Temper: grit.
 21 Surface: black. Clay: brown. Temper: heavy white & black grit. Rim di. 13.
 22 Clay: black. Temper: large grit.
 23 Surface: buff/brown. Clay: light brown. Temper: fine grit & veg. Rim di. c.7.
 24 Clay: brown. Temper: grit. Lug off cooking pot.
 25 Surface: buff/brown. Clay: pink. Core: grey. Temper: heavy white grits. Base di. c.6.
 26 Surface: buff. Clay: pink. Temper: grit. Base di. c.8.5.
 27 Surface: brown. Clay: buff. Temper: fine white grit & veg. Base di. 5.
51T:162 (LEVEL M)

- 01 Surface: brown. Clay: pink. Temper: fine grit. Rim di. 9.
 02 Surface: buff. Clay: pink. Temper: grit. Rim di. c.10.
 03 Surface: buff. Clay: pink. Temper: grit. Rim di. 17.
 04 Surface: buff. Clay: pink. Temper: grit, occasional large
51U:204 (LEVEL M)
 01 Surface: buff. Clay: pink. Temper: grit. Rim di. 16.
 02 Surface: buff. Clay: pink. Temper: fine grit. Rim di. c.11. Red paint.
 03 Surface: green. Clay: pink. Temper: fine veg. Purple paint.
 04 Surface: buff. Clay: pink. Temper: grit. Rim di. 38.
 05 Surface: buff. Clay: pink. Temper: grit. Handmade
 06 Surface: buff/brown. Clay: pink. Temper: white grit & veg. Rim di. c.38.
 07 Surface: buff. Clay: pink. Temper: grit. Rim di. 44.
 08 Surface: buff. Clay: pink. Temper: grit. Red paint.





51V:182

51V:181 (LEVEL M)

01 Pot scraper(?). Surface: bright red. Clay: pink. Temper: veg. Max. ht. 7.1. L. 5.9. Th. 0.8. Parallel scraping marks visible on flat side. Broken along bottom edge.

02 Bone point. Fragment. L. 6.9. max. w. 1.1.

03 Surface: brown. Clay: pink. Temper: sparse fine grit. Rim di. 21.

04 Clay: green. Temper: sparse fine grit & veg. Rim di. 8–9.

05 Surface: brown. Clay: pink. Temper: grit. Red paint.

06 Surface: brown. Clay: pink. Temper: grit & sparse fine veg. Rim di. 13–15. 2 shallow grooves.

07 Surface: brown. Clay: grey. Temper: grit. Rim di. 17–19.

08 Surface: buff. Clay: pink. Temper: grit. Bitumen lumps adhering to outside.

09 Surface: buff. Clay: pink. Temper: grit.

10 Surface: buff. Clay: pink. Temper: grit. Rim di. c.34.

11 Surface: buff. Clay: pink. Temper: grit. Rim di. c.28.

12 Surface: buff. Clay: pink. Temper: grit. Rim di. c.23.

13 Surface: pink. Clay: grey. Temper: fine grit. Rim di. +37.

14 Surface: buff. Clay: pink. Temper: grit. Rim di. +31.

15 Clay: grey. Temper: grit & veg. Rim di. c.15.

16 Surface: brown. Clay: grey. Temper: grit. Two clay knobs stuck to outside.

17 Surface: brown. Clay: pink. Temper: grit & veg. Rim di. c.17.

18 Surface: green. Clay: pink. Temper: coarse grit. Rim di. 23–25.

19 Surface: brown. Clay: pink. Temper: heavy white grit.

20 Surface: green. Clay: pink. Temper: heavy fine white grit. Rim di. c.17.

21 Clay: brown. Temper: fine grit & veg. Rim di. 11.

22 Surface: brown/pink. Clay: pink. Temper: white & black grits; sparse fine veg. Rim di. 13–14.

23 Surface: brown. Clay: pink. Temper: heavy black & white grit. Rim di. 8.5.

24 Surface: green. Clay: pink. Temper: coarse grit. Rim di. 23–25.

Handmade

25 Clay: brown. Core: black. Temper: coarse grit, grog & sparse veg. Handmade

51V:182 (LEVEL M)

01 Bone point. L. 7.8. Max. w. 0.5.

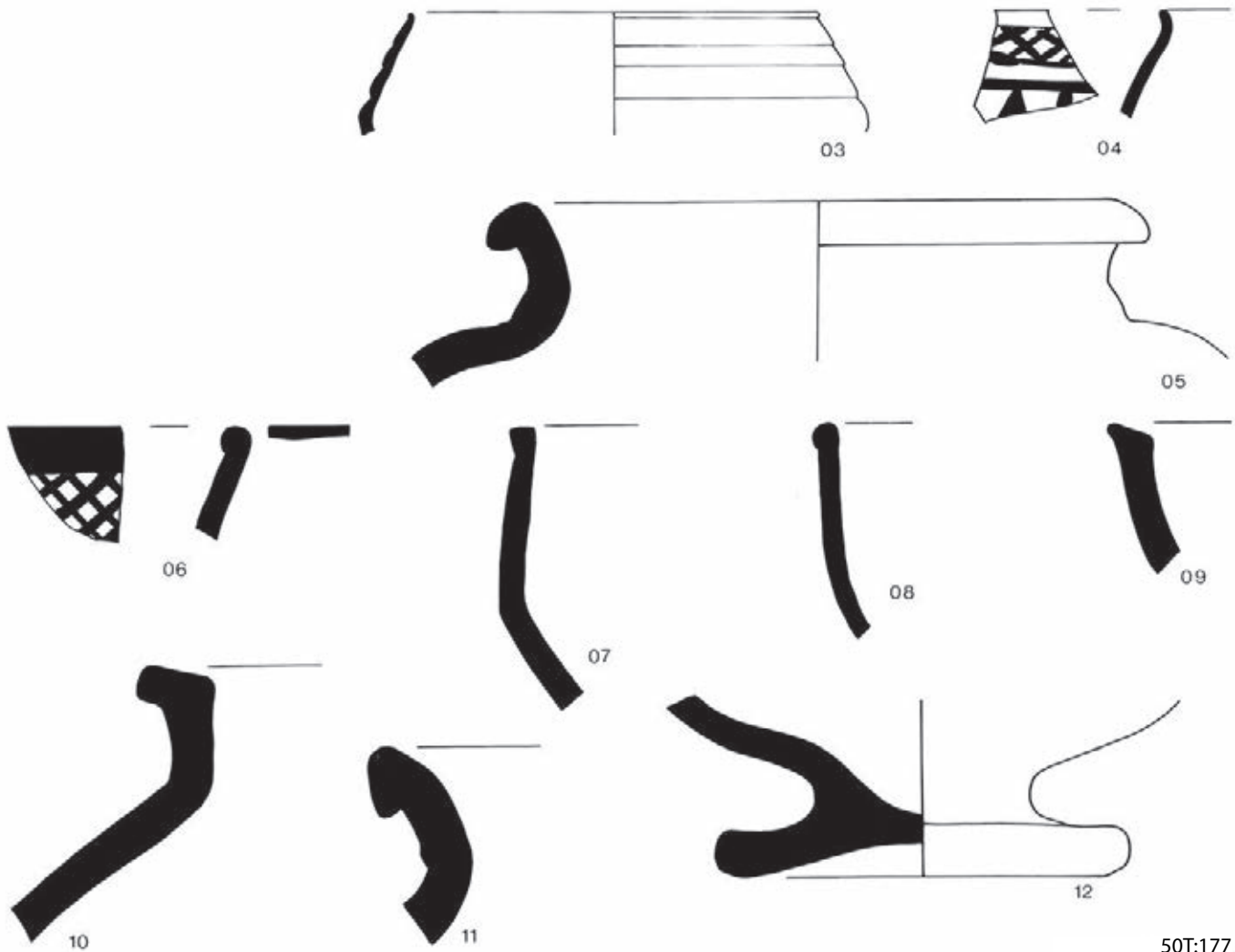
02 Surface: buff/brown. Clay: pink. Temper: heavy white grit pocking surface.

Red paint.

03 Clay: buff/brown.

04 Surface: buff/brown. Clay: pink. Temper: fine grit & veg. Rim di. 10.

LEVEL L



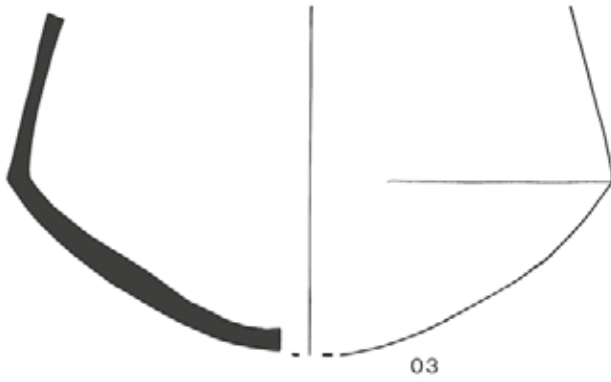
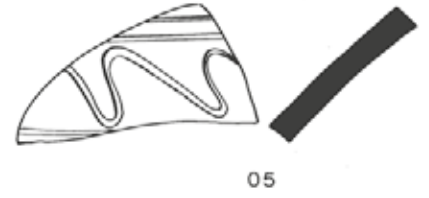
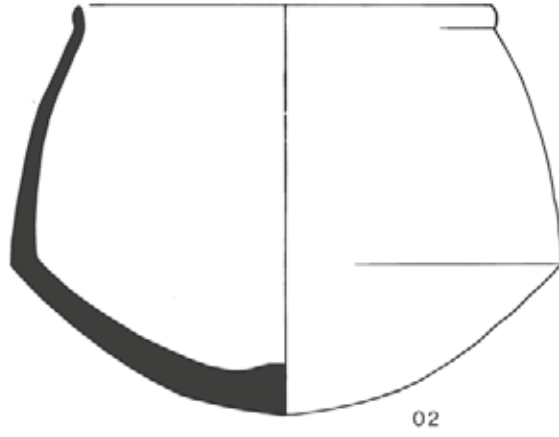
50T:177

50T:177 (LEVEL L)

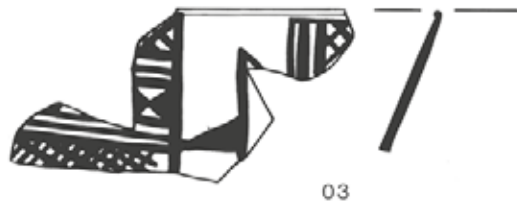
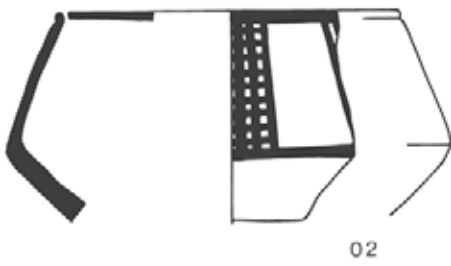
- 01 Carbon sample.
- 02 Shell (unworked).
- 03 Clay: green. Temper: none visible. Rim di. 12.
- 04 Surface: buff. Clay: pink. Temper: fine grit. Red paint.
- 05 Surface: buff. Clay: pink. Temper: white grit. Rim di. c.17. Bitumen splashes inside on neck.
- 06 Clay: green. Temper: veg. Dark red paint.
- 07 Surface: brown/buff. Clay: brown. Temper: fine veg.
- 08 Surface: buff. Clay: pink. Temper: grit. Rim di. 26.
- 09 Clay: pink/red with grey core. Temper: grit & veg. Rim di. 29–30.
- 10 Surface: buff. Clay: pink. Temper: heavy grit, fine/medium white grit. Rim di. 20–21.
- 11 Surface: buff/brown. Clay: pink. Temper: grit & veg. Rim di. 25.
- 12 Surface: pink. Clay: light brown. Temper: medium white grit, coarse grit & fine veg. Base di. c.12.

50U:206 (LEVEL L)

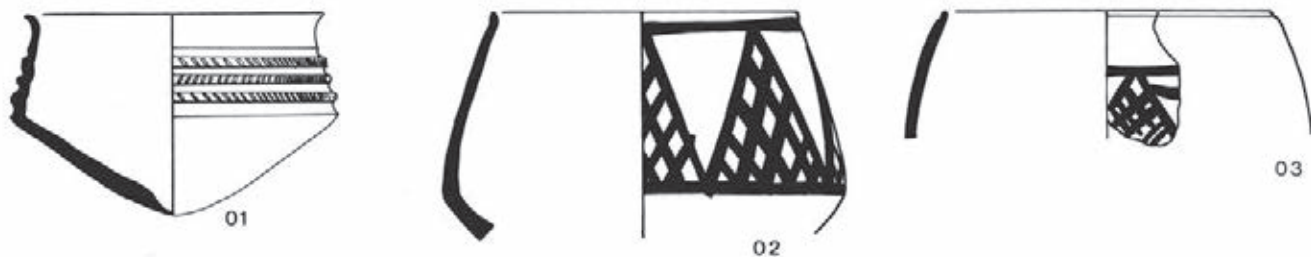
- 01 White stone bead. Ht. 0.32. Di. 0.30.
 - 02 Clay: red/yellow. Temper: fine veg. & fine grit. Rim di. 11. Ht. 10.9.
 - 03 Surface: buff. Clay: red/yellow. Temper: veg. & some limestone (large & small.)
 - 04 Surface: buff. Clay: pink. Temper: fine grit & veg.
 - 05 Surface: buff. Clay: pink. Temper: white grit.
 - 06 Surface: buff. Clay: pink. Temper: grit. Rim di. 8. Red/purple paint.
 - 07 Surface: buff. Clay: pink. Temper: heavy fine grit. Rim di. 27–28.
- 50U:214 (LEVEL L)
- 01 Not used.
 - 02 Clay: green (over-fired.) Temper: grit. Rim di. 9. Purple paint.
 - 03 Surface: buff/cream. Temper: grit. Red paint.
 - 04 Surface: pink. Clay: pink. Temper: grit. Red paint.
 - 05 Surface: buff. Clay: pink. Temper: coarse grit & veg. Rim di. 32–33. Handmade.
 - 06 Surface: buff/green. Clay: pink. Temper: white grit & veg. Base di. 6.



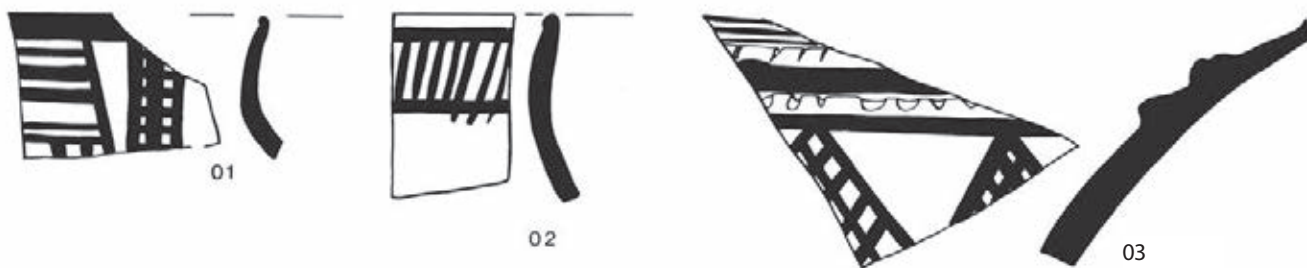
50U:206



50U:214



50V:138



50V:139

50V:138 (LEVEL L)

01 Clay: dark grey. Temper: none visible. Rim di. 9. Ht. 5.5. Base has split where clay was too thin.

02 Surface: buff. Clay: pink. Temper: grit. Rim di. 8–8.5.

03 Surface: buff/green. Temper: grit. Rim di. 9. Red paint.

04 Surface: buff. Clay: pink. Temper: white grit. Rim di. c. 14. Red paint.

05 Surface: buff/brown. Clay: pink. Temper: large white grit & fine veg. Rim di. 13–13.5.

06 Surface: buff/brown. Temper: white grit. Rim di. c. 14.

07 Clay: brown/black. Temper: large grit.

08 Surface: buff. Clay: pink. Temper: heavy white grit. Rim di. 5.5.

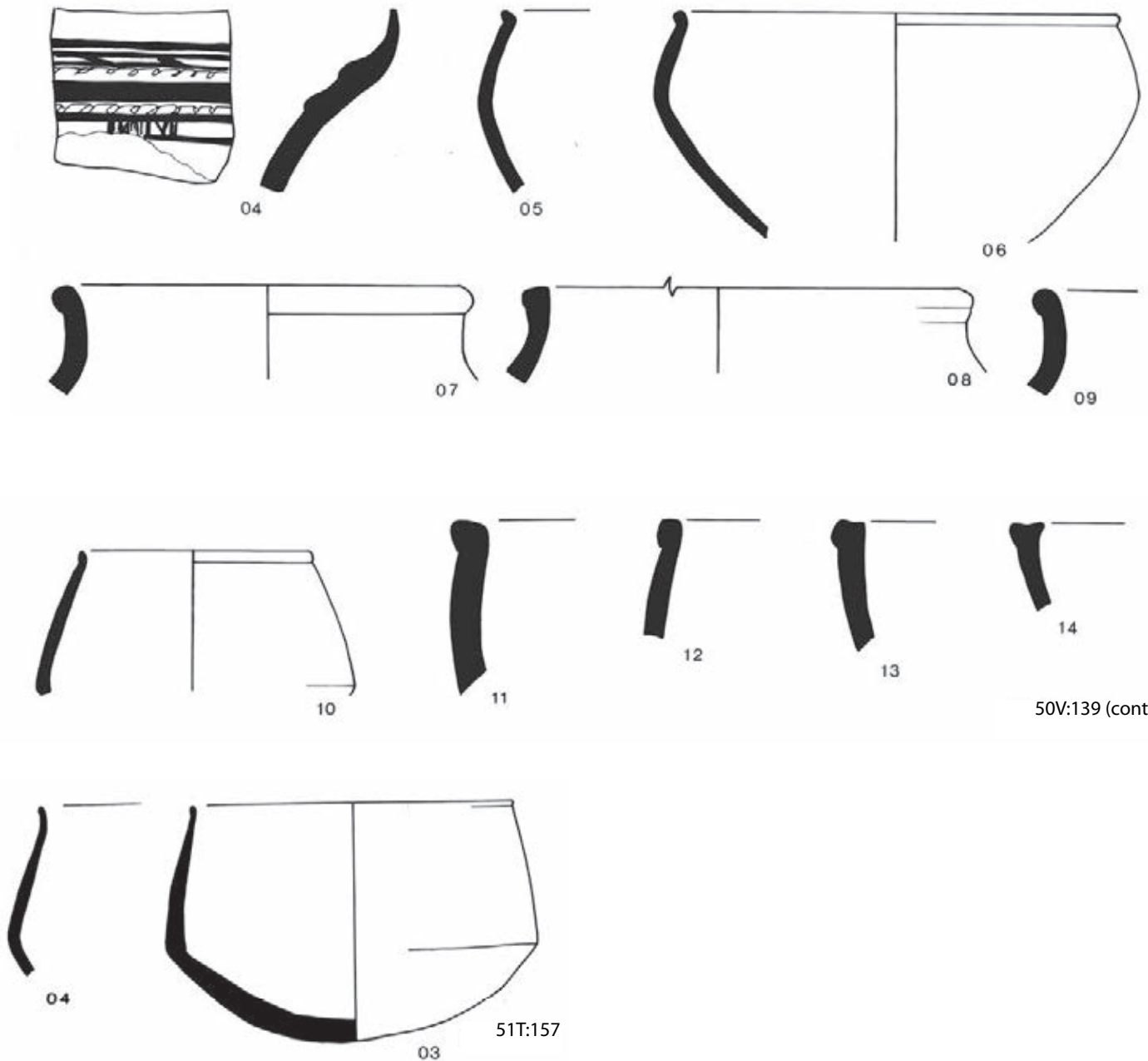
09 Surface: light cream. Clay: pink. Temper: grit.

50V:139 (LEVEL L)

01 Surface: buff. Clay: pink. Temper: grit. Rim di. 14–15. Red paint.

02 Surface: brown/buff. Clay: pink. Temper: heavy white grit. Red/brown paint.

03 Surface: buff. Clay: pink. Temper: grit. Red paint.



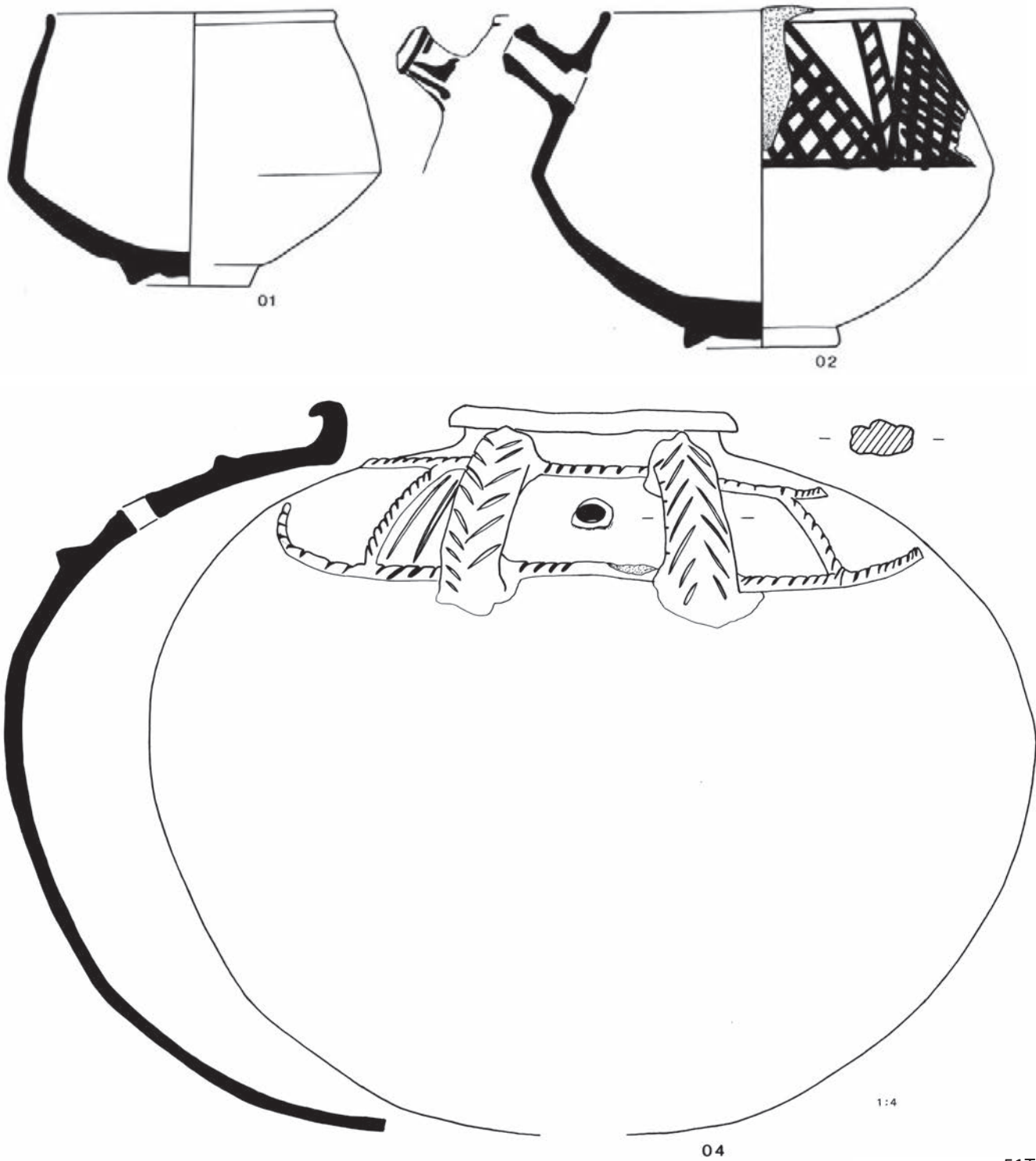
50V:139 (cont'd)

0 50V:139 (cont'd)

- 4 Surface: pink/red. Clay: pink/red. Temper: heavy grit. Red paint.
 05 Surface: buff/red. Clay: pink. Temper: white grit.
 06 Surface: buff/brown. Clay: pink. Temper: grit. Rim di. 14.
 07 Surface: buff. Clay: pink/grey. Temper: grit & mica. Rim di. 13.
 08 Surface: buff/brown. Clay: pink. Temper: heavy white grit. Rim di. 16.
 09 Surface: light cream. Clay: pink. Temper: grit.
 10 Surface: pink/buff. Clay: pink. Temper: fine white grit. Rim di. 7-8.
 11 Surface: buff/brown. Clay: pink. Temper: heavy fine/medium white grit. 7-28.
 12 Surface: buff. Clay: pink. Temper: grit. Rim di. 22-23.
 13 Surface: buff. Clay: pink. Temper: grit. Rim di. 22.
 14 Surface: buff. Clay: pink. Temper: grit.

51T:157 (LEVEL L)

- 03 Clay: green (over-fired). Temper: veg. Rim di. 9-10.
 04 Surface: pink. Clay: buff. Temper: grit.



51T:160 (LEVEL L)

01 Clay: buff. Temper: veg. Rim di. c.10. Base di. 4.

02 Clay: buff. Temper: veg. Rim di. 11. Brown paint. Repaired in antiquity with bitumen.

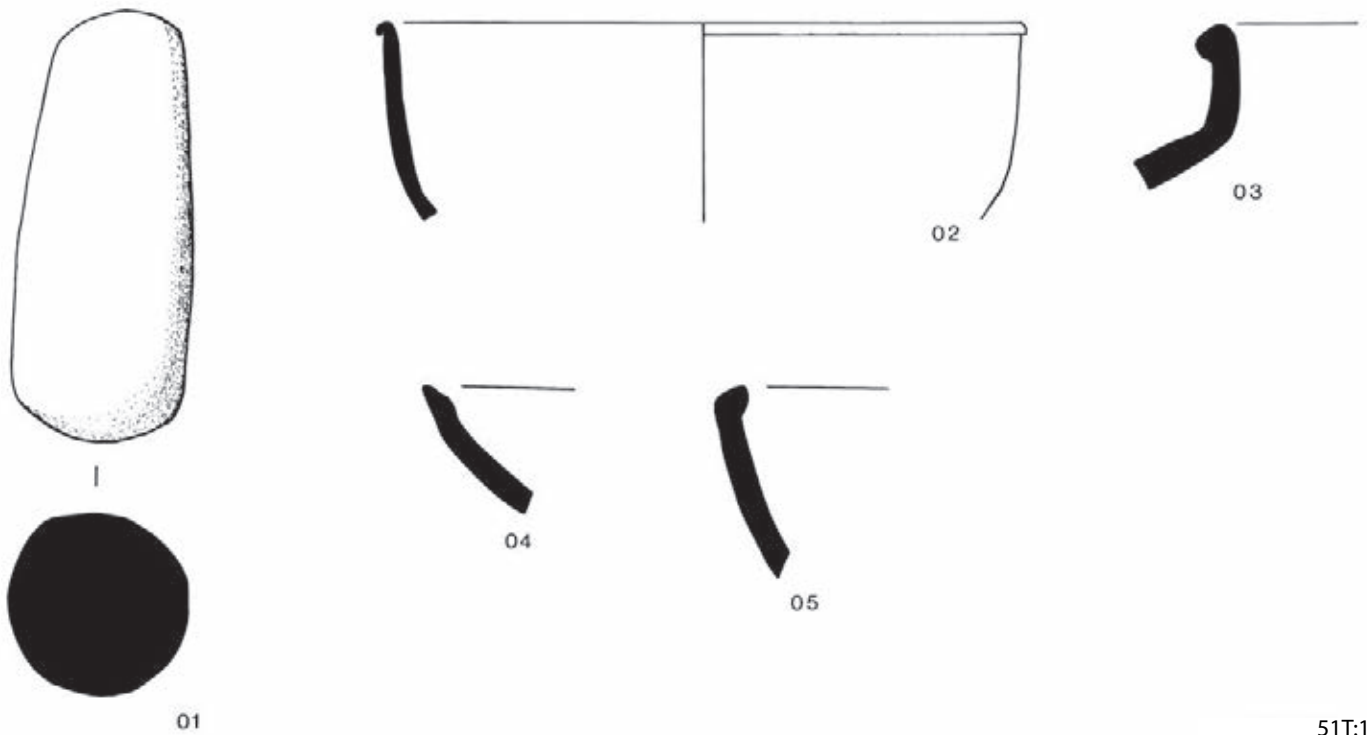
03 Discarded

04 Surface: buff/brown. Clay: pink. Temper: heavy medium/fine white grit, some fine veg. Rim di. c.18. Applied rope decoration.

51T:160



51T:160 (cont'd)



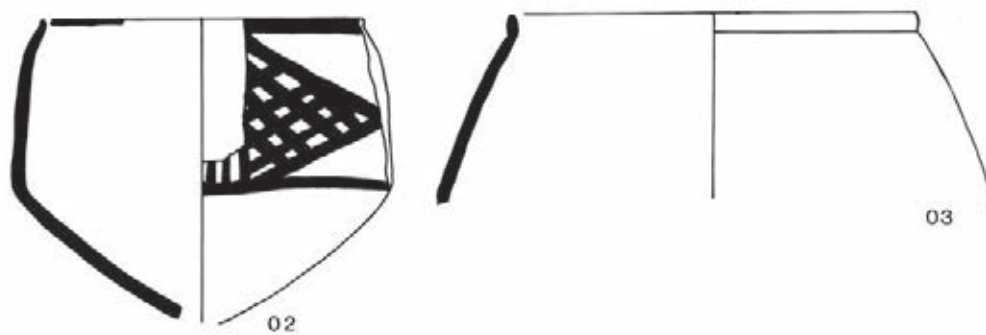
51T:161

51T:160 (cont'd)

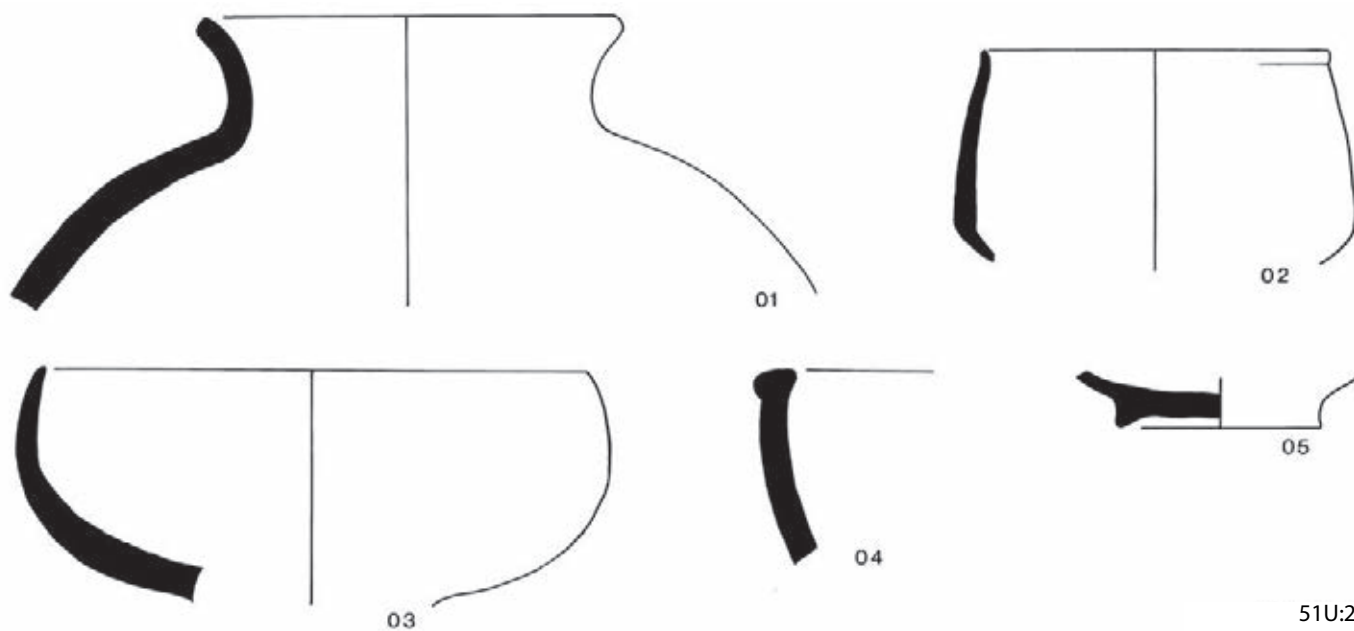
- 05 Clay: green (over-fired). Temper: veg. Rim di. 8.5.
 06 Clay: buff. Temper: veg. Rim di. 10. Brown paint.
 07 Surface: buff. Clay: pink. Temper: white grit. Rim di. ? Combed and wavy-line decoration.
 08 Surface: brown/red. Clay: pink. Temper: grit. Rim di. c.16. Red/brown paint.

51T:161 (LEVEL L)

- 01 Stone tool. Dark grey basalt, with traces of wear along bottom edge. Max. l. 11.5. Max. w. 4.9. Max. Th. 4.8.
 02 Surface: red/brown. Clay: grey. Temper: fine white & black grit. Rim di. 17-18.
 03 Surface: buff. Clay: pink. Temper: white grit. Rim di. c.16.
 04 Surface: dark brown. Core: black. Temper: veg. Rim di. 29-30.
 05 Surface: buff/green. Clay: pink. Temper: fine veg. Rim di. 29-30



51U:195



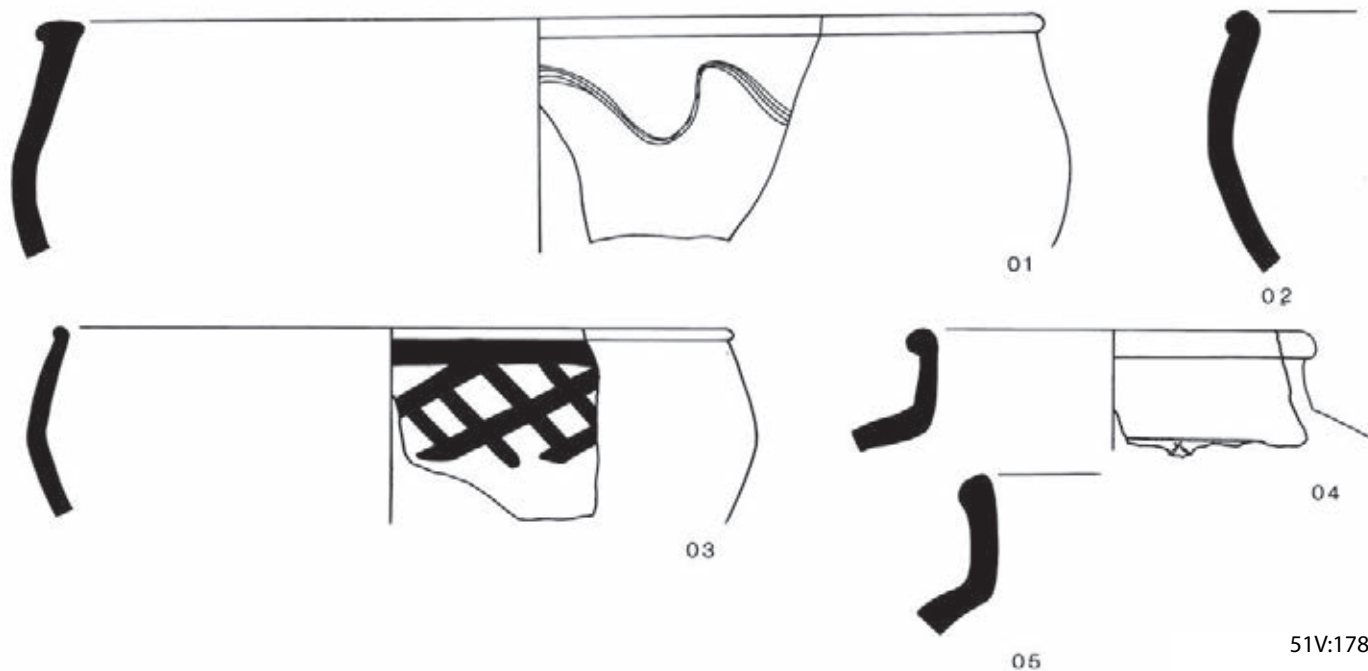
51U:202

51U:195 (LEVEL L)

- 01 Grindstone fragment.
- 02 Clay: green. Temper: white grit. Rim di. 8.5–9. Purple paint.
- 03 Surface: cream. Clay: pink. Temper: white grit. Rim di. c.11.
- 04 Surface: black. Core: black. Temper: very large limestone grits.
- 05 Clay: green. Temper: ? Over fired.

51U:202 (LEVEL L)

- 01 Surface: buff. Clay: pink. Temper: white grit. Rim di. c.11.
- 02 Surface: buff/brown. Clay: pink. Temper: very fine grit, some fine veg. Rim di. 9.
- 03 Surface: buff. Clay: pink. Temper: decayed limestone grit, some veg. Rim di. 14–15. Handmade
- 04 Surface: pink/brown. Core: grey. Temper: grit. Rim di. c.28.
- 05 Surface: buff/brown. Clay: pink. Temper: grit. Base di. 5.5.



51V:178



51V:179

51V:178 (LEVEL L)

01 Surface: buff/red. Clay: light brown. Temper: heavy white grit.

Rim di. c.26. Combed decoration.

02 Surface: buff. Clay: pink. Temper: heavy white grit. Rim di. c.25.

03 Brown surface. Clay: pink. Core grey. Temper: grit. Rim di. 16. Red paint.

04 Clay: pink., Temper: heavy grit. Rim di. c.10. Scored lines and incision on shoulder.

05 Clay: brown. Temper: veg. Rim di. c.13.

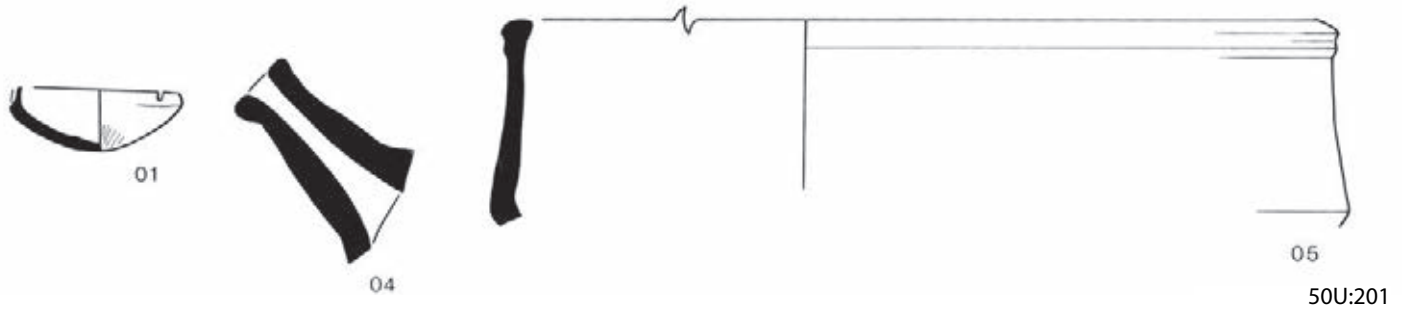
51V:179 (LEVEL L)

01 Clay: buff. Core: black. Temper: grit. Rim di. 12-14.

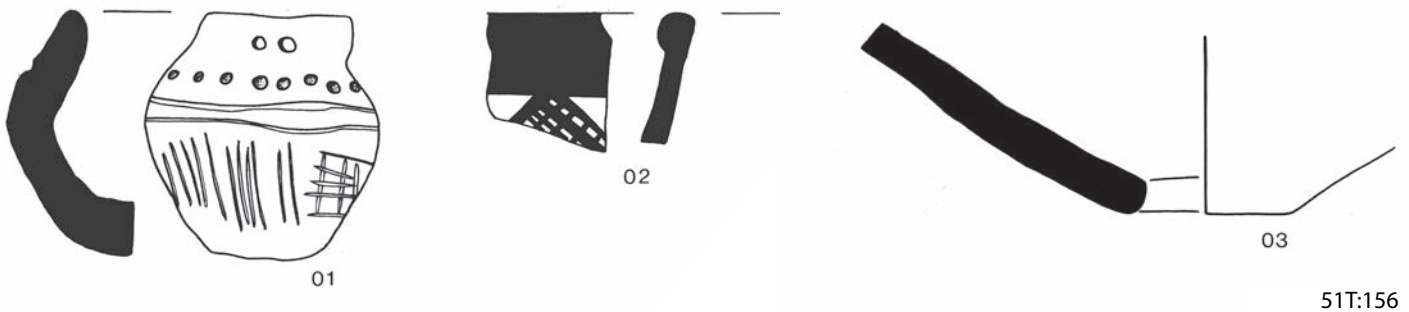
02 Clay: brown. Temper: grit. Rim di. 12.

03 Surface: pink. Clay: buff/brown. Temper: grit.

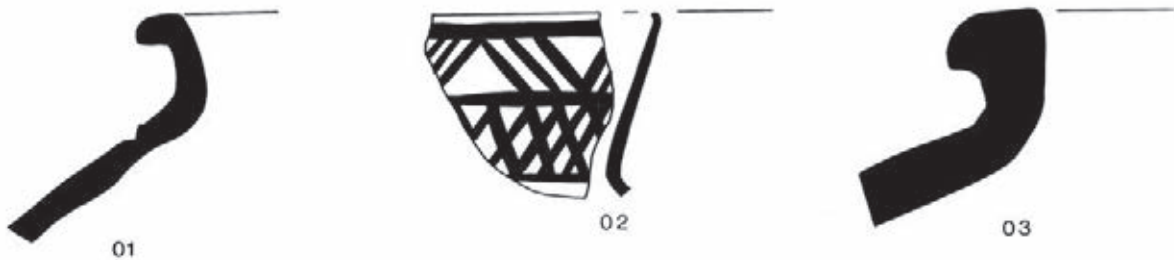
LEVEL K



50U:201



51T:156



51V:176

50U:201 (LEVEL K)

01 Clay: grey. Temper: none visible. Rim di. 4.5. Three lugs visible. Base of a miniature pot, the upper part having been removed and the edges smoothed.

02 Carbon sample.

03 Shell.

04 Spout. Clay: buff. Temper: some grit.

05 Surface: buff/brown. Clay: pink. Temper: white grit, occasional large grit, veg. Rim di. 27.

51T:156 (LEVEL K)

01 Clay: brown. Temper: white grit & (?)veg. Rim di. c.4. Very crude.

02 Surface: buff. Clay: buff. Temper: veg. Purple paint.

03 Surface: buff/brown. Clay: pink. Temper: white grit & veg. Rim di. c.5.

51V:176 (LEVEL K)

01 Surface: buff. Clay: pink. Temper: grit. Rim di. 15–17. Row of gouged decoration on shoulder.

02 Clay: pink. Core: grey. Temper: grit, large white grits pocking surface. Rim di. 11–12.

03 Clay: buff/brown. Core: grey. Temper: grit. Rim di. c.23.

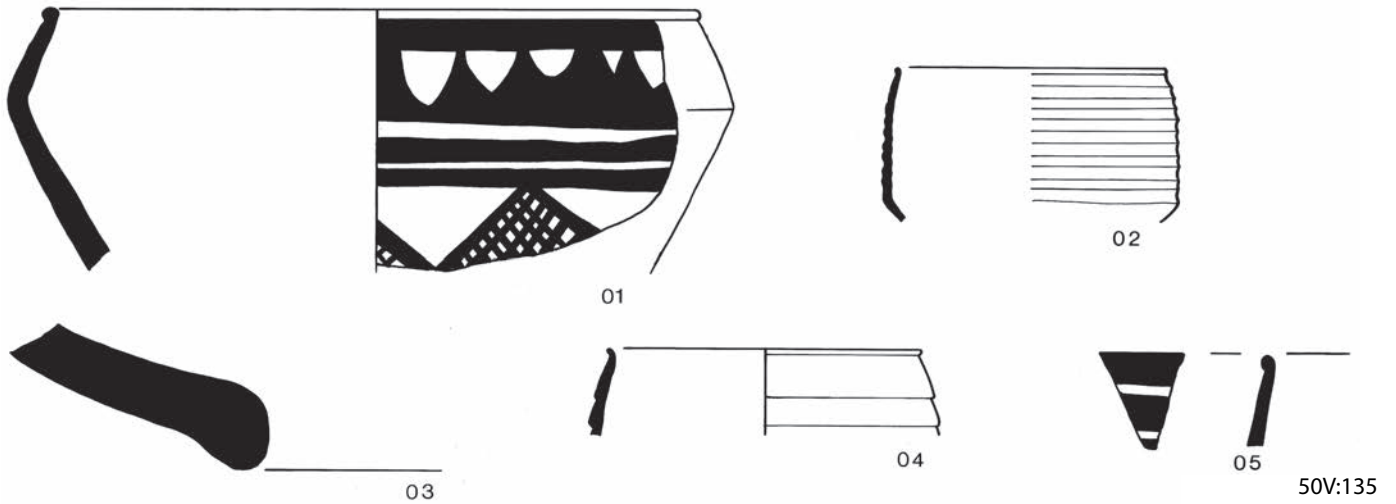
04 Clay: brown. Temper: grit. Rim di. 19–21.

05 Surface: buff. Clay: pink. Temper: white grit.

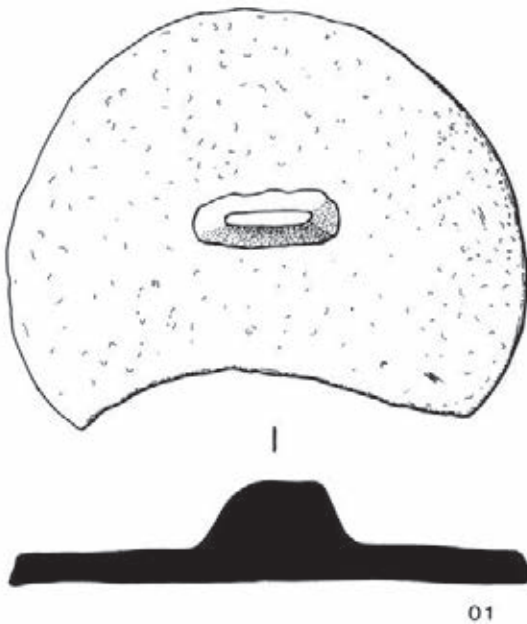
06 Surface: brown. Clay: pink. Temper: grit.

07 Surface: green. Clay: pink. Temper: large white grit. Rim di. c.25.

LEVEL J



50V:135



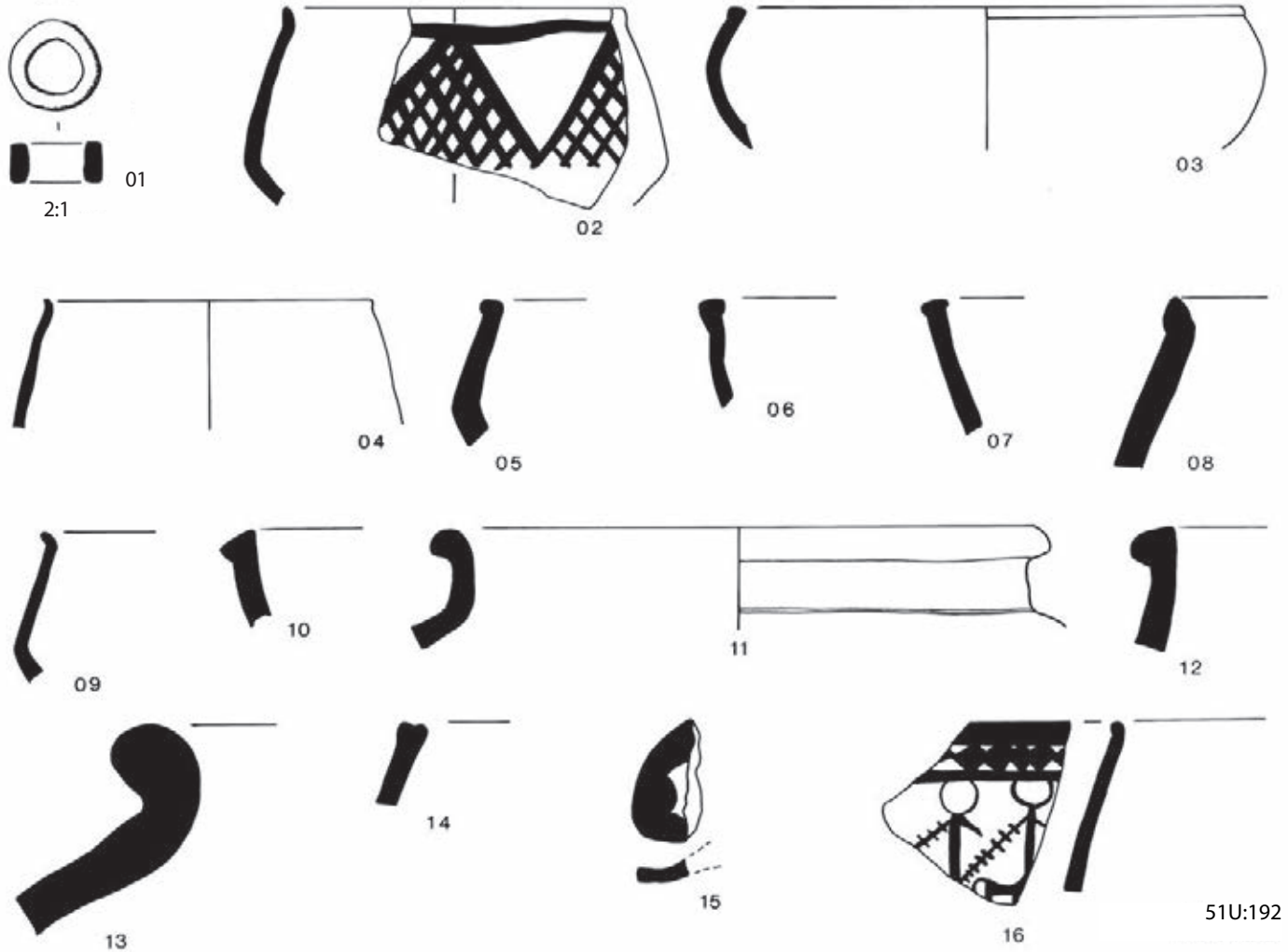
51U:190

50V:135 (LEVEL J)

- 01 Clay: green/buff. Temper: veg. Rim di. 13.5. Wheel made, paint.
 02 Clay: grey. Temper: grit. Rim di. 7. Wheelmade.
 03 Surface: brown. Core: black. Temper: coarse veg., sparse grog, grit.
 04 Clay: green. Temper: ? Rim di. 8.
 05 Surface: cream. Temper: veg. Purple paint.

51U:190 (LEVEL J)

- 01 Surface: brown. Core: black. Temper: heavy coarse veg. Rim di. c.13.5.
 Handmade.
 02 Clay: green. Temper: veg. Purple paint.



51U:192

51U:192 (LEVEL J)

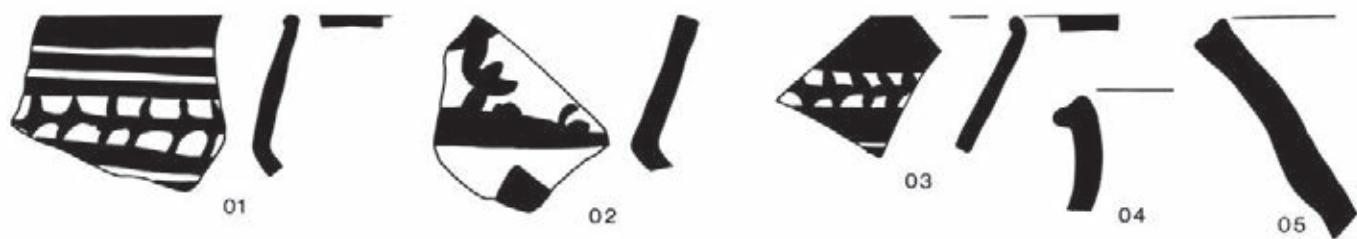
- 01 Stone bead. White. Di. 0.65. Ht. 0.25.
 02 Surface: brown. Clay: pink. Temper: medium & coarse white grit. Rim di. c. 10. Red paint, .
 03 Surface: brown. Clay: pink. Temper: fine grit. Rim di. c. 15
 04 Surface: buff/brown. Clay: pink. Temper: sparse white grit. Rim di. 9.
 05 Surface: buff. Clay: pink. Temper: grit.
 06 Surface: buff. Clay: pink. Temper: grit. Rim di. 31–33.
 07 Surface: buff. Clay: pink. Temper: white grit. Rim di. 19.
 08 Surface: brown. Core: grey. Clay: red/brown. Temper: white grit, some veg. Rim di. 29.
 09 Surface: buff. Clay: pink. Temper: grit & veg. Rim di. 17.
 10 Surface: buff/brown. Clay: pink. Temper: grit. Rim di. 21–23.

11 Surface: green. Core: black. Temper: white & black grit. Rim di. 17. Over-fired.

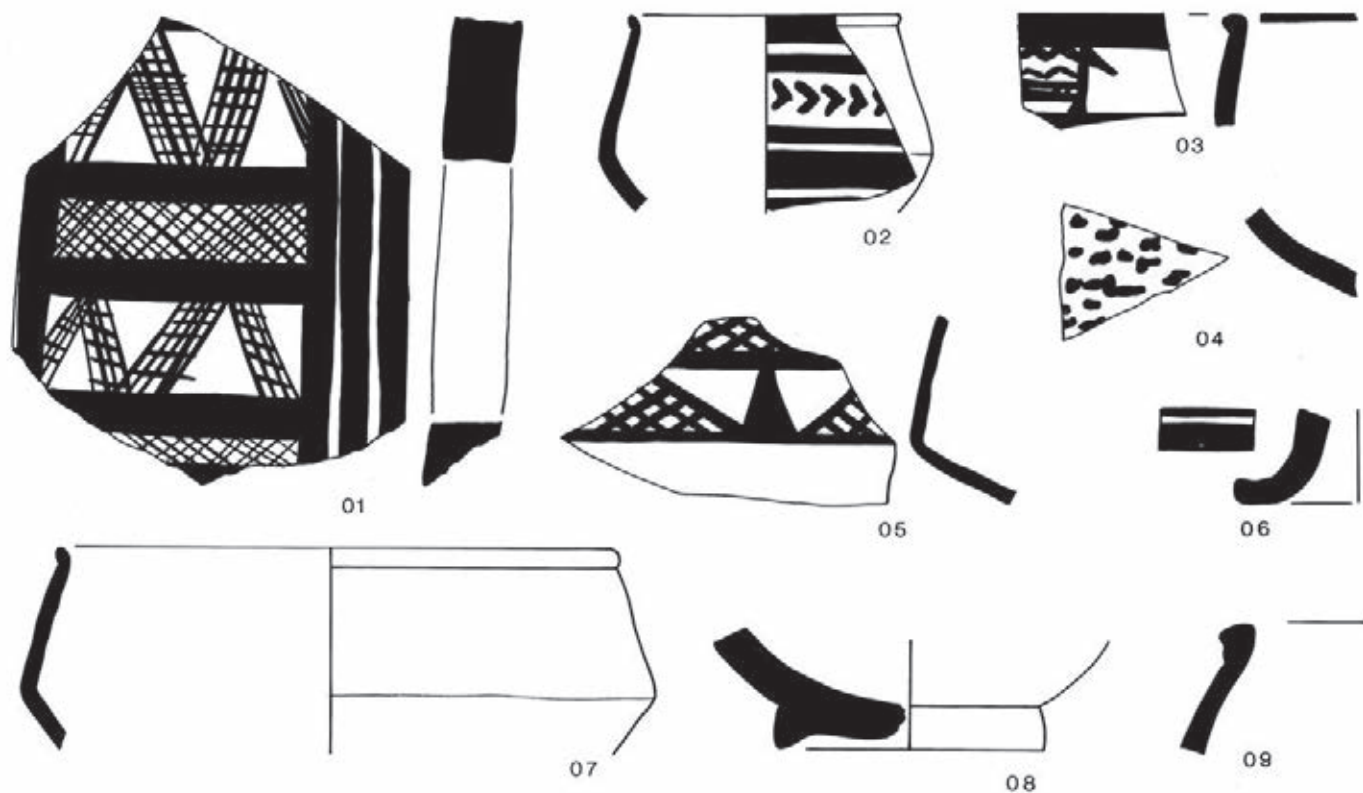
- 12 Clay: brown. Temper: heavy medium white grit. Rim di. 15.
 13 Surface: green. Clay: light brown. Temper: veg. Handmade
 14 Surface: buff. Clay: pink. Temper: white grit.
 15 Surface: green. Clay: pink. Temper: veg. Purple paint.
 16 Surface: green. Temper: veg. Purple paint.

51V:166 (LEVEL J)

- 01 Clay: buff. Temper: veg. & sparse white grit. Rim di. c. 15. Purple paint.
 02 Surface: buff/brown. Clay: pink. Temper: white grit. Red/brown paint.
 03 Surface: buff. Clay: pink. Temper: fine grit. Red paint.
 04 Surface: cream. Clay: pink. Temper: grit & sparse veg. Rim di. c. 12.
 05 Clay: green. Temper: veg. Rim di. c. 14. BRB fragment.



51V:166



51V:167

51V:167 (LEVEL J)

01 Surface: buff. Clay: pink. Temper: coarse white grit & veg. Di. c. 12.5.

Purple paint. Part of fenestrated stand.

02 Clay: green, vitrified. Temper: none visible. Rim di. c. 7. Purple paint.

03 Clay: green. Temper: veg. Rim di. c. 18–19. Dark purple paint.

04 Clay: green. Temper: veg. Purple paint.

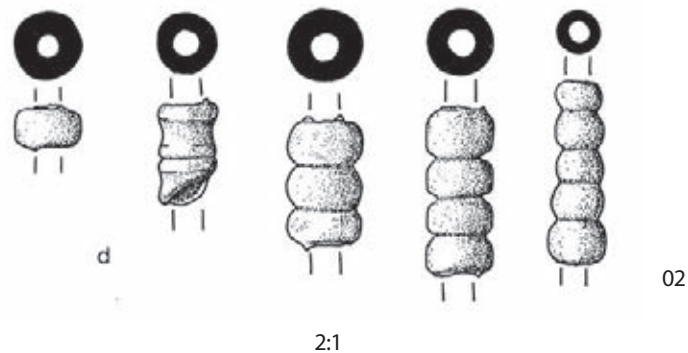
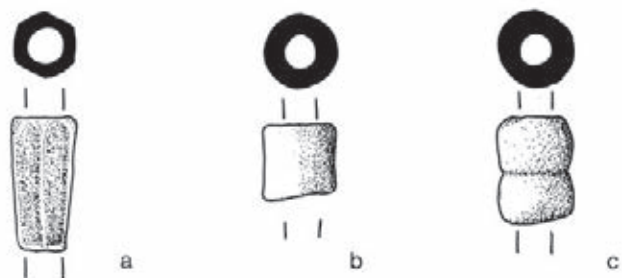
05 Clay: green with black core. Temper: heavy fine grit & sparse veg. Di. at carination: c. 13.

06 Surface: buff/green. Clay: pink. Temper: white grit & sparse veg. Base di. c. 6–7. Purple paint.

07 Surface: buff. Clay: pink. Temper: heavy white grit. Rim di. 15.

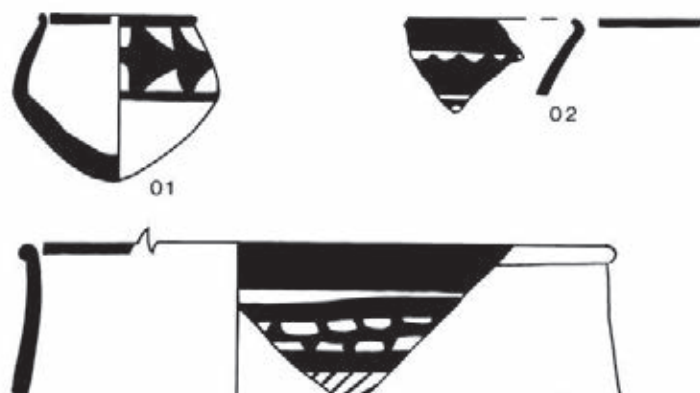
08 Surface: buff. Clay: pink. Temper: grit. Base di. 7.

09 Surface: buff. Clay: pink. Temper: grit. Rim di. 15.

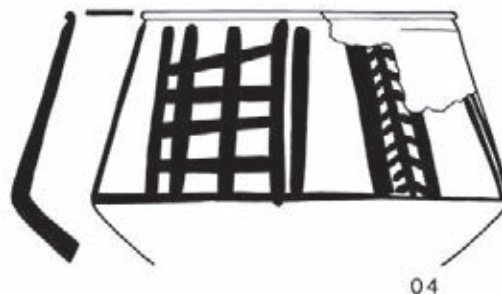


03

51V:168



03



04

51V:172

51V:168 (LEVEL J, grave)

02 Examples of necklace beads (total beads in necklace: 102). Scale 2:1.

- a) Dentalium bead. Ht. 0.8. Di. 0.4.
- b) Frit (sintered quartz) bead. Ht. 0.4. Di. 0.2.
- c) Two frit (sintered quartz) beads fused(?) together. Ht. 0.6. Di. 0.45.
- d) Fused frit (sintered quartz) beads.

03 Polished pebble. Black surface with many surface scratches.
L. 7.4. Max. w. 3.8. Th. 2.1. Scale 1:2.

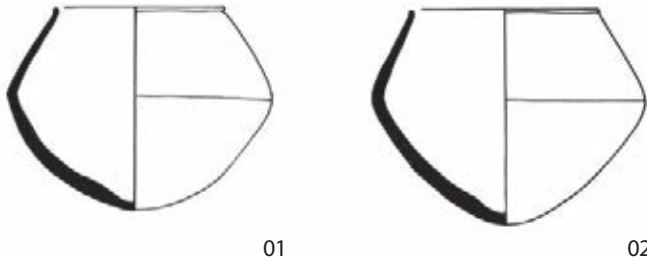
51V:172 (LEVEL J)

01 Clay: buff. Temper: fine grit. Rim di. 4. Ht. 4.4. Dark brown paint.

02 Clay: green. Temper: veg. Rim di. c.8. Purple paint.

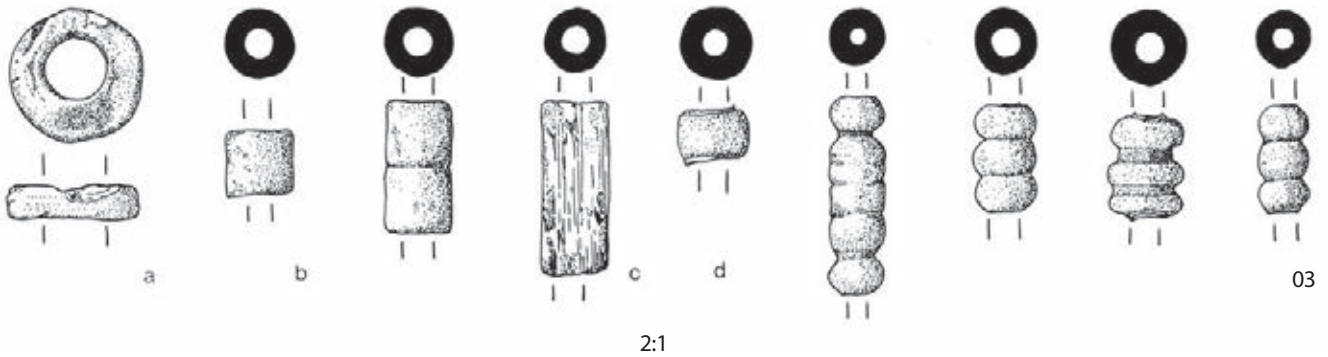
03 Clay: green. Temper: veg. Rim di. c.19–20. Purple paint.

04 Surface: buff. Clay: pink. Temper: grit. Rim di. 7.9. Red paint. 3 panels of hatched squares alternating with herring-bone.



01

02



2:1

03

51V:173

51V:173 (LEVEL J, grave)

01 Pottery cup. Clay: green. Temper: none visible. Rim di. 4.3. Ht. 5.2. Bottom is wet-smoothed. Complete and intact. Scale 1:2.

02 Pottery cup. Clay: green. Temper: none visible. Rim di. 4.4–4.9. Ht. 5.5. Complete and intact. Scale 1:2.

03 Examples of beads from the belt (total number of beads: 266). Scale 2:1.

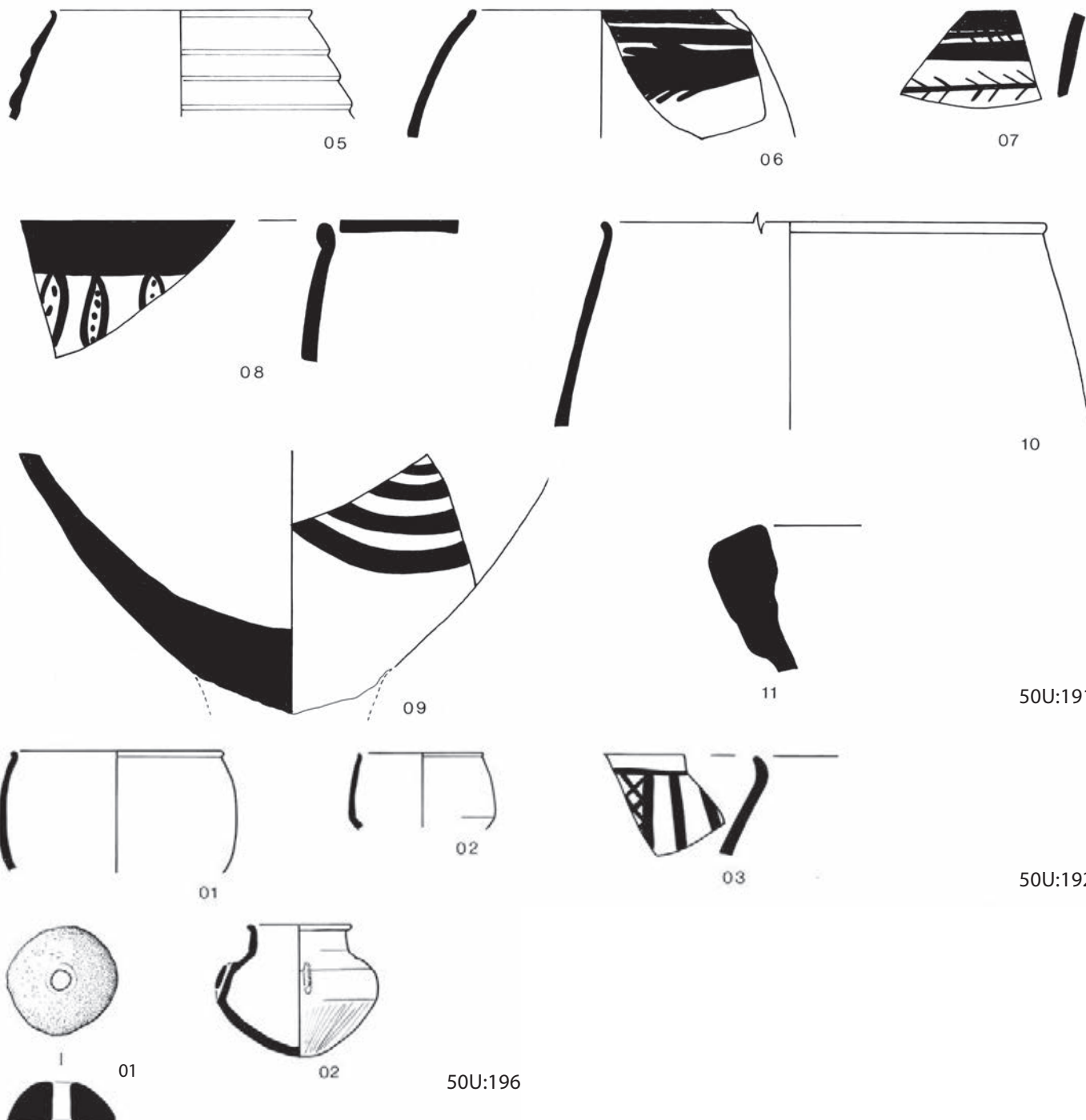
a) Bone bead. Di. 0.9. Ht. 0.2.

b) Frit (sintered quartz) bead. Light blue surface. Di. 0.4. Ht. 0.4.

c) Dentalium bead. Ht. 1.1. Di. 0.4.

d) Fused frit (sintered quartz) beads.

LEVEL I



50U:191 (LEVEL I)

- 01 Bronze fragment.
 02 Sliced base of miniature pot (not illustrated).
 03 Bitumen sample.
 04 Bitumen sample.
 05 Clay: green. Temper: veg. & occasional grit. Rim di. 5.
 06 Clay: green. Temper: none visible. Rim di. 8–9. Black paint.
 07 Clay: buff. Temper: veg. Purple paint.
 08 Clay: green/buff. Temper: veg. Rim di. 26. Handmade, purple paint.
 09 Clay: green. Temper: veg. Handmade, purple paint.

10 Clay: green. Temper: large white grit. Rim di. 17. Wheelmade.

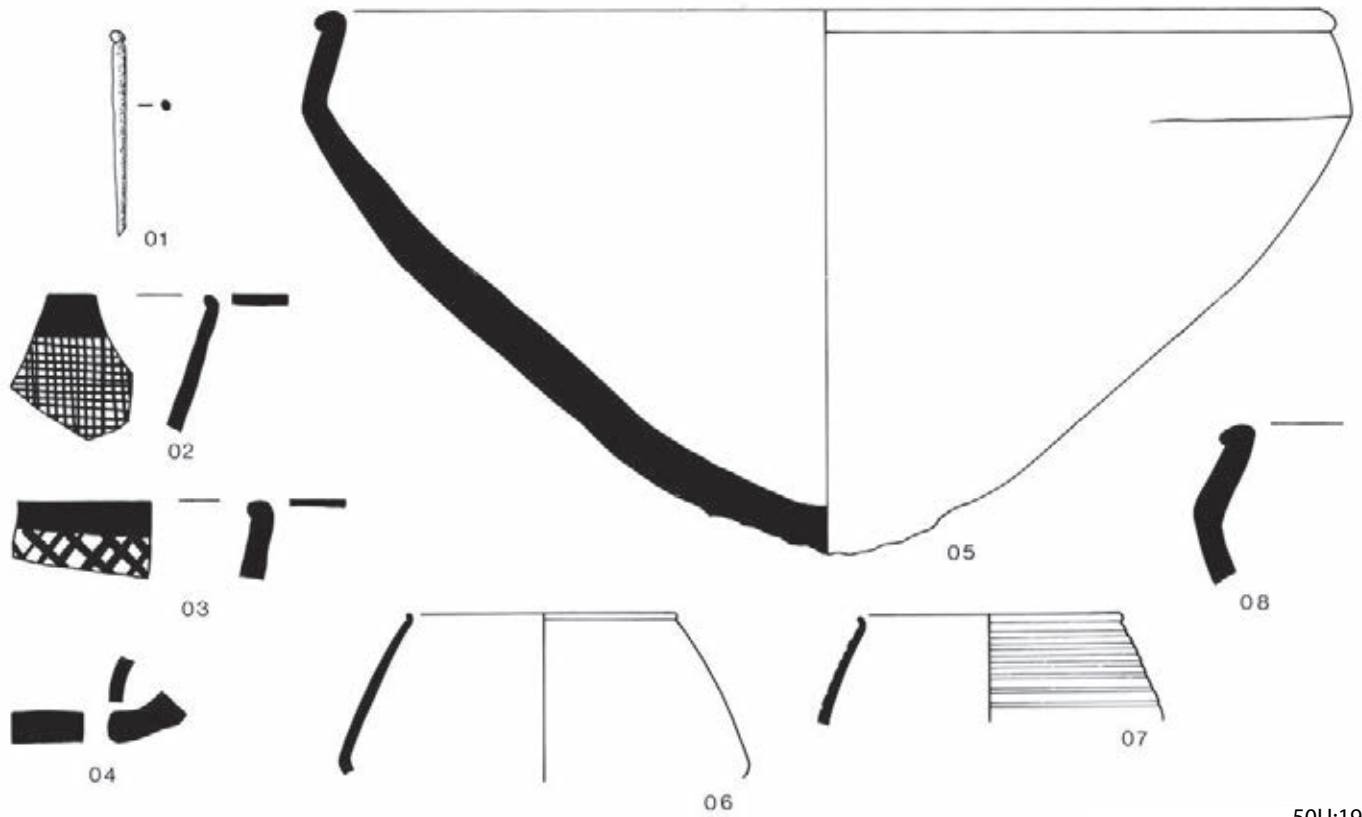
11 Surface: buff. Clay: pink. Temper: grit & veg. Rim di. +38.

50U:192 (LEVEL I)

- 01 Clay: grey. Temper: none visible. Rim di. 7.
 02 Clay: grey. Temper: none visible. Rim di. 4.
 03 Surface: cream/green. Clay: pink. Rim di. 10. Red paint.

50U:196 (LEVEL I)

- 01 Spindle whorl. Grey stone. Ht. 1.3. Di. 3.6.
 02 Clay: grey. Temper: none visible. Rim di. 5. Ht. 4.4. Base scraped and flattened. Four irregularly spaced pierced lugs.



50U:197

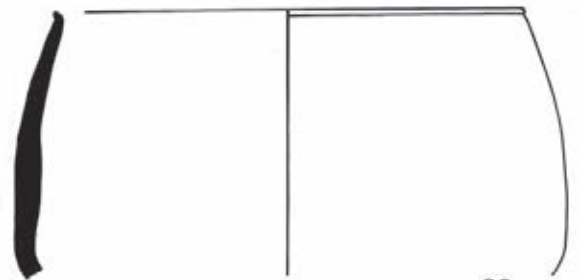


01

50V:133



01



02

50V:134

50U:197 (LEVEL I)

01 Bone pin. Broken at bottom. L. 5.5. Di. of head: 0.40. Highly polished with chipped spherical head.

02 Clay: green. Temper: veg. Black paint.

03 Surface: green. Clay: pink. Temper: veg., some grit. Rim di. 14. Red paint.

04 Surface: buff. Clay: pink. Temper: fine veg. Red paint.

05 Surface: buff. Clay: pink. Temper: white grit & veg. Rim di. 26–27. Base missing. Handmade.

06 Clay: green. Temper: none visible. Rim di. 7.

07 Clay: green. Temper: none visible. Rim di. 7.

08 Surface: buff. Clay: pink. Temper: veg. & some white grit. Rim di. 21.

50V:133 (LEVEL I)

01 Miniature jar. Complete & intact. Clay: grey. Temper: none visible. Rim di. 3.9. Ht. 4.9.

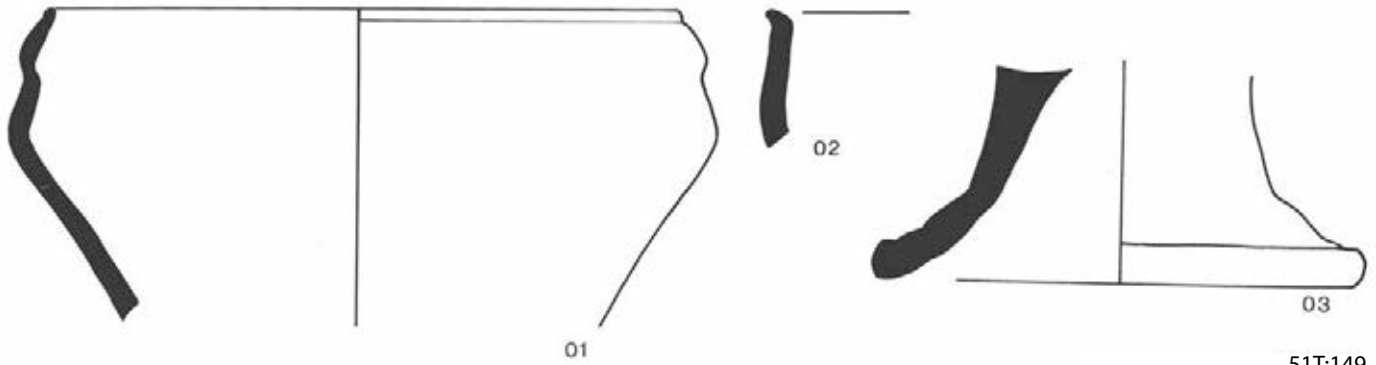
50V:134 (LEVEL I)

01 Clay: green/yellow. Temper: veg. & some large white grit. Purple paint.

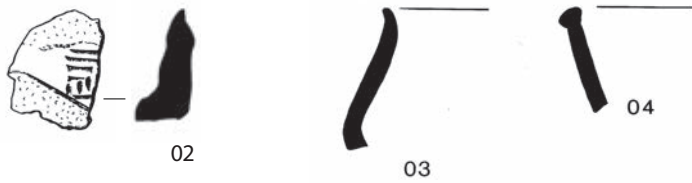
02 Clay: green. Temper: none visible. Rim di. 12.5. Wet smoothed.



50V:137



51T:149



51U:179

50V:137 (LEVEL I)

01 Clay: green. Temper: veg. Rim di. 15. Purple paint.

51T:149 (LEVEL I)

01 Surface: green. Clay: green. Temper: veg. Rim di. c.17.

02 Surface: buff/green. Clay: pink. Temper: white grit. Rim di. c.26.

03 Surface: buff. Clay: pink. Temper: grit & heavy veg. Base di. 12-13.

51U:179 (LEVEL I)

01 Flint.

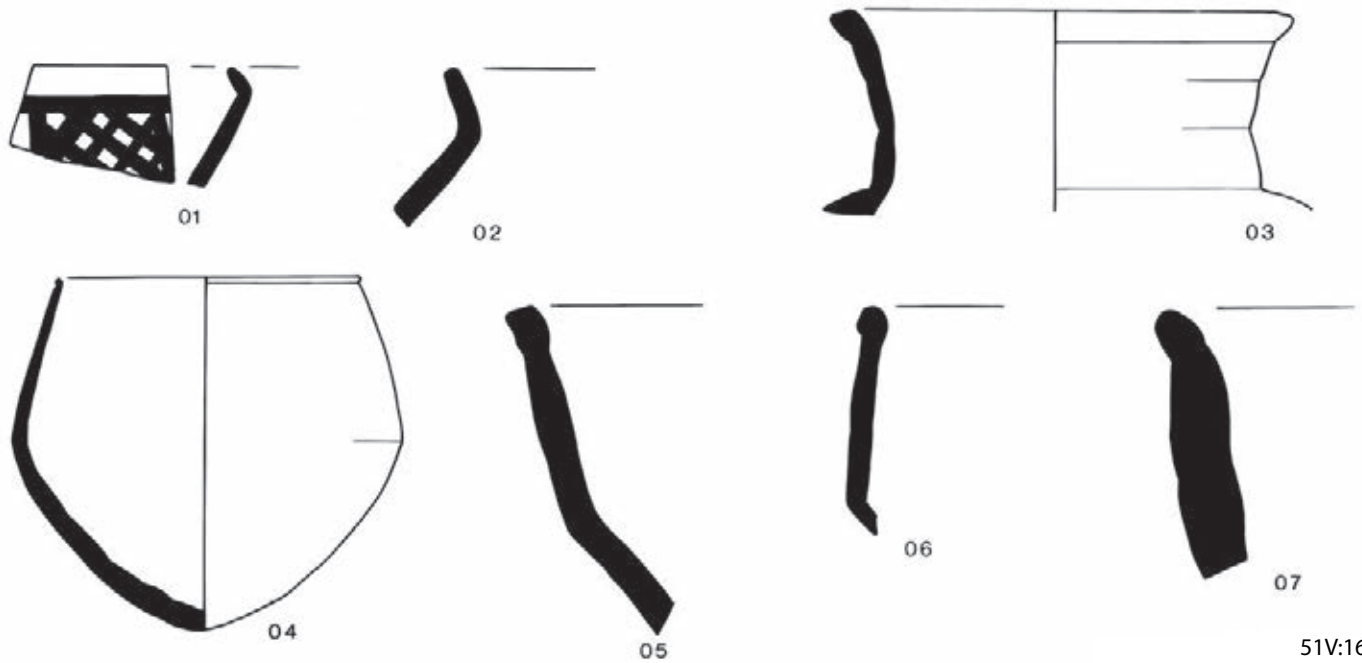
02 Sealing. 6 small; fragments of unbaked brown clay, with incised design.

03 Clay: green. Temper: veg.

04 Surface: buff/brown. Clay: buff/brown. Temper: grit. Rim di. c.13.



51V:159



51V:163

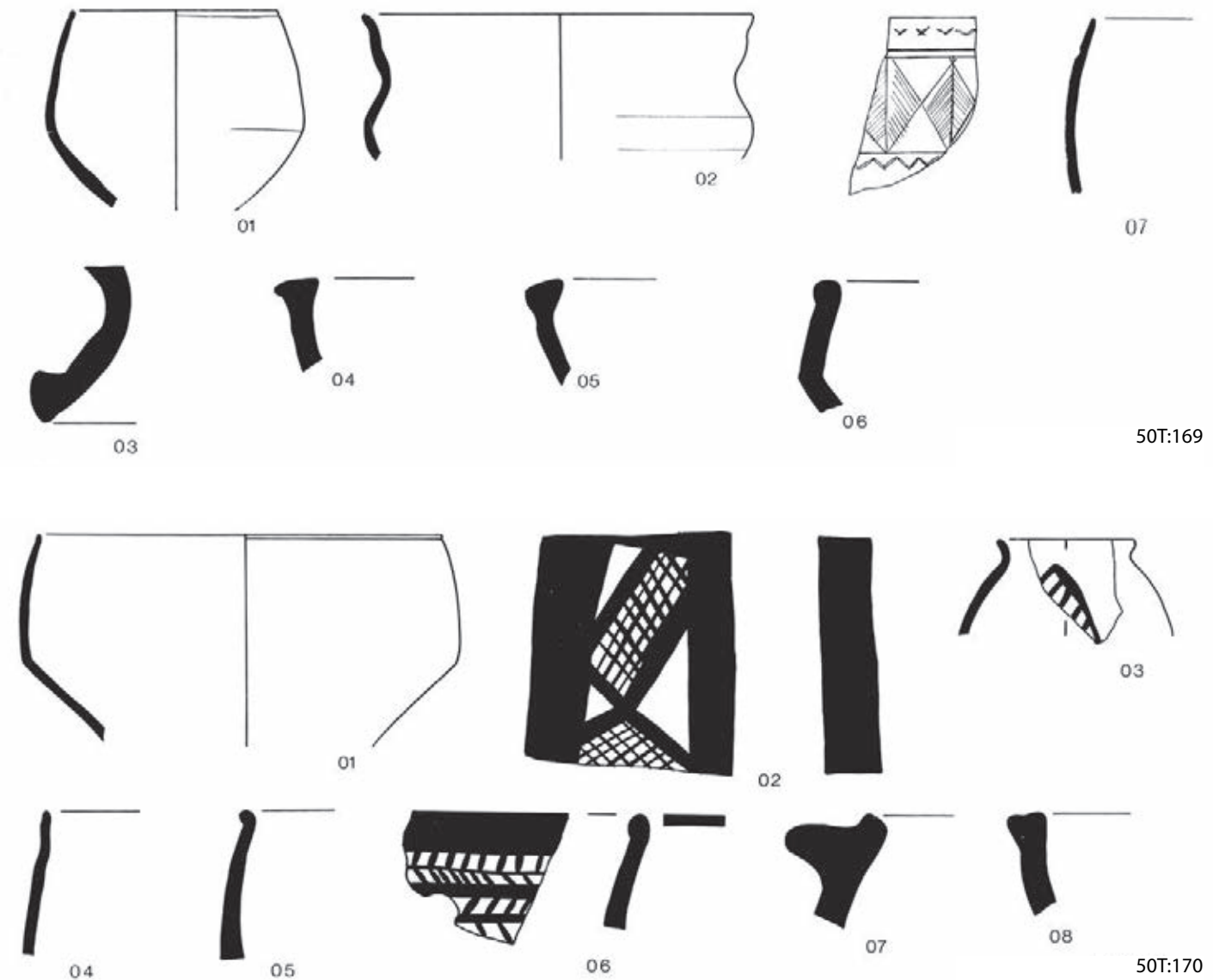
51V:159 (LEVEL I)

- 01 Flint blade (not drawn)
 02 Clay: buff/brown. Temper: fine veg. Rim di. c.12. Purple paint.
 03 Clay: green. Temper: veg. Rim di. c.12. Purple paint.
 04 Stone bowl fragment. White, decayed surface. Limestone or gypsum
 ? Rim di. c.15–16.

51V:163 (LEVEL I)

- 01 Surface: buff outer. Clay: pink. Temper: veg. with sparse large grit. Rim di. c.11–12. Dark red/brown paint.
 02 Clay: buff. Temper: fine veg. Rim di. c.18–19.
 03 Surface: buff. Clay: pink. Temper: grit. Rim di. 11.
 04 Clay: green. Temper: none visible. Rim di. 8.1.
 05 Surface: buff/brown. Clay: pink. Temper: heavy white grit. Rim di. c.34.
 06 Surface: buff. Clay: pink. Temper: grit. Rim di. c.23.
 07 Clay: buff/brown. Temper: heavy coarse veg. Rim di. c.14–15.
 Handmade

LEVEL H



50T:169 (LEVEL H)

- 01 Clay: grey. Temper: none visible. Di. 6.5.
 02 Surface: cream. Clay: pink. Temper: fine grit. Di. 10–11.
 03 Surface: buff/brown. Clay: pink. Temper: veg. Base di. 11. Red paint all over outside.
 04 Surface: buff/brown. Clay: grey. Temper: white grit & fine veg. Rim di. 23.
 05 Surface: buff/brown. Clay: brown. Temper: grit & some veg. Rim di. ?
 06 Surface: buff. Clay: pink. Temper: fine grit & veg. Rim di. c.27.

50T:170 (LEVEL H)

- 01 Clay: grey. Temper none visible. Rim di. 12–13.
 02 Clay: brown/buff. Temper: white grit & veg. Red paint, fenestration at either edge.
 03 Surface: buff. Clay: pink. Temper: grit. Rim di. 4–4.5. Paint.
 04 Clay: dark grey. Temper: none visible. Rim di. c. 11.
 05 Surface: brown/red. Clay: pink. Temper: heavy white grit. Rim di. c. 17.
 06 Surface: cream slip out. Clay: pink. Temper: veg. & very sparse white grit. Rim di. c.29. Purple paint.
 07 Clay: black/brown. Temper: heavy grit. Crescentic lug.
 08 Surface: buff. Clay: pink. Temper: white grit. Rim di. + 20.



01 50U:174



01 50U:175



01



02

50U:184



01



02



03

50U:188



02

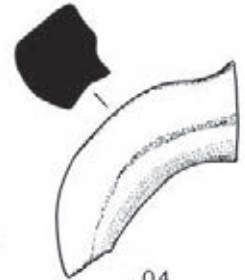
50U:190



01



02



04



03

50U:194

50U:174 (LEVEL H)

01 Clay: grey. Temper: none visible..

50U:175 (LEVEL H)

01 Miniature pot. Complete and intact. 4 pierced lugs. Di. 2.9. Ht. 4.0. Base has been pared down.

50U:184 (LEVEL H)

01 Grey ware. Impressed decoration.

02 Surface: green/buff. Clay: pink. Temper: grit & veg. Very shallow ribbing with purple paint.

50U:188 (LEVEL H)

01 Clay: dark grey. Temper: none visible.

02 Clay: green. Temper: none visible. Rim di. 11. Shallow ridged.

03 Surface: buff. Clay: pink. Temper: sparse veg. Rim di. 12.

50U:190 (LEVEL H)

01 Metal fragment (discarded).

02 Miniature pot. Clay: grey. Temper: none visible. Rim di. 2. Height: 3.7.

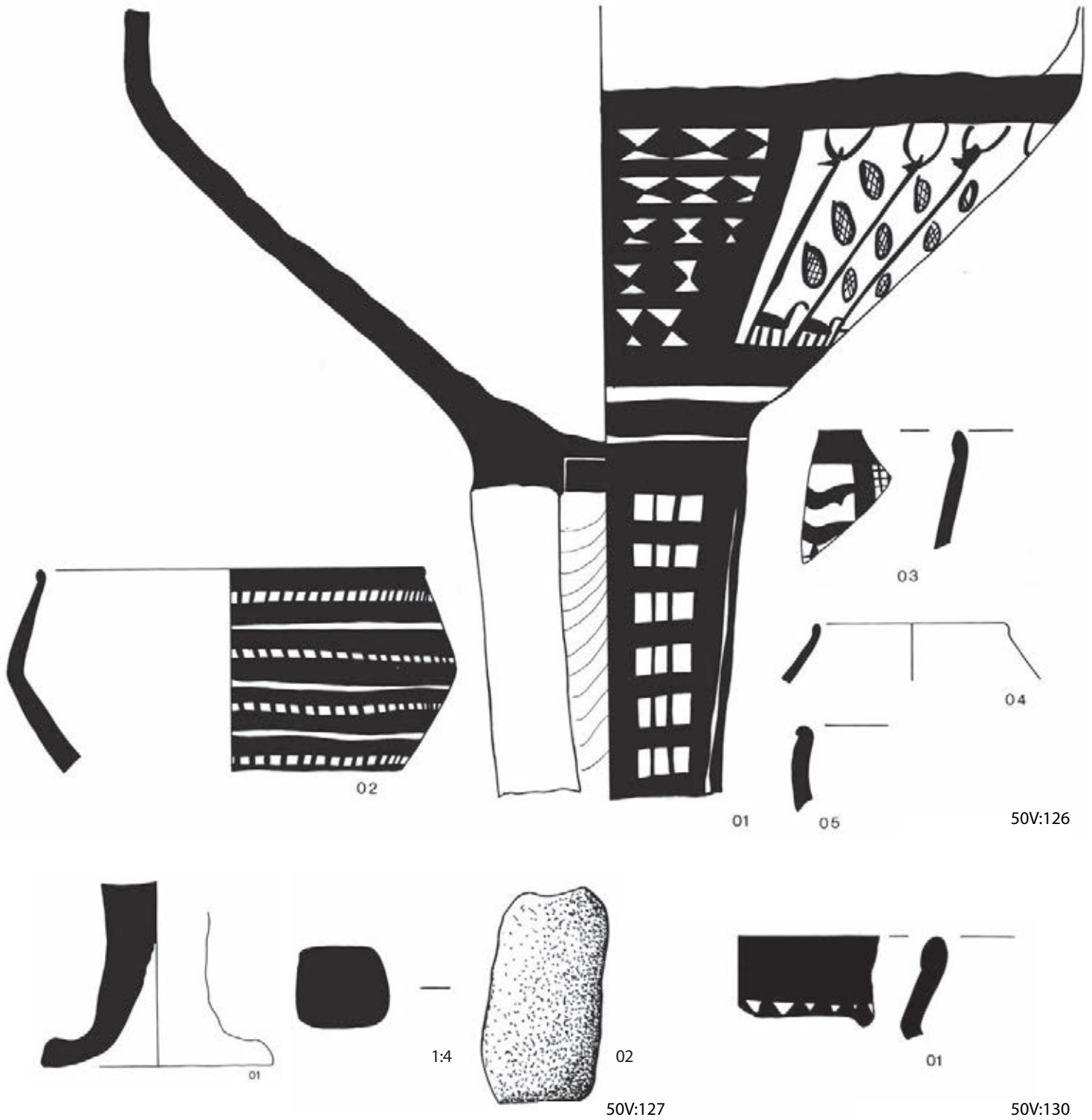
50U:194 (LEVEL H)

01 Four transparent crystal beads. Largest has diameter of 0.8 and height of 0.4.

02 Clay: buff. Temper: veg. Purple paint.

03 Surface: pink/brown. Clay: pink. Temper: grit and veg. Rim di. 11. Handmade.

04 Surface: buff. Clay: pink. Temper: black & white grit & large grits.



50V:126 (LEVEL H)

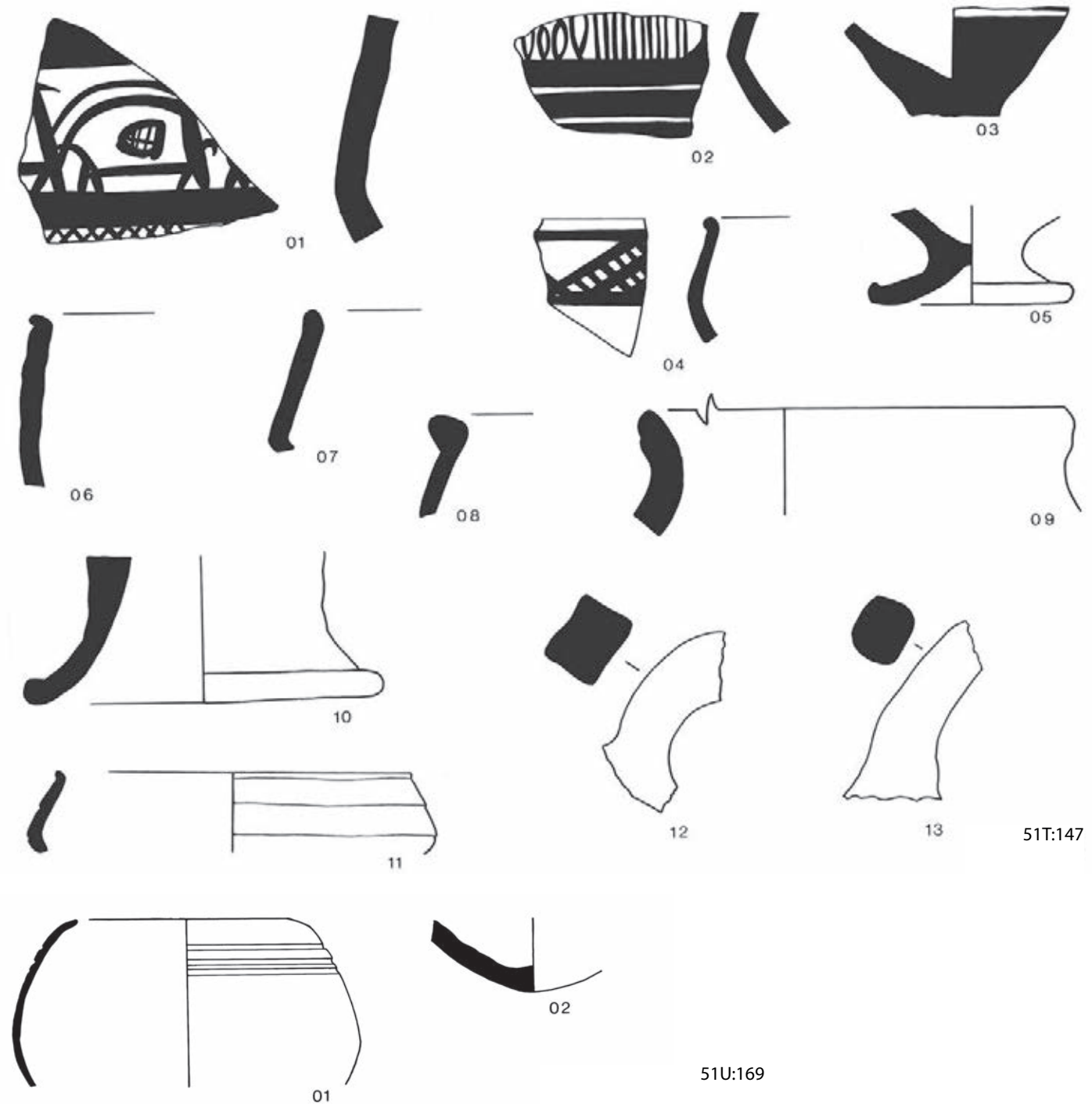
- 01 Surface: cream slip. Clay: buff. Temper: veg. Stem fenestrated, three panels of each design in dark brown paint.
 02 Surface: cream slip. Clay: buff. Temper: veg. Rim di. c. 13.5. Black paint.
 03 Surface: cream slip. Clay: pink. Temper: sparse veg. Purple paint.
 04 Clay: buff. Temper: slightly sandy. Rim di. 6–7.
 05 Clay: buff. Temper: grit. Rim di. +30.

50V:127 (LEVEL H)

- 01 Clay: yellow. Temper: veg. Base di. c.11.
 02 Stone tool. Grey river pebble with traces of wear along top and bottom edges.

50V:130 (LEVEL H)

- 01 Surface: green. Temper: veg. Rim di. c.28. Handmade, purple paint.



51T:147 (LEVEL H)

01 Surface: buff. Core: pink. Temper: veg. with occasional white grit. Dark red/brown paint.

02 Surface: green. Temper: veg. Purple paint.

03 Clay: buff. Temper: veg. Purple paint.

04 Surface: buff/brown. Clay: pink. Temper: grit. Rim di. 16. Red paint.

05 Clay: grey. Temper: none visible. Base di. 7.

06 Surface: buff. Clay: pink. Temper: white grit. Rim di. c.23.

07 Surface: buff. Clay: pink. Core: grey. Temper: fine veg. & white grit. Rim di. 22.

08 Surface: buff. Clay: pink. Core: black. Temper: sparse fine veg. Rim di. c.29.

09 Surface: buff/brown. Clay: brown. Temper: fine veg. Rim di. 19.

10 Surface: buff. Clay: pink. Temper: veg. Base di. 12.

11 Surface: green. Clay: green. Temper: ? Rim di. 12.

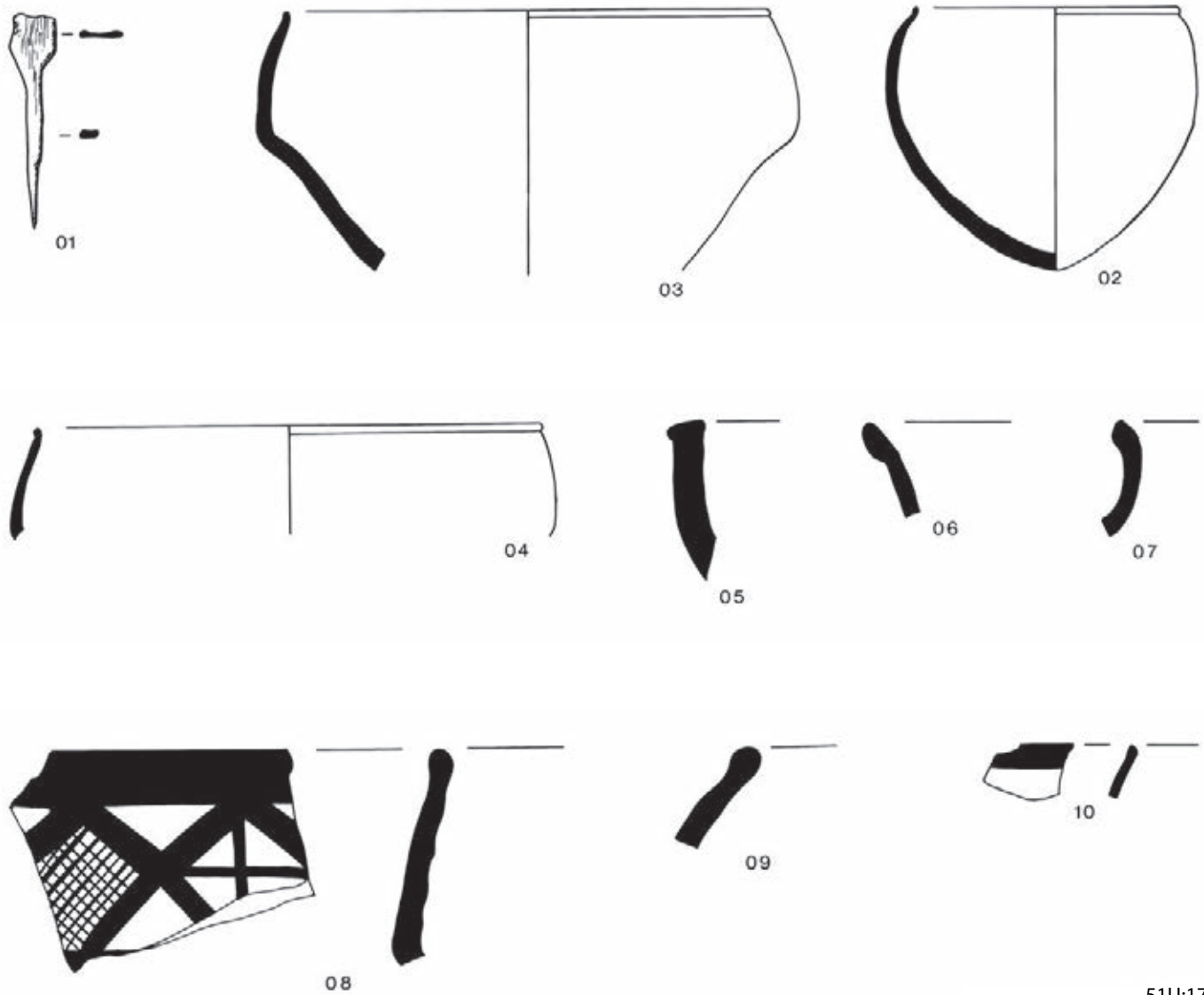
12 Surface: brown. Core: black. Temper: veg.

13 Surface: buff. Clay: pink. Temper: veg. & coarse grit.

51U:169 (LEVEL H)

01 Clay: green. Temper: none visible. Rim di. c.8.

02 Clay: buff. Temper: none visible.



51U:170

51U:170 (LEVEL H)

01 Bone tool. Spatula? L. 6.3.

02 Clay: green/grey. Temper: none visible. Rim di. 8.

03 Surface: green. Clay: grey. Temper: fine veg. Rim di. c.14.5.

04 Clay: green. Temper: fine grit. Rim di. 16.

05 Surface: buff. Clay: pink. Temper: medium veg. Rim di. 22–25.

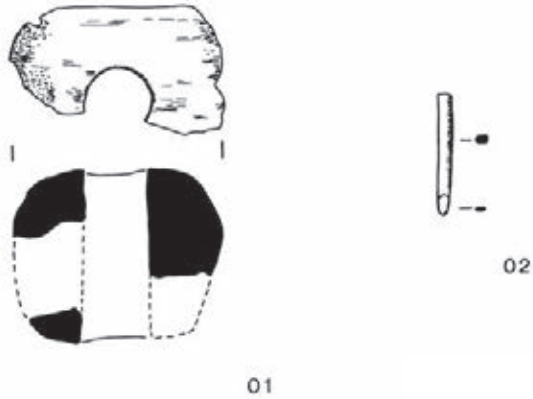
06 Clay: red. Temper: sparse veg. Rim di. 20–22. Handmade

07 Clay: buff. Temper: rough veg. Rim di. c.16.

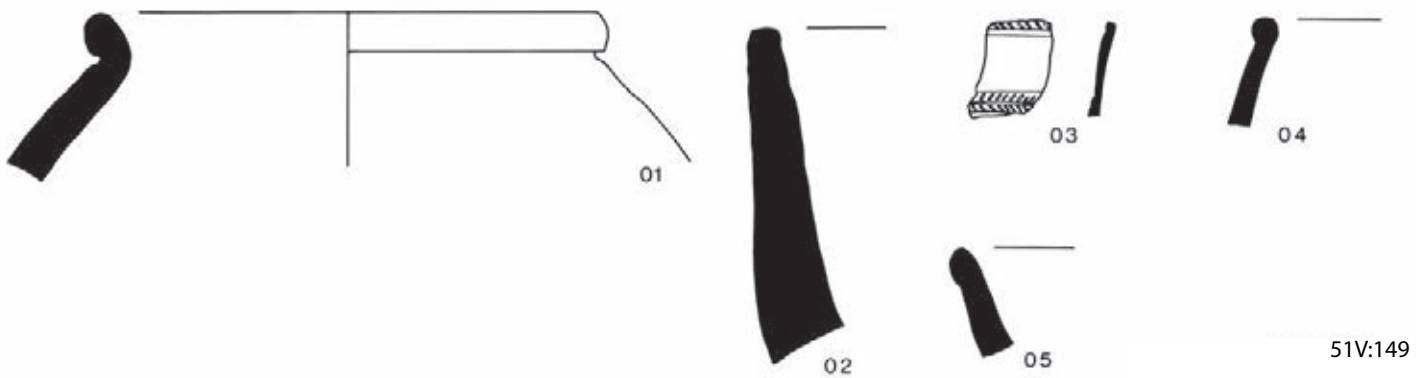
08 Clay: buff. Temper: medium veg. Rim di. 28. Cream slip, purple paint.

09 Clay: buff. Temper: rough veg. Rim di. 24–26.

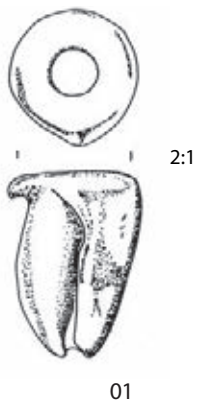
10 Clay: buff. Temper: none visible. Purple paint.



51U:171



51V:149



01

51V:150

51U:171 (LEVEL H)

01 Bone toggle(?) Fragmentary. Max. w. 5.6. Max. ht. 4.6. Di. of perforation: 1.8.

02 Copper pin fragment. Square section tapering to wedge. L. 3.3. Max. di. 0.39.

51V:149 (LEVEL H)

01 Surface: cream slip. Clay: pink. Temper: coarse veg. Rim di. c14.

02 Core: black. Clay: pink. Temper: grog & veg. Handmade

03 Clay: black. Temper: none visible.

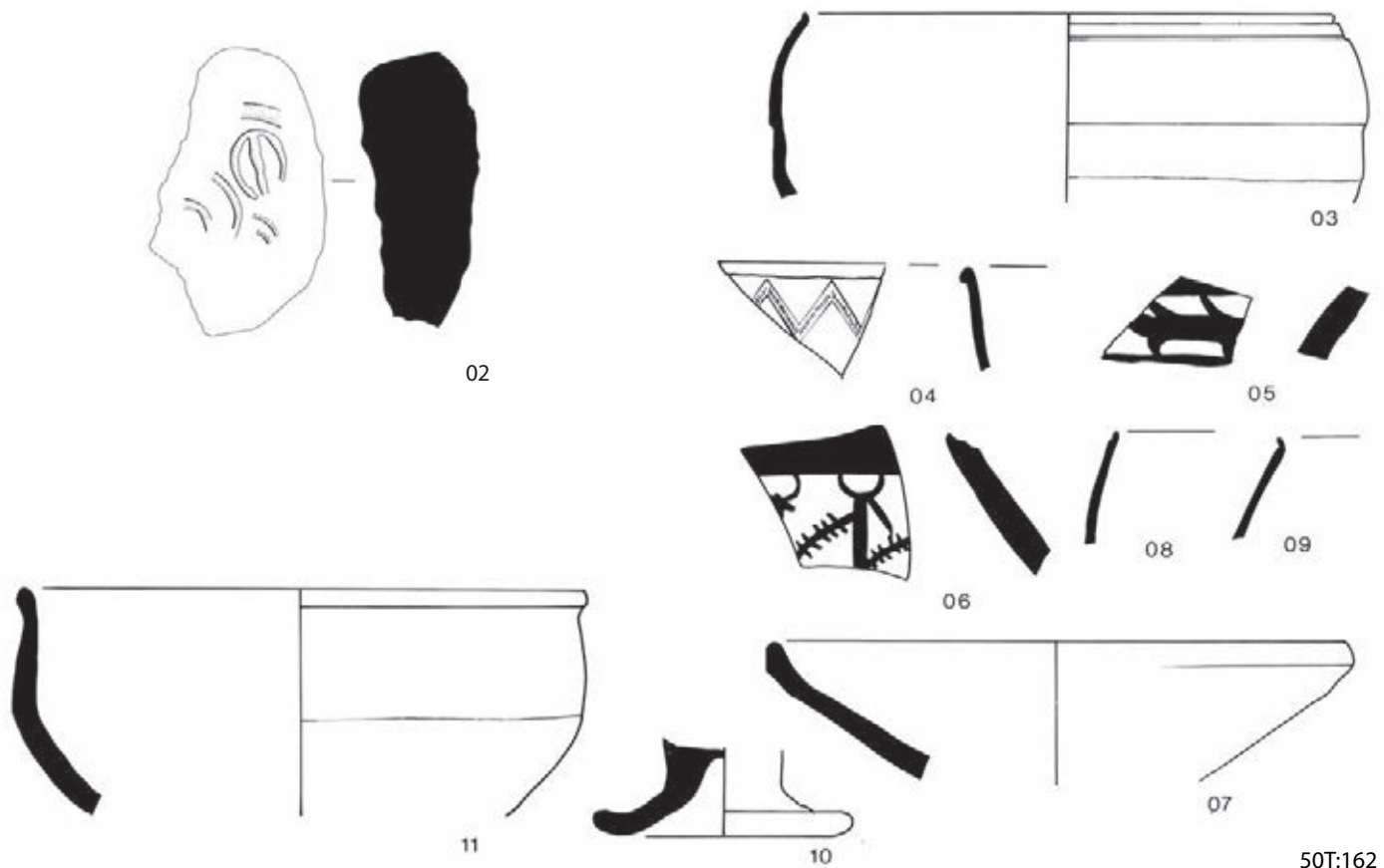
04 Clay: buff. Temper: fine veg.

05 Clay: pink. Temper: fine veg.

51V:150 (LEVEL H)

01 Conus shell bead. Pierced.

LEVEL G



50T:162

50T:162 (LEVEL G)

01 Copper pin fragment (not drawn).

02 Clay sealing. Burnt clay sealing, broken. Max. ht. 3.82. Max. w. 2.37.

Obverse has faintly impressed oval and parts of concentric rings. Reverse has string impressions.

03 Clay: grey. Temper: none visible. Rim di. c.12–14.

04 Clay: grey. Temper: none visible. Rim di. 11–12.

05 Surface: cream slip. Clay: pink. Temper: hard veg. Brown paint.

06 Clay: green. Temper: veg. Purple paint.

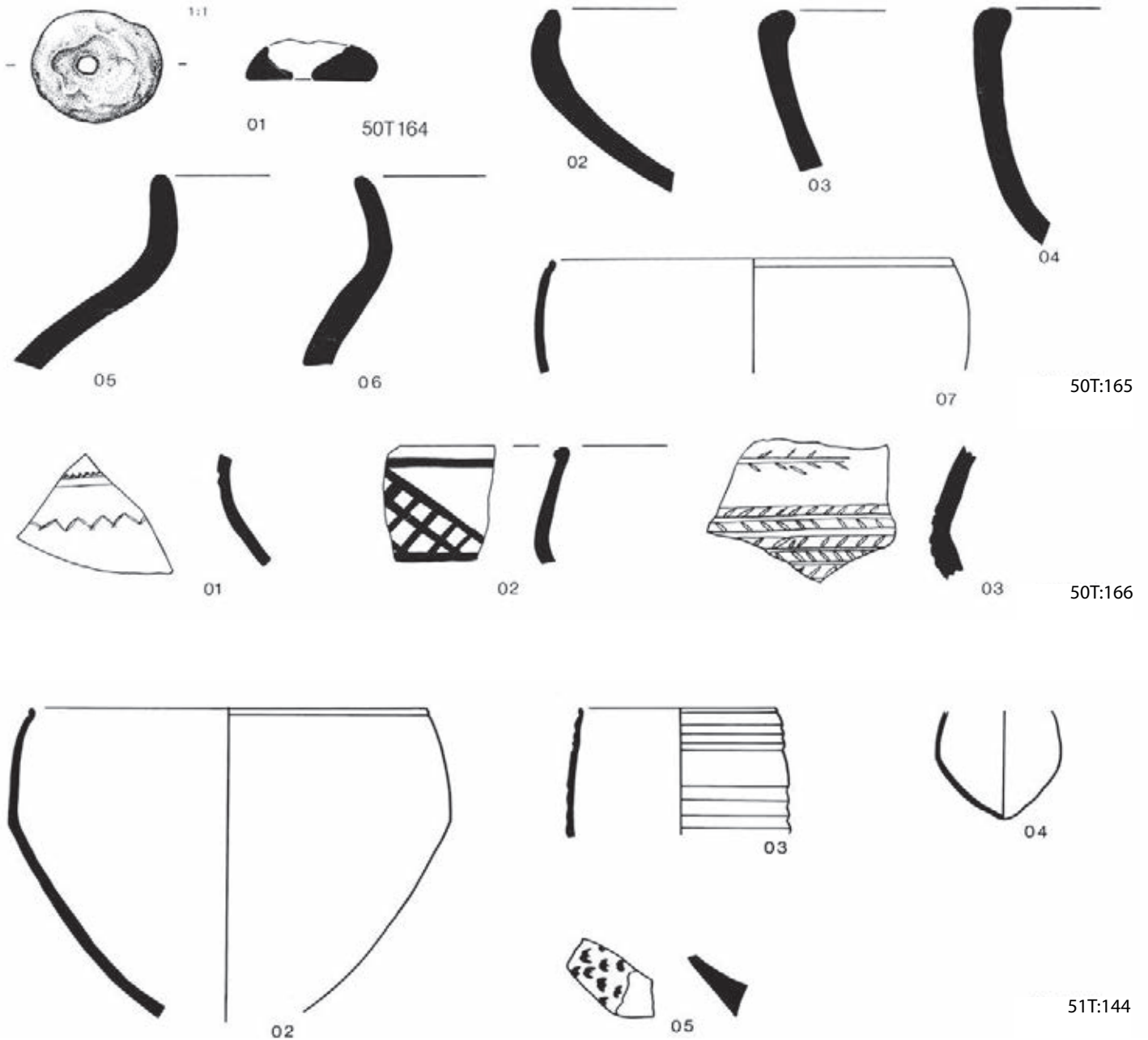
07 Clay: overfired green. Temper: veg. Rim di. c.15.

08 Clay: grey. Temper: none visible. Rim di. 10.

09 Clay: green/grey. Temper: none visible.

10 Clay: grey/green. Temper: grog, veg. & grit. Base di. c.6.

11 Clay: sandy pink. Temper: little white grit. Rim di. 15. Scraped below carination.



50T:164 (LEVEL G)

01 Stone bead(?). Di. 1.95.

50T:165 (LEVEL G)

01 Not used.

02 Clay: buff/brown with black core. Temper heavy veg. and grit. Rim di. 19-21. Handmade.

03 Surface: brown/red. Temper: veg. Rim di. c.35. Handmade.

04 Clay: brown/red with black core. Temper: veg. & grit. Rim di. 33.

05 Clay: red/brown. Temper: heavy coarse veg. Rim di. c.12.

Blackened on rim.

06 Clay: brown. Temper: heavy veg. & white grit. Rim di. 11-12.

07 Clay: green. Temper: none visible. Rim di. 13.

50T:166 (LEVEL G)

01 Clay: grey. Temper: none visible.

02 Clay: brown with red core. Temper: heavy white grit pocking the surface. Rim di. 14. Red paint.

03 Clay: buff with grey core. Temper: some grit.

51T:144 (LEVEL G)

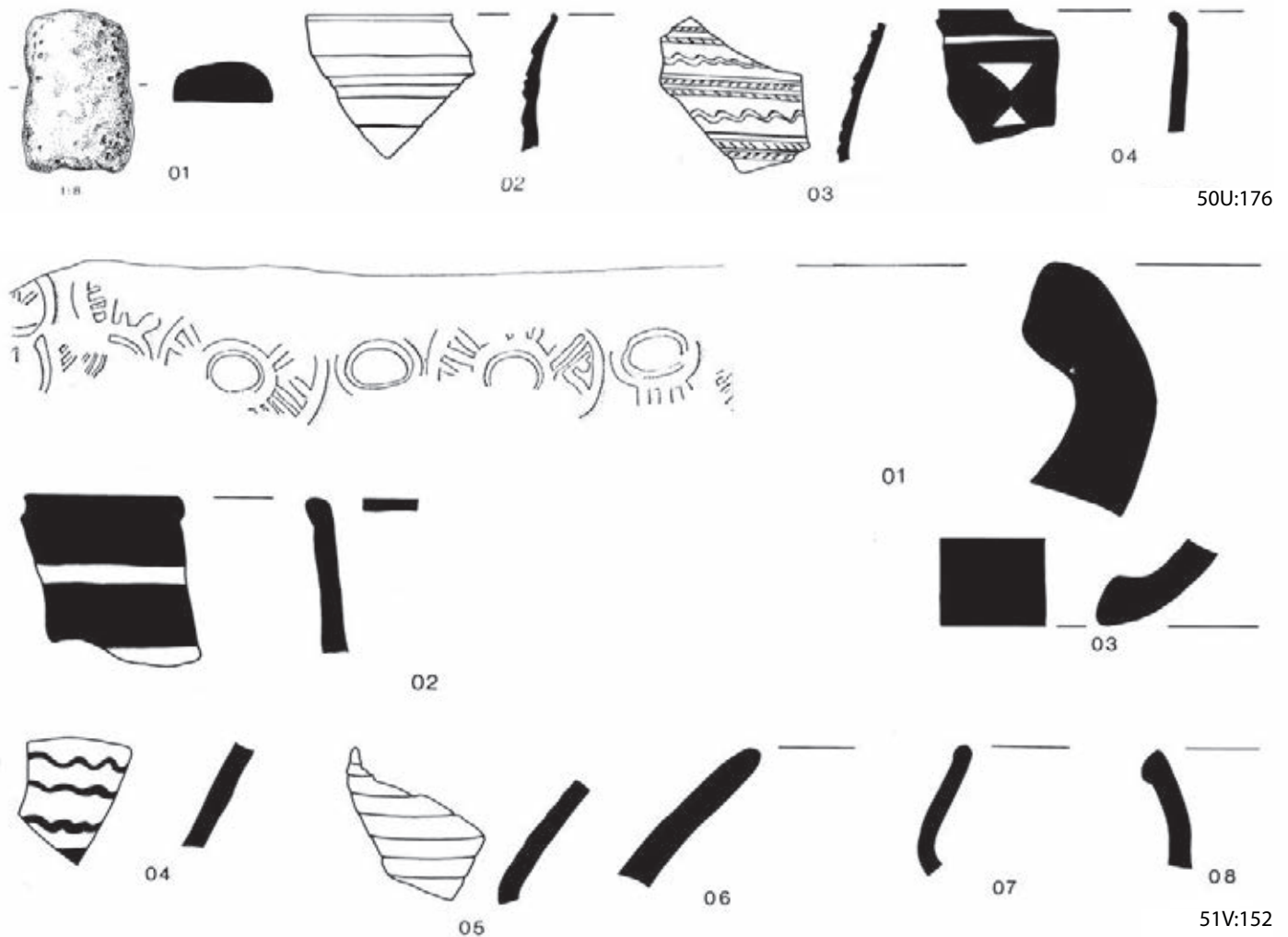
01 Obsidian fragment.

02 Clay: grey. Temper: none visible. Rim di. 13.

03 Clay: grey. Temper: none visible. Rim di. 6.5.

04 Clay: green. Temper: white grit.

05 Clay: buff/brown. Temper: ? Red paint.



50U:176 (LEVEL G/H)

- 01 Limestone mortar. Length: 18.4. Max. w. 12.8.
 02 Clay: grey. Temper: none visible.
 03 Clay: grey. Temper: none visible. Scraped decoration.
 04 Surface: cream slip. Clay: buff. Temper: veg. Brown paint.

51V:152 (LEVEL G)

- 01 Jar with seal impression. Surface: buff. Clay: red. Temper: fine grit. Rim di. c.40. At least two rollings of geometric rosette design impressed below jar rim.
 02 Surface: cream slip Clay: pink. Temper: fine veg. Purple paint. Handmade
 03 Surface: cream slip Clay: pink. Temper: fine veg. Base di. 18–20. Handmade
 04 Surface: white slip out. Clay: buff. Temper: fine veg. Purple paint. Handmade
 05 Clay: buff. Temper: fine veg.
 06 Clay: brown. Temper: grog & grit. Rim. di. ? Handmade
 07 Surface: buff. Clay: pink. Temper: white grit.
 08 Clay: buff. Temper: veg.

50T:172 (Level F, grave)

- 03 Clay: grey. Temper: Small inclusions of limestone and mica. Ht. 17.5 Rim di. 9.6. Excised decoration. Four lugs, one only intact.
 04 Cu pin. Di. of head 0.4. Length 13. Head decorated with grooves. Circular in cross-section.
 05 Natural pebble. Used as jar stopper. Found inside Jar 03. Max. di. 13.

50T:173 (Level F, grave)

- 02 Frit(?) bead. White with decayed surface. Roughly cylindrical. Max. di. 0.55. Max. length 0.55–0.60.

50U:180 (Level F, grave)

- 02 Bone point. Broken at both ends. Remains of drilled hole at top. Length: 5.96. Width: 0.44. Scale 1:2.

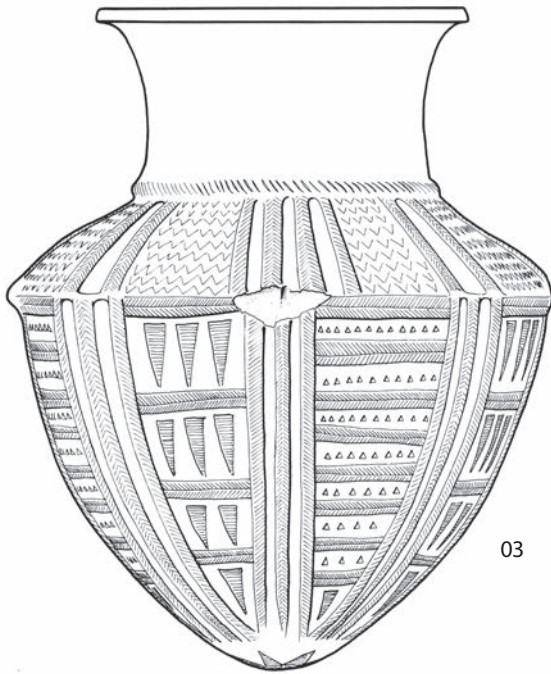
50V:123 (Level F, grave)

- 01 Cu pin. Complete and intact. Heavily corroded with unclear motif on head of pin, possibly an animal (or bird?). L. 14.1. Max. di. of shaft 0.48

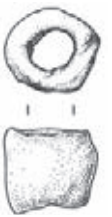
51U:176 (Level F, grave)

- 01 Jar. Clay: grey. Temper: fine limestone and mica. Rim di. 8.6. Ht. 16.8. Four lugs. Incised decoration. Complete and intact.
 02 Cup. Clay: grey/blue. Temper: none visible. Rim di. c.6.5.
 03 Jar. Clay: grey. Temper: Small inclusions of limestone and mica. Ht. 17.5 Rim di. 9.6. Four lugs, one only extant. Excised decoration.

LEVEL F



50T: 172



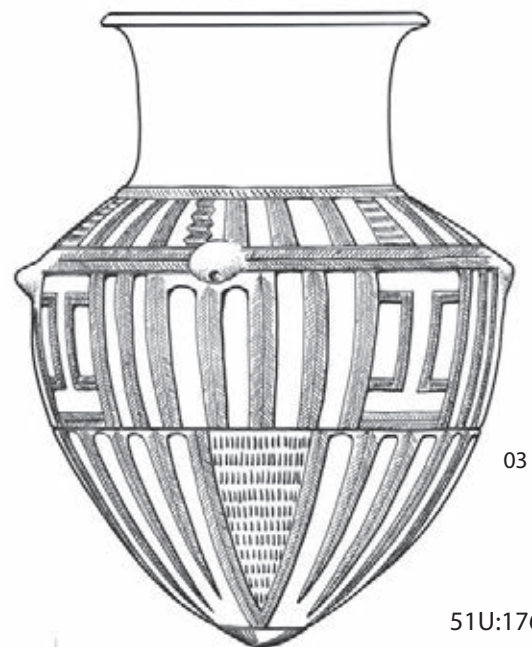
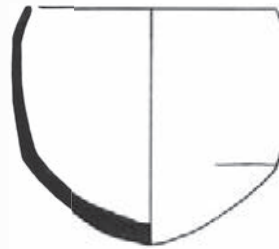
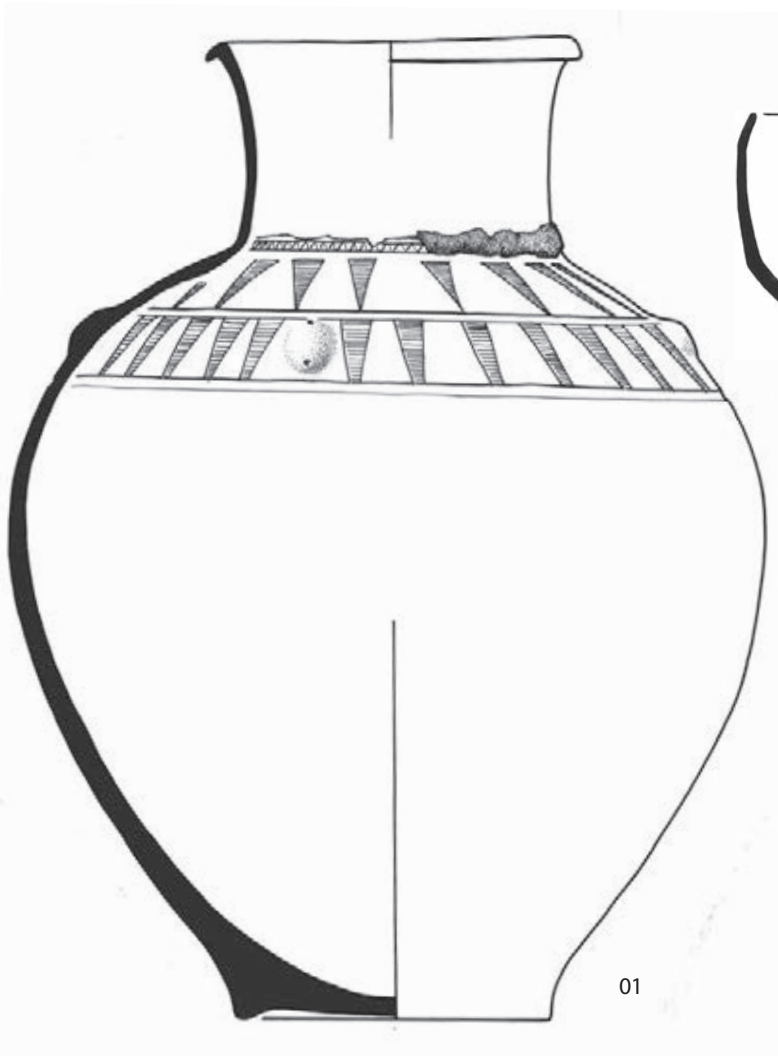
2:1
02
50T: 173



50U: 180

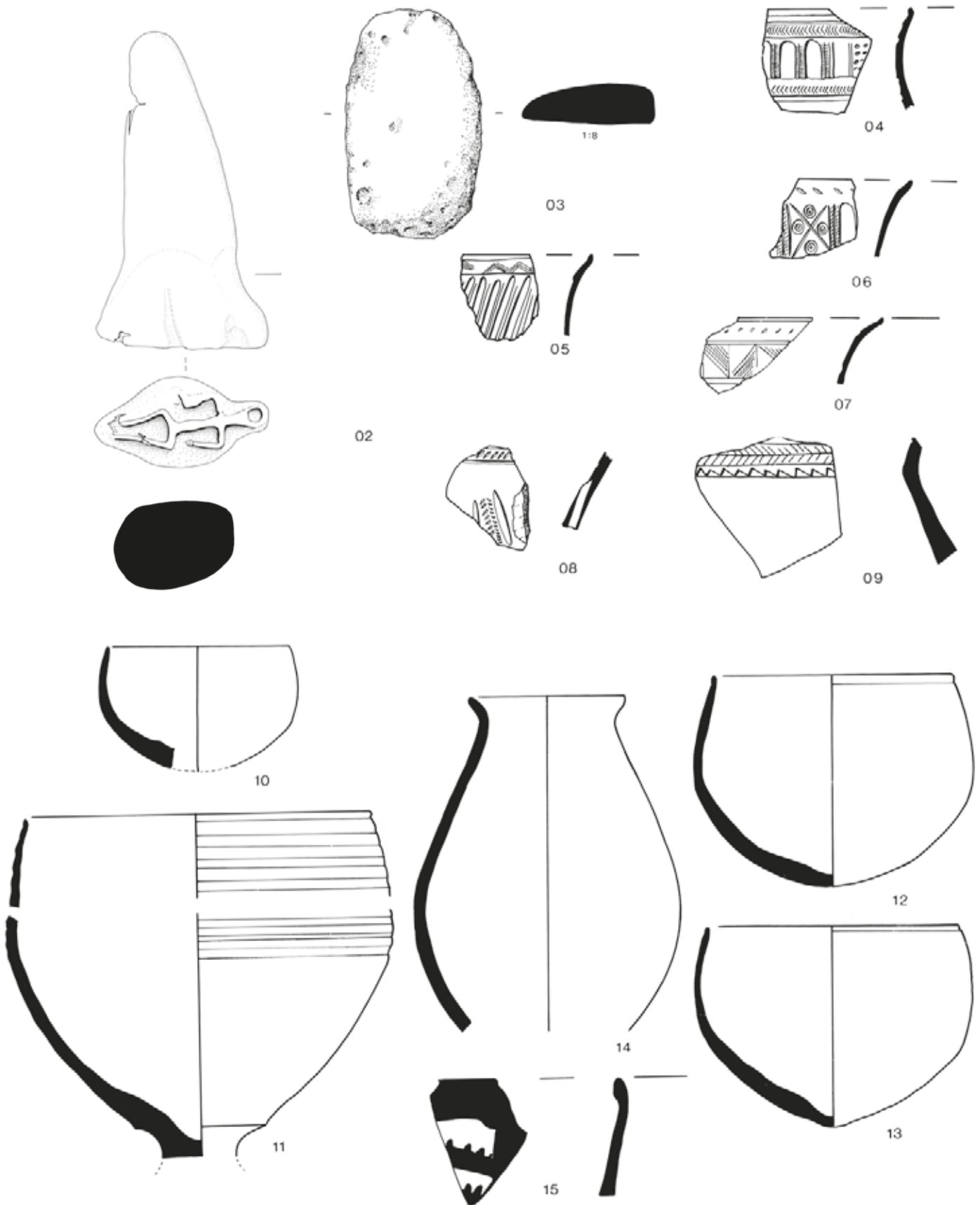


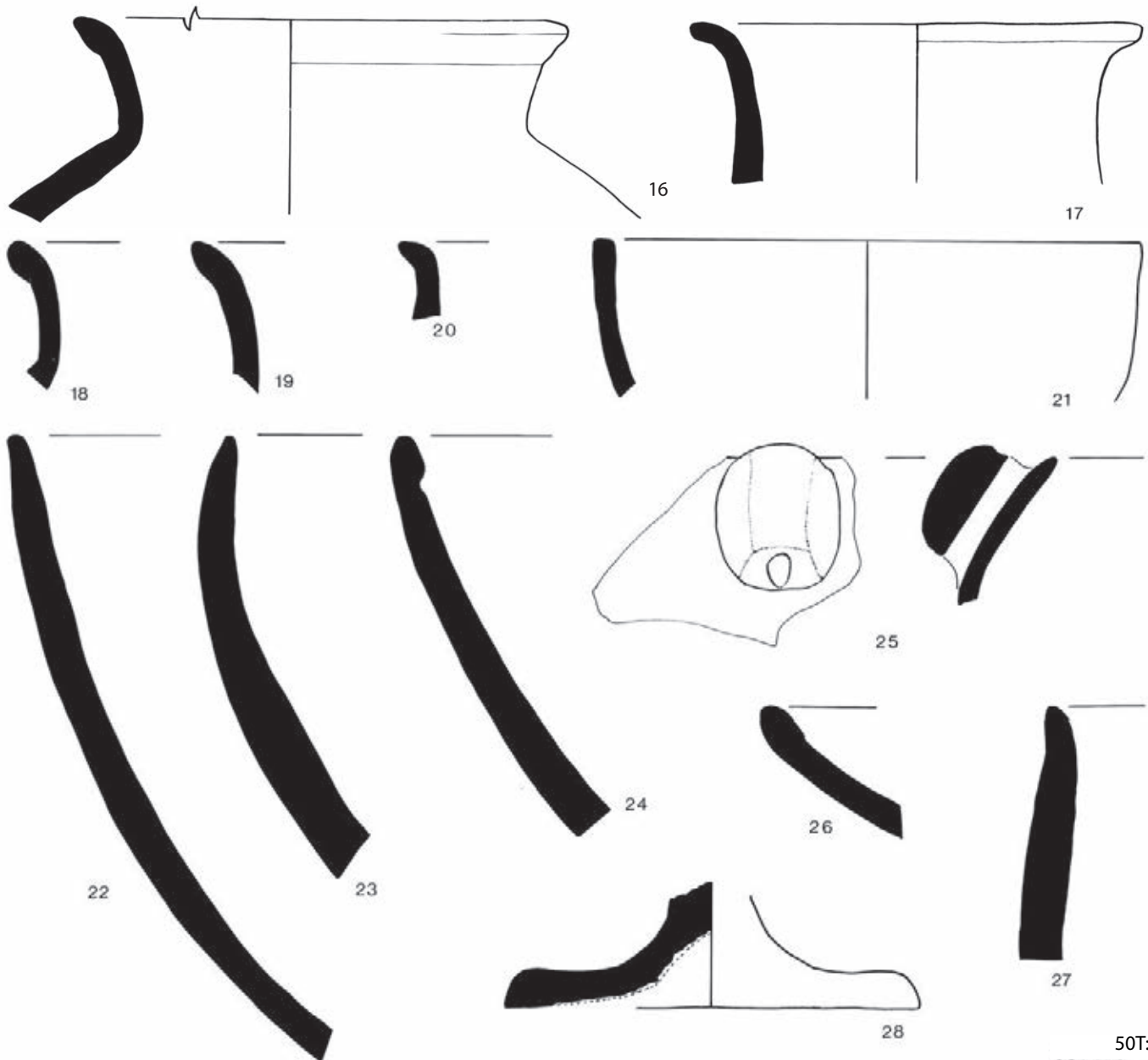
50V: 123



51U:176

LEVEL E





50T:158 (LEVEL E)

01 Pebble, discarded

02 Clay stamp. Clay: grey/brown. Temper: veg. Lump of clay, moulded in the fist and with a design of a dancing man(?) on the bottom. Width across stamp: 3.32. Height: 6.15.

03 Stone grinder. Limestone. Length: 34.4. Ht. 6.4. Th. 20.5.

04 Clay: grey. Temper: fine grit.

05 Clay: grey. Temper: none visible.

06 Clay: grey. Temper: none visible.

07 Clay: grey. Temper: none visible.

08 Clay: grey. Temper: none visible. Remnant of pierced lug visible.

09 Clay: spongy grey. Temper: none visible.

10 Clay: pale grey. Temper: none visible. Rim di. c.7.

11 Surface: black, olive above carination on outside. Clay: black. Temper: none visible.

12 Clay: grey. Rim di. c.9. Ht. 8.0.

13 Clay: grey. Temper: none visible. Rim di. c.9. Ht. 7.6.

14 Clay: red with black core. Temper: veg. & large grit. Rim di. 6.

15 Surface: cream slip. Clay: buff. Temper: veg. Black paint.

16 Clay: buff. Temper: grog & veg. Rim di. 16. Handmade.

17 Surface: buff out with traces of burning. Clay: pink. Temper: veg. Rim di. c.14. Handmade.

18 Surface: buff. Clay: pink. Temper: veg. (?) Handmade, wheel finished.

19 Surface: buff. Clay: pink. Temper: sparse veg. Rim di. 15-20. Handmade.

20 Clay: pink. Temper: rough veg. Rim di. 13-15. Handmade.

21 Clay: pink. Temper: veg. Rim di. c.17. Handmade.

22 Clay: yellow with black core. Temper: veg. Rim di. 34-37. Crudely handmade.

23 Clay: green. Temper: coarse veg. Rim di. c.39. Very crudely handmade.

24 Clay: hard orange. Temper: fine veg. & light grit. Rim di. c.37. Scraped on outside.

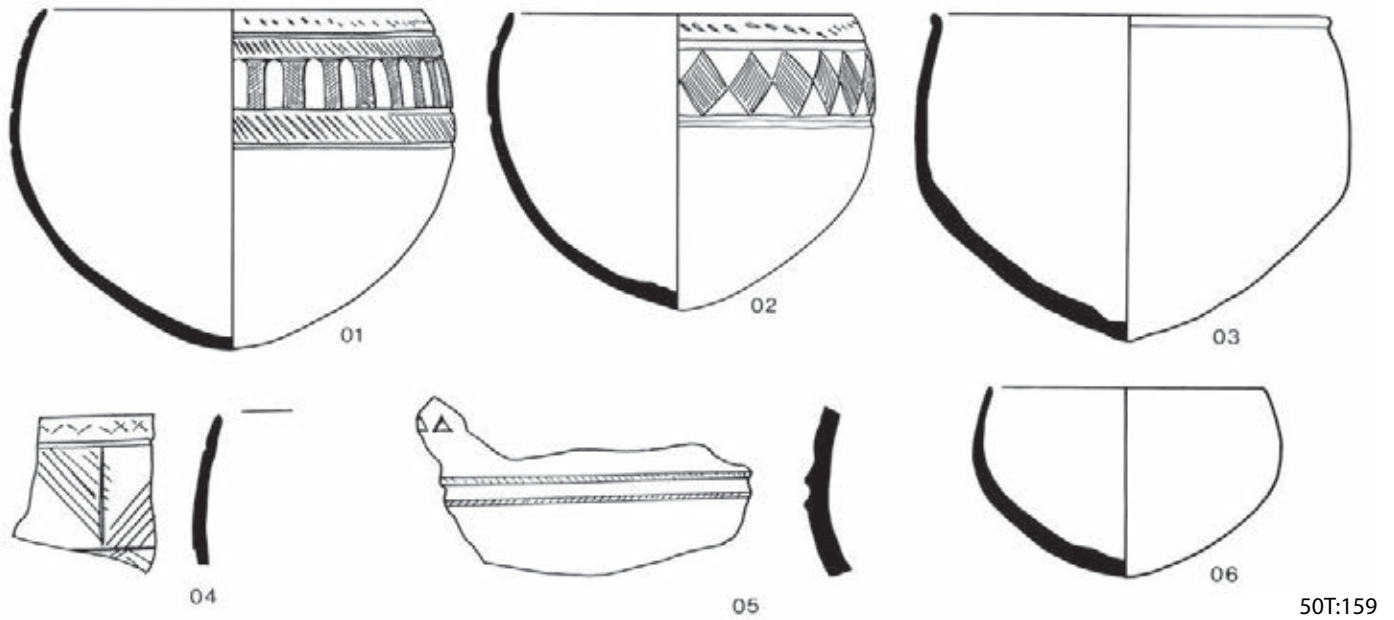
25 Clay: pink. Temper: white grit. Handmade. Applied lug.

26 Surface: buff. Clay: pink. Temper: veg. Handmade.

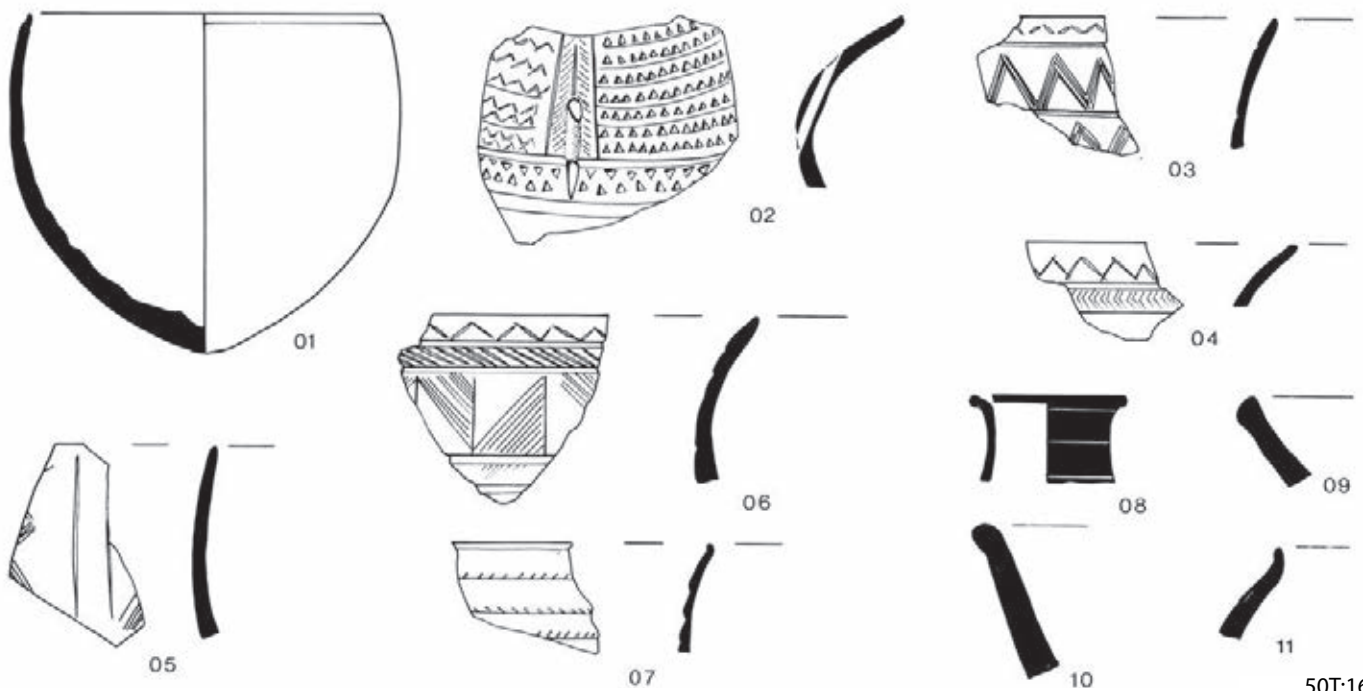
27 Clay: brown. Temper: veg. Rim di. c.33. Handmade.

28 Clay: buff with darker core. Temper: rough veg. Rim di. c.13.

50T:158



50T:159



50T:160

50T:159 (LEVEL E)

01 Clay: grey. Temper: none visible. Rim di. 10. Ht. 9.0.

02 Clay: grey. Temper: none visible. Rim di. c.9. Ht. 7.8.

03 Clay: pale grey. Temper: ? Rim di. c.10.5. Ht. 8.7.

04 Grey ware. Rim di. c.9.

05 Clay: grey. Temper: sparse veg. Triangles are impressed.

06 Clay: pale grey. Temper: none visible. Rim di. c.7.5. Ht. 5.0.

50T:160 (LEVEL E)

01 Clay: grey. Temper: none visible. Rim di. c.9.5. Ht. 9.0. Base has been pared down.

02 Clay: grey. Temper: none visible.

03 Clay: grey. Temper: none visible.

04 Clay: grey. Temper: none visible.

05 Clay: pale grey. Temper: none visible.

06 Clay: pale grey. Temper: slightly sandy. Rim di. c.20.

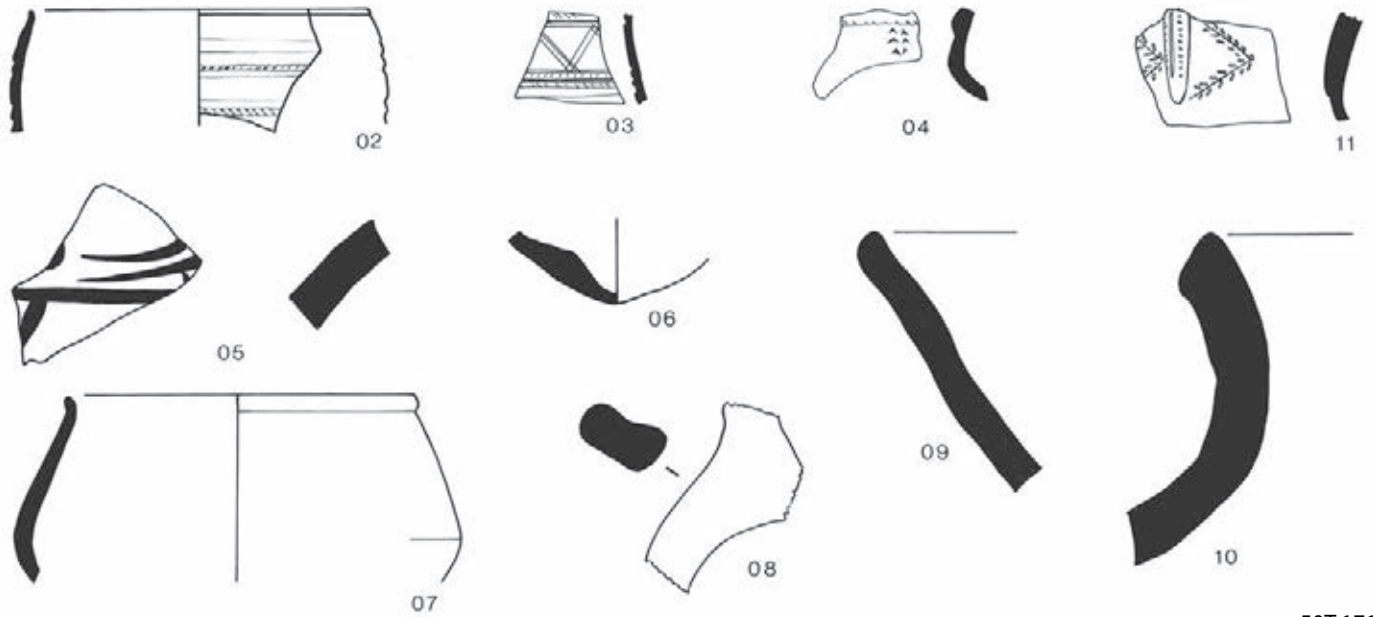
07 Clay: dark grey. Temper: none visible.

08 Surface: cream slip. Clay: buff. Temper: white grit. Rim di. c.4. Red paint.

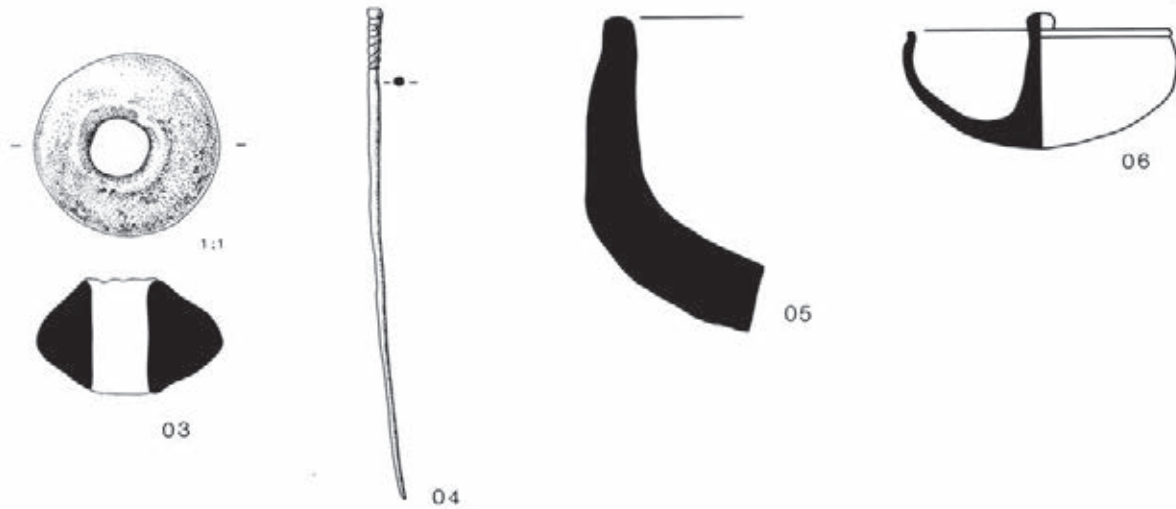
09 Clay: pink. Temper: grit & mica. Rim di. 15.

10 Core: dark. Clay: pink. Temper: hard veg.

11 Clay: sandy buff. Temper: white grit & mica.



50T:171



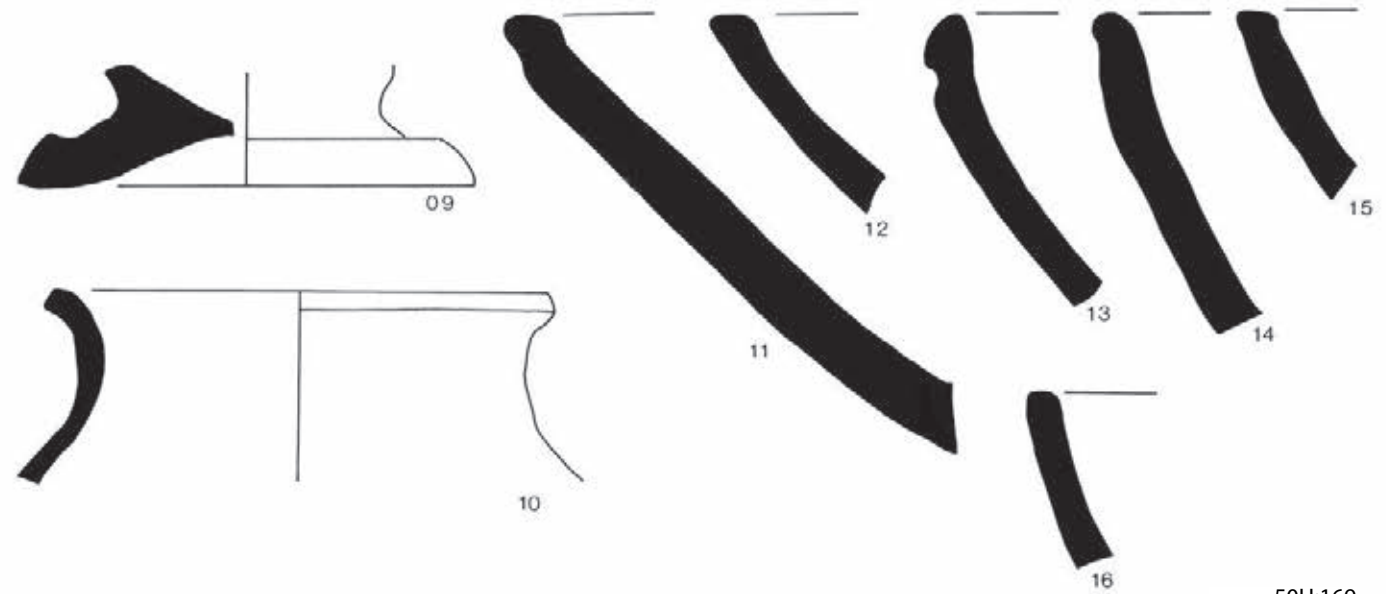
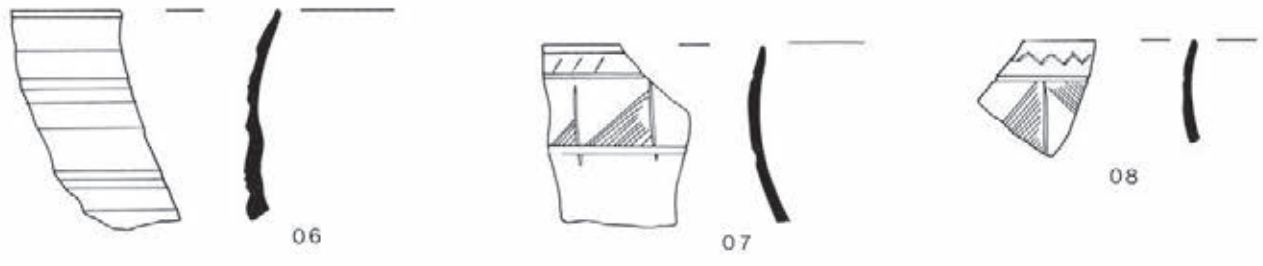
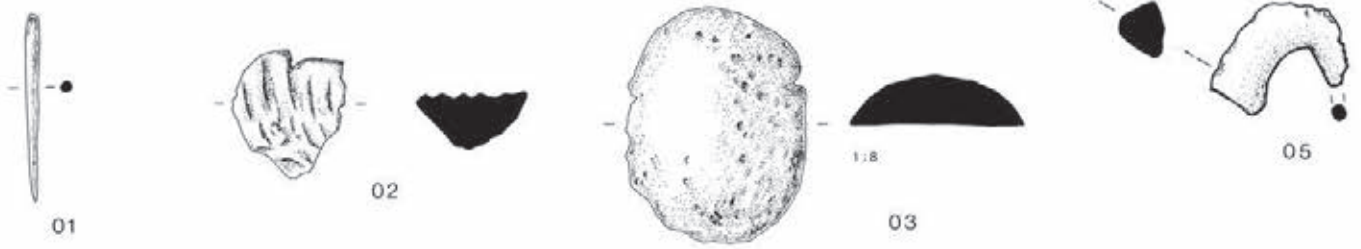
50U:168

50T:171 (LEVEL E)

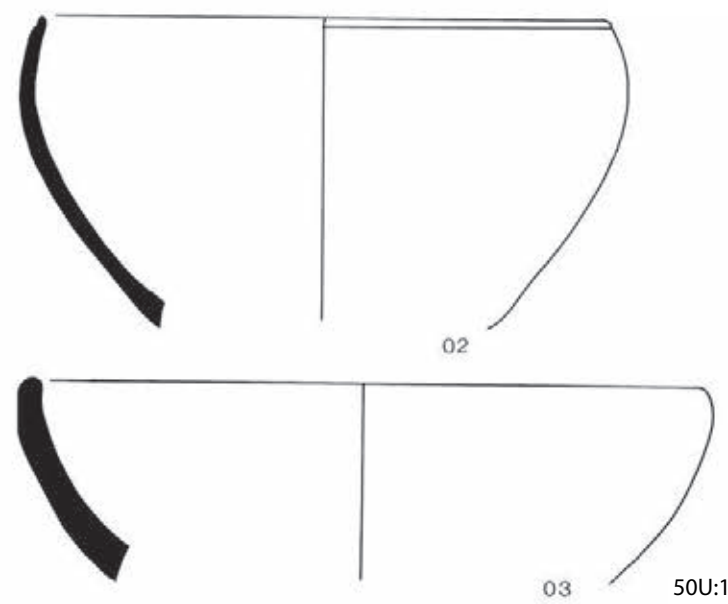
- 01 Sample, discarded.
- 02 Clay: Grey. Temper: none visible. Rim di. c.9.
- 03 Clay: grey. Temper: none visible.
- 04 Clay: fine green. Temper: none visible.
- 05 Surface: light brown. Clay: pink. Temper: veg. Purple paint.
- 06 Clay: grey. Temper: none visible.
- 07 Surface: buff. Clay: pink. Temper: fine white & black grit. Rim di. c.9.5.
- 08 Clay: brown with black core.
- 09 Surface: buff. Clay: pink. Temper: veg. & sparse grit. Rim di. c.10. Handmade.
- 10 Surface: buff. Clay: pink. Temper: veg. & large grit. Rim di. c.20.

50U:168 (LEVEL E)

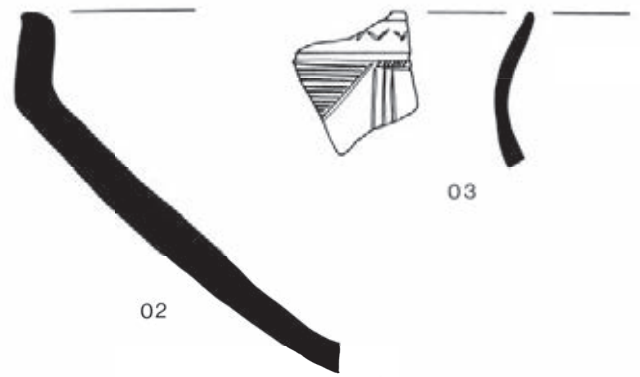
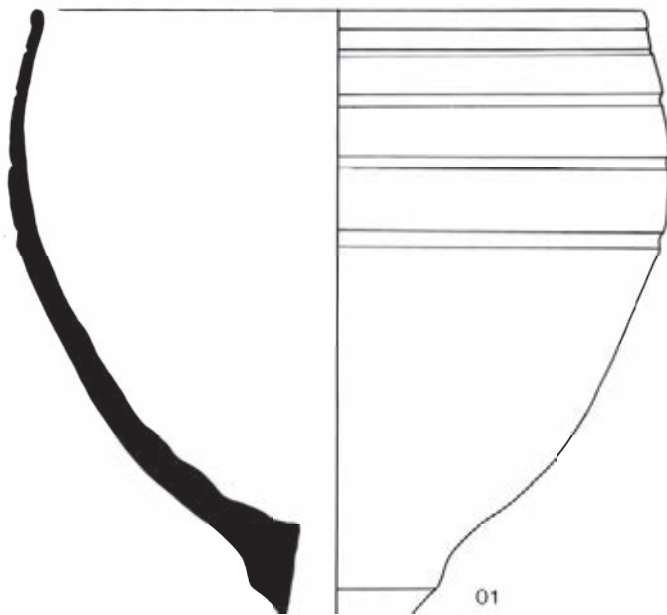
- 01 Carbon sample.
- 02 Carbon sample.
- 03 Clay spindle whorl. Complete and intact. Height: 1.5. Di. 2.4. Biconical.
- 04 Copper pin. Complete and intact. Length: 13.1. di. 0.25. grooved head.
- 05 Clay: buff. Temper: rough veg. Handmade.
- 06 Clay: grey. Temper: veg. Rim di. 7. Max. ht. 3.7.



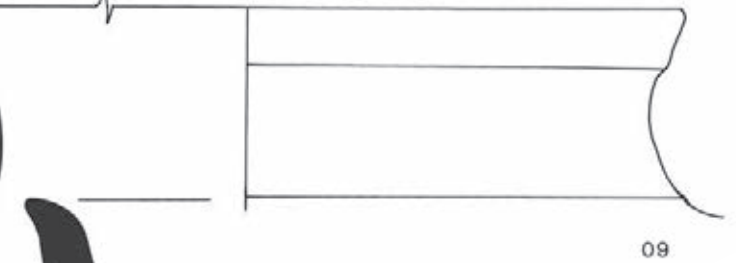
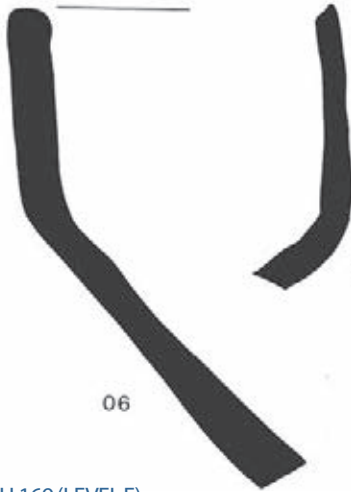
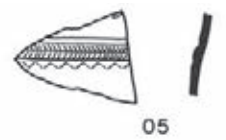
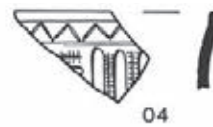
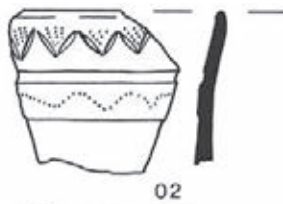
50U:169



50U:172



50U:173



50V:121

50U:169 (LEVEL E)

- 01 Bone pin. Complete and intact. Length: 5.0. Di. 0.27.
- 02 Clay sealing. Obverse broken. Reverse shows string impressions.
- 03 Limestone mortar. Length: 25.2. Width: 18.4.
- 04 Bitumen sample.
- 05 Clay: buff. Temper: veg.
- 06 Clay: grey. Temper: none visible.
- 07 Clay: grey. Temper: none visible.
- 08 Clay: grey. Temper: none visible.
- 09 Clay: buff. Temper: veg. Base di. 12. Handmade.
- 10 Surface: cream slip. Clay: pink. Temper: veg. Rim di. 12–14.
- 11 Clay: brown. Temper: veg. Rim di. 40. Handmade.
- 12 Clay: buff. Temper: veg. Surface smoothed.
- 13 Surface: cream slip. Clay: pink. Temper: veg. Rim di. 30.
- 14 Surface: cream slip. Clay: pink. Temper: veg. Handmade.
- 15 Surface: pink. Clay: buff. Temper: veg.
- 16 Clay: buff. Temper: veg. Rim di. 21–23. Handmade.

50U:172 (LEVEL E)

- 01 Seal impression. Fragmentary design, perhaps a cross with

lozenge fill motifs.

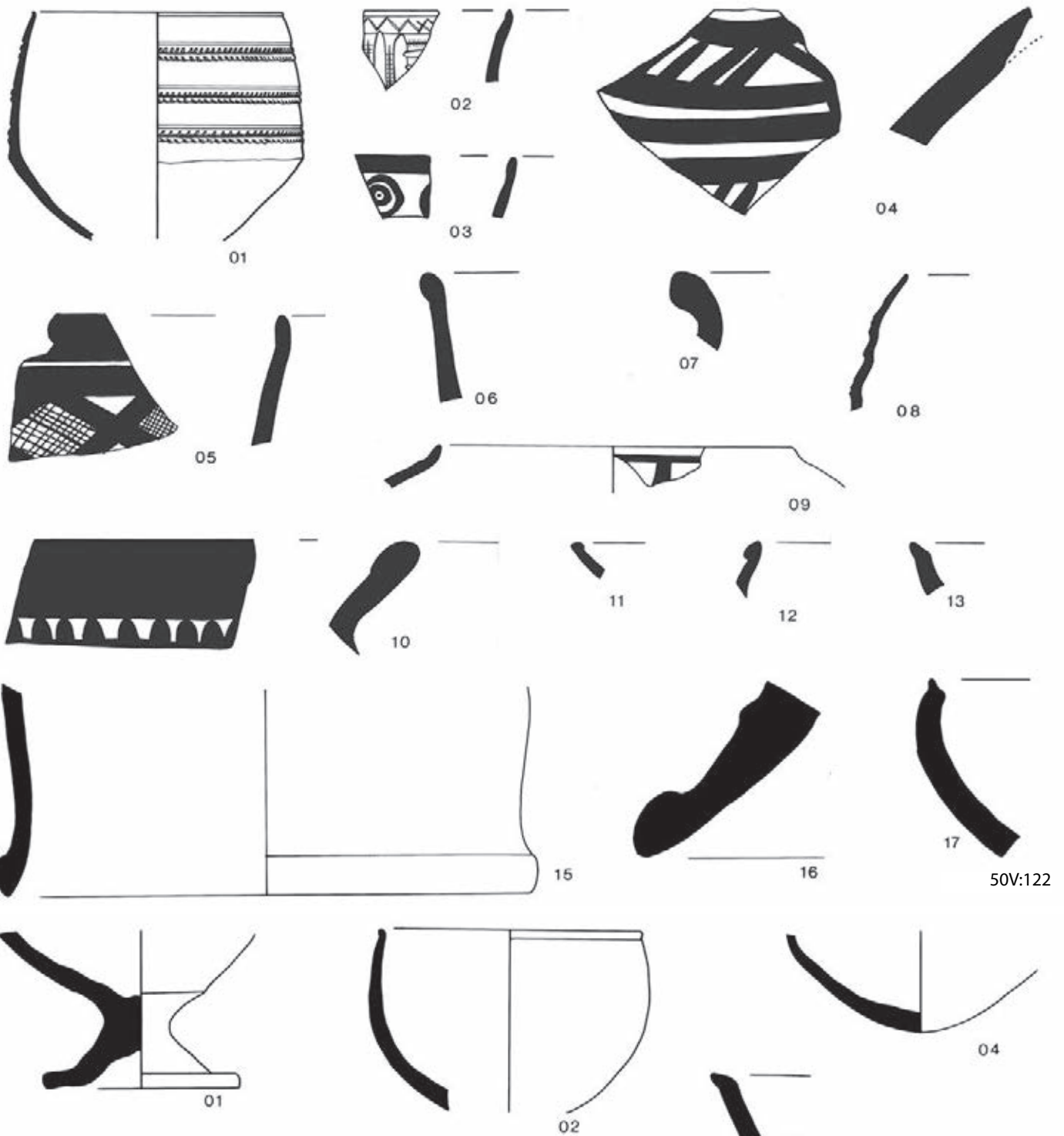
- 02 Clay: grey. Rim di. 15.
- 03 Clay: buff. Temper: rough veg. Rim di. 18. Handmade.

50U:173 (LEVEL E)

- 01 Clay: grey. Temper: none visible. Rim di. 13.
- 02 Clay: pink. Temper: rough veg. Rim di. 21. Handmade.
- 03 Clay: grey. Temper: none visible.

50V:121 (LEVEL E)

- 01 Discarded
- 02 Clay: grey. Temper: none visible.
- 03 Clay: grey. Temper: none visible.
- 04 Clay: grey. Temper: none visible.
- 05 Clay: grey. Temper: none visible.
- 06 Clay: pink. Temper: veg. Wheelmade.
- 07 Clay: yellow. Temper: veg. & grog. Hand made.
- 08 Clay: buff. Temper: veg. Rim di. 14–16.
- 09 Clay: green (over-fired) Temper: ? Rim di. 23–24.
- 10 Clay: pink. Temper: grog. Rim di. ? Handmade.

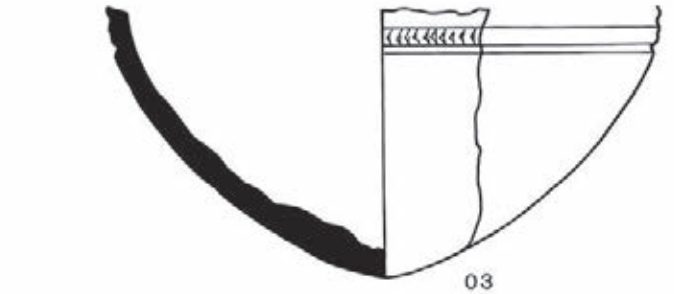
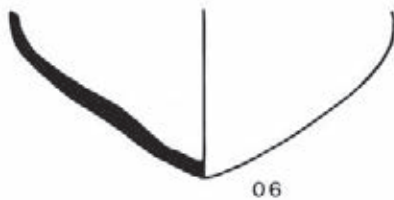
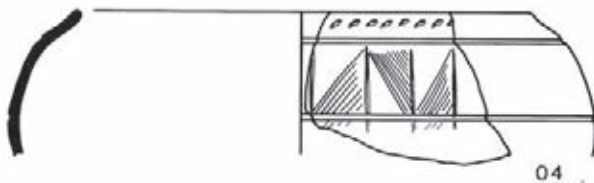
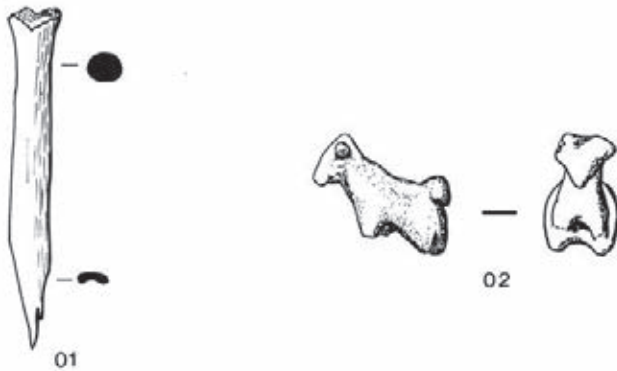
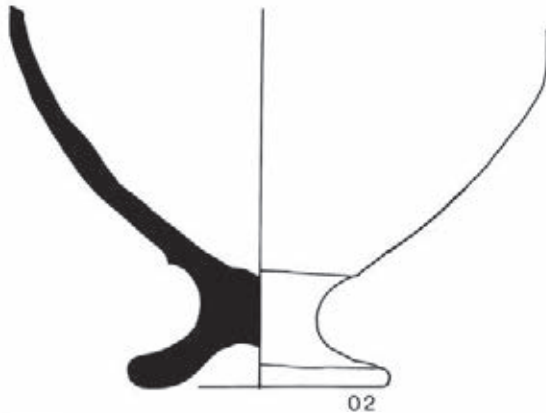


50V:122 (LEVEL E/H)

- 01 Clay: pale grey. Temper: none visible. Rim di. 8–9.
 02 Clay: black. Temper: none visible.
 03 Clay: cream. Temper: fine veg. Black paint.
 04 Surface: yellow. Clay: buff. Temper: veg. Black paint.
 05 Surface: cream. Clay: orange. Temper: veg. Handmade, red paint.
 06 Clay: buff. Temper: grit & veg.
 07 Clay: buff. Temper: grit. Rim di. 20.
 08 Clay: grey. Temper: none visible. Rim di. 8–10.
 09 Surface: cream slip. Clay: pink. Temper: fine grit. Rim di. 11–13. Purple paint.

50V:122

51T:130



- 10 Clay: buff. Temper: fine veg. Purple paint.
 11 Clay: buff. Temper: fine grit.
 12 Surface: cream slip. Clay: orange. Temper: sparse sand.
 13 Surface: buff. Clay: orange. Temper: white grit.
 14 Not used.
 15 Surface: buff slip. Clay: pink. Temper: veg. & white grit. Base di. c.18.
 16 Clay: pink. Temper: rough veg. Hand made.
 17 Surface: cream. Clay: red. Temper: veg. Rim di. 20–25. Handmade, wheel finished(?).

51T:130 (LEVEL E)

- 01 Clay: grey. Temper: light veg., more in pedestal. Base di. c.6.5.
 02 Clay: grey. Temper: none visible. Rim di. 9.
 03 Clay: pink. Temper: grit.
 04 Clay: grey. Temper: light veg.
 05 Clay: grey. Temper: light veg., more in pedestal. base di. c.5.6.

51T:132 (LEVEL E)

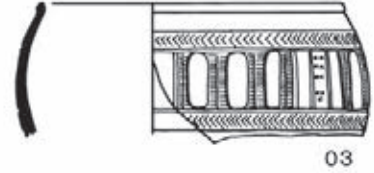
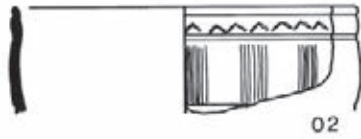
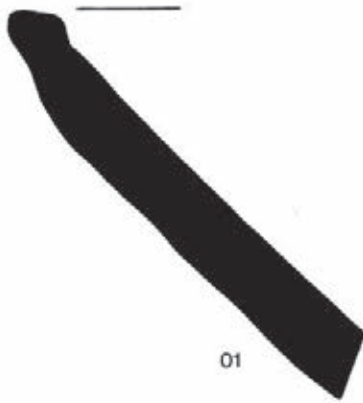
- 01 Carbonised seeds.
 02 Clay: grey. Temper: light veg., more in pedestal. Base di. c.6.1.
 03 Surface: cream slip. Clay: pink. Temper: none visible.
 04 Clay: pink. Temper: veg.

51T:133 (LEVEL E)

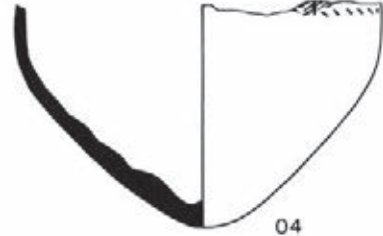
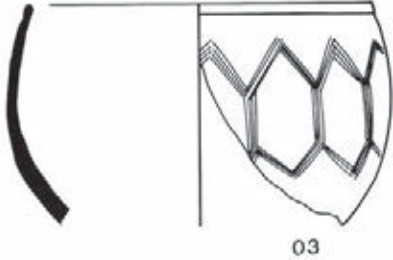
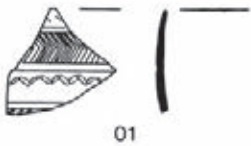
- 01 Bone awl with finely tapered point. L. 9.0. Di. at centre: 0.98.
 02 Animal figurine. Black, burnt clay. Front legs & right ear missing.. H. 2.2. L. 3.6. W. 1.9.
 03 Clay: grey. Temper: none visible.
 04 Clay: grey. Temper: none visible. Rim di. 11–12.
 05 Clay: dark grey. Temper: none visible.
 06 Clay: buff. Temper: none visible.
 07 Clay: buff. Temper: none visible.
 08 Clay: buff. Temper: veg. Rim di. 18–20.

51T:132

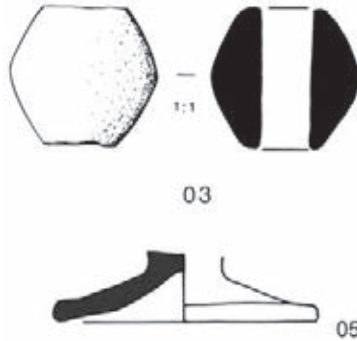
51T:133



51T:134



51T:135



51T:139

51T:134 (LEVEL E)

- 01 Clay: pink. Temper: rough veg. Handmade
- 02 Clay: grey. Temper: none visible. Rim di. 9.
- 03 Clay: grey. Temper: Ground shell? Rim di. 8.8.

51T:135 (LEVEL E)

- 01 Clay: grey. Temper: occasional white grit.
- 02 Clay: green/grey. Temper: occasional large white grit. Rim di. 9.5.
- 03 Clay: grey. Temper: none visible. Rim di. 8.8.
- 04 Clay: buff. Temper: veg. Handmade

51T:139 (LEVEL E)

- 01 Charcoal sample.
- 02 Sealing. Black clay. Geometric seal impression on front. Reverse has clear string marks and finger impressions. L. 3.78.
- 03 Clay bead. Baked brown clay. H. 1.9. Maximum di. 1.95.

- 04 Surface: cream slip with black paint. Clay: pink. Temper: much medium veg.
- 05 Clay: dark grey. Temper: much veg. Base di. 5.6.

51T:141 (LEVEL E)

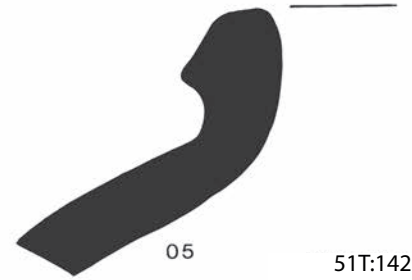
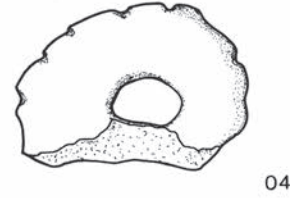
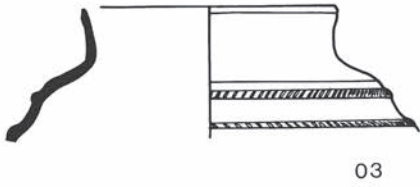
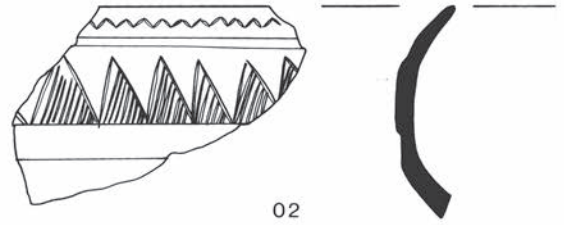
- 01 Copper pin fragment. L. 3.2.
- 02 Stone pendant. Green stone. Triangular with irregular facet. Pierced close to top edge. H. 0.7. Width across base: 0.76.

51T:142 (LEVEL E)

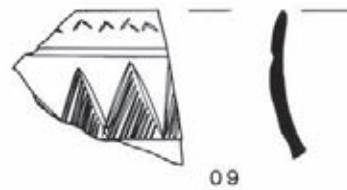
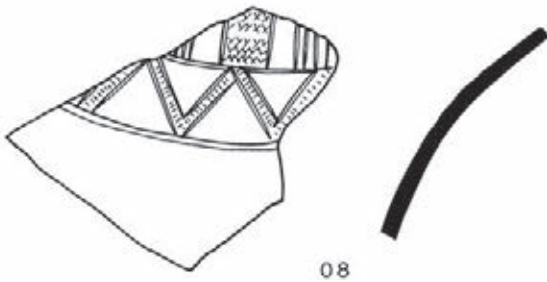
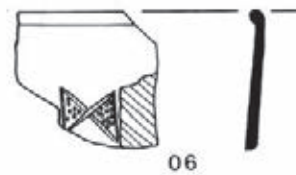
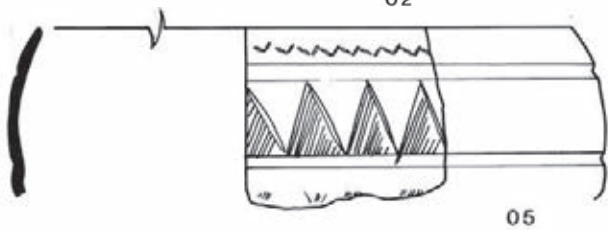
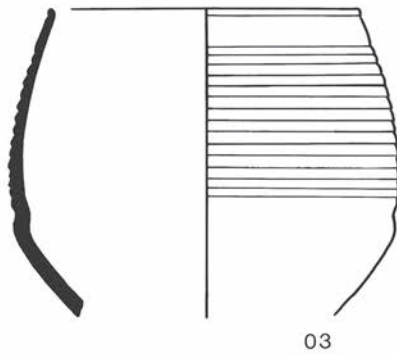
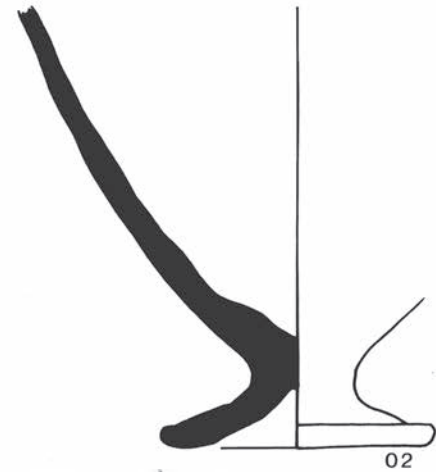
- 01 Carbon sample.
- 02 Clay: grey. Temper: none visible. Rim Di. ?
- 03 Clay: dark grey. Temper: none visible. Rim di. 7.
- 04 Clay: pink. Core: black. Temper: veg. Handle from lid(?)
- 05 Clay: green. Temper: veg.



51T:141



51T:142

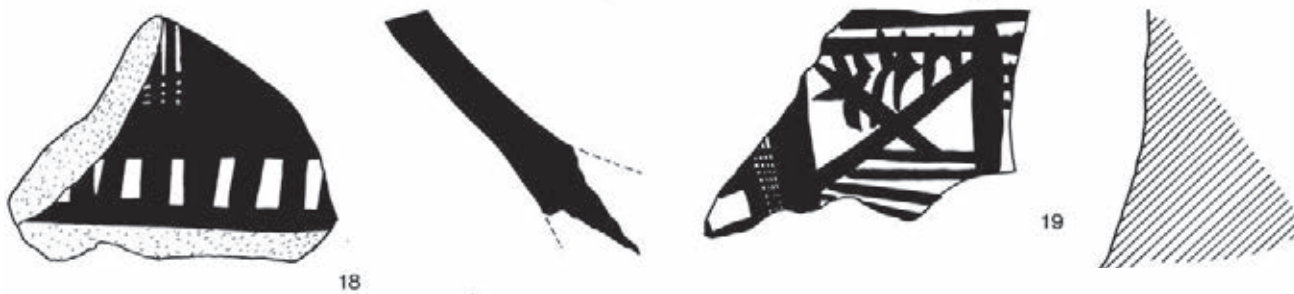
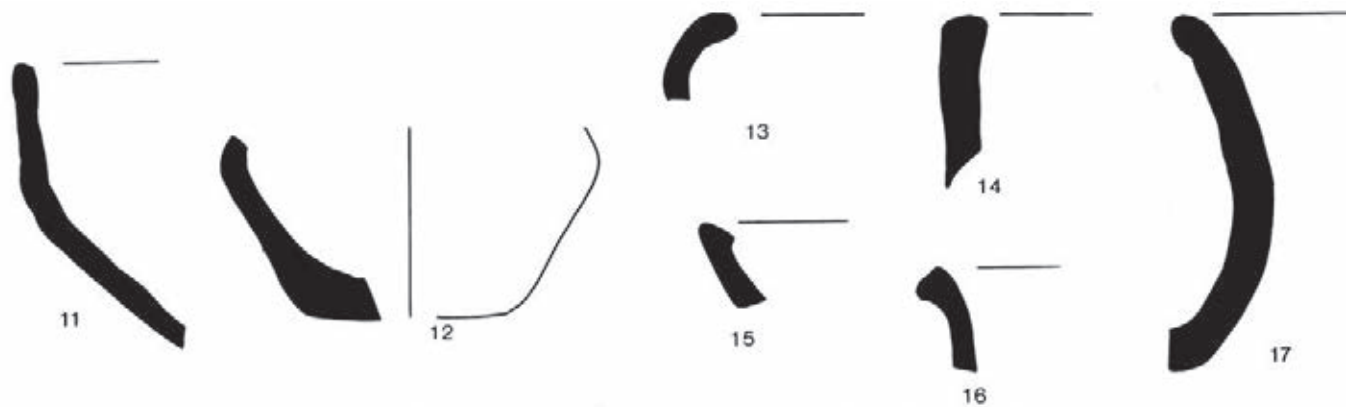


51T: 143

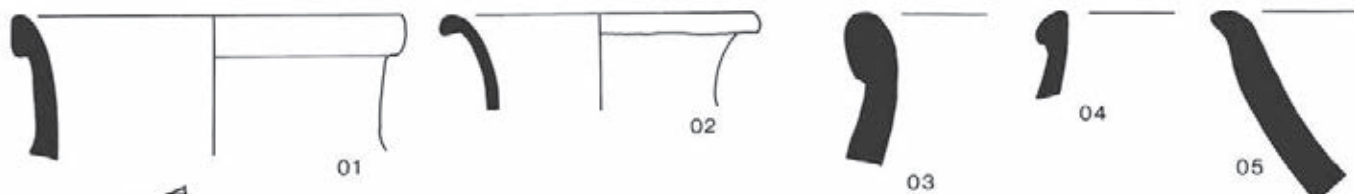
51T:143 (LEVEL E/G)

- 01 Discarded
- 02 Clay: grey. Temper: none visible. Base di. 6.1.
- 03 Clay: grey. Temper: none visible. Rim di. c.8.
- 04 Clay: grey. Temper: some white grit & veg. Base di. 6.2.
- 05 Clay: grey. Temper: grit. Rim di. 15.

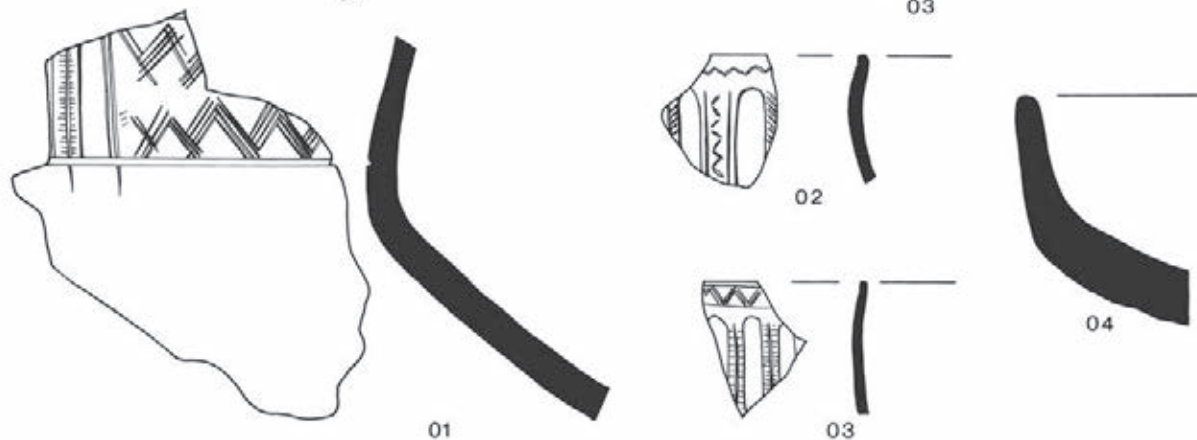
- 06 Clay: grey. Temper: none visible. Rim di. 11.
- 07 Clay: grey. Temper: none visible.
- 08 Clay: dark grey. Temper: none visible.
- 09 Clay: light grey. Temper: none visible.
- 10 Clay: grey. Temper: none visible.



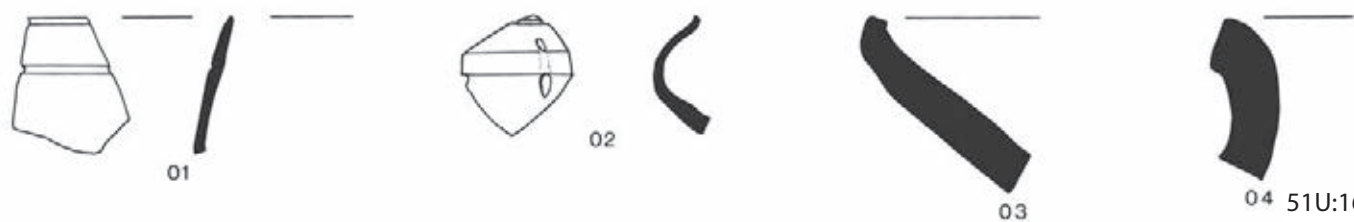
51T: 143 (cont'd)



51U:160



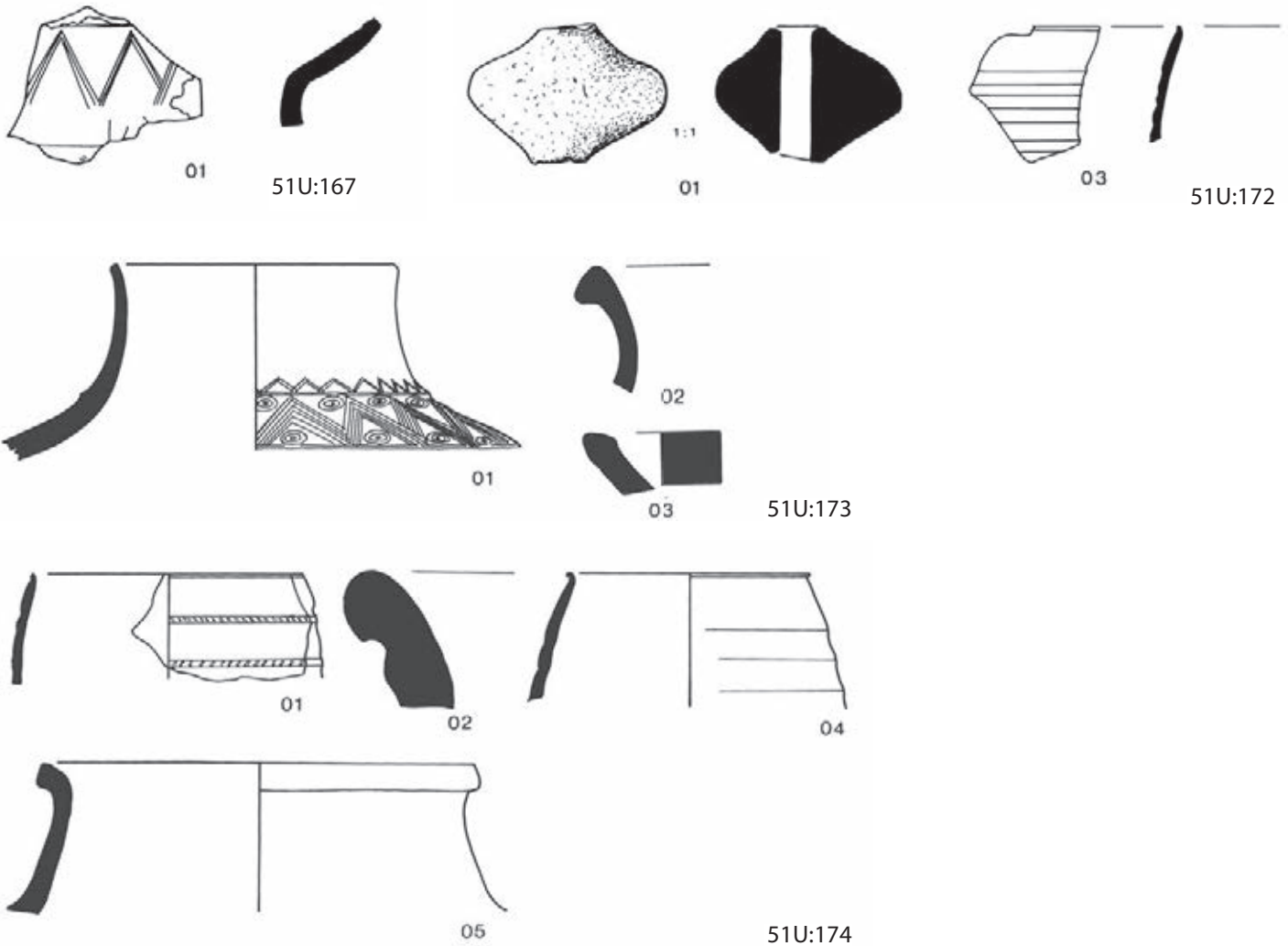
51U:161



51U:162



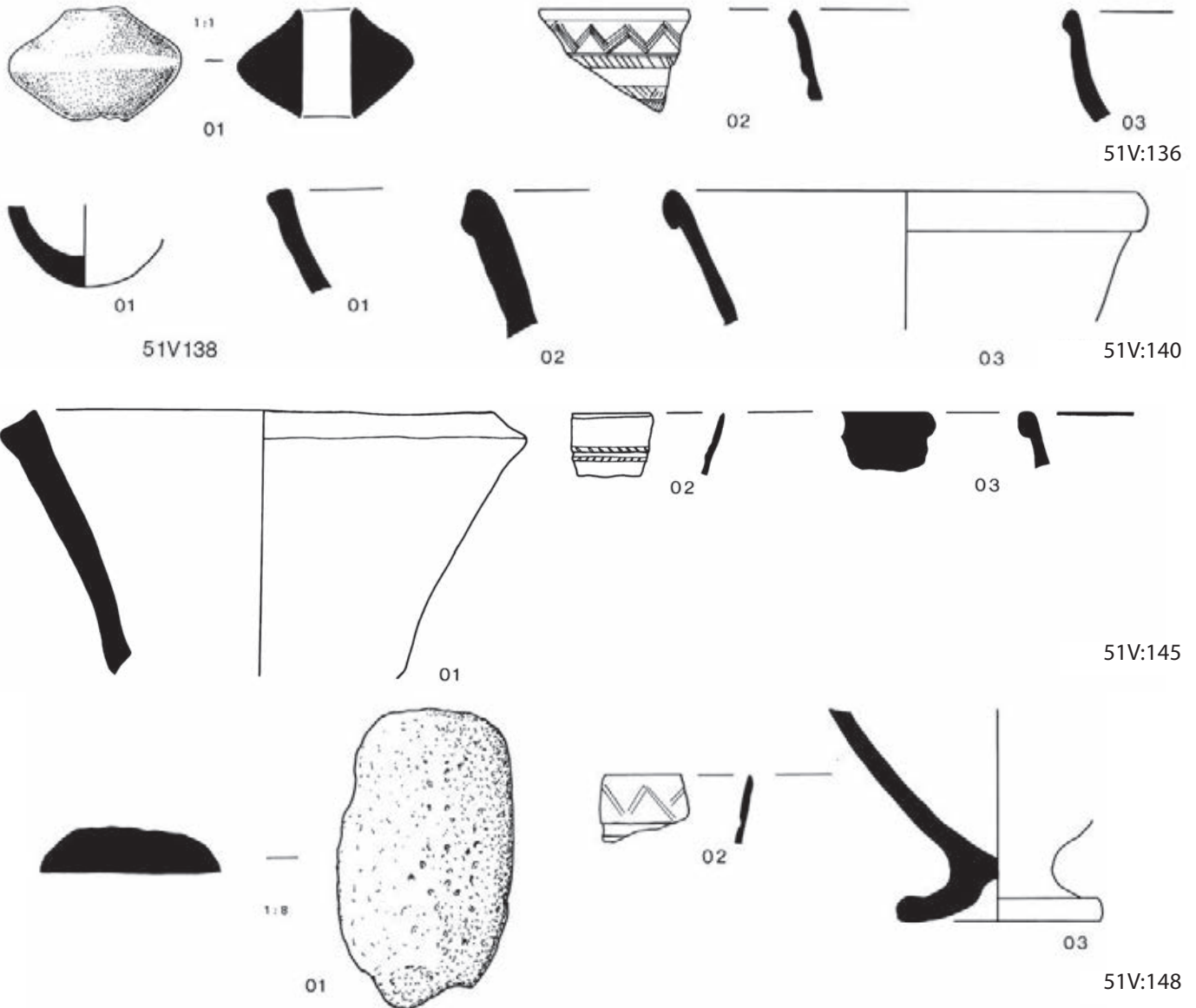
51U:164



51T:143 cont'd.

- 11 Surface: pink. Clay: buff. Temper: veg. Rim di. c.22. Handmade
 12 Surface: cream slip. Clay: pink. Temper: rough veg. Handmade,
 13 Clay: buff/green. Temper: veg. Rim di. c.26. Handmade
 14 Clay: buff/pink. Temper: veg. Rim di. 30.
 15 Surface: buff outer, pink inner. Temper: fine grit.
 16 Surface: buff. Clay: pink. Temper: gritty.
 17 Surface: dark grey. Core: black. Temper: gritty. Rim di. 18.
 18 Clay: pink. Temper: veg. Buff slip, black paint, Handmade
 19 Surface: green/yellow. Clay: pink. Temper: ? Purple paint.
 51U:160 (LEVEL E)
 01 Surface: buff. Clay: pink. Temper: straw. Rim di. c.10. Handmade
 02 Clay: grey. Temper: none visible. Rim di. 8.
 03 Surface: burnt. Temper: veg.
 04 Clay: pink. Temper: veg.
 05 Clay: pink. Temper: veg.
 51U:161 (LEVEL E)
 01 Clay: grey. Temper: none visible.
 02 Clay: light grey. Temper: none visible. Di. ?
 03 Clay: grey. Temper: none visible.
 04 Surface: pink. Core: black. Temper: rough veg.
 51U:162 (LEVEL E)
 01 Clay: grey. Temper: none visible.
 02 Clay: grey. Temper: none visible.

- 03 Clay: brown. Temper: rough veg. & large grits. Rim di. 25–30.
 04 Clay: pink. Temper: veg. Rim di. large. Handmade
 51U:164 (LEVEL E)
 01 Baked clay bead/spindle whorl. Biconoid. Ht. 1.67. Di. 2.57.
 02 Clay: grey. Temper: sparse veg.
 03 Clay: grey. Temper: sparse veg. Rim di. 8–9.
 51U:167 (LEVEL E)
 01 Clay: grey. Temper: none visible.
 51U:172 (LEVEL H)
 01 Clay spindle whorl. Dark grey. Biconical. Di. 2.8. Ht. 2.18.
 02 Carbon sample.
 03 Surface: dark green/yellow. Temper: none visible, but some large white grits.
 51U:173 (LEVEL E/H)
 01 Clay: fine grey. Temper: none visible. Rim di. c.8. I
 02 Clay: Flaking buff slip. Temper: fine grit. Rim di. 15–17.
 03 Clay: buff. Temper: veg. Rim di. c.15. Black paint.
 51U:174 (LEVEL E)
 01 Clay: light grey. Temper: ? Rim di. c.8.
 02 Surface: buff. Core: pink. Temper: veg.
 03 Discarded.
 04 Surface: green. Clay: green. Temper: none visible. Rim di. 7–8.
 05 Clay: pink, flaky. Temper: grit. Rim di. 12–13. Surface eroded.

**51V:136 (LEVEL E)**

- 01 Spindle whorl. Baked clay. Highly polished. Di. 2.6.
 02 Clay: black. Temper: none visible. Rim di. 15–17.
 03 Clay: buff. Temper: fine veg.

51V:140 (LEVEL E)

- 01 Clay: pink. Temper: grit. Rim di. 20–22.
 02 Clay: pink. Temper: rough veg. Rim di. 23–25. Handmade
 03 Clay: pink. Temper: veg. Rim di. 13–14. Cream slip, Handmade

51V:145 (LEVEL E)

- 01 Clay: buff. Temper: coarse veg. Rim di. 13–15. BRB fragment.
 02 Clay: grey. Temper: none visible.
 03 Clay: pink. Temper: medium coarse veg. Cream slip, purple paint.

51V:148 (LEVEL E?)

- 01 Stone tool. Grinder. Limestone. L. 37.2. W. 13.2. Traces of wear on flat edge.
 02 Clay: dark grey. Temper: none visible.
 03 Clay: grey. Temper: veg. in pedestal. Rim di. c.6.
50T:147 (LEVEL D)
 01 Clay: grey. Temper: sparse veg. Rim di. c.9.
 02 Clay: grey. Temper: none visible. Rim di. c.7.5.

- 03 Clay: grey. Temper: sparse veg. Rim di. 9. Ht. 7.5.

- 04 Clay: grey. Temper: sparse veg. Rim di. 9.

- 05 Clay: grey. Temper: veg. Rim di. c.15. Burnt.

- 06 Surface: cream slip. Clay: buff with red/black core. Temper: veg. Rim di. 21–22. Handmade, possibly wheel-finished.

- 07 Clay: pink with black core. Temper: veg. Rim di. 30–36.

50T:148 (LEVEL D)

- 01 Clay: grey. Temper: sparse veg.

- 02 Surface: cream. Clay: pink. Temper: veg. Rim di. c.14. Handmade.

- 03 Core: black. Clay: red. Temper: veg. Rim di. c.40. Handmade.

50T:151 (LEVEL D)

- 01 Copper pin. Length: 5.28. Di. of head: 0.36. Di. of shaft: 0.23.

- 02 Carbon sample.

- 03 Carbon sample.

- 04 Sample of burnt wood.

- 05 Copper pin. Length 11.7. Di. of head: 0.40.

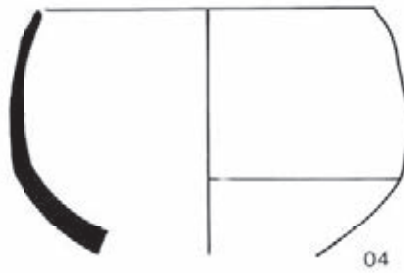
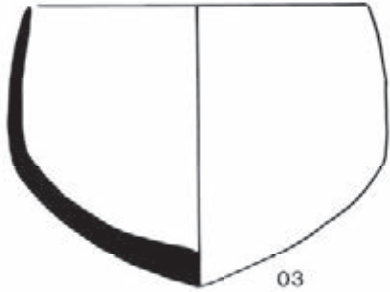
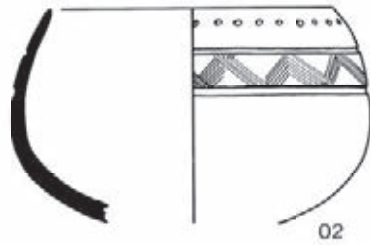
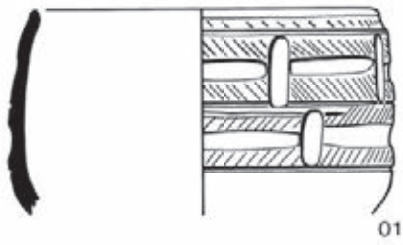
- 06 Clay: green/grey. Temper: none visible. Rim di. 10.

- 07 Not used.

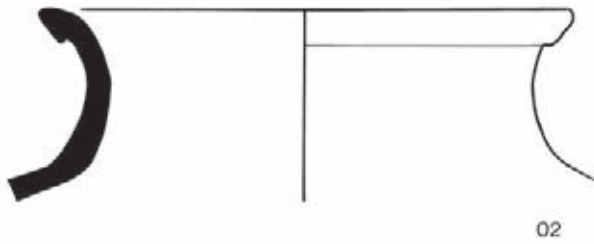
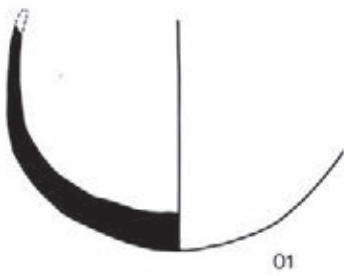
- 08 Clay: grey. Temper: sparse veg. Rim di. c.8.

- 09 Clay: grey. Temper: none visible.

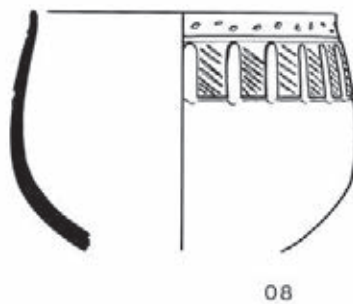
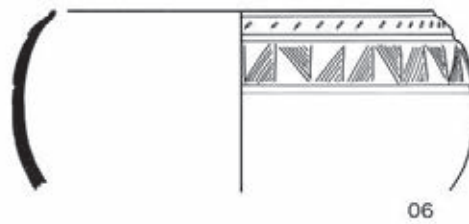
LEVEL D



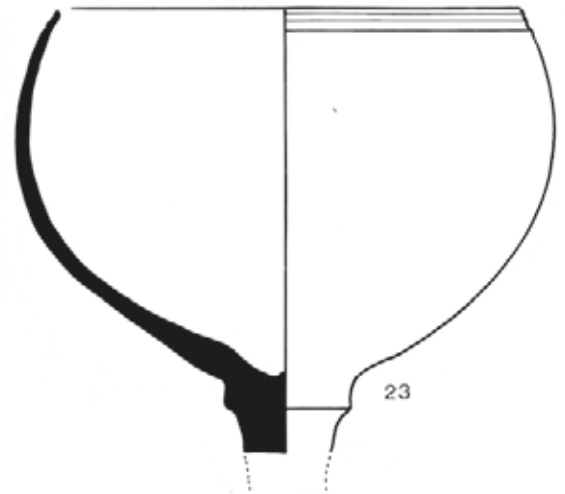
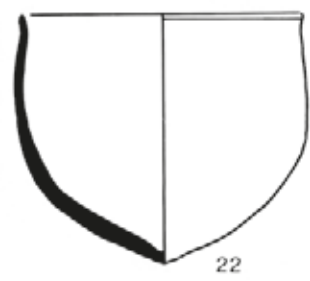
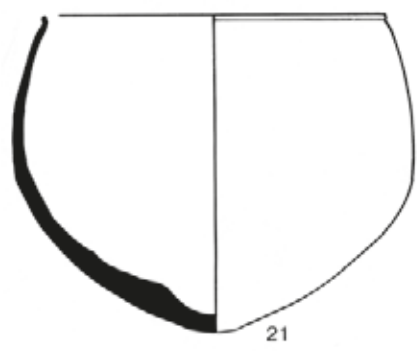
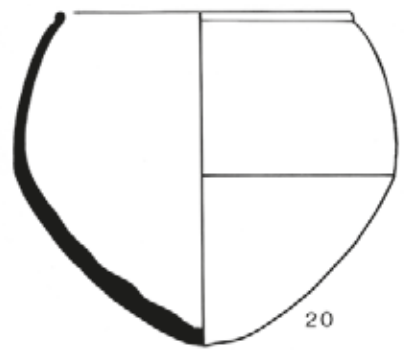
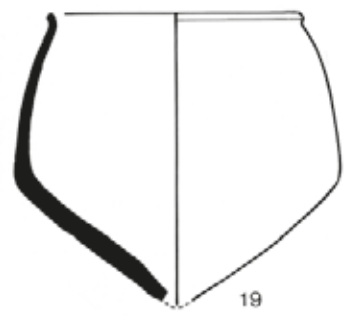
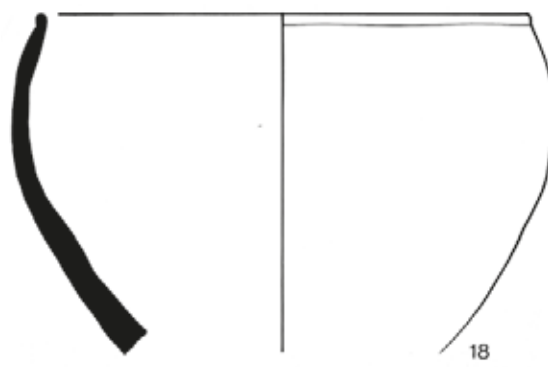
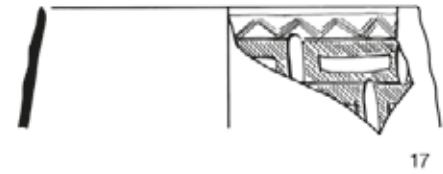
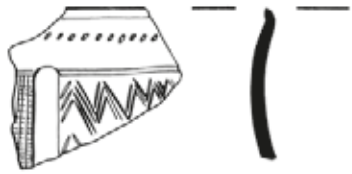
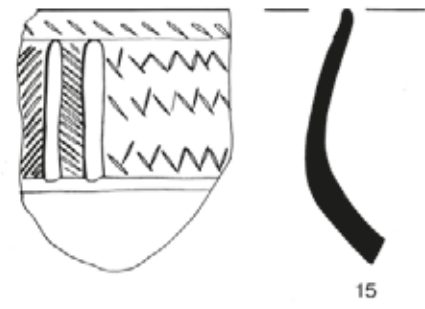
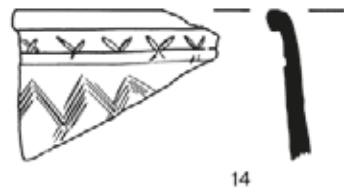
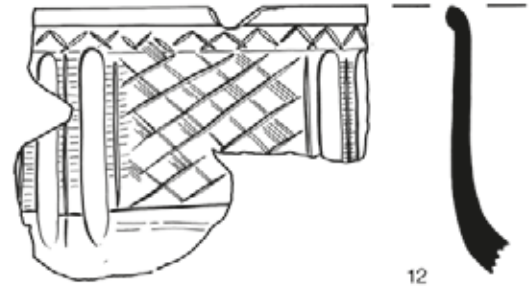
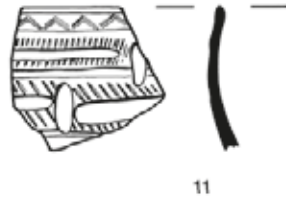
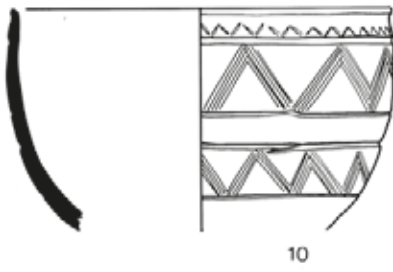
50T:147

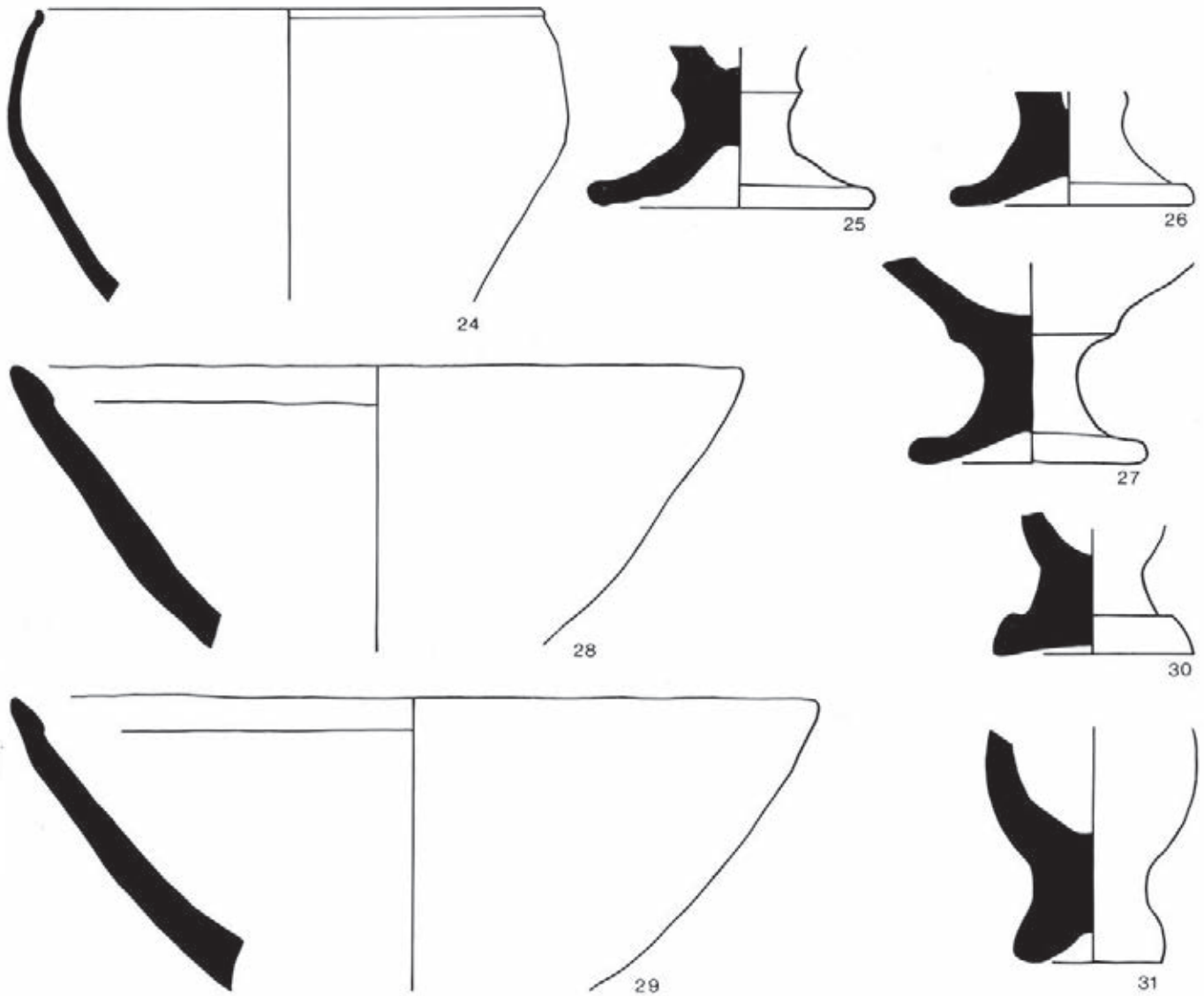


50T:148



50T:151





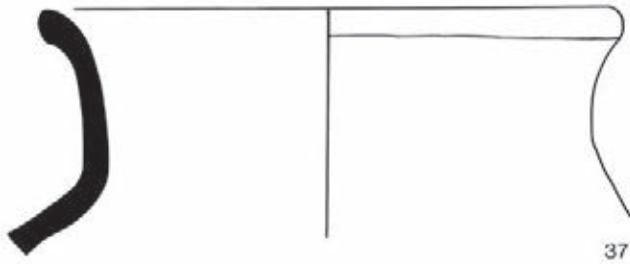
50T:151 (cont'd)

50T:151 (cont'd)

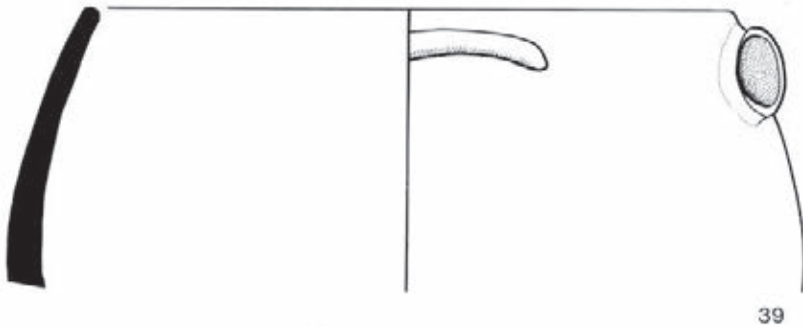
- 10 Clay: fine buff. Temper: none visible. Rim di. 9-11.
 11 Clay: grey. Temper: none visible. Surface slightly pitted.
 12 Surface: grey. Clay: buff. Temper: sparse veg. Rim di. 21-23.
 13 Clay: grey. Temper: none visible. Rim di. c.10.
 14 Clay: spongy grey. Temper: none visible.
 15 Clay: grey. Temper: none visible. Scraped below carination.
 16 Clay: grey. Temper: none visible.
 17 Clay: grey. Temper: sparse veg (?). Rim di. 10.
 18 Clay: grey. Temper: sparse veg. Rim di. c.13.
 19 Clay: buff, porous. Temper: veg. Rim di. (est.): 6.5-7.
 20 Clay: grey. Temper: none visible. Rim di. 7.9. Ht. 8.8.
 21 Clay: grey. Temper: none visible. Rim di. c.9.
 22 Clay: very fine grey. Temper: none visible. Rim di. c.7.5.
 23 Clay: grey. Temper: fine veg. Rim di. 12-12.5. Burnt, especially inside.
 24 Clay: grey. Temper: sparse veg. Rim di. 15.
 25 Clay: green/grey. Temper: veg. Rim di. c.8.5.
 26 Clay: grey. Temper: heavy coarse veg. Rim di. c.7.
 27 Clay: grey. Temper: sparse veg. mostly inside pedestal at base. Rim di. c.7.
 28 Surface: pale pink. Clay: pink. Temper: veg. Rim di. 21-23. Crudely handmade.
 29 Surface: cream Clay: pink. Temper: medium veg. Rim di. 23-25. Crudely handmade.
 30 Clay: grey/buff. Temper: fine veg. Rim di. 6. Base scraped.
 31 Clay: brown. Temper: none visible. Rim di. c.4.5. Crudely handmade, lightly fired.



32



37



39



33



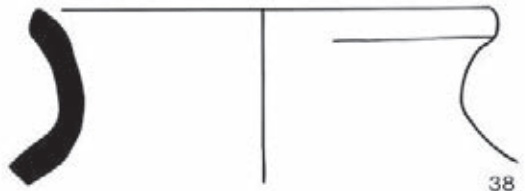
34



35



36



38



40

50T:151 (cont'd)



01



02



03

50T:154



01



01



02

50T:156

50T:151 cont'd.

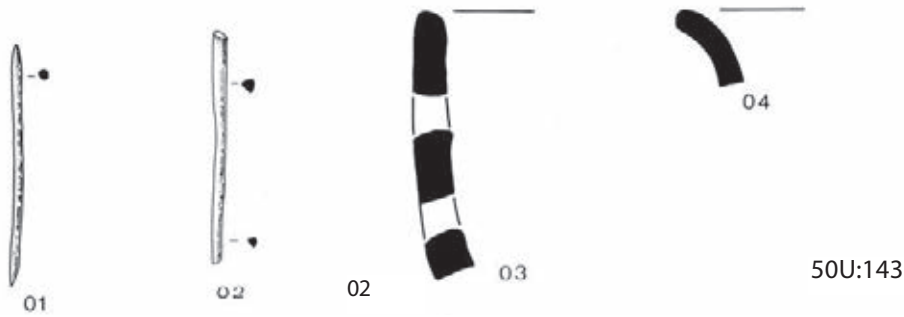
- 32 Clay: yellow/buff, very hard. Temper: medium veg. Rim di. 18. Handmade.
- 33 Core: black. Clay: pink. Temper: rough veg. Rim di. 30-40. Handmade.
- 34 Core: black. Clay: pink. Temper: veg. Rim di. 19-22. Handmade.
- 35 Clay: buff. Temper: rough veg. Handmade.
- 36 Surface: cream. Clay: pink. Temper: veg. Handmade.
- 37 Surface: buff. Clay: pink. Temper: veg. Rim di. c.15.5. Handmade.
- 38 Clay: cream. Temper: veg. Rim di. 12. Handmade; rim smoothed.
- 39 Clay: dark red/black. Temper: grog & mica. Rim di. c.17. Burnt.
- 40 Clay: hard pink. Temper: fine veg. base di. c.6. Handmade.

50T:154 (LEVEL D)

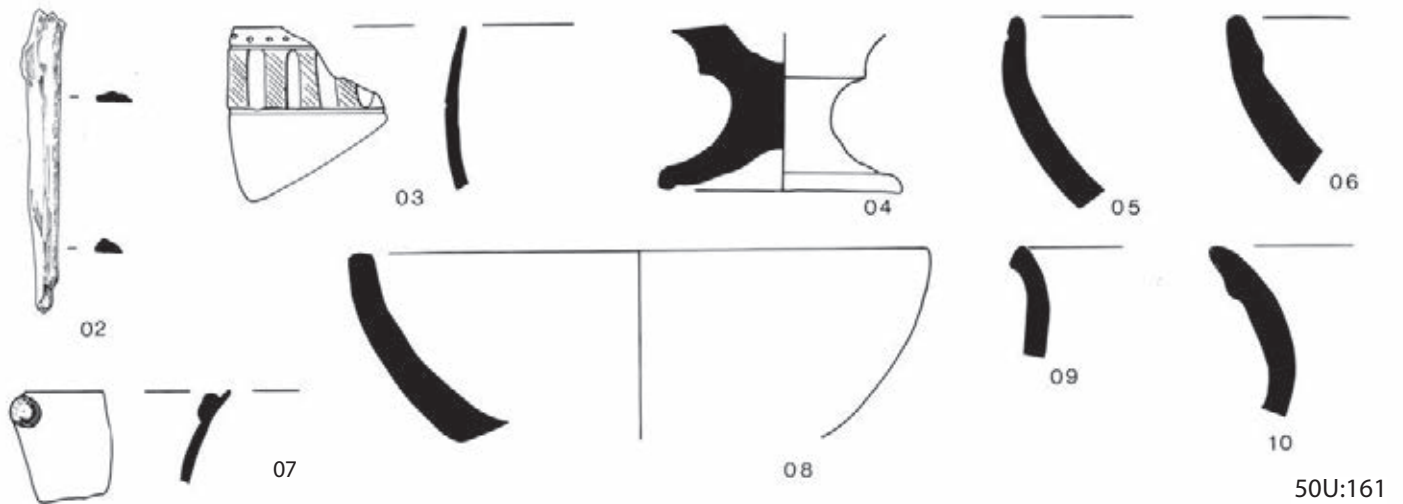
- 01 Clay: pink with grey core. Temper: rough veg.
- 02 Surface: cream. Clay: pink. Temper: veg.
- 03 Surface: cream. Clay: pink. Temper: veg. Rim di. 20-24.

50T:156 (LEVEL D)

- 01 Clay: grey. Temper: none visible.
- 02 Clay: red. Temper: veg.



50U:143



50U:161



50V:120

50U:143 (LEVEL D)

01 Bone pin/point. Complete and intact. Length: 6.41. Di. 0.24. Circular in cross-section.

02 Bone pin. Broken at both ends. Length: 6.14. Di. 0.34.

03 Clay: pink. Temper: veg. Rim di. 13–14. Handmade.

04 Clay: pink. Temper: hard veg. Rim di. 13–16.

50U:161 (LEVEL D)

01 Carbon sample.

02 Bone awl. Both ends broken. Length: 7.76. Max. width: 0.81.

03 Clay: grey. Temper: None visible.

04 Clay: grey. Temper: veg. in base. Base di. 6.5.

05 Clay: red. Temper: rough veg. Handmade.

06 Clay: pink with black core. Temper: hard veg. Rim di. 30. Handmade.

07 Clay: pink. Temper: fine veg. Handmade.

08 Clay: grey. Temper: grog. Rim di. 15–16. Handmade, burnished.

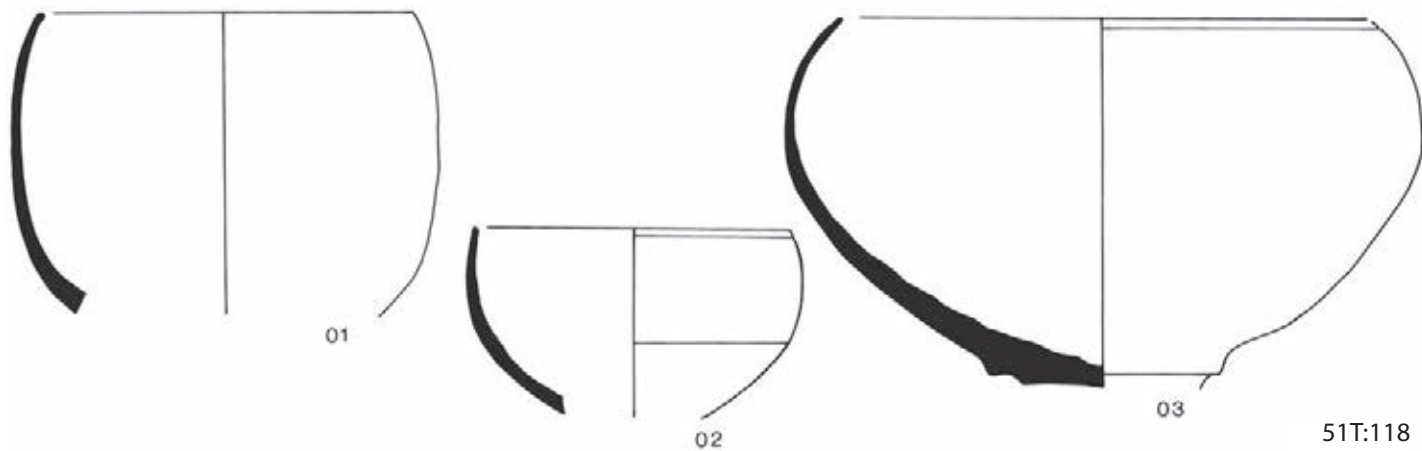
09 Clay: buff. Temper: grit. Rim di. 14.

10 Clay: buff. Temper: veg. Handmade.

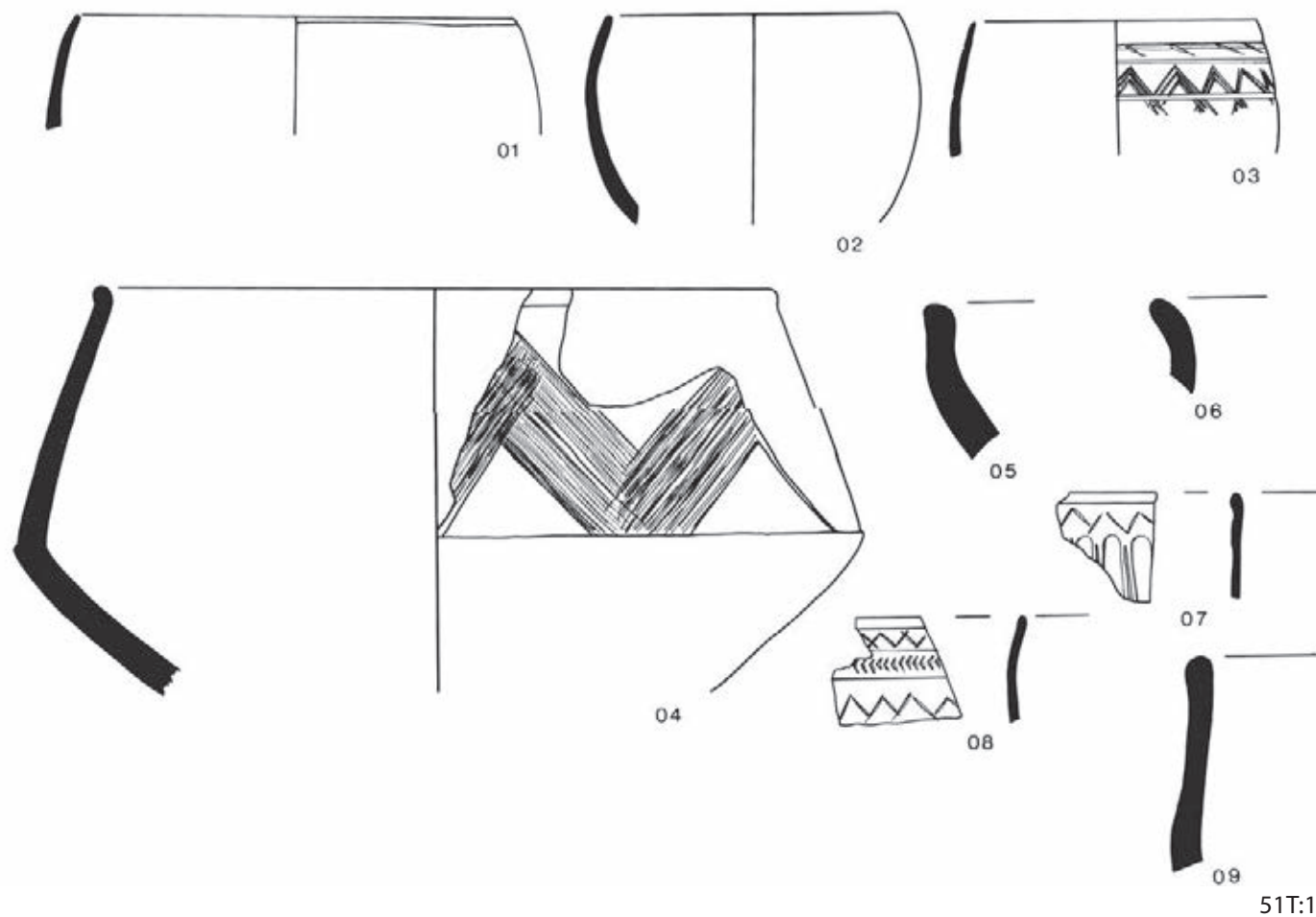
50V:120 (LEVEL D/E)

01 Surface: white. Clay: hard pink. Temper: fine grit. Rim di. +20.

02 Clay: buff. Temper: fine grit & mica. Rim di. 9.



51T:118



51T:119

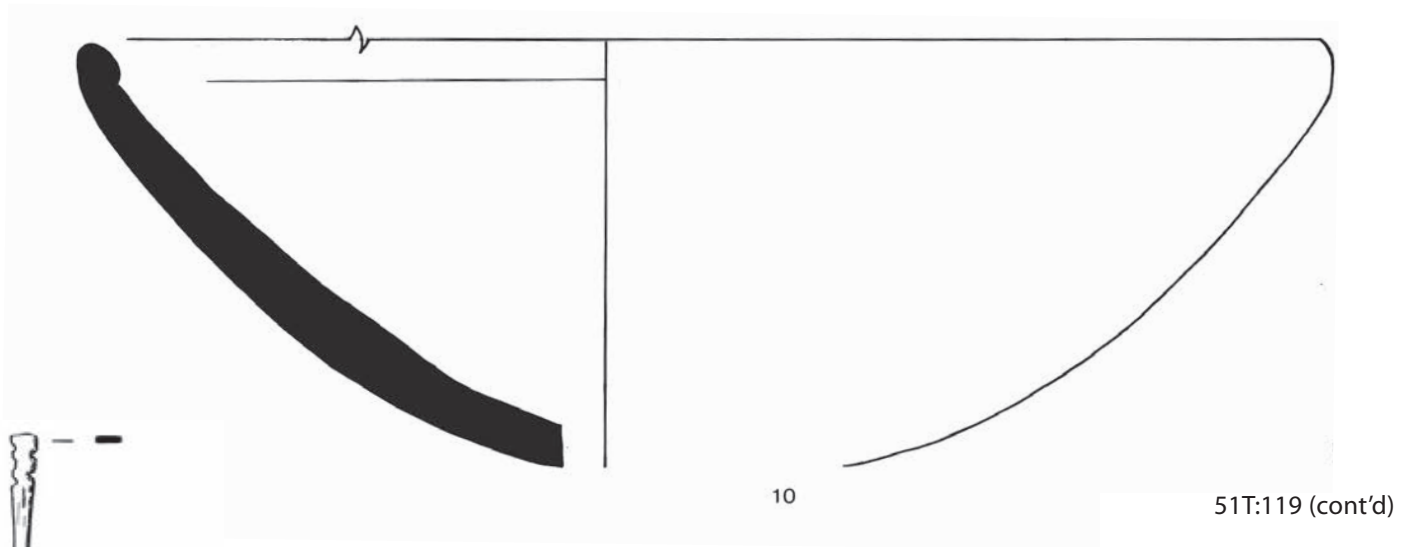
51T:118 (LEVEL D)

- 01 Clay: grey. Temper: sparse veg. Rim di. 9–10.
 02 Clay: grey. Temper: sparse veg. Rim di. 8.5.
 03 Clay: greeny grey. Temper: sparse veg. Rim di. 14.

51T:119 (LEVEL D)

- 01 Discarded.
 02 Clay: pink. Temper: fine veg. Rim di. 8.

- 03 Clay: grey. Temper: sparse veg. Rim di. 8.
 04 Clay: grey. Temper: none visible. Rim di. 19.
 05 Clay: brown. Temper: grog & some large grits. Rim di. ? Handmade
 06 Clay: buff. Temper: veg. & fine grit.
 07 Clay: grey. Temper: none visible.
 08 Clay: grey. Temper: sparse veg.
 09 Clay: pink. Core: black. Temper: rough veg. Rim di. 27–35.



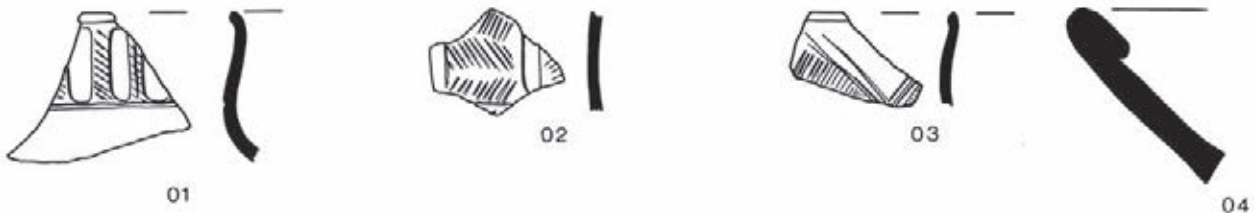
10

51T:119 (cont'd)



01

51T:120



01

02

03

04



05

06

51T:128

10 Clay: brown. Temper: heavy veg. Rim di. c.40.

51T:120 (LEVEL D)

01 Bone pin. Flattened head with three grooves in one side and two in other. Flattened ovoid section, tapering from square-cut head to fine point. L. 8.6. Max. di. 0.7.

51T:128 (LEVEL D/E)

01 Clay: grey. Temper: none visible.

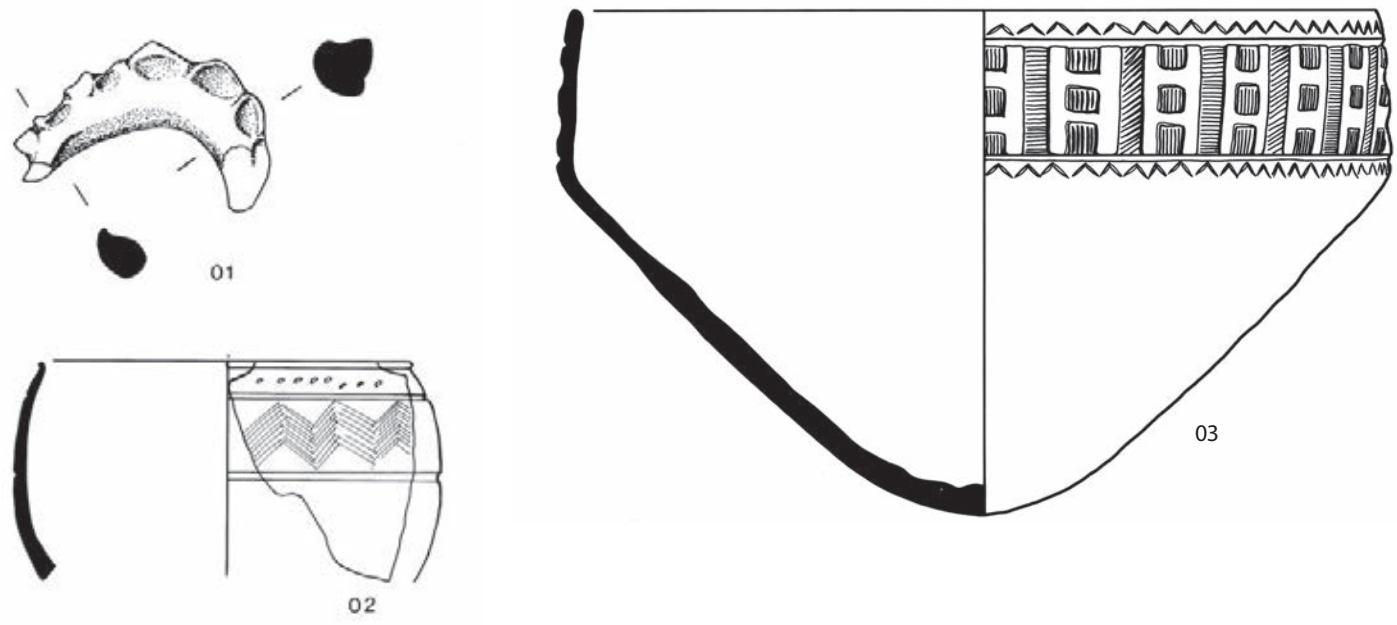
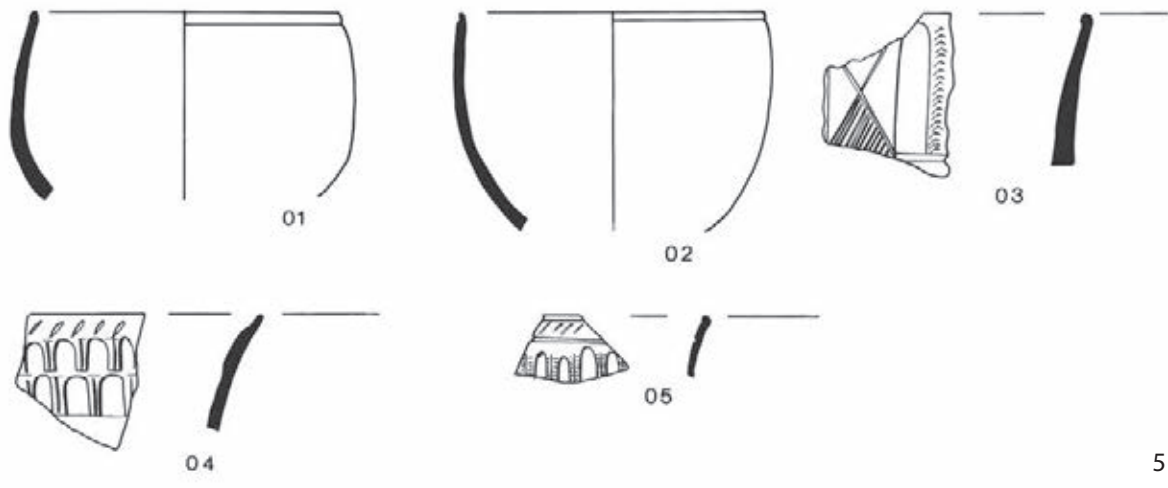
02 Clay: grey. Temper: none visible.

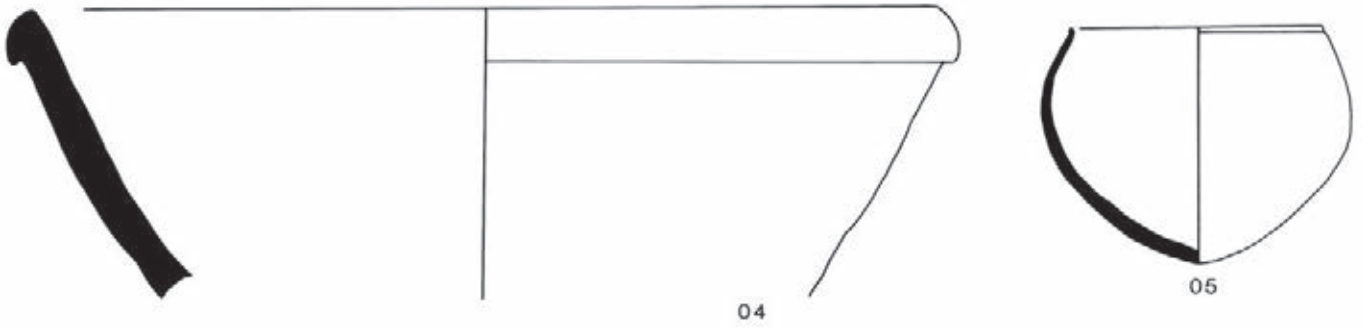
03 Clay: grey. Temper: none visible.

04 Clay: pink. Core: black. Temper: veg. Rim di. 30–40. Handmade

05 Clay: grey. Temper: light veg. Rim di. 8–9.

06 Clay: greeny buff. Temper: veg. Rim di. 13. Handmade





51V:130 (cont'd)



51V:131



02



01



51V:132



01

51V:138

51U:155 (LEVEL D/E)

- 01 Clay: grey. Temper: none visible. Rim di. 8.
- 02 Clay: grey. Temper: none visible. Rim di. 8–9.
- 03 Clay: grey. Temper: none visible.
- 04 Clay: grey. Temper: none visible. Rim di. 8–11.
- 05 Clay: grey. Temper: none visible.

51V:129 (LEVEL D)

- 01 Copper arrowhead. Leaf–shape arrowhead with broad tang. L. 5.76. Max. w. 1.53.

02 Clay: grey. Temper: none visible. Rim di. c8.

03 Clay: grey. Temper: none visible. Rim di. c9.

51V:130 (LEVEL D)

01 Clay: green/buff. Temper: fine veg. Handle.

02 Clay: green. Temper: fine grit. Rim di. c9– 10. Incised decoration.

03 Clay: grey. Temper: none visible. Rim di. c22.

04 Clay: green. Temper: rough veg. Rim di. 24–25. Handmade

05 Clay: grey. Temper: none visible. Rim di. 6.5.

51V:131 (LEVEL D)

01 Surface: buff. Clay: pink. Temper: medium veg. & grit. Rim di. 24–27.

02 Clay: grey. Temper: none visible.

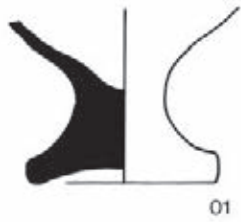
51V:132 (LEVEL D)

01 Fragment of animal figurine. Baked clay. L. 3.5. Max. ht. 3.72.

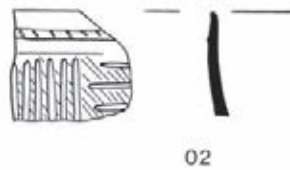
51V:138 (LEVEL D)

01 Clay: brown. Temper: grog. Handmade

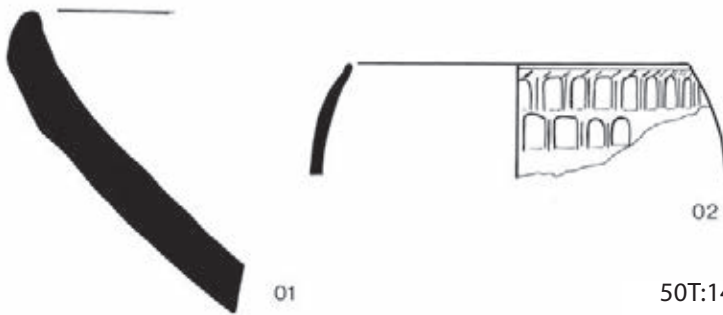
LEVEL C



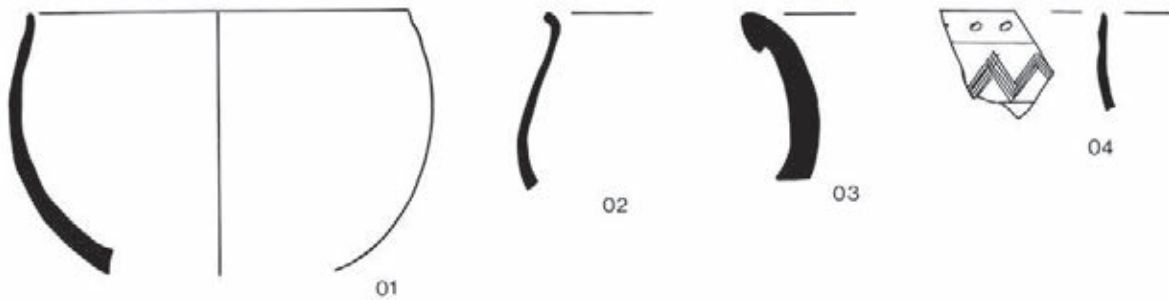
50T:139



50T:140



50T:141



50T:142

50T:139 (LEVEL C)

01 Clay: grey. Temper: some grit in base. Base di. c.5.

02 Clay: grey. Temper: sparse veg.

50T:140 (LEVEL C)

01 Stone adze/axe. Black polished stone, sharp along lower edge. L. 3.1.

Th. 0.9.

50T:141 (LEVEL C)

01 Clay: pink. temp: veg. Rim di. 32–34. Handmade.

02 Clay: grey. Temper: sparse veg. Rim di. 9.

50T:142 (LEVEL C)

01 Clay: grey. Temper: sparse veg. Rim di. c.10.

02 Clay: grey. Temper: none visible. Rim di. ?

03 Surface: cream slip. Clay: pink. Temper: veg. Handmade.

04 Clay: grey. Temper: none visible. Rim di. 8–9.

50T:143 (LEVEL C)

01 Carbon sample.

02 Clay: grey. Rim di. c.7.5.

03 Clay: buff. Temper: veg. Rim di. c.8. Burnt.

04 Clay: grey. Temper: none visible.

05 Clay: grey. Temper: fine veg.

06 Clay: buff. Temper: veg. Lid handle.

07 Clay: yellow. Temper: fine grit & mica. Rim di. 16–17.

08 Clay: brown. Temper: veg. Rim di. 8–8.5. Ht. 9.6. Handmade.

09 Clay: creamy buff. Temper: veg. Rim di. 13–15. Handmade.

10 Surface: green. Clay: buff. Temper: veg. Rim di. 15–16. Handmade.

11 Clay: buff. Temper: grog & veg. Rim di. large Handmade.

12 Clay: buff. Temper: grog & veg. Rim di. c.22. Crudely handmade.

50U:147 (LEVEL C)

01 Carbon sample.

02 Obsidian blade (not illustrated).

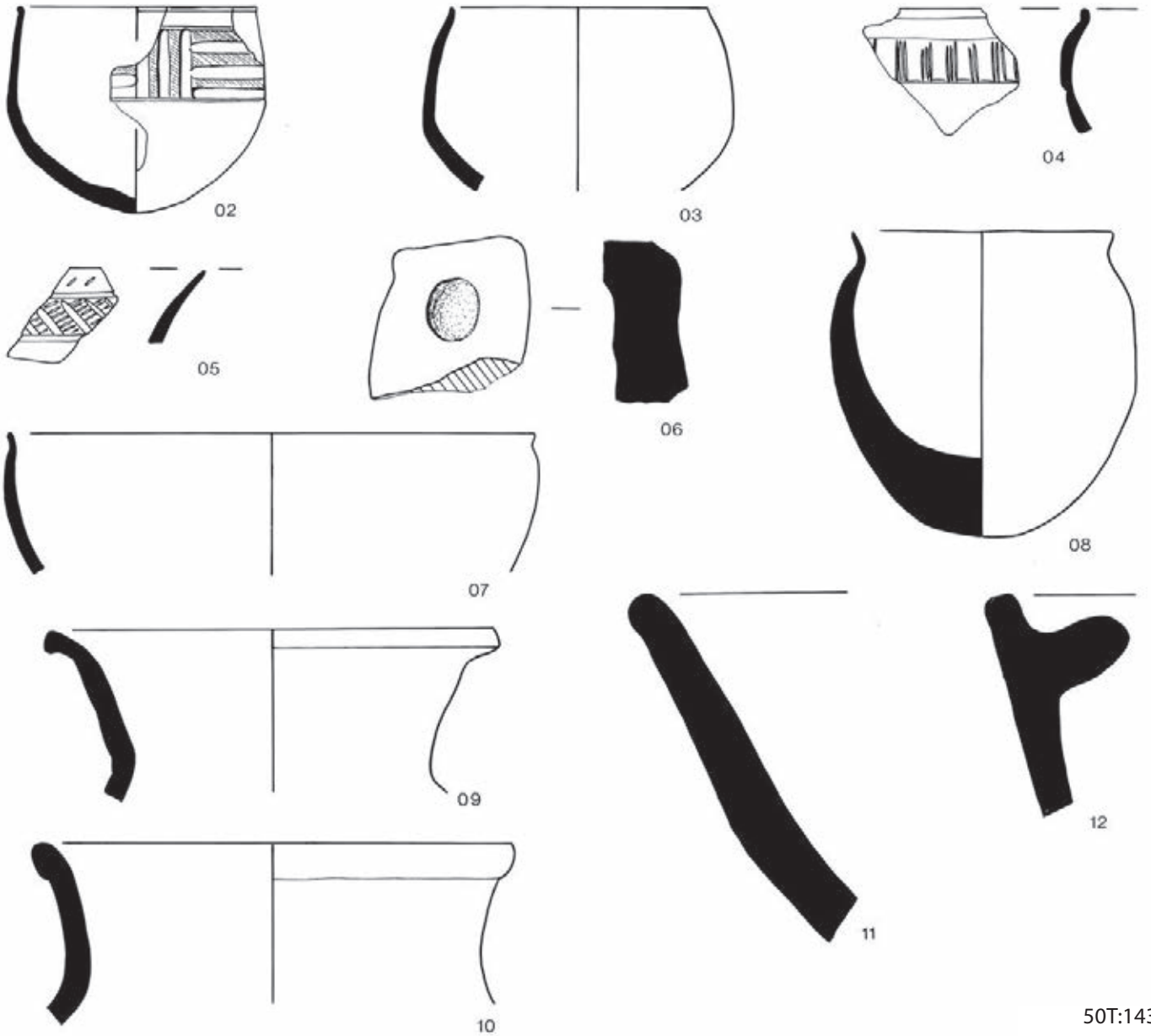
03 Round clay ball. Di. 1.35.

04 Bone pin. Broken at both ends. Length 4.96. Di. 0.27.

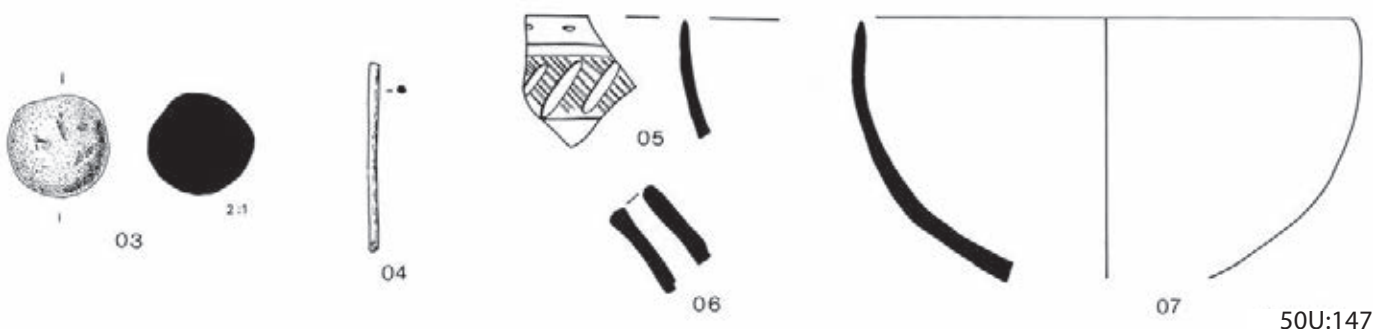
05 Clay: grey. Temper: none visible.

06 Clay: hard buff. Temper: veg.

07 Surface: cream slip. Clay: fine hard pink. Temper: very fine veg. Rim di. 13.



50T:143

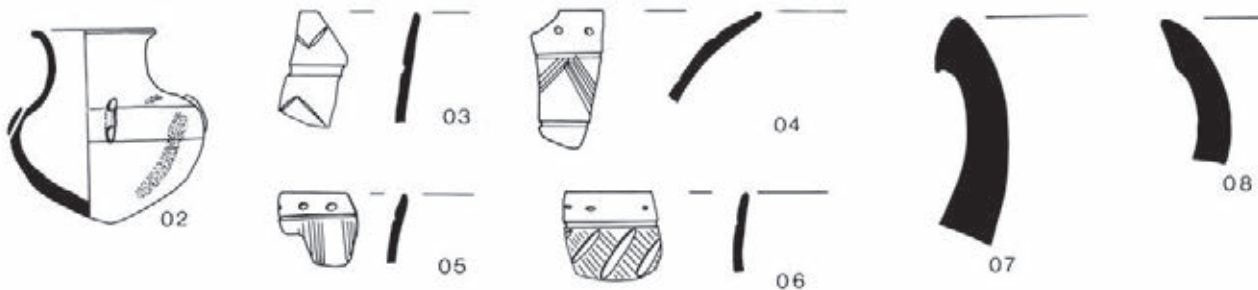


50U:147

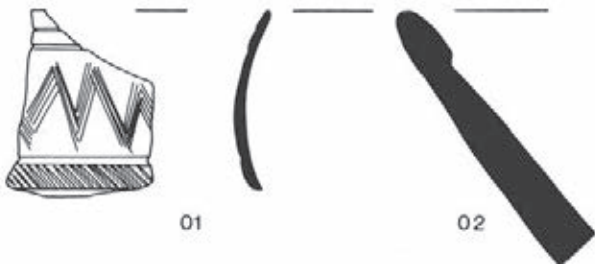


01

50U:159



50U:164



01

02

50V:119

50U:155 (LEVEL C)

01 Carbon sample.

50U:159 (LEVEL C)

01 Bone pin, broken at tip. Length 7.18. Di. 0.36.

50U:164 (LEVEL C/D)

01 Soil sample.

02 Miniature pot. Complete and intact. Clay: grey. Temper: none visible. Rim di. c.3.5. Four applied lugs.

03 Clay: hard pink. Temper: none visible.

04 Clay: grey. Temper: very fine veg.

05 Clay: grey. Temper: sparse veg.

06 Clay: pink. Temper: none visible.

07 Clay: buff. Temper: veg. Rim di. 28–32. Handmade.

08 Surface: cream slip. Clay: pink. Temper: veg. Handmade.

50V:119 (LEVEL C/D)

01 Clay: grey. Temper: sparse veg. white grit.

02 Surface: cream slip. Clay: pink. Temper: hard veg. Rim di. 30–32.

Wheelmade.

51T:116 (LEVEL C)

01 Surface: creamy/grey slip. Clay: pink. Temper: none visible.

02 Clay: grey. Temper: fine veg. Rim di. 8.

03 Clay: grey. Temper: sparse veg. Rim di. 8. Shallow incision.

04 Surface: grey. Clay: pinkish buff. Temper: fine grit. Rim di. 10.

05 Clay: grey. Temper: sparse veg. Rim di. 11.6.

06 Surface: v. dark grey. Clay: dark grey. Temper: sparse fine veg. Rim di. 9. Base black inside.

07 Clay: grey. Temper: fine veg. Rim di. 9.

08 Clay: pink. Temper: v. gritty. Rim di. 12–14.

09 Clay: buff. Temper: sparse hard veg.

10 Clay: dark grey. Core: red. Temper: occasional white grit. Rim di. 10.5.

11 Clay: buff. Temper: fine veg. Rim di. c.8.3.

12 Clay: white. Temper: rough veg. Rim di. 33–35. Handmade

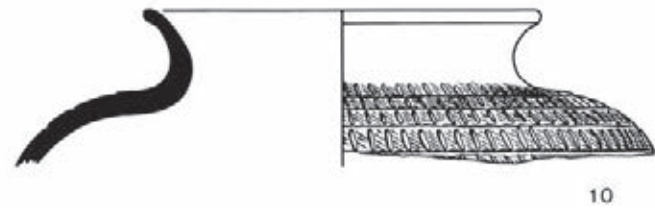
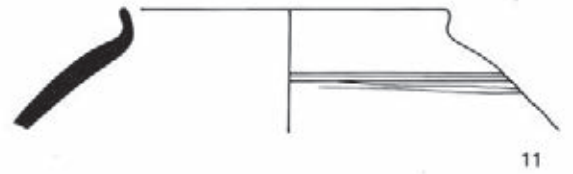
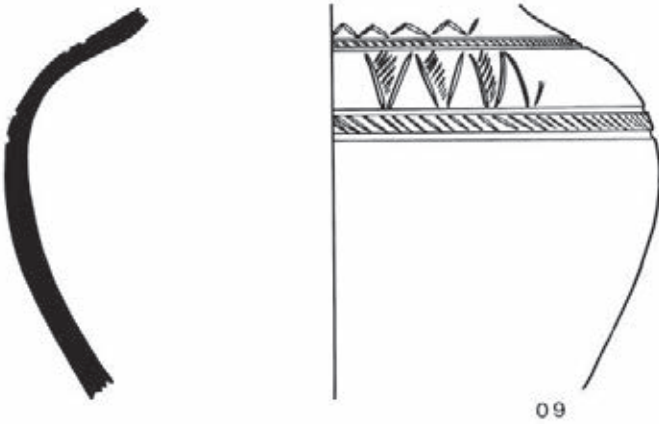
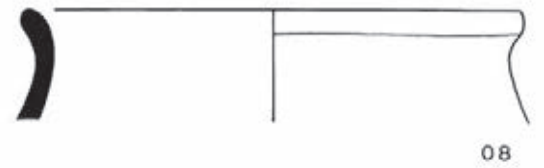
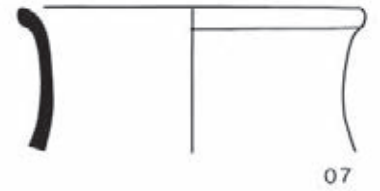
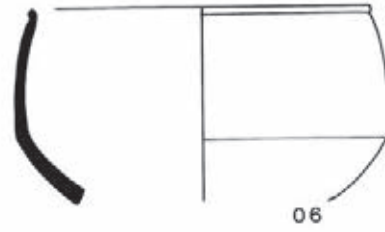
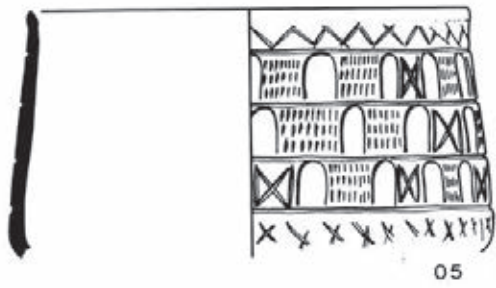
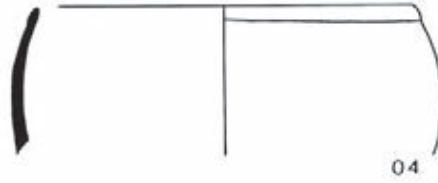
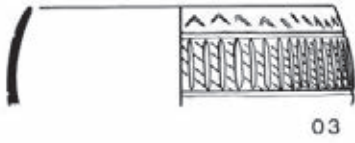
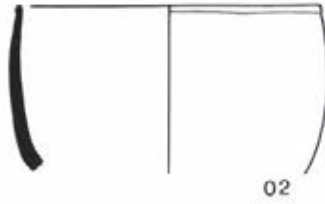
13 Clay: red. Temper: sparse veg. Rim di. 28–30. Handmade

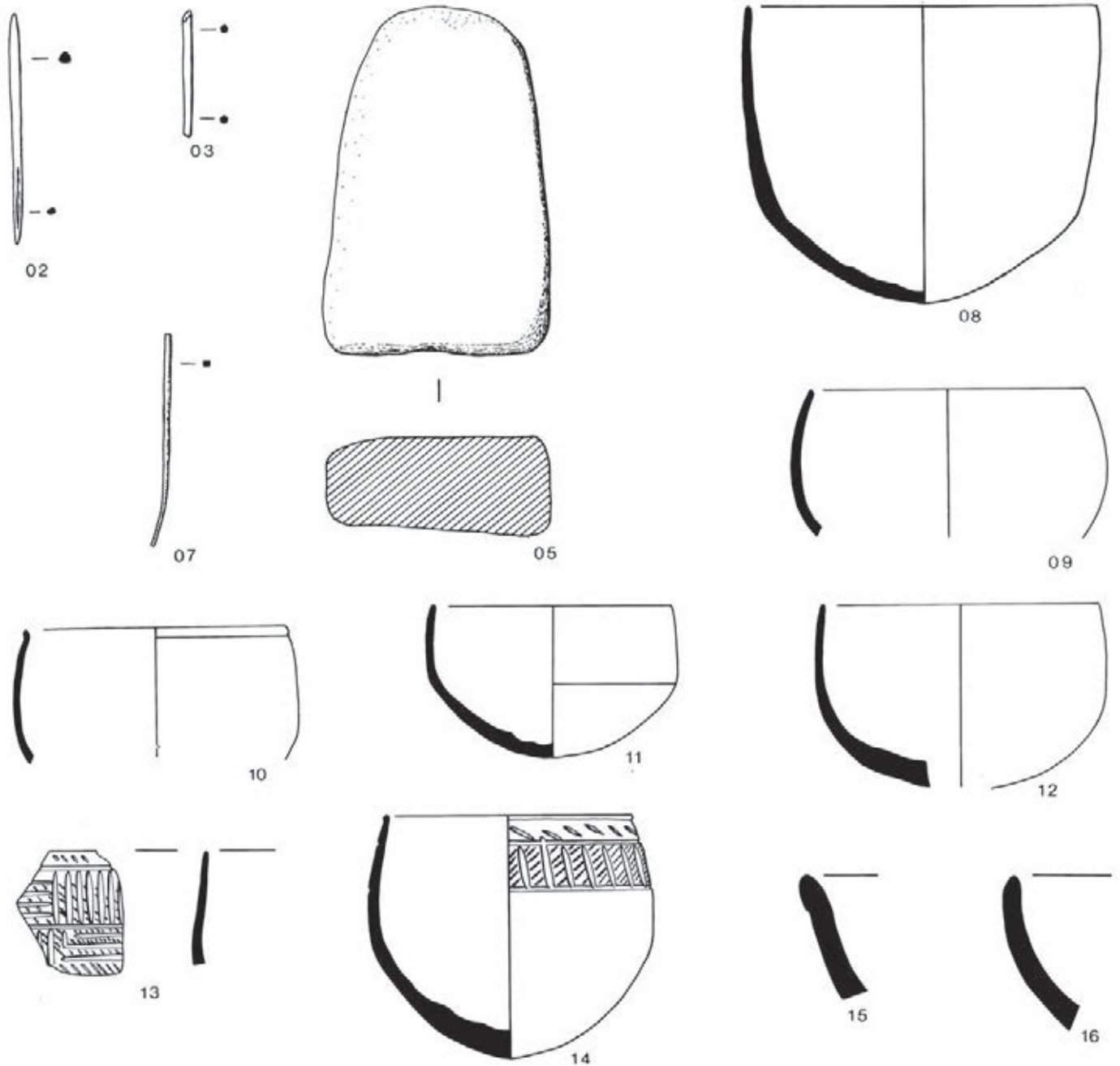
14 Clay: cream. Temper: grit & veg. Rim di. 14–17.

15 Clay: buff. Temper: heavy grit. Rim di. 22–28.

16 Clay: pink. Temper: fine grit. Rim di. 14–17.

17 Clay: pink. Temper: grit & veg.





51T:117

51T:117 (LEVEL C/D)

01 Flint. Not drawn.

02 Bone pin. Complete & intact. Both ends pointed. L. 7.4.

03 Bone pin fragment. Highly polished with vertical striations. L. 4.1.

04 Clinker. Discarded.

05 Stone tool. Black. Signs of wear along all edges. Max. h. 11.2. L. 7.5. W. 3.0.

06 Discarded

07 Copper pin. Square cross-section at top. L. 6.86. Max. di. 0.14.

08 Clay: pink. Temper: none visible. Rim di. 11.5.

09 Surface: greeny grey. Clay: pink. Temper: fine veg. Rim di. 9–10.

10 Clay: grey. Temper: occasional white grit. Rim di. 8–9.

11 Clay: pink. Temper: sparse veg. Rim di. 8. Cream slip on upper outer surface.

12 Clay: grey. Temper: none visible. Rim di. 9.

13 Clay: grey. Temper: none visible.

14 Clay: grey porous. Temper: sparse veg. Rim di. 8.

15 Clay: pink. Temper: veg. Rim di. c.20. Handmade, cream slip on rim.

16 Clay: pink. Temper: veg. Handmade

17 Clay: grey. Temper: none visible. Rim di. 8.

18 Clay: red. Temper: veg. Rim di. 21–24. Handmade

19 Clay: red. Temper: veg.

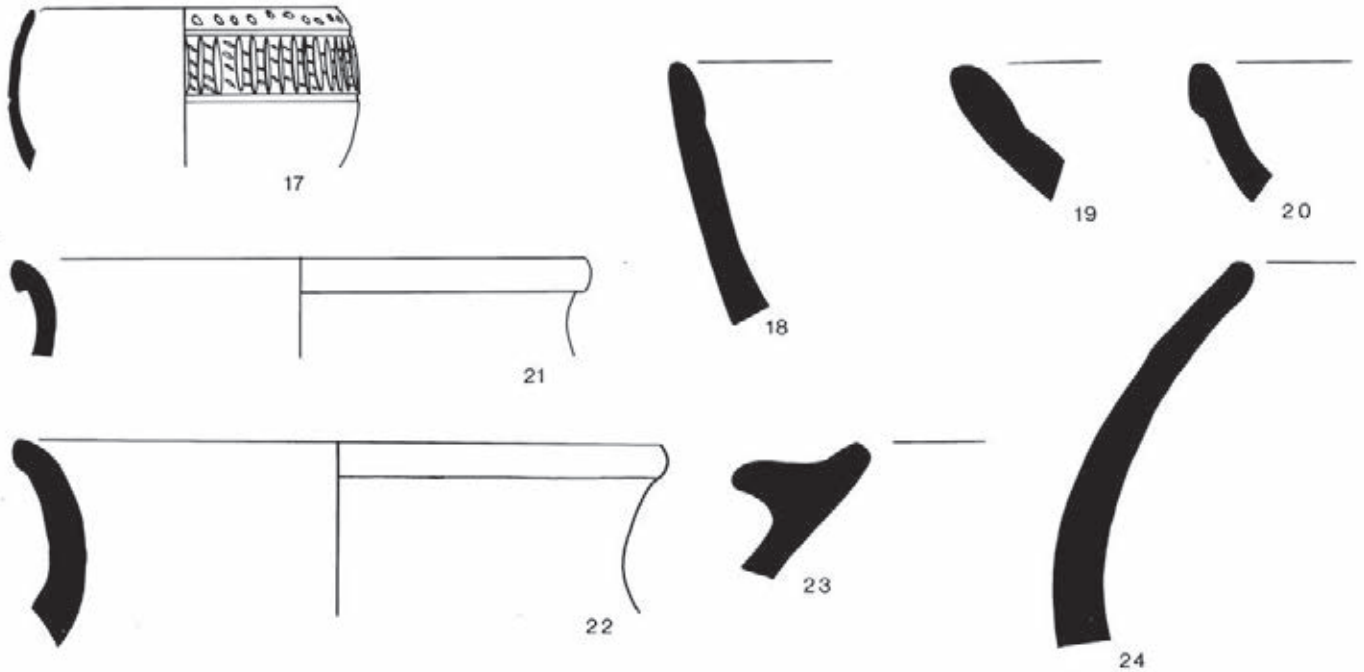
20 Clay: pink. Temper: veg. Rim di. 26–28. Handmade

21 Clay: red. Temper: veg. Di. 14–16. Cream slip on outer surface.

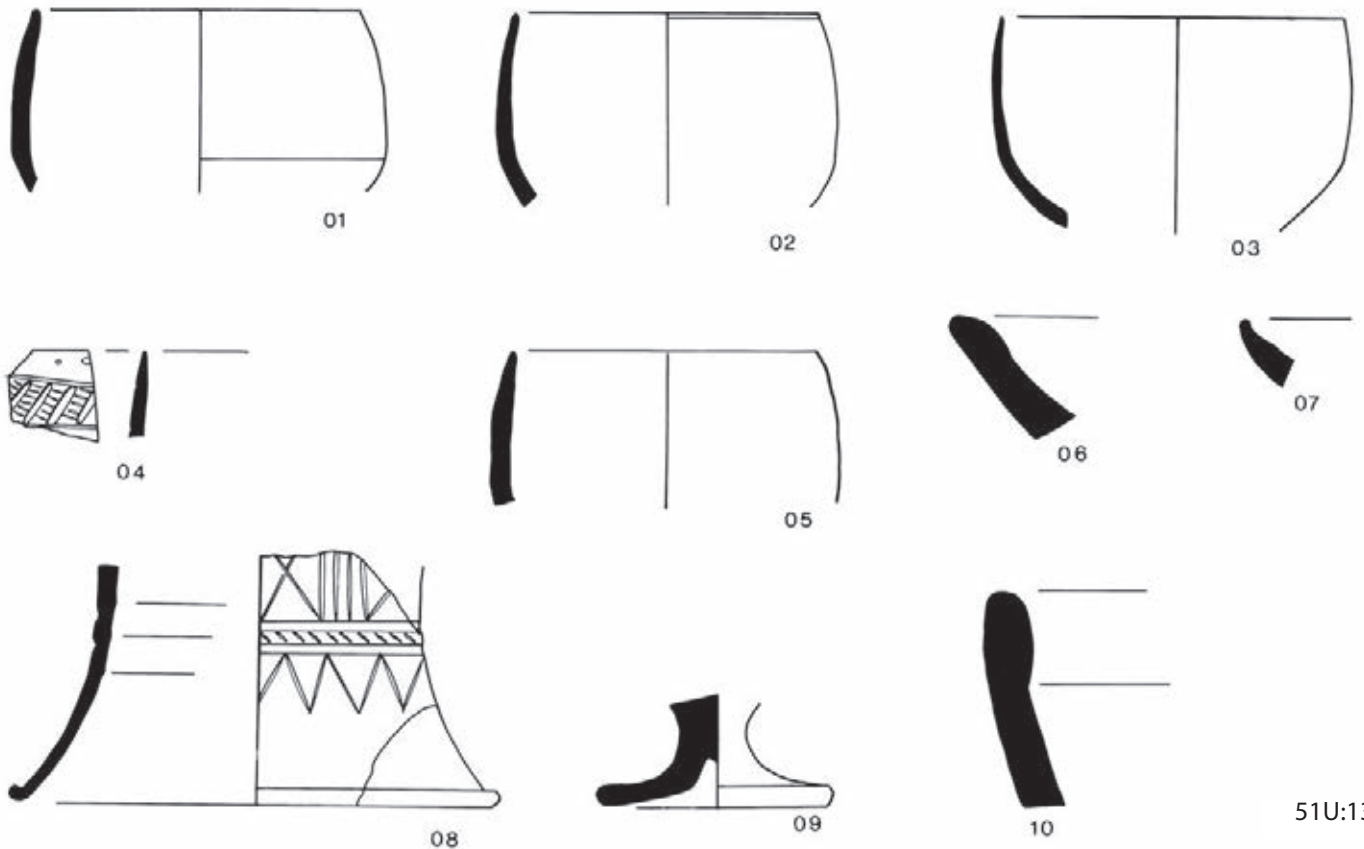
22 Clay: buff. Temper: veg & grog. Rim di. 17. Handmade

23 Clay: red. Core: black. Temper: grog & large grit. Di. ?

24 Surface: cream. Clay: pink. Temper: veg. & large white grit.



51T:117 (cont'd)

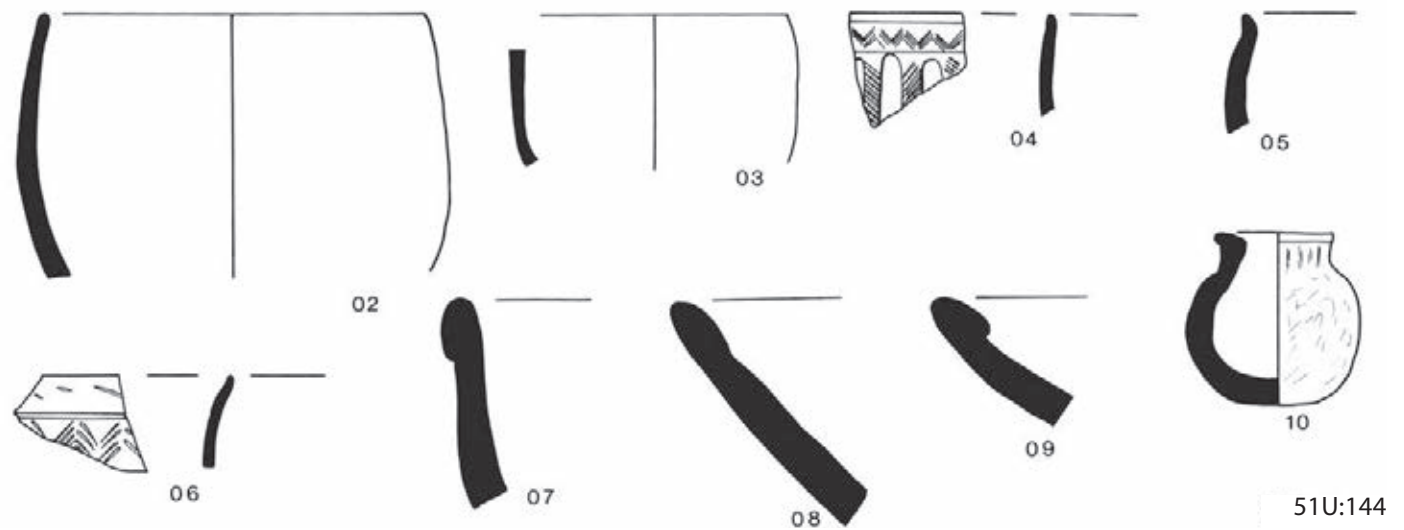
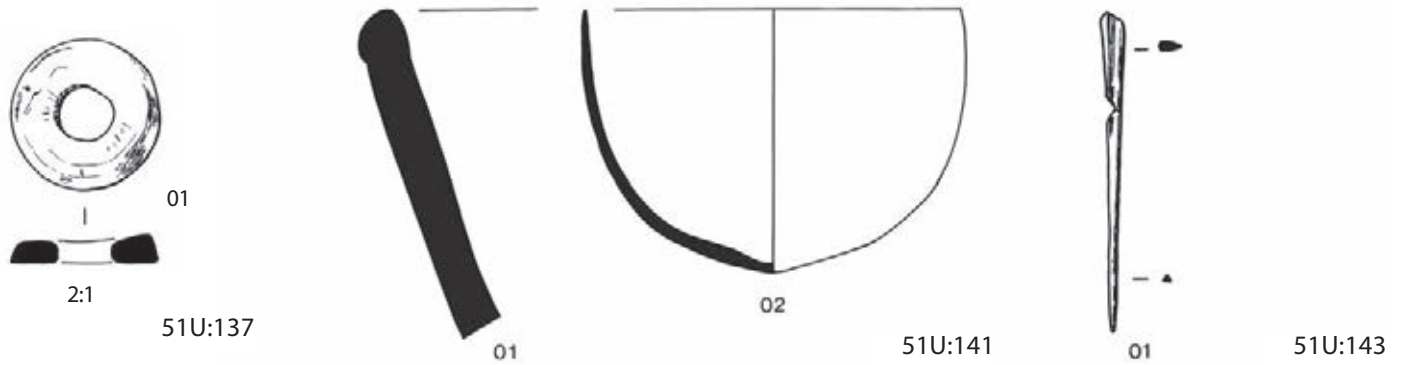
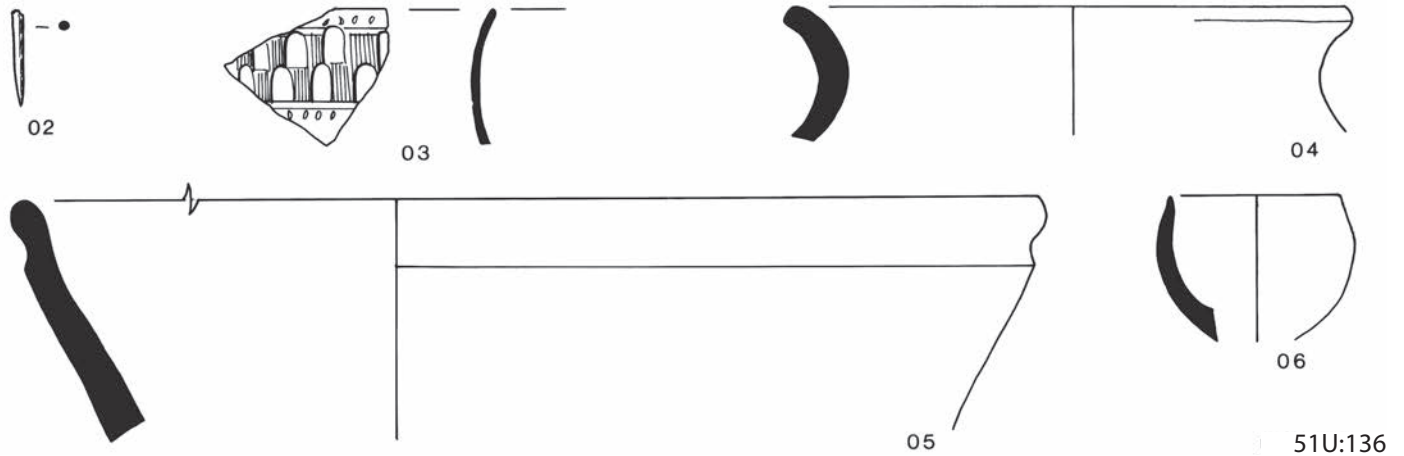


51U:133

51U:133 (LEVEL C)

- 01 Clay: brown/buff. Temper: none visible. Rim di. 8.5.
- 02 Clay: grey. Temper: none visible. Rim di. 7-8.
- 03 Clay: grey. Temper: none visible. Rim di. 9.
- 04 Clay: brown. Temper: none visible.
- 05 Clay: buff. Temper: sparse fine veg., fine grit. Rim di. c.8.

- 06 Clay: buff. Temper: veg. Rim di. 22-25. Handmade
- 07 Clay: green. Temper: veg. Handmade
- 08 Clay: dark grey. Temper: none visible. Base di. 13.
- 09 Clay: grey. Temper: veg. Base di. c.6.5. Clay plug in bottom of base.
- 10 Surface: brown. Clay: brown. Temper: fine white grit, veg., occasional grog.



51U:136 (LEVEL C)

- 01 Carbon sample.
- 02 Bone point. fragment. Highly polished. Ext. l. 2.6.
- 03 Clay: grey. Temper: none visible.
- 04 Surface: buff/brown. Clay: pink. Temper: veg. & white grit. Rim di. 14–15.
- 05 Clay: brown/buff. Temper: fine veg. & fine white grit. Rim di. 34.
- 06 Clay: grey. Temper: sparse veg. Rim di. c.4.5.

51U:137 (LEVEL C)

- 01 Perforated shell disc. Ht. 0.22. Di. 0.98. White, with bevelled edges.

51U:141 (LEVEL C)

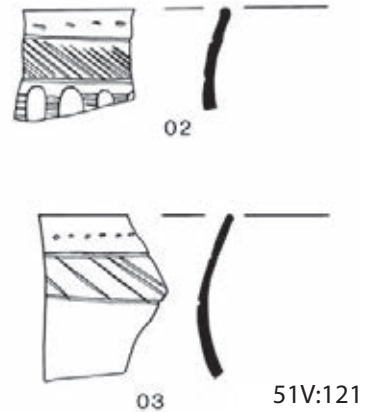
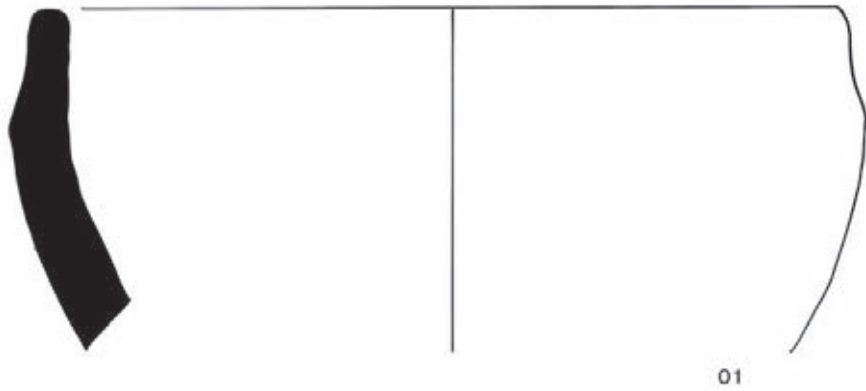
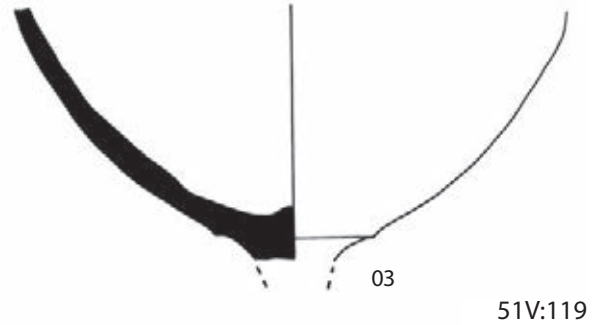
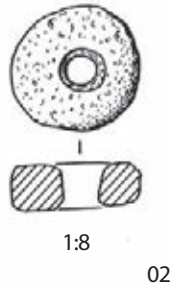
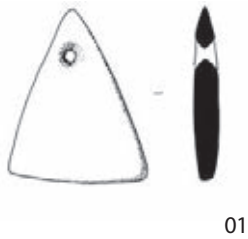
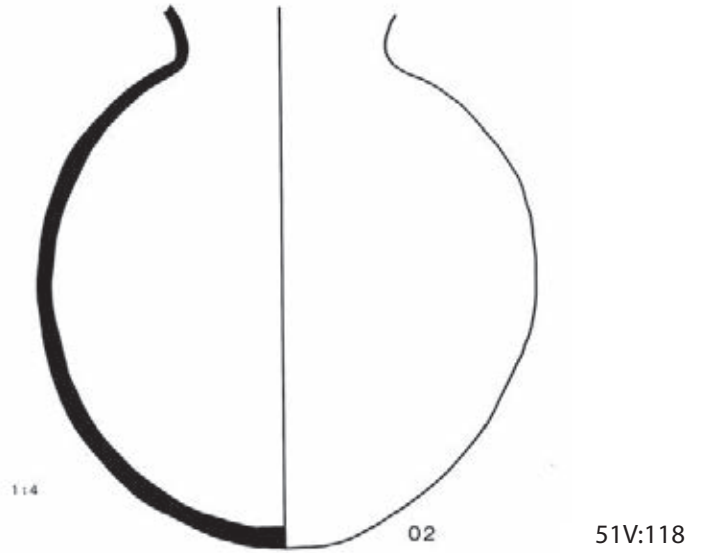
- 01 Surface: pink. Core: dark. Temper: hard veg. & some large grit. Rim di. 35–40.
- 02 Clay: grey. Temper: none visible. Rim di. 9–10.

51U:143 (LEVEL C/D)

- 01 Bone pin. Broken and chipped. L. 8.46. Max. di. 0.61.

51U:144 (LEVEL C/D)

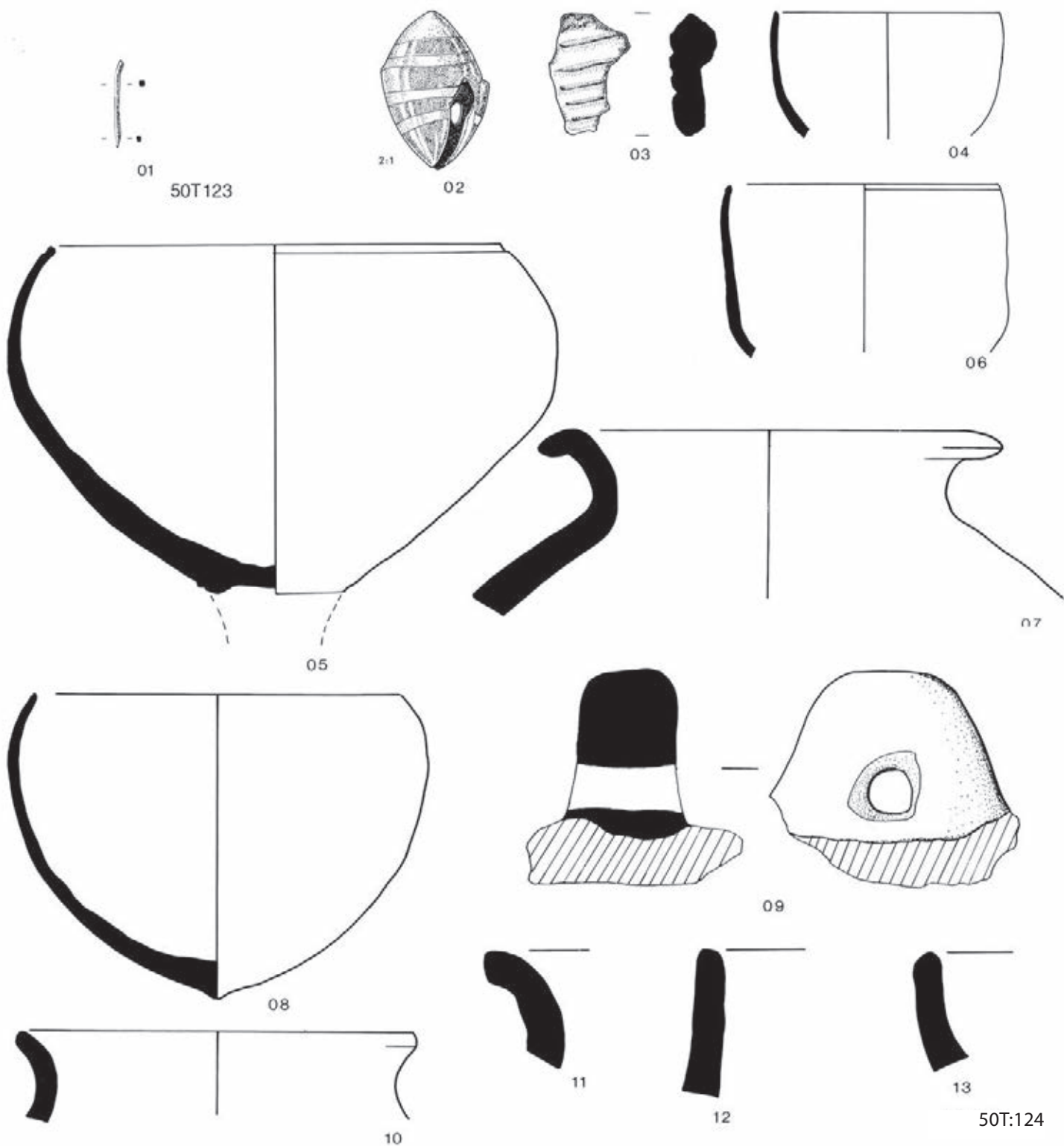
- 01 Discarded.
- 02 Surface: yellow. Clay: buff. Temper: fine veg. & sand. Rim di. c.10.5.
- 03 Clay: brown. Temper: none visible. Rim di. c.7.
- 04 Clay: grey. Temper: none visible.



05 Surface: pink. Core: black. Temper: sparse veg.
 06 Clay: grey. Temper: none visible.
 07 Surface: yellow. Clay: pink. Temper: grit & hard veg. Rim di. c.40. Hand made or slow wheel.
 08 Clay: orange. Temper: veg. Rim di. 27–30. Handmade
 09 Surface: pink with cream slip. Core: green. Temper: fine veg. Rim Di. ?
 10 Surface: buff. Temper: ? Rim di. c.3. Most of body burnt.
 51U:145 (LEVEL C/D)
 01 Clay: grey. Temper: very fine sparse veg.
 51V:118 (LEVEL C)
 01 Discarded.

02 Clay: buff. Temper: coarse veg. Handmade
 51V:119 (LEVEL C)
 01 Sherd pendant. Clay: red. Temper: fine grit.. H.2.29. Th. 0.37. Drilled from both sides.
 02 Door socket. Limestone. Di. 13.4. Ht. 5.44.
 03 Clay: grey. Temper: veg.
 51V:121 (LEVEL C)
 01 Clay: black. Temper: heavy veg. Rim di. c20. Handmade,
 02 Clay: grey. Temper: none visible.
 03 Clay: grey. Temper: none visible.

LEVEL B



50T:123 (Level B)

01 Copper pin. Ext. height: 3.02. Diam: 0.13-0.21. Square-sectioned bent pin, broken at top, tapering at bottom.

50T:124 (Level B)

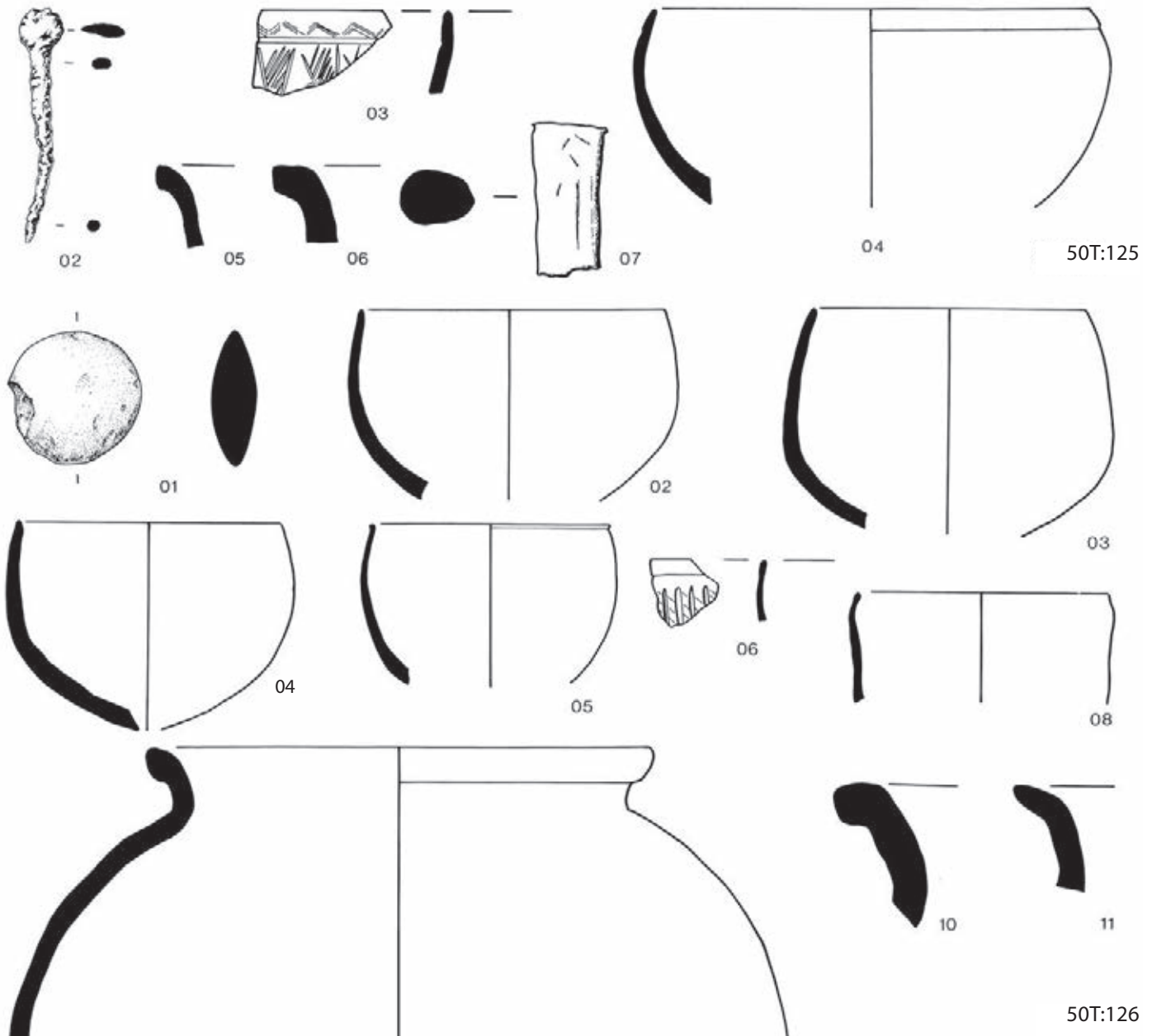
01 Pebble coated in bitumen. Discarded.

02 Shell bead, probably *Engina mendicaria*. Pierced. Striated brown and white. H. 1.4. Di. 0.9.

03 Clay sealing. Height: 4.45. Max. width: 2.84. Max. thickness: 1.67. No impression on obverse. Reverse has four impressions of string.

04 Surface: buff. Clay: pink. Temper: none visible. Rim di. 8.

50T:124



05 Clay: grey. Temper: very sparse veg. Rim di. 16. Burnished to black on outer surface. Slightly warped in firing.

06 Clay: grey. Temper: none visible. Rim di. 9.5–10.

07 Surface: buff. Clay: grey. Temper: medium veg. Rim di. 14–15. Wheel finished?

08 Clay: fine grey. Temper: sparse veg. Rim di. c.13.

09 Clay: pink. Core: black. Temper: coarse veg. Handmade. Pot lid handle.

10 Surface: buff. Clay: orange. Core: green. Temper: medium veg. Rim di. 14. Handmade.

11 Clay: orange. Core: green. Temper: medium veg.

12 Clay: orange. Temper: medium veg. Rim di. 17–20. Handmade.

13 Clay: pink. Temper: fine veg. Rim di. c.25.

50T:125 (LEVEL B)

01 Bitumen sample.

02 Copper pin. Heavily corroded and restored from three pieces. Length: 7.47. Max. di. of head: 1.47.

03 Clay: grey. Temper: none visible.

04 Clay: grey. Temper: very sparse veg. Rim di. 14–15.

05 Clay: pink. Temper: some veg. Handmade.

06 Clay: pink with green core. Temper: veg. Rim di. 17–19. Handmade.

07 Broken handle from lid. Clay: pink. Temper: rough veg. Di. 2.3.

50T:126 (LEVEL B)

01 Clay disk. Clay: brown/black. Di. 2.13. Thickness: 0.70.

02 Clay: grey. Temper: none visible. Rim di. 9–10.

03 Clay: buff. Temper: sparse veg. & grit. Rim di. 10–11.

04 Clay: buff. Temper: veg. Rim di. 8.5(?)

05 Clay: grey. Temper: none visible. Rim di. 7–8.

06 Clay: buff. Temper: sparse veg.

07 Not used.

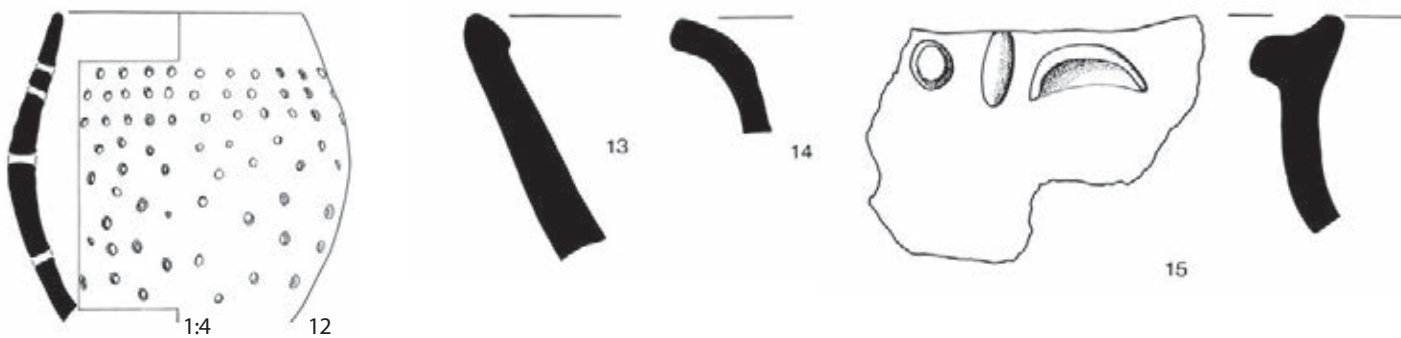
08 Clay: green. Temper: none visible. Rim di. 8.

09 Surface: pink. Clay: grey. Temper: fine veg. Rim di. c.16.

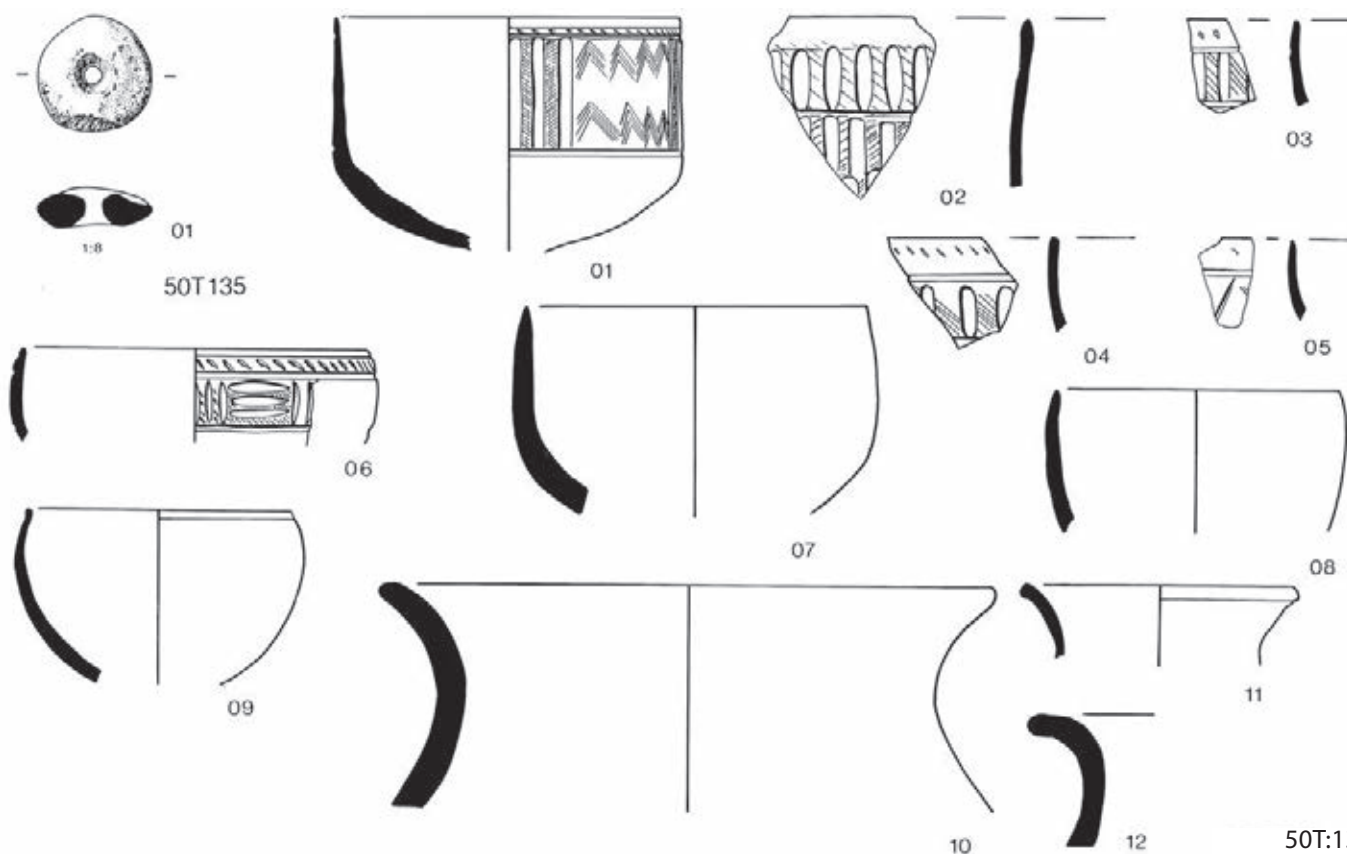
10 Clay: red. Temper: veg. Rim di. 16–17.

11 Surface: cream. Clay: pink. Temper: veg. Rim di. 13–15. Handmade.

50T:126



50T:126 (cont'd)



50T:136

50T:126 (cont'd)

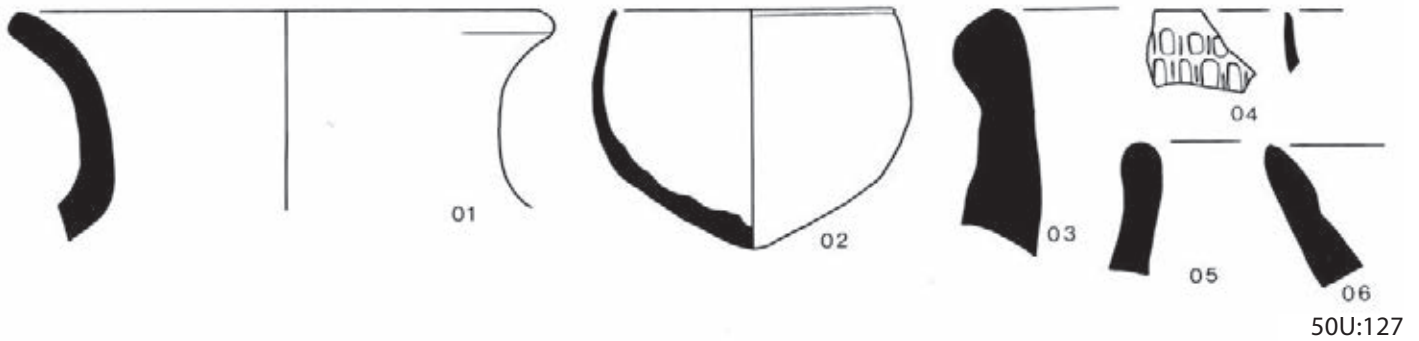
12 Clay: pink. Core: burnt black. Rim di. 13–14. Very crudely handmade. Other fragments suggest the sieve had a thick round base.
 13 Surface: cream. Clay: pink. Temper: hard veg. Rim di. 31–6. Handmade.
 14 Surface: cream. Clay: pink. Temper: veg. Rim di. 16–19. Handmade.
 15 Clay: pink. Temper: grog. Rim di. 12–13. Handmade. Cooking pot rim with applied decoration.

50T:135 (LEVEL B)

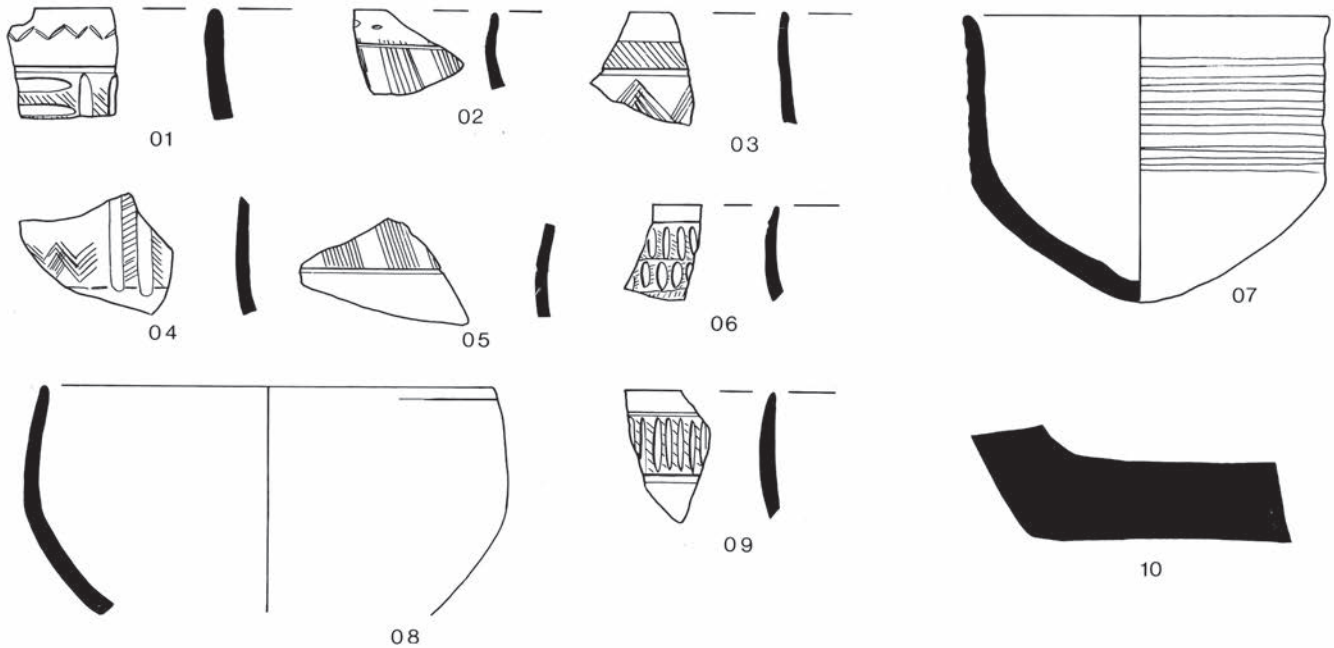
01 Door Socket, limestone. Traces of wear on upper surface. Di. 11.69. Ht. 4.0.

50T:136 (LEVEL B)

01 Clay: grey. Temper: none visible. Rim di. 9.2.
 02 Clay: grey. Temper: sparse sand. Rim. di. 10–12.
 03 Clay: grey. Temper: none visible.
 04 Clay: grey. Temper: very little veg.
 05 Clay: grey. Temper: none visible.
 06 Clay: grey. Temper: none visible. Rim di. 9–10.
 07 Clay: grey. Temper: sparse veg. Rim di. 9.
 08 Clay: grey. Temper: sparse veg. Rim di. 7–8.
 09 Clay: grey. Temper: none visible. di: c7.
 10 Clay: pink with grey core. Temper: veg. Rim di. 16–18. Handmade.
 11 Clay: black. Temper: none visible. Rim di. c.7.5.
 12 Clay: buff. Temper: veg. Rim di. 14–17.



50U:127



50U:129

50U:127 (LEVEL B)

- 01 Clay: pink with green core. Temper: medium veg. Rim di. 14. Handmade.
 02 Clay: green/buff. Temper: none visible. Rim di. 7.5. Ht. 6.3.
 03 Clay: pink with grey core. Temper: hard veg. Handmade.
 04 Clay: grey. Temper: none visible.
 05 Surface: pink. Clay: buff. Temper: rough veg. Handmade.
 06 Clay: pink with green core. Temper: rough veg. Handmade.

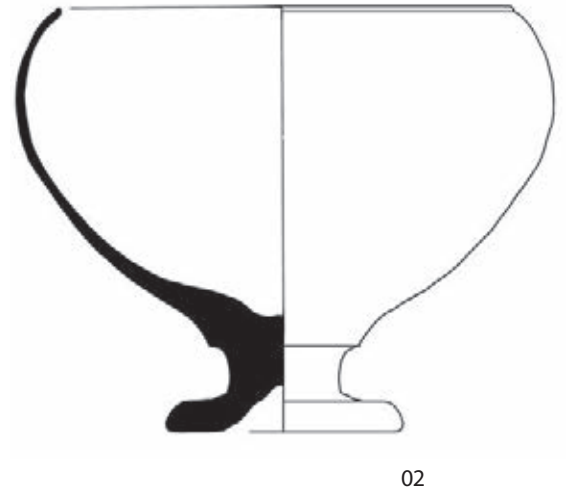
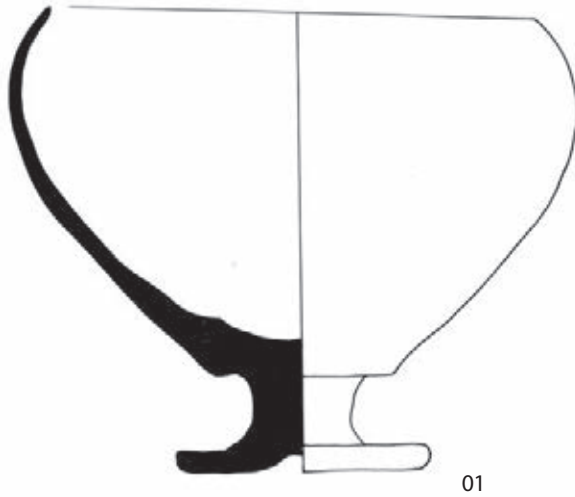
50U:129 (LEVEL B)

- 01 Clay: dark grey. Temper: none visible.
 02 Clay: grey. Temper: none visible.
 03 Clay: grey. Temper: sparse veg.
 04 Clay: grey. Temper: none visible.
 05 Clay: grey. Temper: none visible.

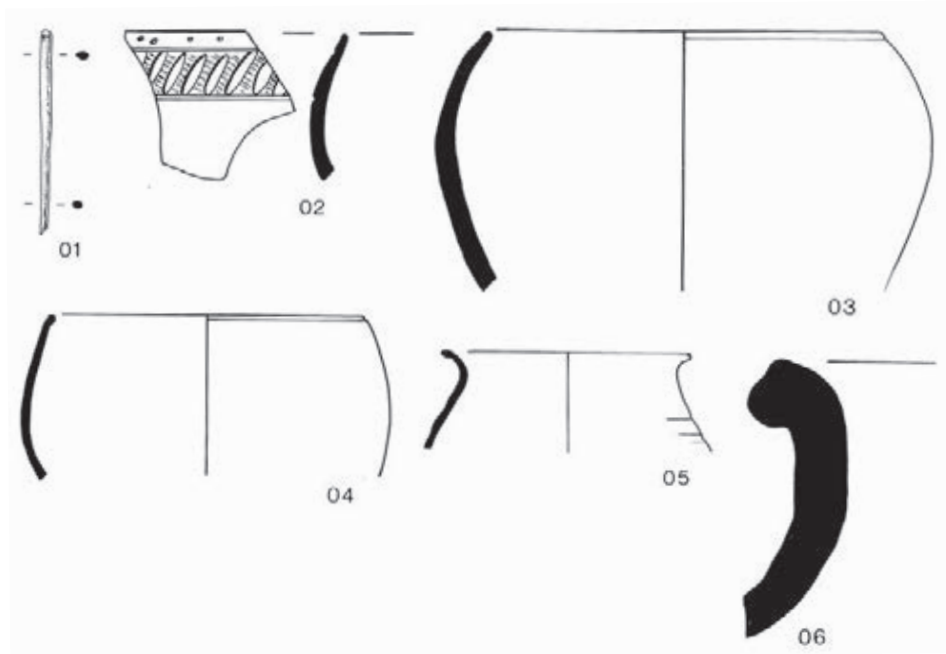
- 06 Clay: grey. Temper: none visible.
 07 Clay: pink. Temper: sparse veg. Rim di. 10.5. Ht. 7.6. Ridges sloppily executed.
 08 Clay: grey. Temper: none visible. Rim di. 11–12.
 09 Clay: grey. Temper: none visible.
 10 Clay: pink with black core. Temper: rough veg. Base di. c.21. Handmade.
 11 Clay: pink with black core. Temper: med. veg., sparse large grit. Handmade.
 12 Clay: pink with black core. Temper: hard veg. Handmade.
 13 Surface: buff. Clay: pink with green core. Temper: large grit. Handmade.
 14 Clay: pink with black core. Temper: veg. & large grit. Handmade. Polished outer surface.



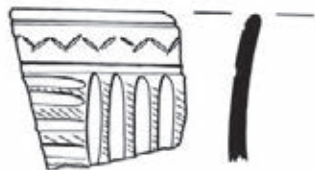
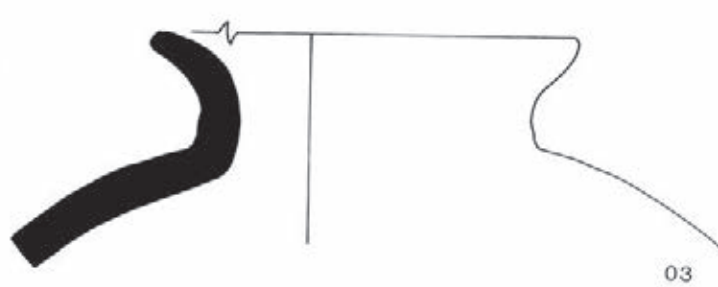
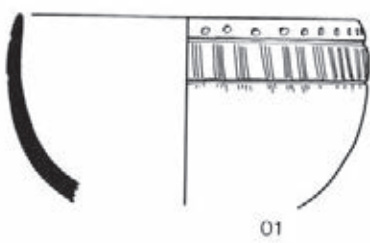
50U:132



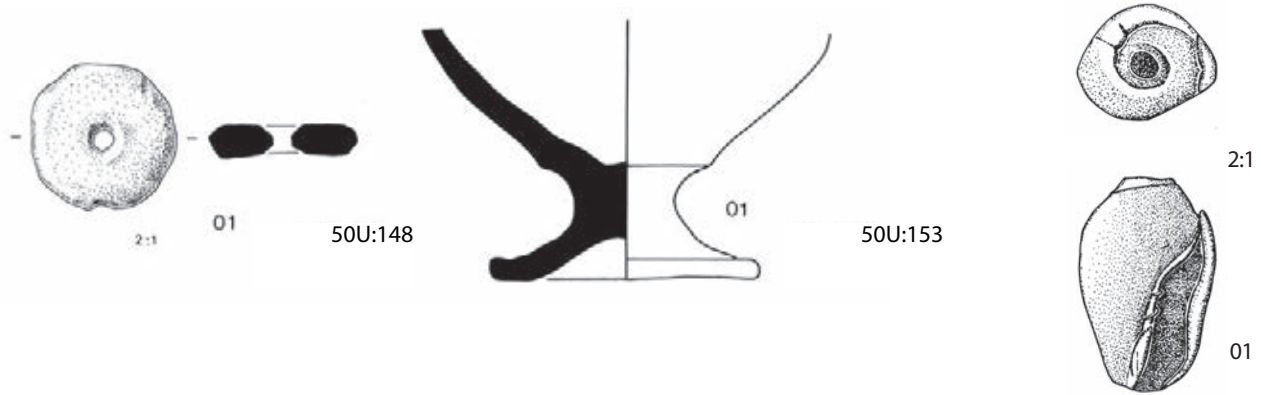
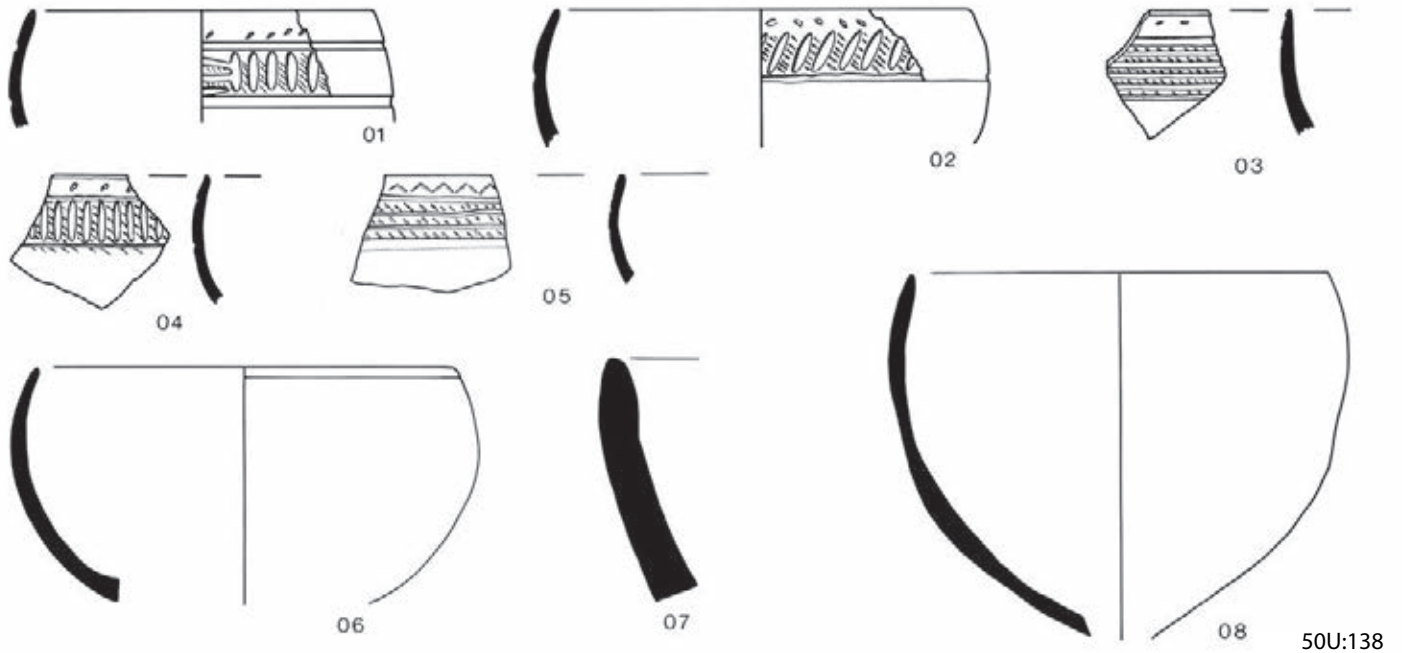
50U:133



50U:134



50U:137



50U:132 (LEVEL B)

01 Bone pin. Complete and intact. Length: 7.36. Di. 0.5. Oval-shaped in section tapering to a point.

50U:133 (Level B, grave)

01 Pedestal bowl. Clay: grey. Temper: none visible. Rim di. c.13. Ht. 12.4. Fine-walled but poorly finished.

02 Pedestal bowl. Surface: buff. Clay: orange. Temper: none visible, but traces of straw on surface, especially around base. Rim di. 12. Ht. 11.2.

Scale 1:2.

50U:134 (LEVEL B)

01 Bone pin. Broken at both ends. Length: 5.36. Di. 0.29.

02 Clay: brown/buff. Temper: occasional white grit. Rim di.9.

03 Surface: grey. Clay: grey. Temper: none visible. Rim di. 10.5.

04 Clay: fine grey. Temper: none visible. Rim di. 8.

05 Surface: buff. Clay: pink. Temper: sparse grit. rim di. 6.5.

06 Surface: green. Clay: green. Temper: veg. & large white grit. Rim di. 20.

50U:137 (LEVEL B)

01 Clay: grey. Temper: sparse veg. Rim di. 8-9.

02 Clay: dark grey. Temper: sparse veg. Rim di. 17-19.

03 Surface: cream. Clay: pink. Temper: heavy veg. Rim di. 14. Handmade.

04 Surface: cream. Clay: pink. Temper: veg. Handmade.

50U:138 (LEVEL B)

01 Clay: grey. Temper: none visible. Rim di. 8-9.

02 Clay: grey. Temper: sparse veg. Rim di. 11.

03 Clay: grey. Temper: sparse veg.

04 Clay: grey. Temper: none visible.

05 Clay: grey. Temper: none visible. Rim di. 9.

06 Clay: grey. Temper: sparse veg. Rim di. 10-11. Slight polish on outer surface.

07 Clay: buff. Temper: veg. Rim di. 29-35. Handmade.

08 Clay: grey. Temper: none visible. Rim di. 10-12.

50U:148 (LEVEL B)

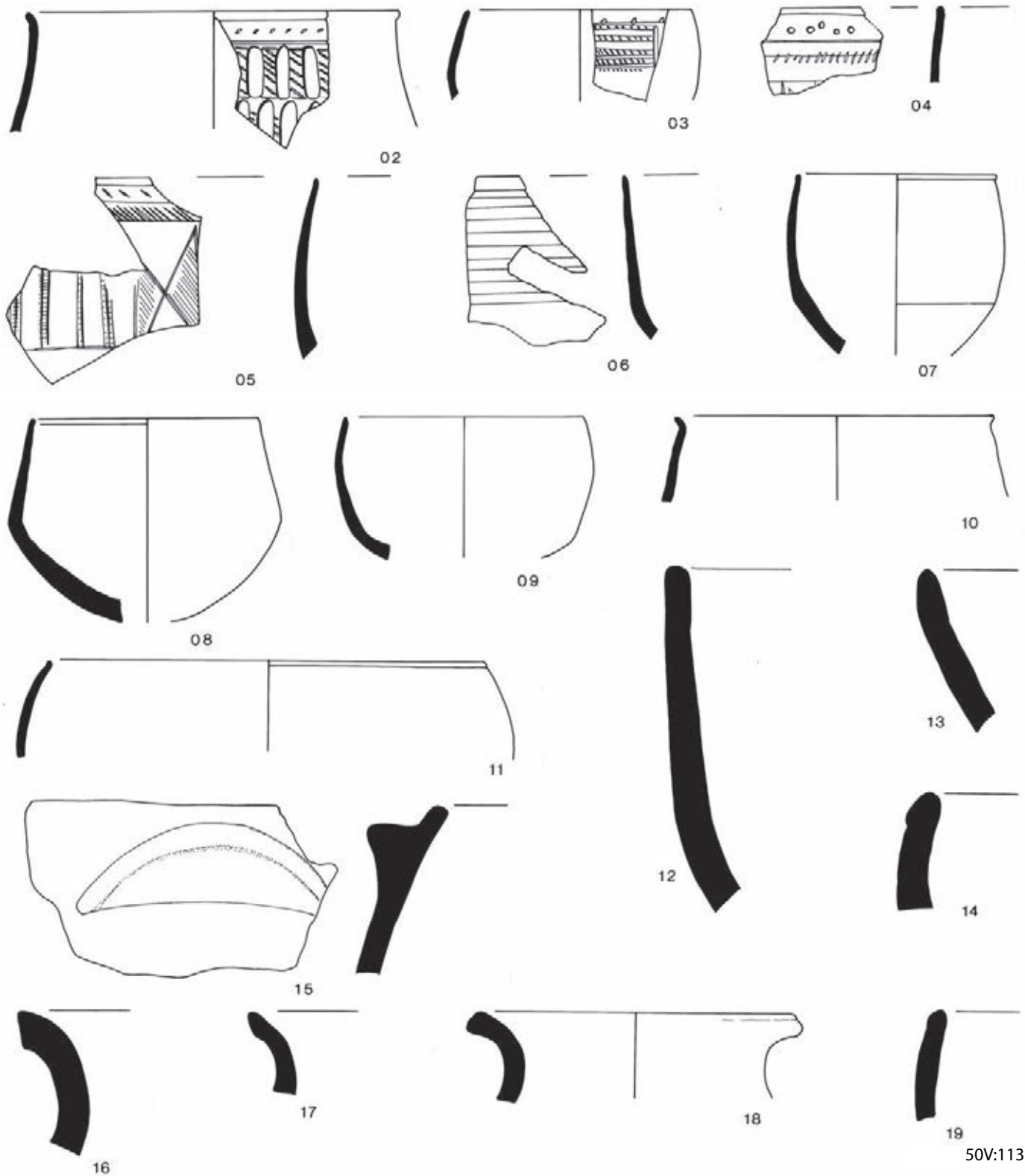
01 Shell bead. Lower surface flat and white. Upper surface grey and irregular. Di. 1.18. H. 0.28.

50U:153 (LEVEL B)

01 Clay: pink. Temper: veg. Base di. 7.

50U:154 (LEVEL B?)

01 Conus shell bead. Black polished surface. Pierced at both ends. Height: 1.42. Width: 0.81.



50V:113 (LEVEL B/C)

01 Pebble (discarded).

02 Clay: grey. Temper: none visible. Rim di. 13.

03 Clay: grey. Temper: none visible. Rim di. c.8.

04 Clay: grey. Temper: sparse veg. Rim di. 10-11.

05 Clay: grey. Temper: sparse veg.

06 Clay: buff. Temper: fine veg.

07 Clay: grey. Temper: sparse veg. Rim di. 7.

08 Surface: cream. Clay: pink. Temper: sparse fine veg. Rim di. c.8.

09 Clay: dark grey. Temper: none visible. Rim di. c.8.5.

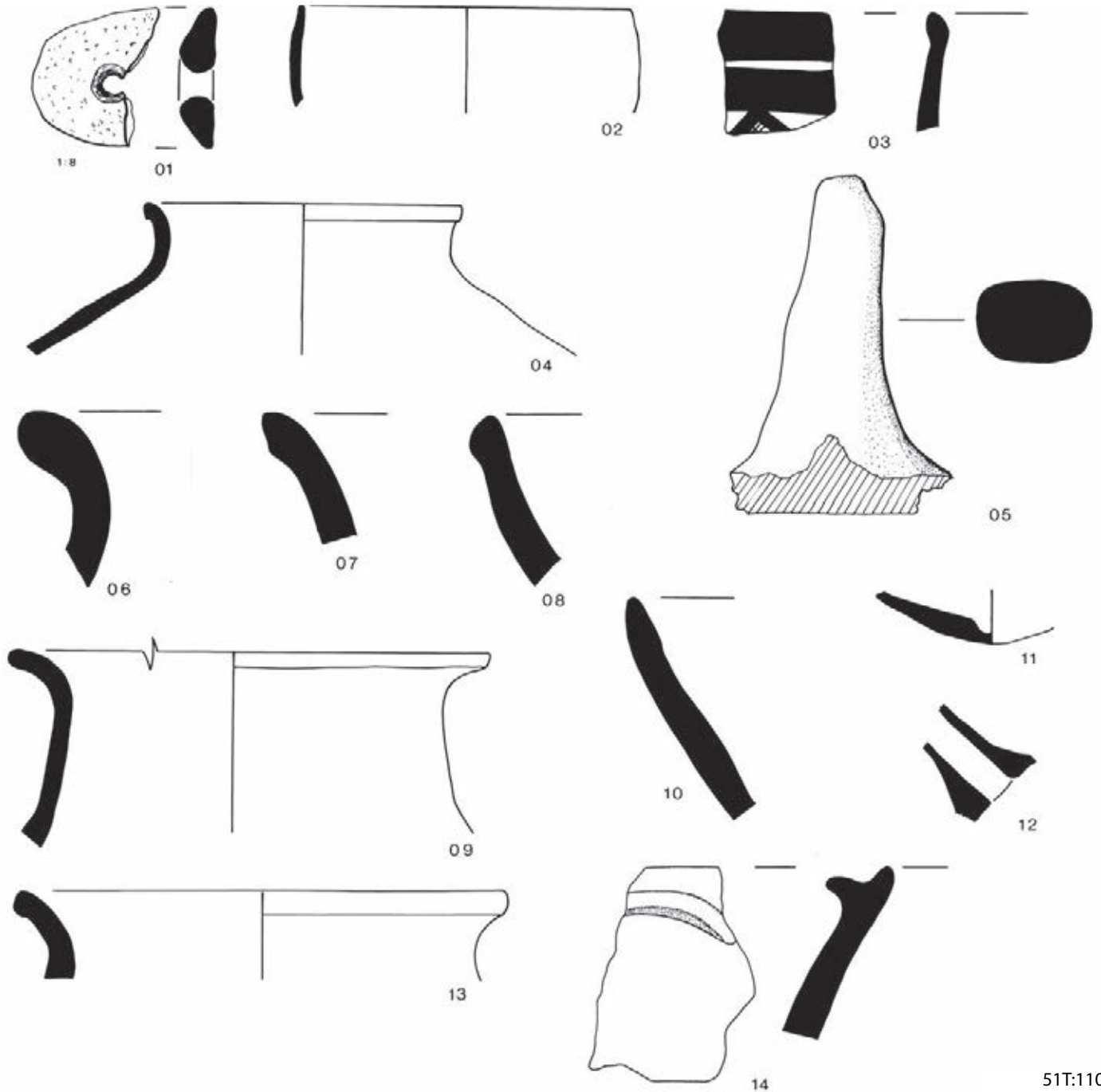
10 Clay: green. Temper: none visible. Rim di. c.11.

11 Clay: grey. Temper: none visible. Rim di. c.15.5.

12 Clay: pink. Temper: rough veg. Rim di. c.30.

13 Surface: brown. Clay: pink. Temper: med. veg. & occasional grit. Rim di. 30.

50V:113



14 Clay: pink. Temper: fine veg.

15 Surface: brown. Core: black. Temper: large grit. Handmade.

16 Clay: buff. Temper: hard veg.

17 Surface: buff. Temper: med. veg.

18 Surface: cream. Clay: brown. Temper: sparse fine veg. Rim di. 11.

19 Clay: pink. Temper: hard veg. Rim di. ?

51T:110 (LEVEL B)

01 Quern stone reused as door socket. Evidence of wear on both sides of central hole. Grey basalt. L. 18. W. 16. Ht. 5.4.

02 Clay: buff. Temper: sparse veg. Rim di. 11. Interior surface pale grey.

03 Surface: cream. Clay: green. Temper: veg. Rim di. c.20–30. Black paint.

04 Clay: buff. Temper: hard veg & sparse grit. Rim di. 10.5. Handmade.

05 Surface: brown. Core: black. Temper: veg.

06 Surface: cream. Clay: pink. Temper: grit & veg. Rim di. very large.

07 Clay: green. Temper: veg. Rim di. 33. Vitrified. Probably handmade.

08 Surface: cream slip. Clay: pink. Core: green. Temper: fine veg. & little grit. Rim di. 32. Handmade.

09 Surface: buff. Clay: pink. Temper: soft veg. Rim di. 17. Handmade.

10 Surface: orange. Clay: yellow. Temper: medium veg. Rim di. c.33. Handmade.

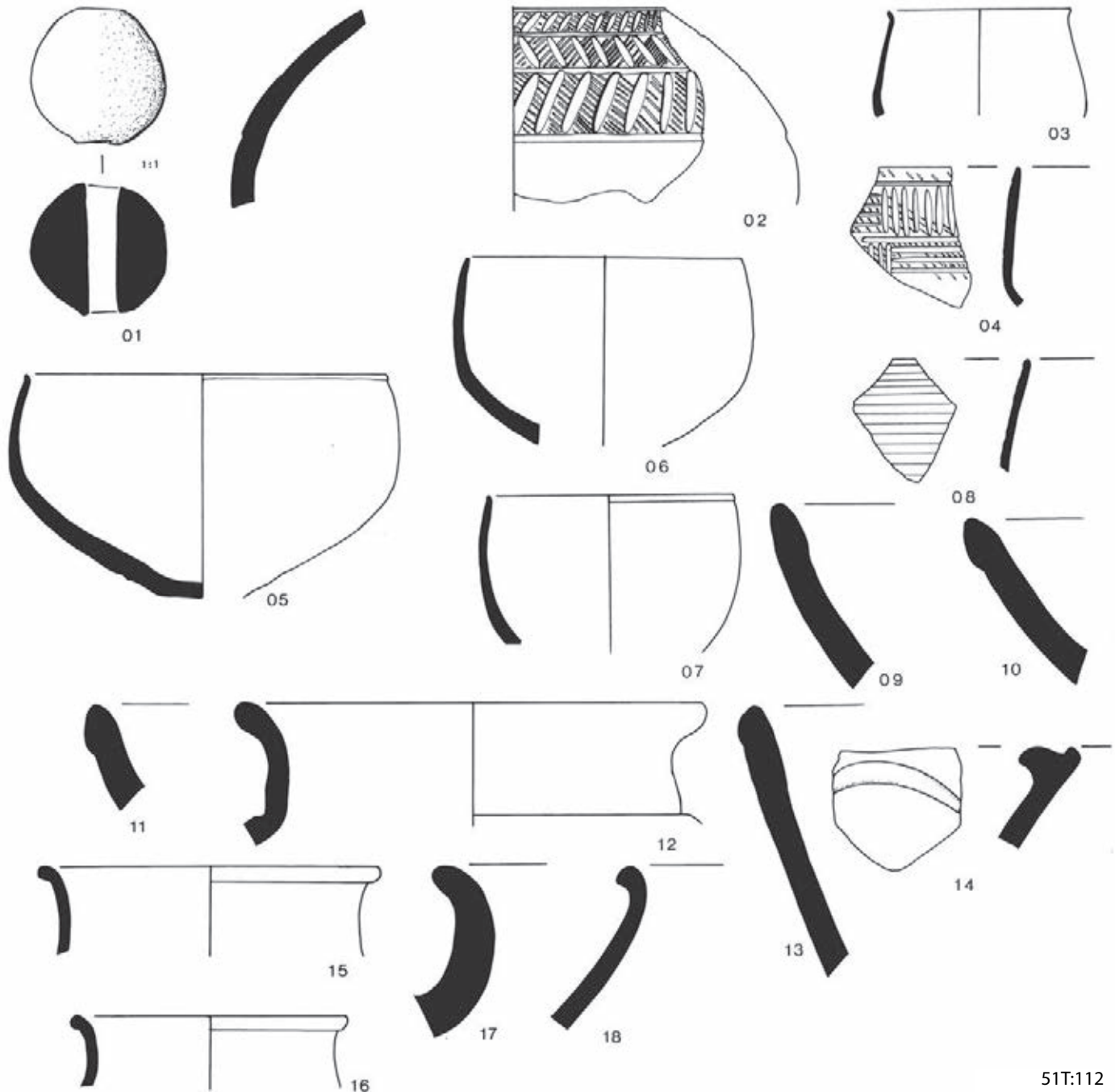
11 Clay: pink. Temper: none visible.

12 Surface: buff. Clay: pink. Temper: veg. & grit.

13 Surface: cream. Clay: pink. Temper: veg. Rim di. 16.5. Poorly made.

14 Surface: brown. Clay: black. Temper: medium veg. Handmade, polished outer surface.

51T:110



51T:112

51T:112 (LEVEL B)

01 Clay bead. Max. ht. 2.2. Max. w. 2.4.

02 Clay: grey. Temper: none visible. burnished outer surface, incised decoration.

03 Clay: grey. Temper: none visible. Rim di. 6.

04 Clay: grey. Temper: none visible. Rim di. 7-10.

05 Clay: grey. Temper: none visible. Rim di. c.12. Polished on black outer surface.

Inner surface rubbed round with veg. Upper surface grey, lower surface black.

06 Clay: pale grey. Temper: none visible. Rim di. 9.

07 Clay: grey. Temper: sparse veg. Rim di. 8.

08 Clay: buff. Temper: none visible.

09 Clay: orange. Core: green. Temper: veg. Rim di. 42+. Handmade.

10 Surface: pale pink. Clay: pink. Temper: grit & veg. Handmade.

11 Clay: buff. Temper: veg. Handmade.

12 Surface: cream. Clay: pink. Temper: veg. Rim di. 15-16. Handmade.

13 Surface: cream slip. Clay: pink. Core: green. Temper: veg. Rim di. 35-9. Handmade.

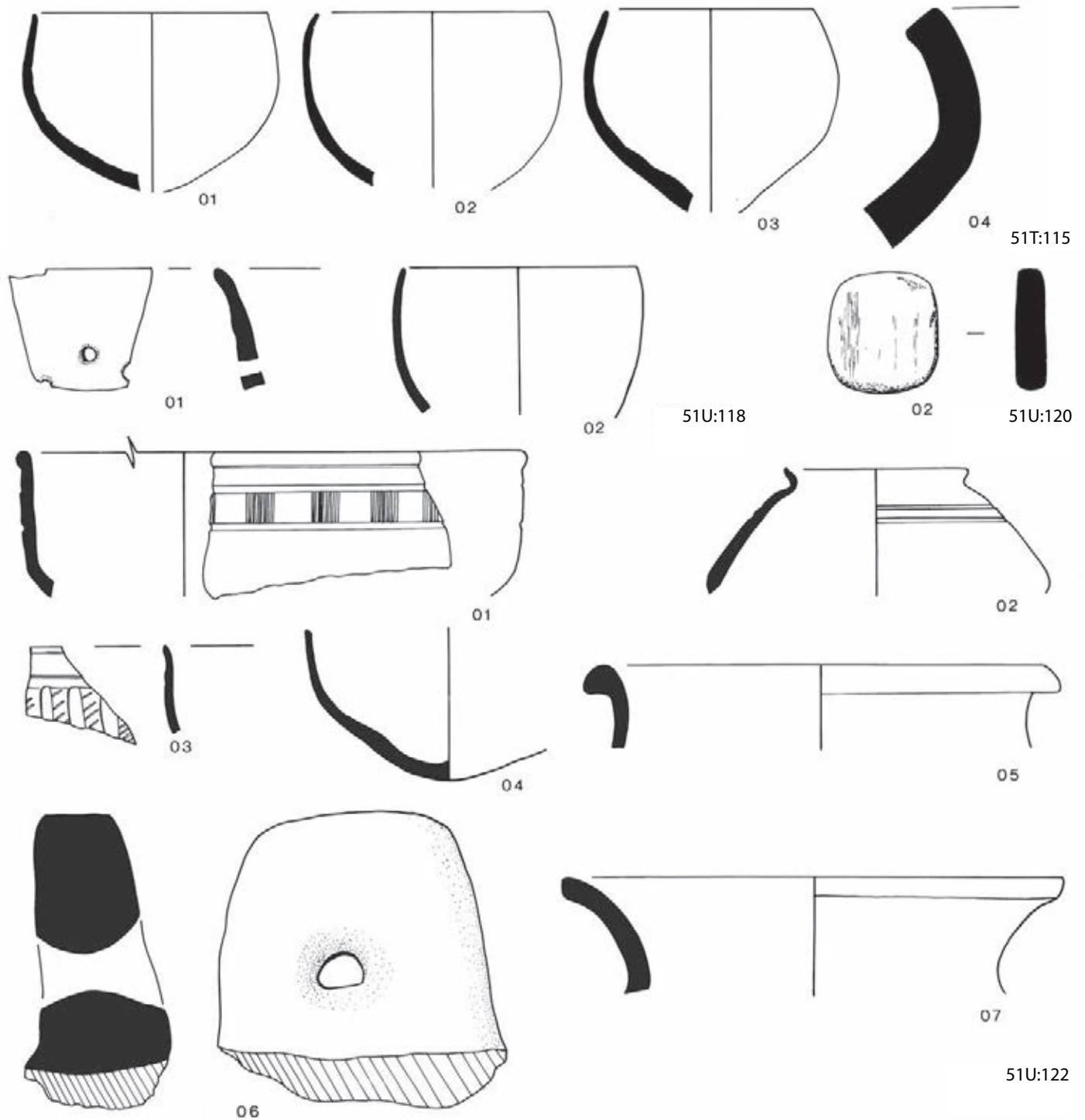
14 Clay: pink. Core: black. Temper: grog & occasional large grit. Di. ?

15 Surface: black. Clay: grey. Temper: none visible. Rim di. 11.

16 Clay: grey. Temper: none visible. Rim di. 9. Surface stained or painted black.

17 Surface: pink. Clay: grey. Temper: hard veg. Burnt.

18 Clay: pink. Temper: veg. Handmade.



51T:115 (LEVEL B)

- 01 Clay: grey. Temper: none visible. Rim di. 8.
 02 Clay: grey. Temper: sparse grit. Rim di. 8.
 03 Clay: green/grey. Temper: sparse veg. Rim di. 7.
 04 Clay: brown. Core: black. Temper: sparse hard veg. Rim di. 25-7.

51U:118 (LEVEL B)

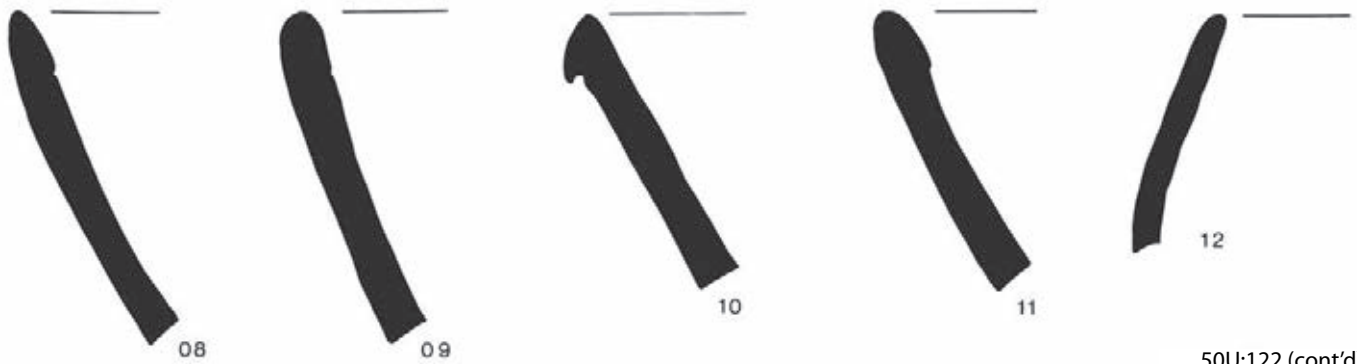
- 01 Clay: pink. Temper: coarse veg. Rim di. 14-18.
 02 Clay: grey. Temper: fine grit. Rim di. 8.

51U:120 (LEVEL B)

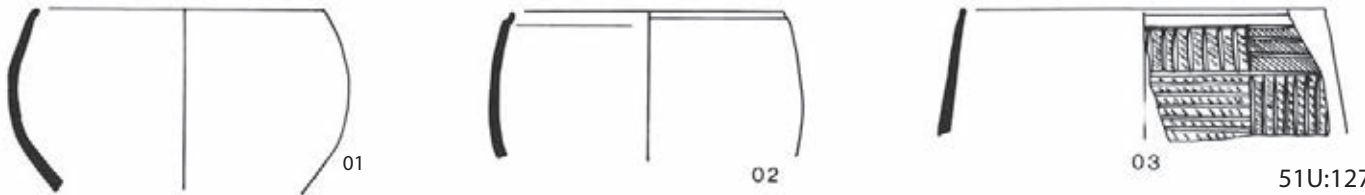
- 02 Bone disc. Max. h. 2.1. Th. 0.5.

51U:122 (LEVEL B)

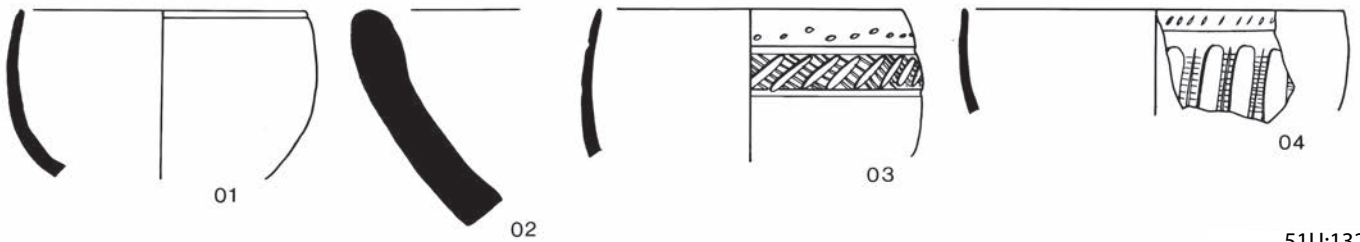
- 01 Clay: grey. Temper: none visible. Rim di. c.24.
 02 Clay: green. Temper: fine veg. Rim di. c.6.5. Blackened interior.
 03 Clay: grey. Temper: none visible.
 04 Clay: grey. Temper: fine veg.
 05 Surface: buff. Clay: pink. Temper: fine veg. Rim di. 15.
 06 Surface: red. Core: black. Temper: veg. Handle.
 07 Surface: pink. Core: grey. Temper: veg. & grit. Rim di. 17. Handmade.



50U:122 (cont'd)



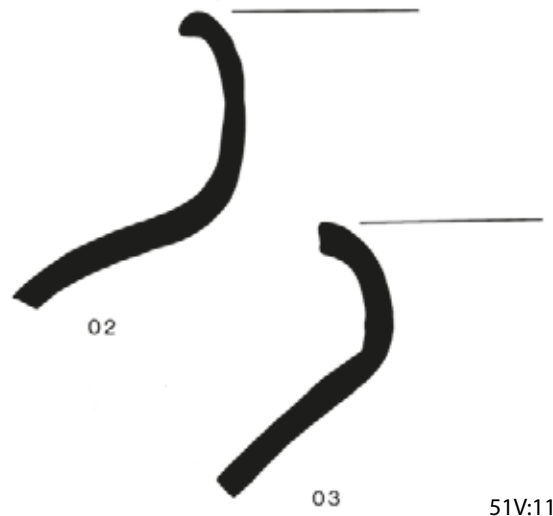
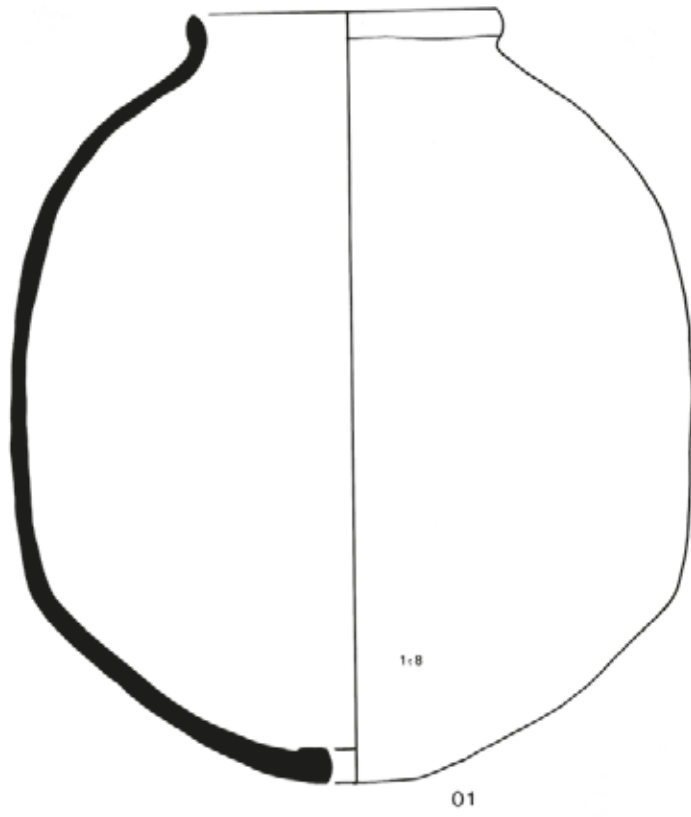
51U:127



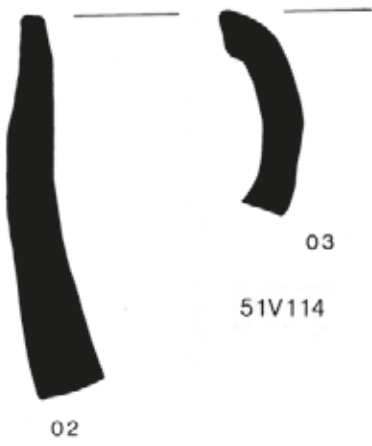
51U:132

- 08 Surface: brown. Core: grey. Temper: grit & veg. Rim di. 29. Handmade.
- 09 Surface: pink. Core: grey. Temper: veg. Handmade.
- 10 Clay: buff. Temper: fine veg. Handmade ?
- 11 Surface: brown. Core: grey. Temper: veg. Rim di. more than 40. Handmade. Smoothed outer surface.
- 12 Clay: pink. Temper: veg. Rim di. c.21. Handmade.
- [51U:127 \(LEVEL B\)](#)
- 01 Clay: brown/buff. Temper: none visible. Rim di. c.7.5.
- 02 Clay: grey. Temper: none visible. Rim di. 7.
- 03 Clay: grey. Temper: none visible. Rim di. 8.3.
- [51U:132 \(LEVEL B\)](#)
- 01 Clay: grey. Temper: none visible. Rim di. 7-8.
- 02 Surface: orange. Temper: hard veg.
- 03 Clay: grey. Temper: none visible. Rim di. 8.
- Surface: pink. Core: black. Temper: coarse veg. Handmade.
- [51V:111 \(LEVEL B\)](#)
- 01 Surface: cream. Clay: pink. Rim di. 32-4.

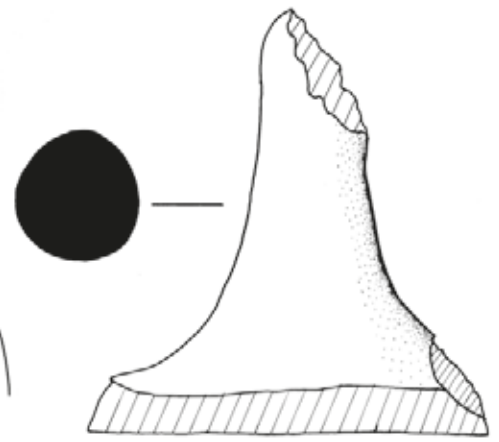
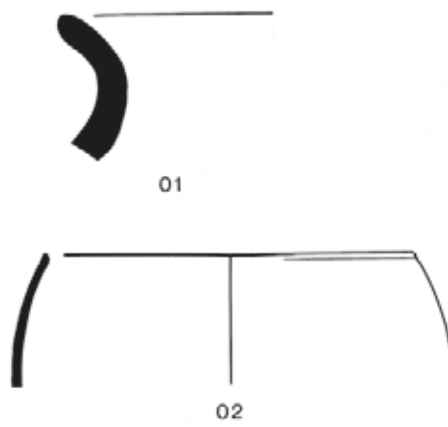
- 02 Surface: buff. Clay: grey. Temper: veg & fine grit. Rim di. c14.5. Handmade.
- 03 Clay: buff. Temper: veg. Rim di. c15. Handmade.
- [51V:114 \(LEVEL B\)](#)
- 01 Carbon sample.
- 02 Core: grey. Clay: buff. Temper: veg. Rim di. c.40. Handmade.
- 03 Clay: buff. Temper: veg. Rim di. 25.
- [51V:115 \(LEVEL B\)](#)
- 01 Surface: brown. Clay: pink. Temper: medium veg. Rim di. 13.
- 02 Surface: grey. Clay: grey. Temper: none visible. Rim di. c.9.5.
- 03 Surface: red. Core: grey. Temper: rough veg. Handle of lid.
- [51V:117 \(LEVEL B\)](#)
- 01 Clay: grey. Temper: none visible.
- [51V:123 \(LEVEL B\)](#)
- 01 Carbon sample.
- 02 Clay: grey. Temper: none visible.
- 03 Clay: buff. Temper: veg. Rim di. c.8-9. Handmade.



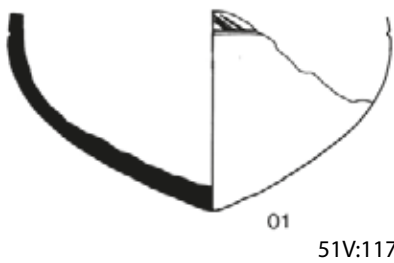
51V:111



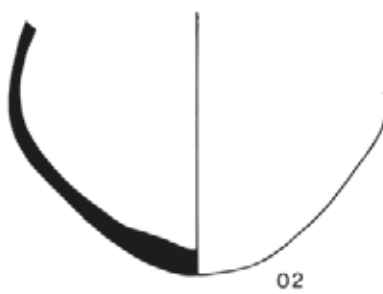
51V114



51V:115

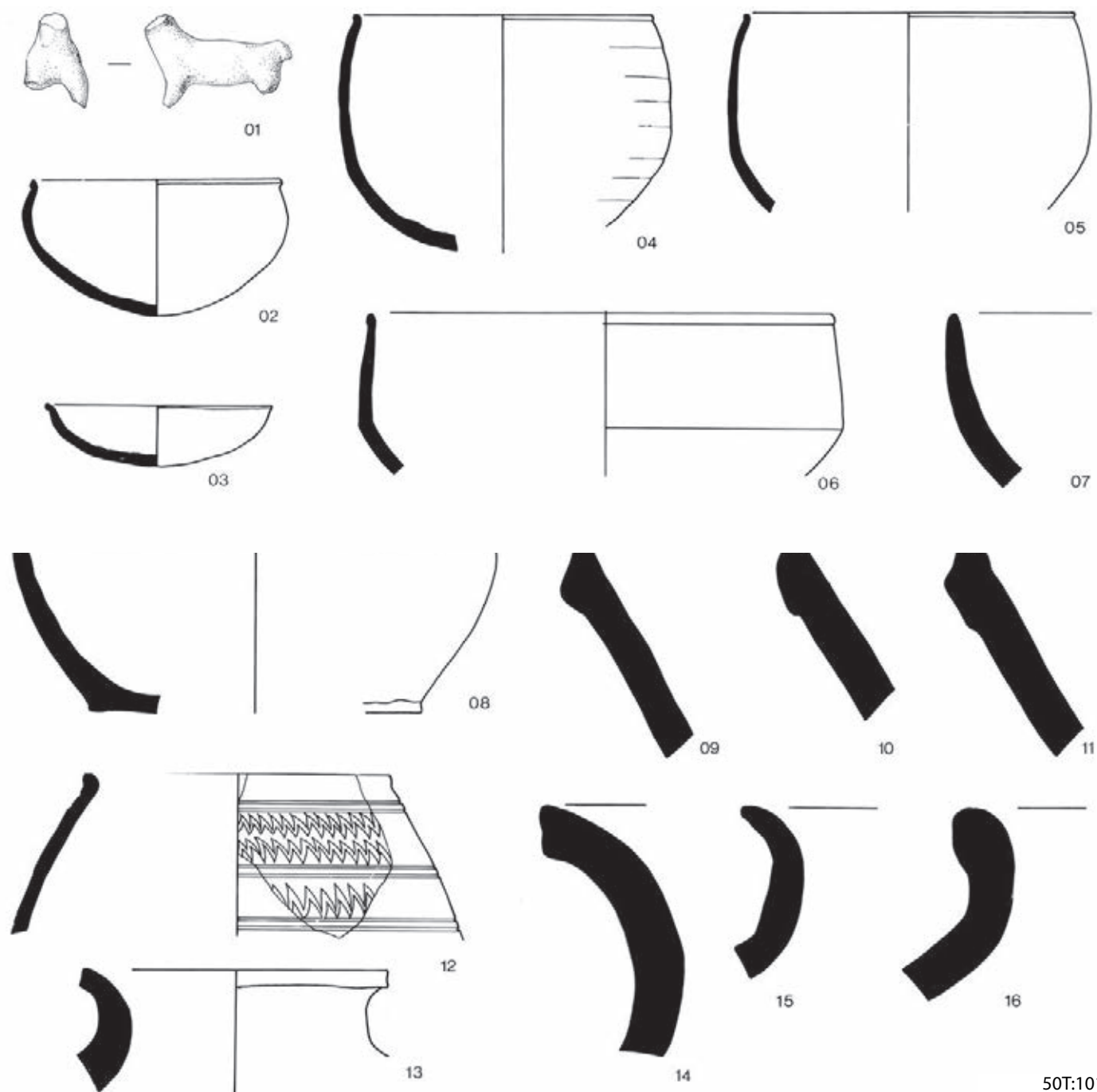


51V:117



51V:123

LEVEL A

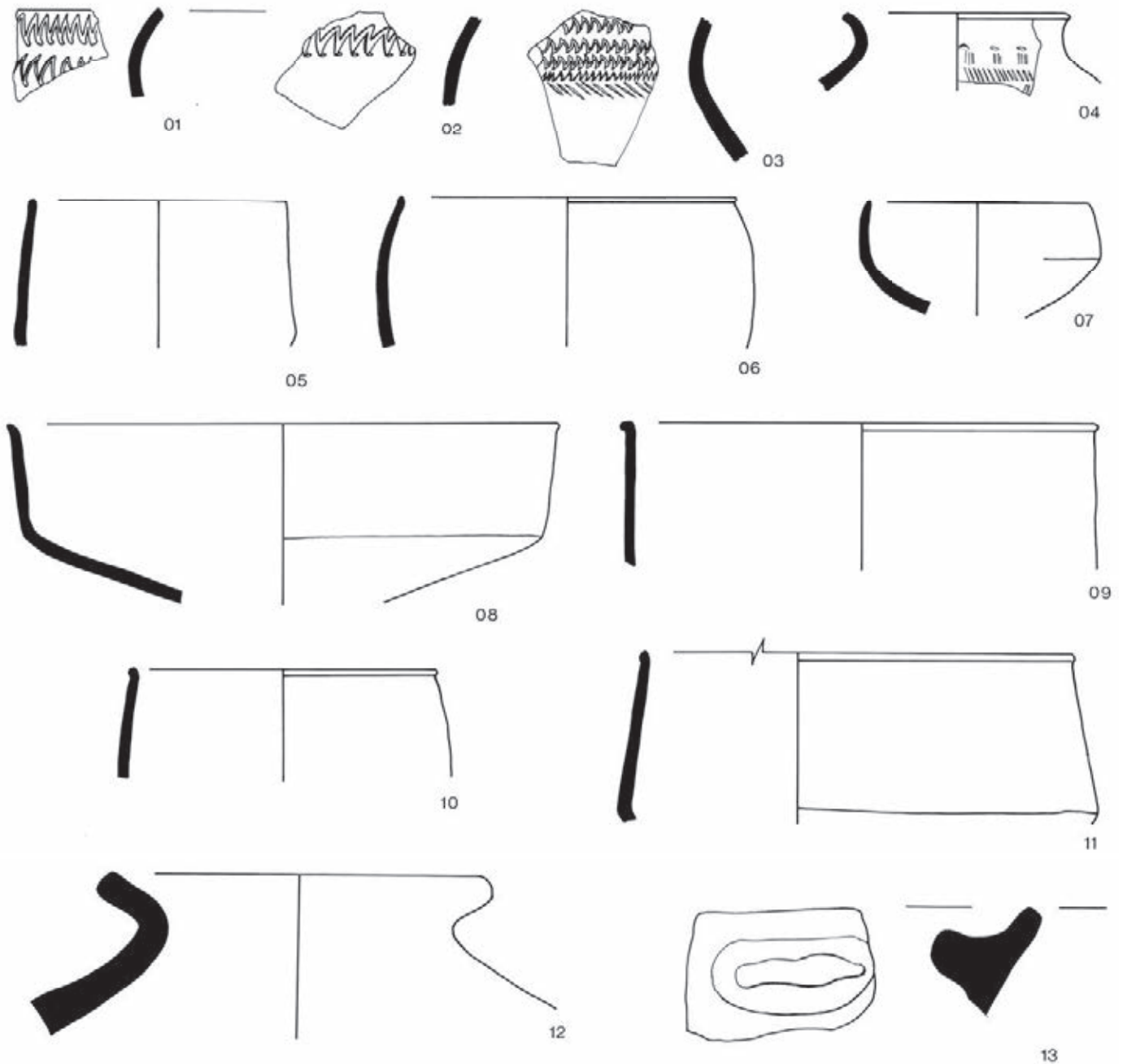


50T:101 (LEVEL A)

01 Animal figurine. Baked clay with grey/black surface. Height 3.32. Length 4.89. Width 1.99. Broken with head, tail and feet fragmentary.
 02 Clay: green. Temper: none visible. Rim di. 8. Ht. 4.5.
 03 Clay: green. Temper: none visible. Rim di. 7.2. Ht. 2.0.
 04 Surface: grey and wet smoothed. Clay: grey. Temper: none visible. Rim di. 9.6. Reconstructed height: 7.9.
 05 Clay: grey. Temper: none visible. Rim di. c.10.
 06 Surface: buff/brown. Clay: pink. Temper: sparse fine grit. Rim di. c.15.5.

07 Clay: green. Temper: veg. Rim di. 22.
 08 Surface: green. Clay: pink. Temper: veg. Rim di. c.11. Handmade.
 09 Surface: green, wet-smoothed out. Clay: pink. Temper: white grit & veg. Rim di. c.38.
 10 Surface: brown. Clay: brown with black core. Temper: coarse straw & grog. Rim di. c.44.
 11 Surface: buff/brown. Clay: pink. Temper: white grit & fine veg. Rim di. c.36.

50T:101



50T:103

12 Clay: buff. Temper: sparse fine veg. Rim di. c.10. Rocker pattern.

13 Surface: buff slip. Clay: pink. Temper: white grit. Rim di. c.10.

14 Surface: green. Clay: pink. Temper: white grit & heavy veg. Rim di. c.23.

15 Clay: green. Temper: heavy veg. & grog. Rim di. c.12. Handmade.

16 Surface: buff. Clay: red. Temper: fine white grit & veg.

50T:103 (LEVEL A)

01 Surface: buff. Clay: brown. Temper: grit. Rim di. c.9. Rocker pattern.

02 Clay: green. Temper: none visible. Rocker pattern.

03 Clay: green. Temper: fine sparse veg. Rocker pattern.

04 Clay: grey. Temper: none visible. Rim di. 7.

05 Clay: green. Temper: none visible. Rim di. c.8.

06 Surface: green/buff. Clay: brown. Temper: none visible. Rim di. c.11.

07 Clay: green. Temper: none visible. Rim di. 7.

08 Clay: green. Temper: none visible. Rim di. 18.

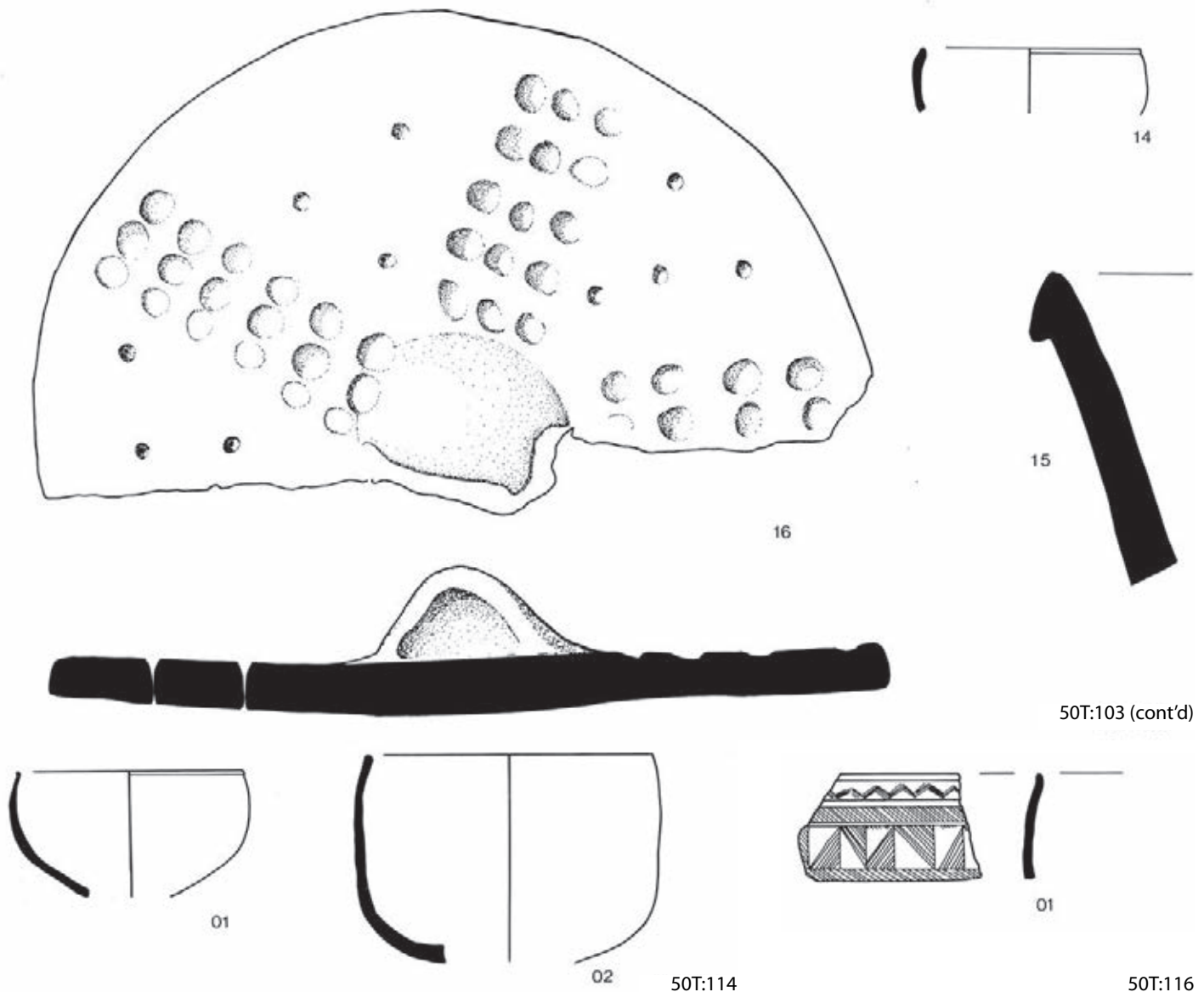
09 Clay: green. Temper: none visible. Rim di. c.15.

10 Surface: green. Clay: pink. Temper: none visible. Rim di. 9.

11 Surface: green. Clay: brown. Temper: none visible. Rim di. 18.12

Surface: green/buff slip. Clay: pink. Temper: fine veg. Rim di. 12.

13 Clay: brown. Core: black. Temper: large grit & veg. Rim di. c.19.



14 Clay: green. Temper: very fine veg. Rim di. 7.

15 Clay: pink with black core. Temper: grit & veg. Rim di. c.37.

16 Clay: pink. Temper: veg. Lid di. 26.1

[50T:114 \(LEVEL A\)](#)

01 Clay: pink. Temper: none visible. Rim di. 7.

02 Surface: pale pink. Clay: pink. Temper: fine veg. & sand. Rim di. c.9.

[50T:116 \(LEVEL A/B\)](#)

01 Clay: grey. Temper: none visible. Rim di. c.18.

[50T:120 \(LEVEL A/B\)](#)

01 Bone toggle or pin head (MA 241). Cylindrical. Broken at bottom. Ext. ht. 2.53. Di. 0.71. Carved with two bands of diagonal grooves between horizontal grooves.

02 Clay: green/grey. Temper: sparse fine veg. Rim di. 15-16.5. Ht. 16.1.

Base shows traces of hand finishing on outside. Complete and intact.

03 Copper pin (MA 241). Round head with two grooves. Height: 6.3. Diam of shaft: 0.3. Complete and intact.

04 Clay: green. Temper: fine veg. Rim di. 8-9.

05 Surface: cream out, pink in. Clay: pink. Temper: fine veg. & sparse grit. Rim di. 12. Ht. 8.9. Much of rim and body missing.

06 Clay: grey. Temper: sparse veg. Rim di. 11-12.

07 Surface: cream. Clay: pink. Core: black. Temper: rough veg. Rim di. 12-14. Handmade.

08 Surface: cream slip. Clay: pink. Temper: sand(?). Rim di. c.13.

09 Clay: grey. Temper: none visible.

10 Clay: grey. Temper: none visible.

11 Clay: grey. Temper: none visible.

12 Surface: cream. Clay: pink. Temper: veg. Rim di. 16-18. Handmade?

13 Surface: cream. Clay: pink. Temper: coarse veg. Rim di. 13-14.

14 Surface: cream. Clay: pink. Temper: grog & sparse veg. Rim di. 21-25. Handmade.

15 Surface: cream. Clay: pink. Temper: rough veg. Handmade.

16 Clay: pink. Temper: sparse veg. Handmade.

17 Surface: cream. Clay: pink. Temper: veg. & some large grit. Rim di. 13-17. Handmade.

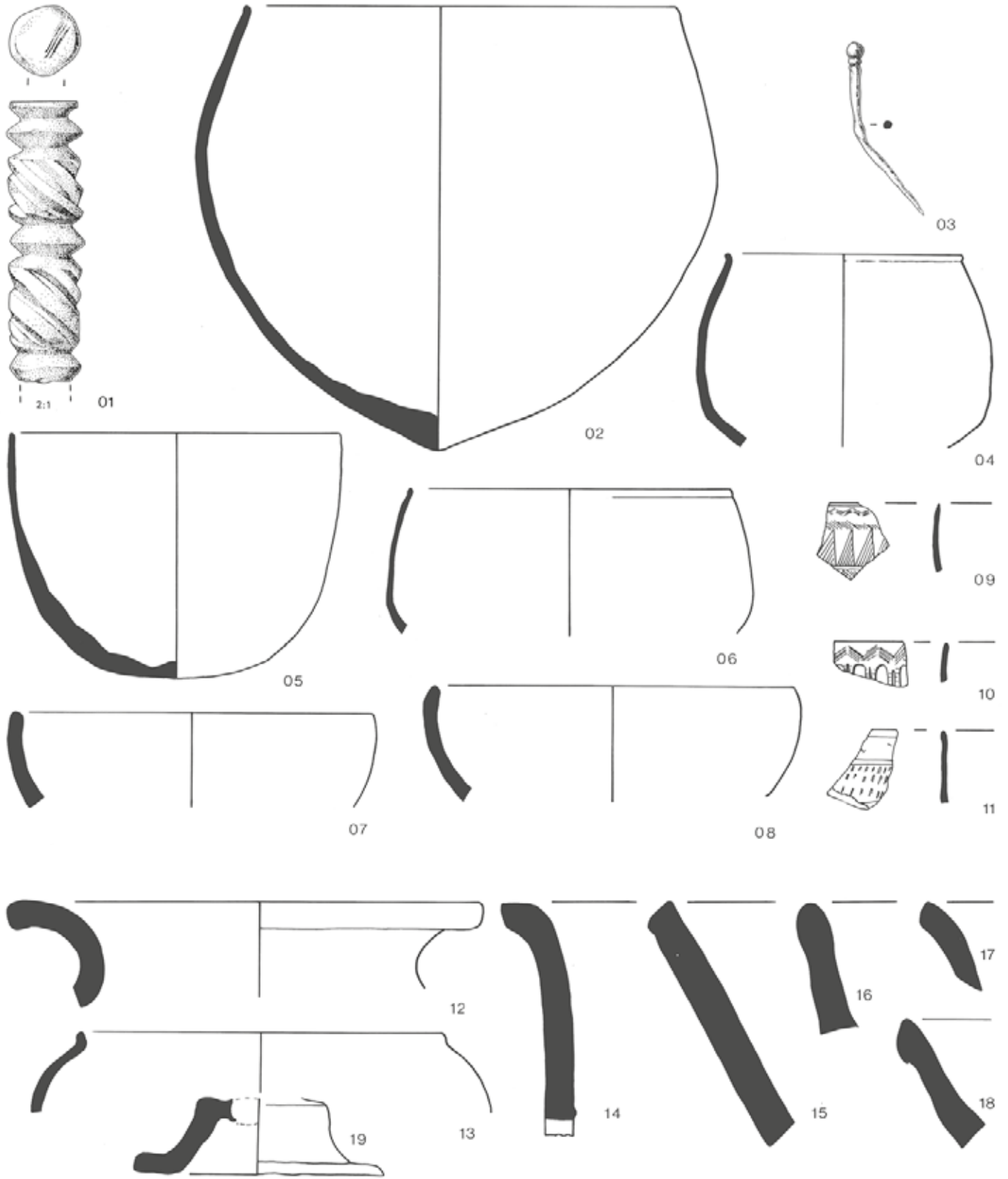
18 Surface: greenish slip. Clay: pink. Temper: veg. & grit. Rim di. c.32. Handmade.

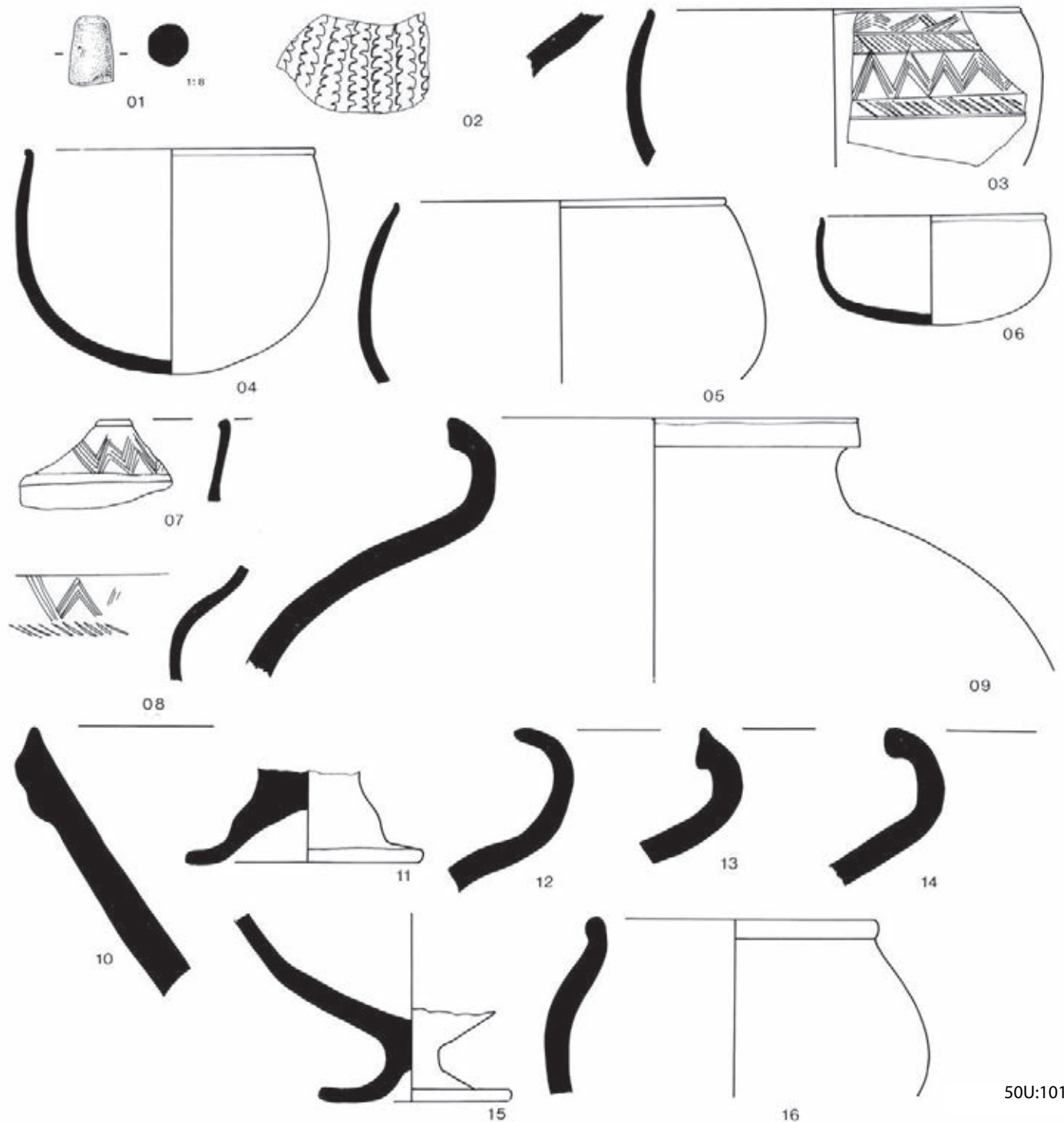
19 Clay: buff. Temper: veg. Base di. c.9. Handmade.

50T:103 (cont'd)

50T:114

50T:116





50U:101

50U:101 (LEVEL A)

01 Limestone grinder, bottom edge chipped. Ht. 9.41. Di. 5.60.

02 Clay: pink. Heavily impressed design.

03 Clay: grey/green. Temper: none visible. Rim di. 13.

04 Clay: light green/grey. Temper: none visible. Rim diam:10. Ht. 7.8.

05 Surface: green. Clay: pink. Temper: fine grit. Rim di. 11. Outer surface wet smoothed.

06 Clay: green. Temper: none visible. Rim di.5-8. Ht. 3.8.

07 Clay: pink. Temper: none visible.

08 Clay: green. Temper: none visible. Crude incised decoration.

09 Surface: green. Clay: pink. Temper: fine veg. Rim di. 14.

10 Surface: brown. Clay: pink. Temper: white grit & sparse veg. Rim di. 26.

11 Clay: grey. Temper: none visible. Base di. c.8.

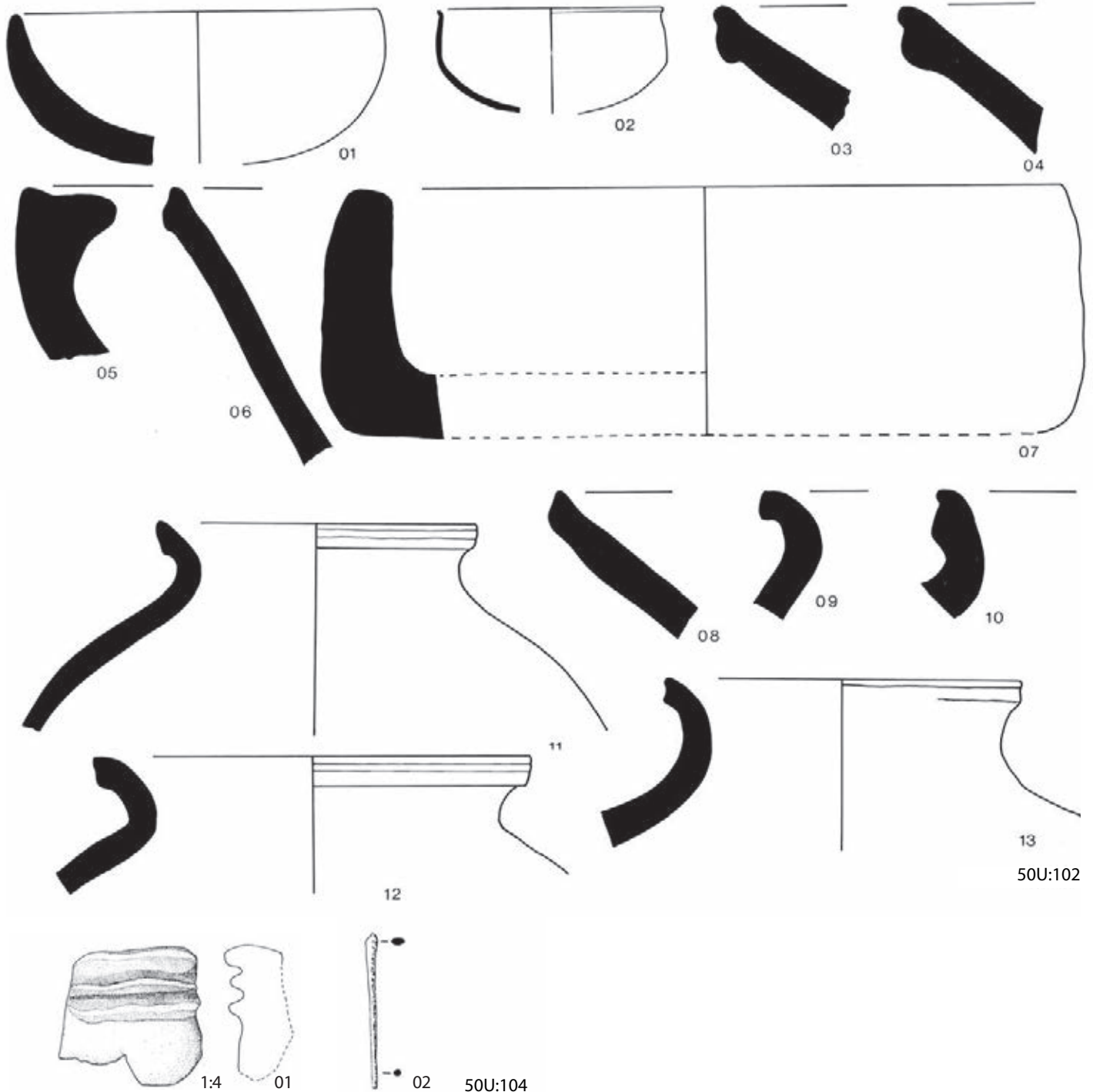
12 Surface: buff slip out. Clay: pink. Temper: fine veg. Rim di. 12.

13 Clay: green. Temper: veg. Rim di. 11.

14 Surface: green. Clay: green. Temper: grog, veg. & grit. Rim di. 12-13.

15 Clay: grey. Temper: none visible. Base di. c.6.5.

16 Surface: pink/brown. Clay: pink. Temper: sparse fine veg. Rim di. 9.



50U:102

50U:102 (LEVEL A)

- 01 Clay: light green. Temper: veg. Rim di. 12.5–13. Crudely handmade.
 02 Clay: grey. Temper: a little grit, some straw inside on base. Rim di. 5–8.
 03 Clay: orange. Temper: fine grog & veg. Handmade.
 04 Clay: grey with black core. Temper: sparse fine grit & veg. Rim di. 35.
 05 Clay: burnt brown and black. Temper: grog.
 06 Clay: orange with white slip out. Temper: grog & sparse veg. Rim di. 29. Handmade.
 07 Surface: brown. Clay: black. Temper: grog & veg. Handmade.
 08 Clay: brown. Temper: fine veg. Handmade?
 09 Clay: pink. Temper: grog & veg. Rim di. 23.

- 10 Surface: green. Clay: brown. Temper: grog & large grit.

11 Surface: cream. Clay: pink. Temper: veg. Rim di. 11. Shoulder hand-formed, perhaps wheel-finished.

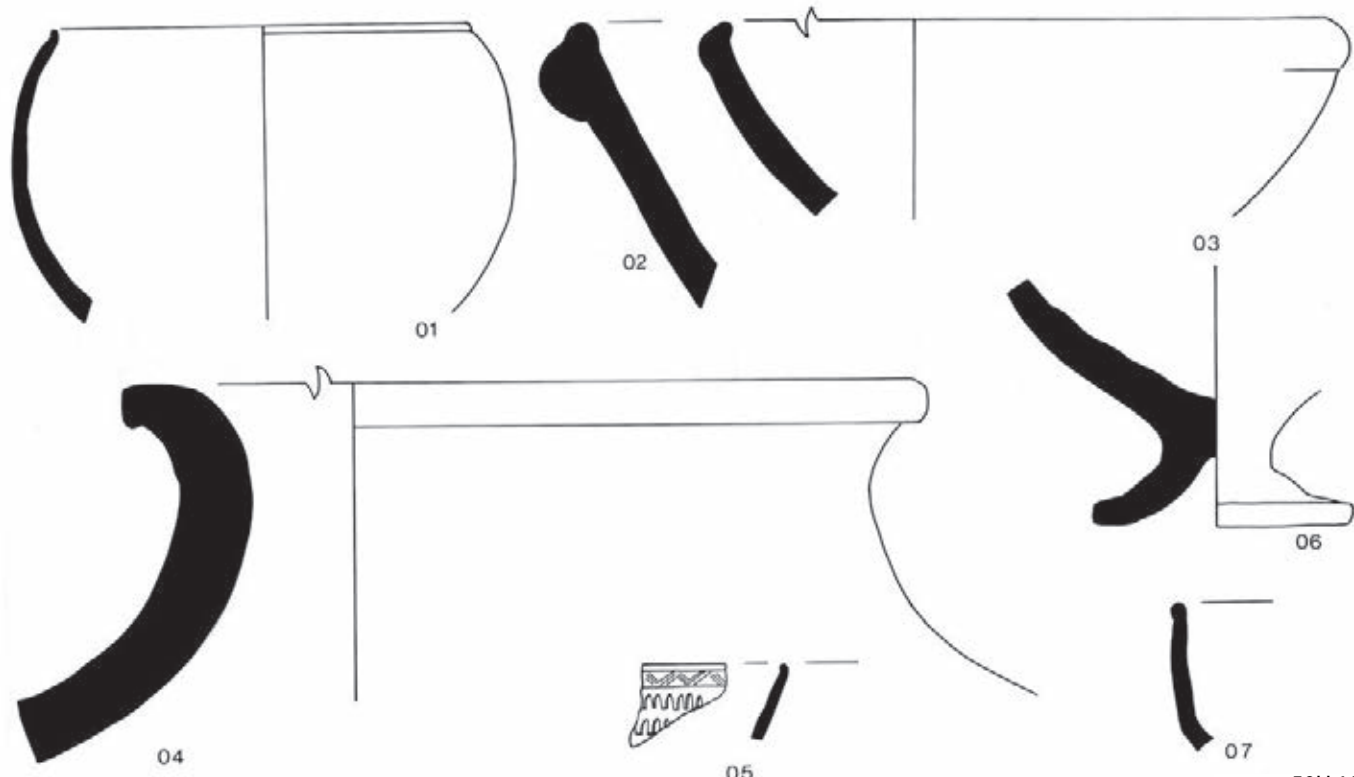
12 Surface: cream. Clay: buff with grey core. Temper: sparse veg. Rim di. 15.

13 Surface: brown. Clay: pink. Temper: fine grit & veg. Rim di. 12.

50U:104 (LEVEL A)

01 Lid handle. Clay: dark brown. Temper: veg. Ht. 9.47. Max. length: 9.78. Thickness 4.18. Handle with 3 pinched handmade ridges.

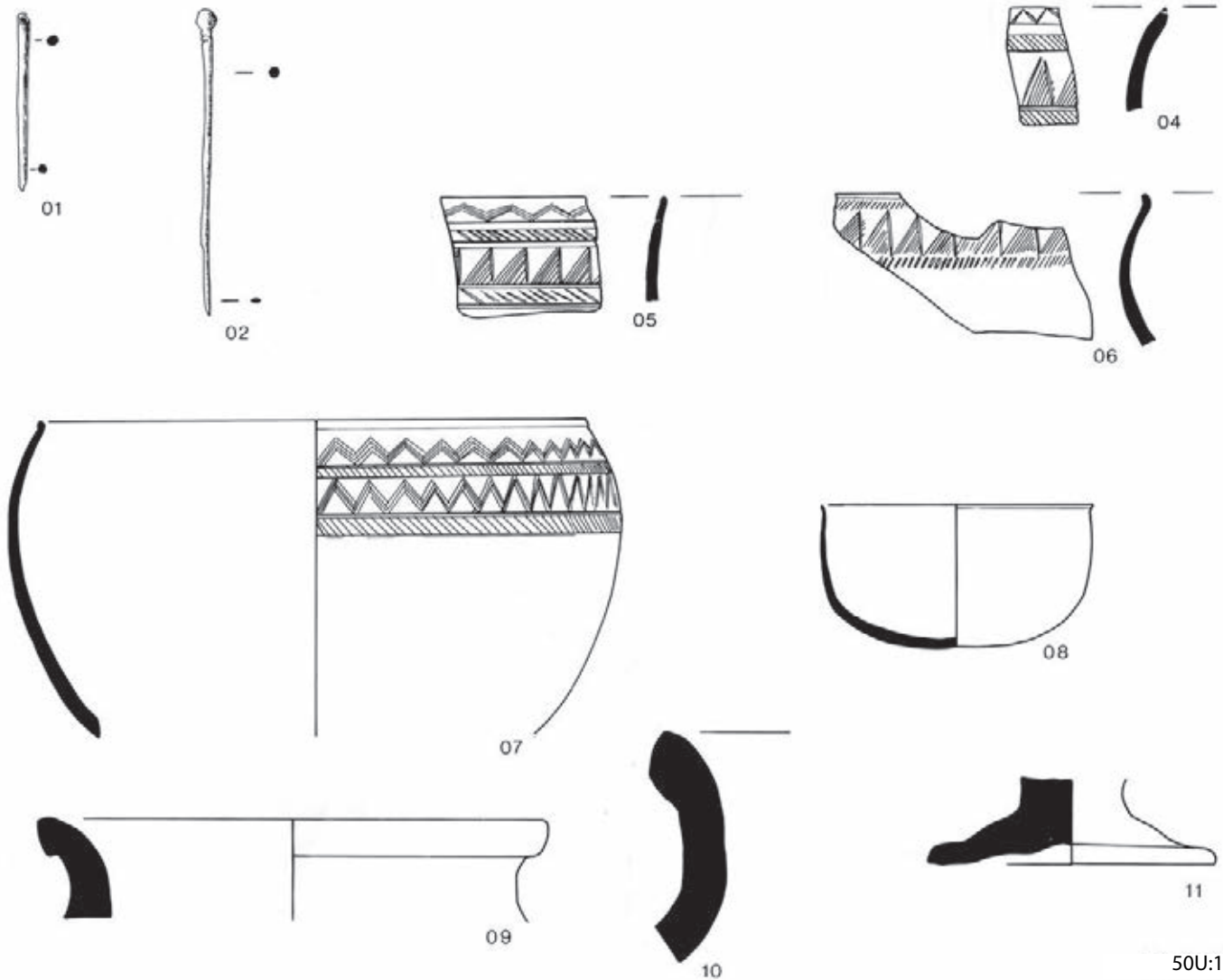
02 Bone pin. Length: 5.3. Di. 0.30. Broken at point, roughly circular in section with slightly flattened head.



50U:107



11 50U:109



50U:118

50U:107 (LEVEL A)

- 01 Surface: buff. Clay: brown. Temper: none visible. Rim di. 11.
 02 Surface: brown. Clay: pink. Temper: heavy fine/med. white grit, fine veg. Rim di. 40.
 03 Surface: brown/buff. Clay: brown/buff. Temper: veg. Rim di. 22.
 04 Surface: flaking green slip out. Clay: brick red. Temper: heavy coarse veg. & white grit. Rim di. 30.
 05 Clay: grey. Temper: fine sparse veg. rubbed inside around base.
 06 Clay: grey. Temper: none visible. Base di. 6.5–7.
 07 Clay: green. Temper: none visible. Rim di. 17.

50U:109 (LEVEL A)

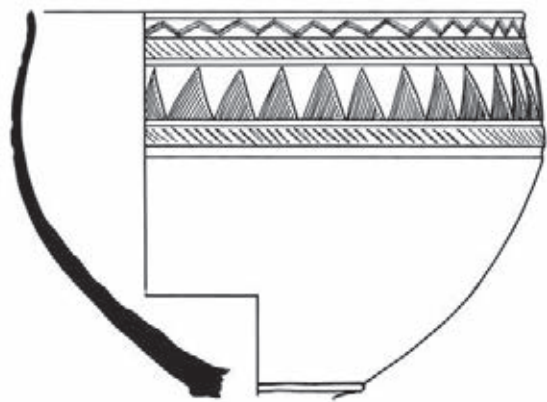
- 01 Clay: grey. Temper: none visible. Rim di. 13.
 02 Clay: grey. Temper: none visible.
 03 Clay: grey. Temper: none visible.
 04 Clay: pink/buff. Temper: none visible. Rim. di. 8. Ht. 4.0.
 05 Clay: grey. Temper: fine sparse veg. Rim di. 9. Ht. 3.8.
 06 Clay: buff. Temper: hard rough veg. Rim di. 28–31. Handmade.
 07 Surface: green. Clay: green. Temper: medium veg. Rim di. 19.
 08 Surface: green. Clay: pink. Temper: veg. Rim di. 15. Handmade.
 09 Surface: buff/green. Clay: pink. Temper: veg.
 10 Clay: red/brown. Temper: fine veg. Rim di. 11.5.

- 11 Surface: buff/green. Clay: pink. Temper: sparse veg. Rim di. 9.
 Handmade.

- 12 Surface: cream with green slip. Clay: pink. Temper: sparse fine veg. Rim di. 12.

50U:118 (LEVEL A)

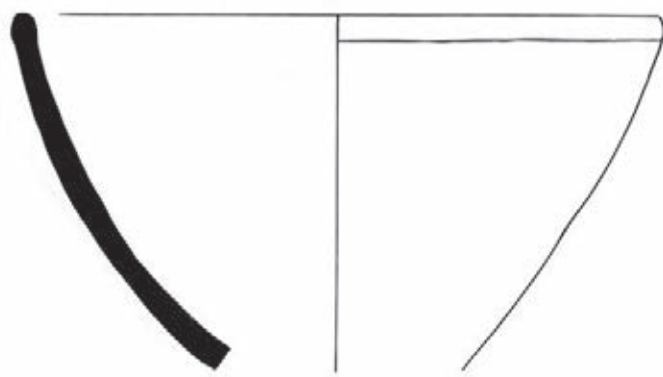
- 01 Bone pin. Broken at both ends. Max. length: 5.29. Max. di. 0.32.
 02 Copper pin. Complete and intact. Length: 8.9. Di. of upper shaft: 0.2. Polygonal head with three grooves below. Roughly circular in cross-section, tapering to point.
 03 Not used.
 04 Clay: grey. Temper: none visible.
 05 Surface: grey. Clay: grey. Temper: none visible. Rim di. 13.
 06 Clay: grey. Temper: none visible.
 07 Surface: grey. Clay: grey. Temper: none visible. Rim di. 16.
 08 Clay: grey. Temper: none visible. Rim di. 8. Ht. 4.1.
 09 Clay: buff. Temper: med. veg. Rim di. 15.
 10 Clay: pink. Temper: hard veg. Rim di. 30. Bitumen coated on both surfaces.
 11 Clay: grey. Temper: veg. Base di. c.8.5.



01

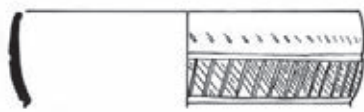


03



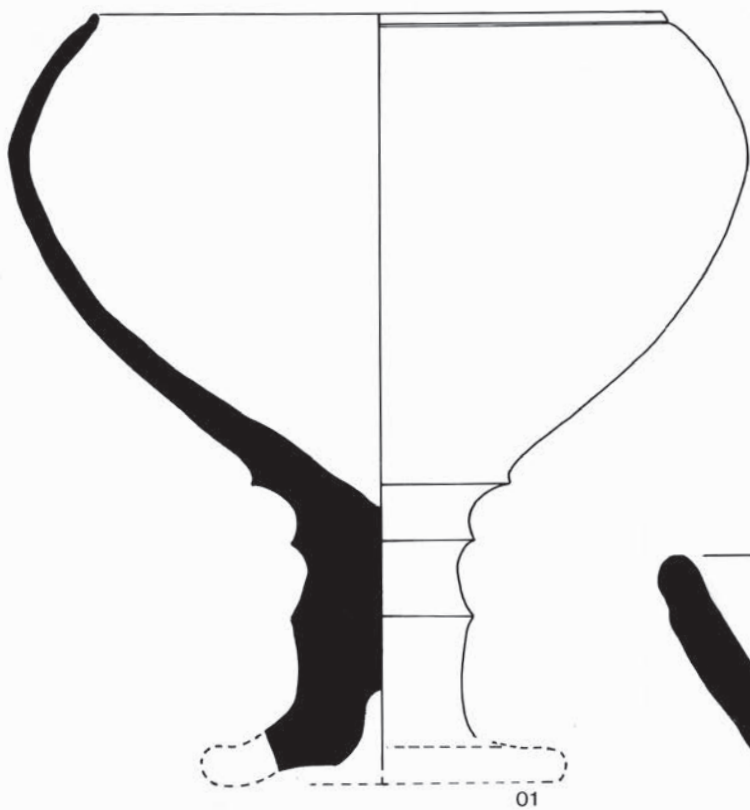
1:4

02



04

50U:118



01



04



05



06



07



08



09

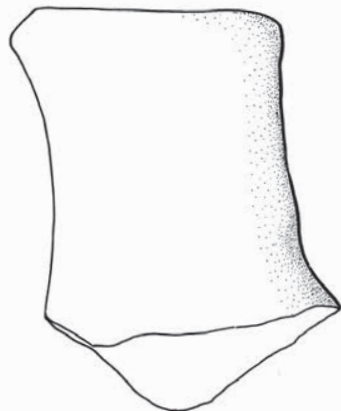


10



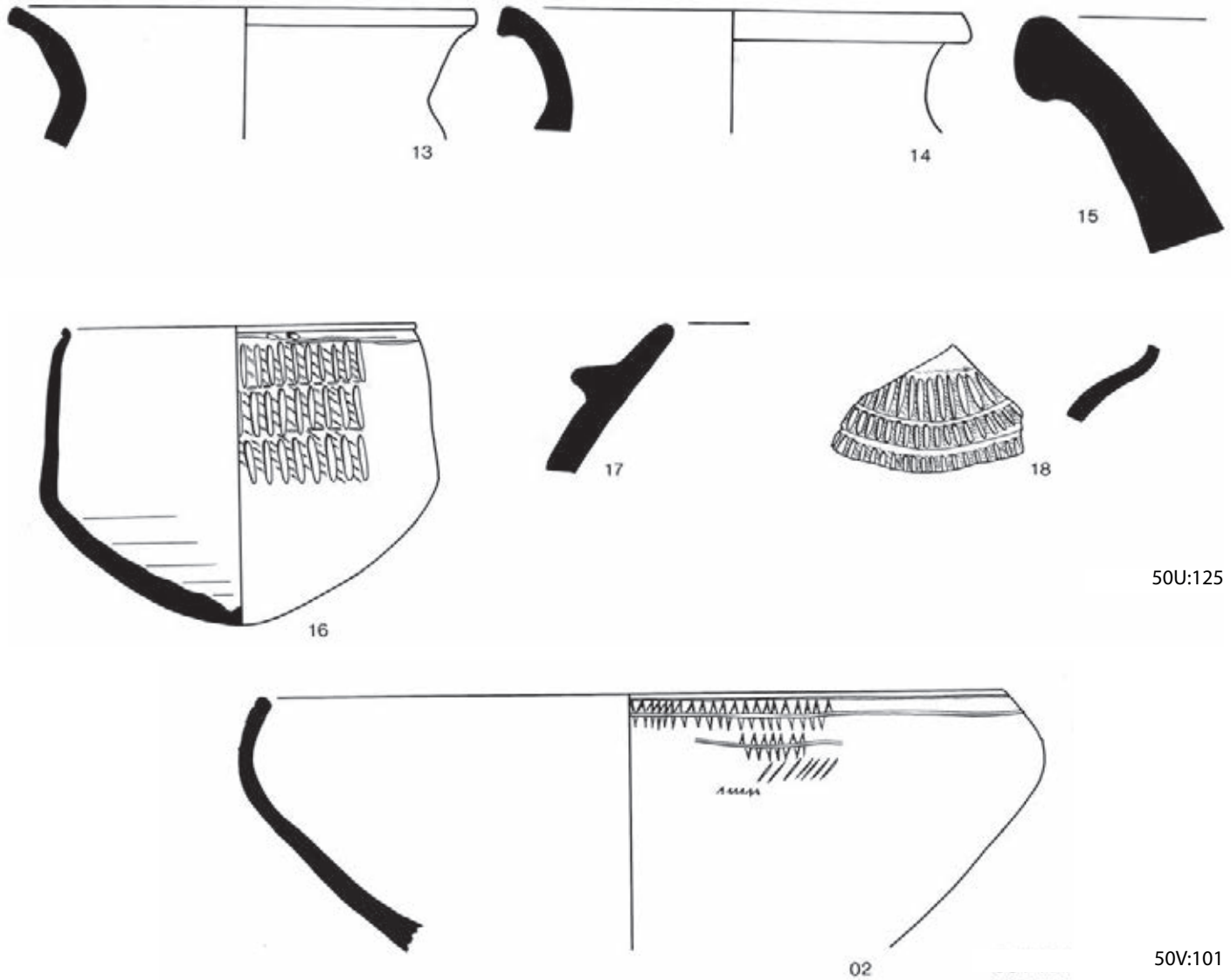
11

12



03





50U:125

50V:101

50U:123 (LEVEL A/B)

- 01 Clay: grey. Temper: none visible. Rim di. 13.
- 02 Surface: buff. Clay: pink with green core. Temper: veg. Rim di. 34. Handmade.
- 03 Clay: grey. Temper: none visible. Rim di. 9.
- 04 Clay: grey. Temper: none visible.

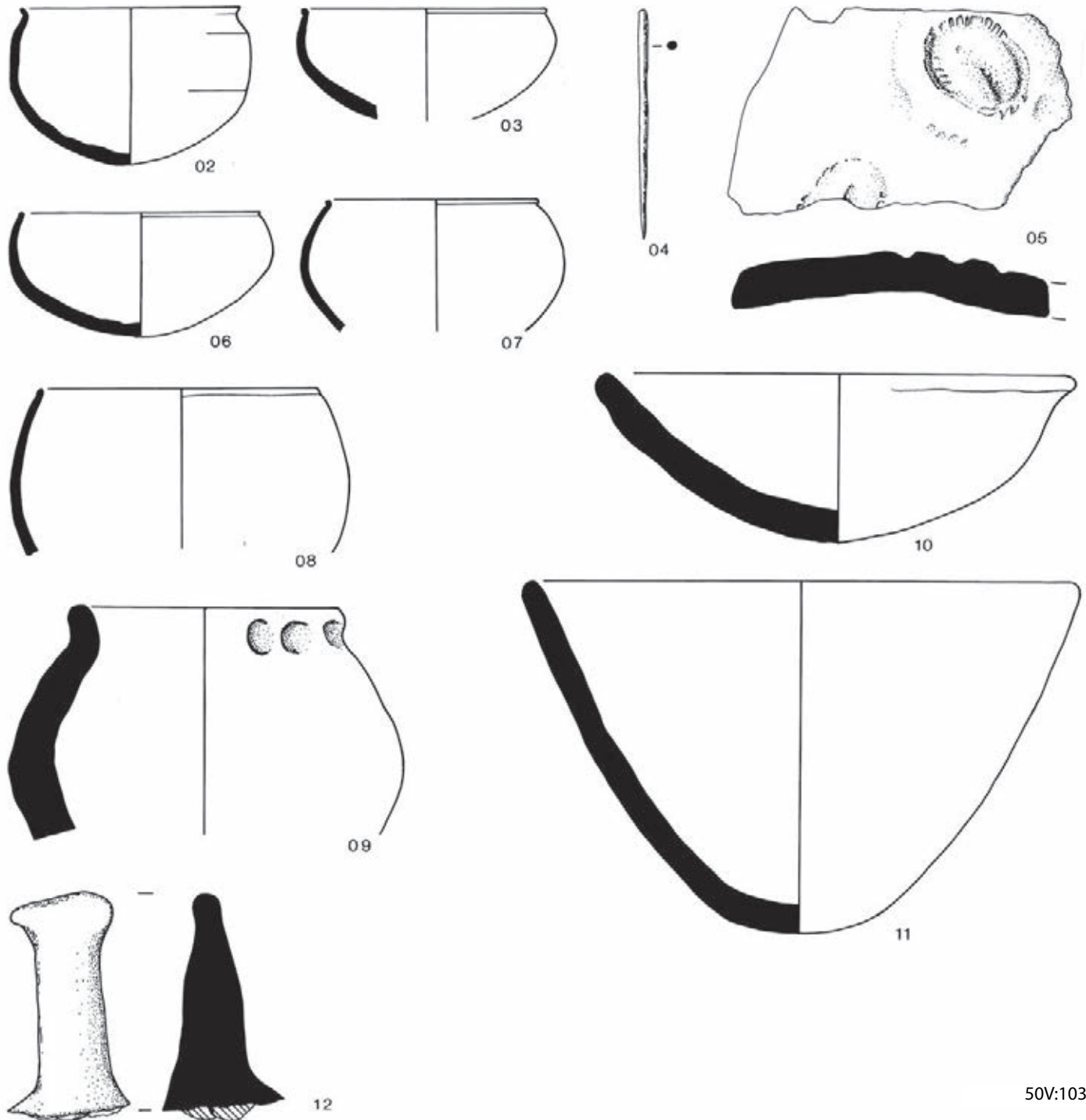
50U:125 (LEVEL A/B)

- 01 Surface: dark grey. Clay: dark grey. Temper: none visible visible. Rim di. 15. Ext. ht. 20.
- 02 Not used
- 03 Lid handle. Clay: buff. Temper: rough grog & veg.
- 04 Clay: grey. Temper: none visible.
- 05 Clay: grey. Temper: veg. Base di. c.6.
- 06 Clay: grey. Temper: none visible.
- 07 Clay: grey. Temper: none visible.
- 08 Clay: buff. Temper: sparse veg. & sand.

- 09 Clay: buff. Temper: none visible.
- 10 Surface: cream slip. Clay: pink. Temper: veg. & sparse grit. Rim di. 20.
- 11 Core: green. Clay: pink. Temper: veg. Rim di. 40. Handmade.
- 12 Surface: buff. Clay: pink. Temper: coarse veg. Rim di. 20. Handmade.
- 13 Surface: buff. Clay: pink with green core. Temper: sparse med. veg. Rim di. 14. Handmade.
- 14 Surface: cream slip. Clay: pink. Temper: coarse veg. Rim di. 14.
- 15 Core: grey. Clay: pink. Temper: hard med. veg. & sparse white grit. Handmade.
- 16 Clay: grey. Temper: none visible. Rim di. 10.5. Ht. 9.1.
- 17 Clay: grey. Temper: grog & white grit. Polished surface.
- 18 Clay: grey. Temper: none visible.

50V:101 (LEVEL A)

- 01 Flint blade (not drawn).
- 02 Clay: green/grey. Temper: none visible. Rim di. c.22.



50V:103 (LEVEL A)

01 Not used.

02 Clay: green. Temper: none visible. Rim di. 7.

03 Clay: green. Temper: none visible. Rim di. 8.

04 Bone pin. Head broken. L. 7.7. Max. di. 0.36.

05. Stamp impression on lid. Design of two concentric notched ovals with a central groove, possibly repeated at a different angle.

06 Surface: pink/buff. Clay: pink. Temper: fine grit. Di. 8. Interior striped pink & buff.

07 Surface: green. Clay: green. Temper: none visible. Rim di. 7.

08 Clay: brown. Temper: sparse fine grit. Rim di. 9-10.

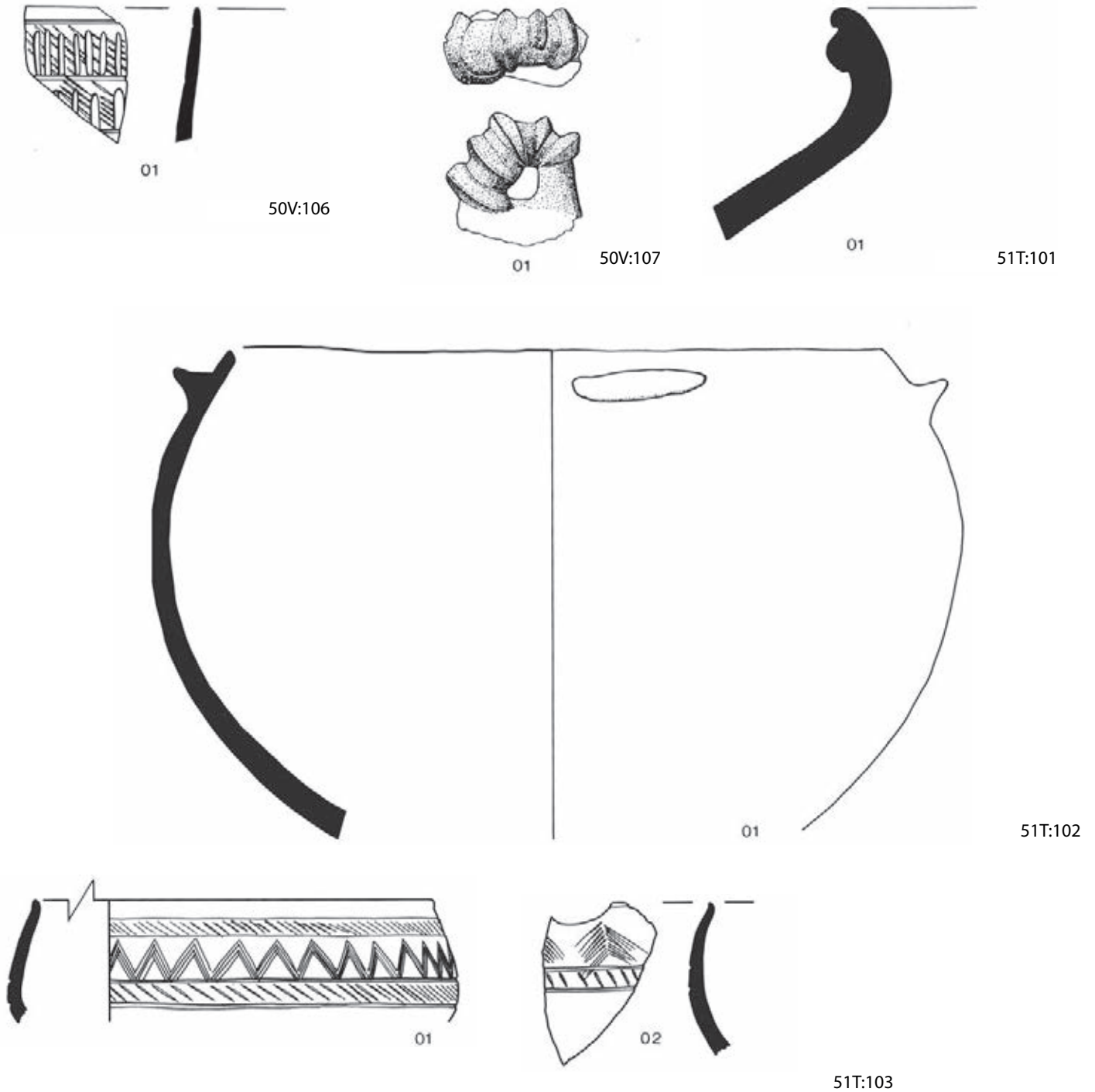
09 Surface: black. Clay: black. Temper: coarse straw. Rim di. c.9. Handmade.

10 Surface: brown/black. Clay: brown. Temper: coarse straw. Rim di. c.16.

11 Surface: green slip. Clay: pink. Temper: veg. & sparse grit. Rim di. 18. Handmade.

12 Handle. Clay: brown/buff. Ht. 7.8. Broken at base.

50V:103



[50V:106 \(LEVEL A\)](#)

01 Clay: grey. Temper: none visible. Rim di. c.12.

[50V:107 \(LEVEL A\)](#)

01 Pot lid handle. Clay: brown. Temper: veg.

[50V:117 \(LEVEL A\)](#)

01 Clay: grey. Temper: sparse veg.

02 Clay: grey. Temper: none visible. Rim di. c.11.

[51T:101 \(LEVEL A\)](#)

01 Surface: reddish & buff, patchy. Clay: pink. Temper: large grit. Rim di. 29.

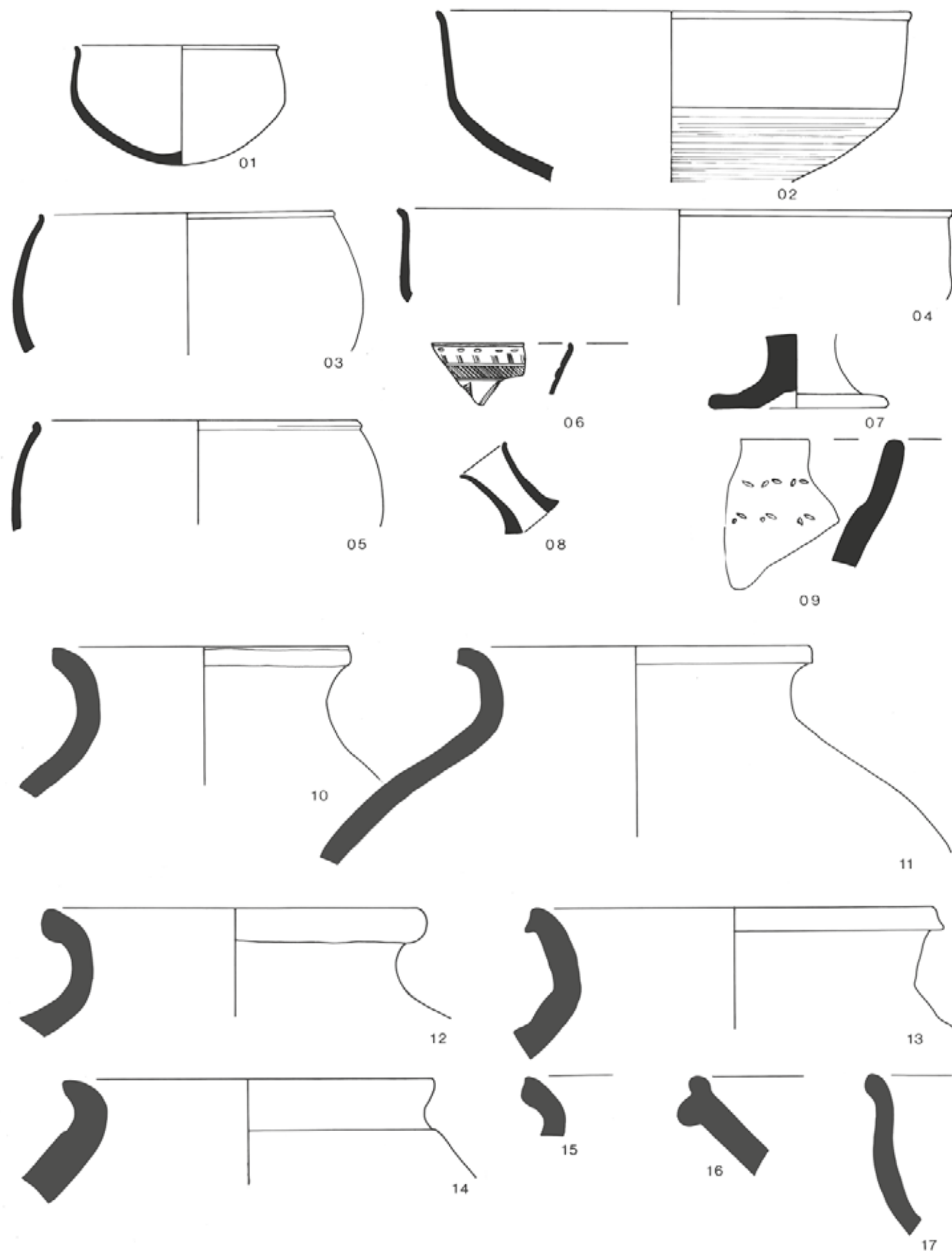
[51T:102 \(LEVEL A\)](#)

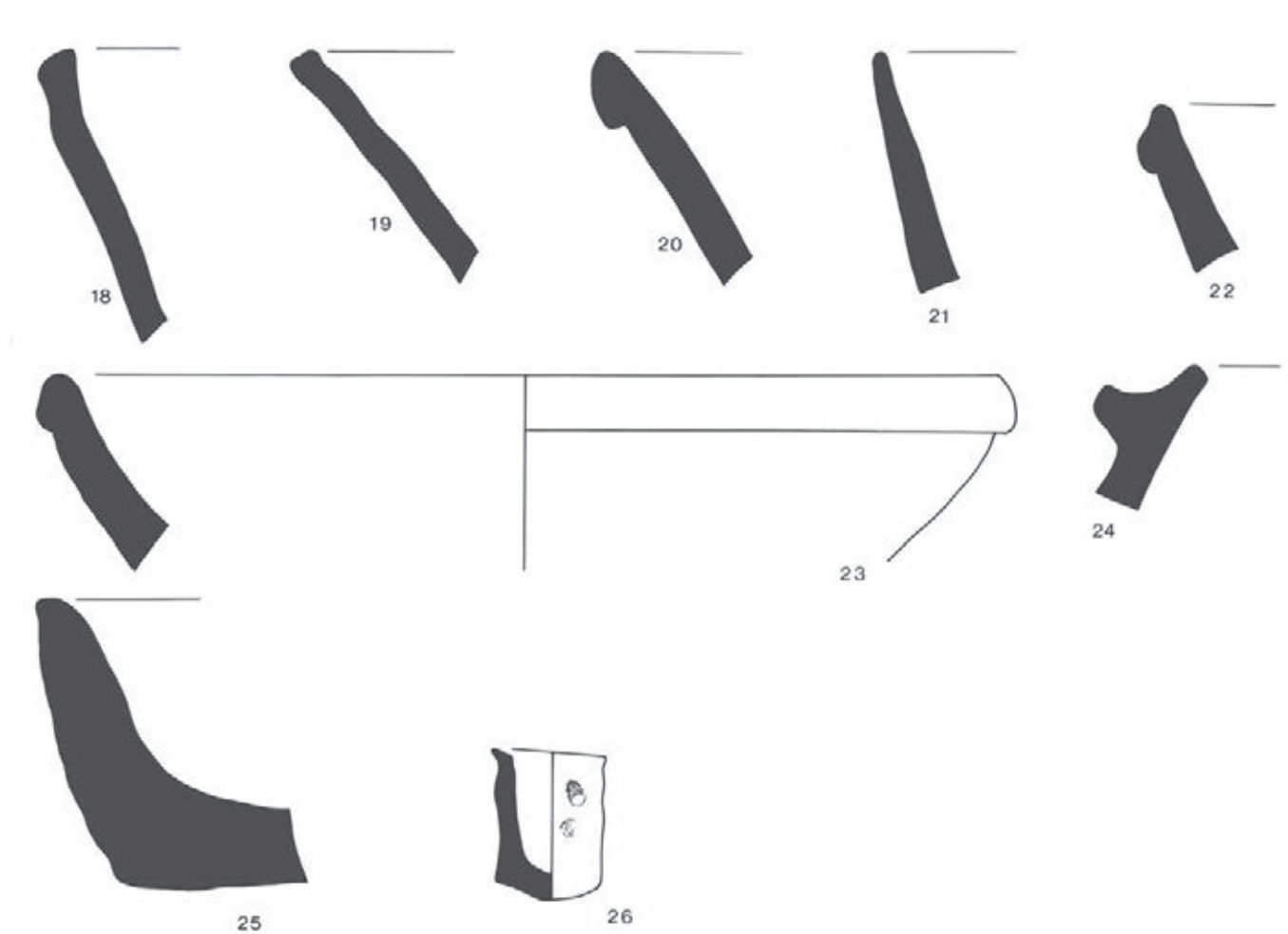
01 Surface: brown. Core: black. Rim di. 15.5. Handmade, 4 attached lugs, upper body burnished,

[51T:103 \(LEVEL A\)](#)

01 Surface: vitrified green. Rim di. 22.

02 Surface: buff. Clay: pink. Temper: veg.



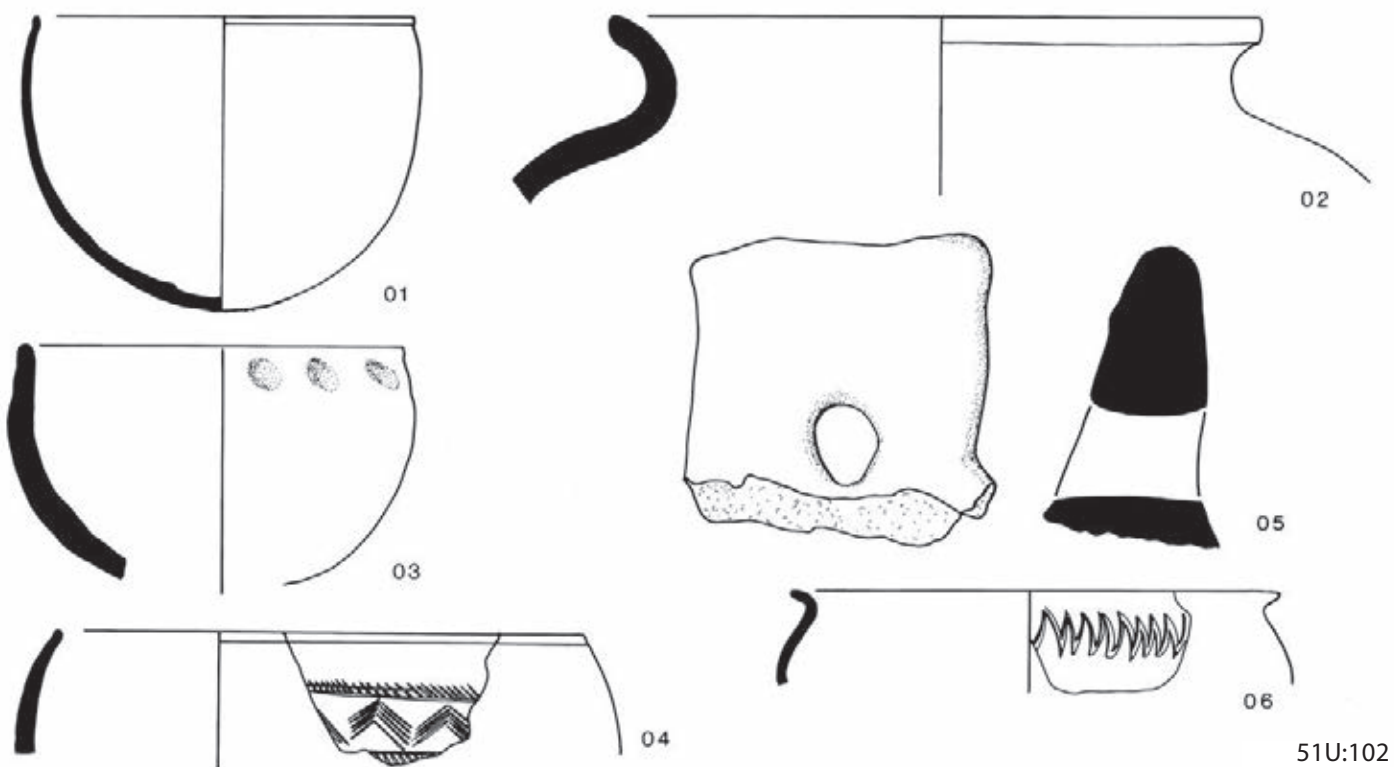
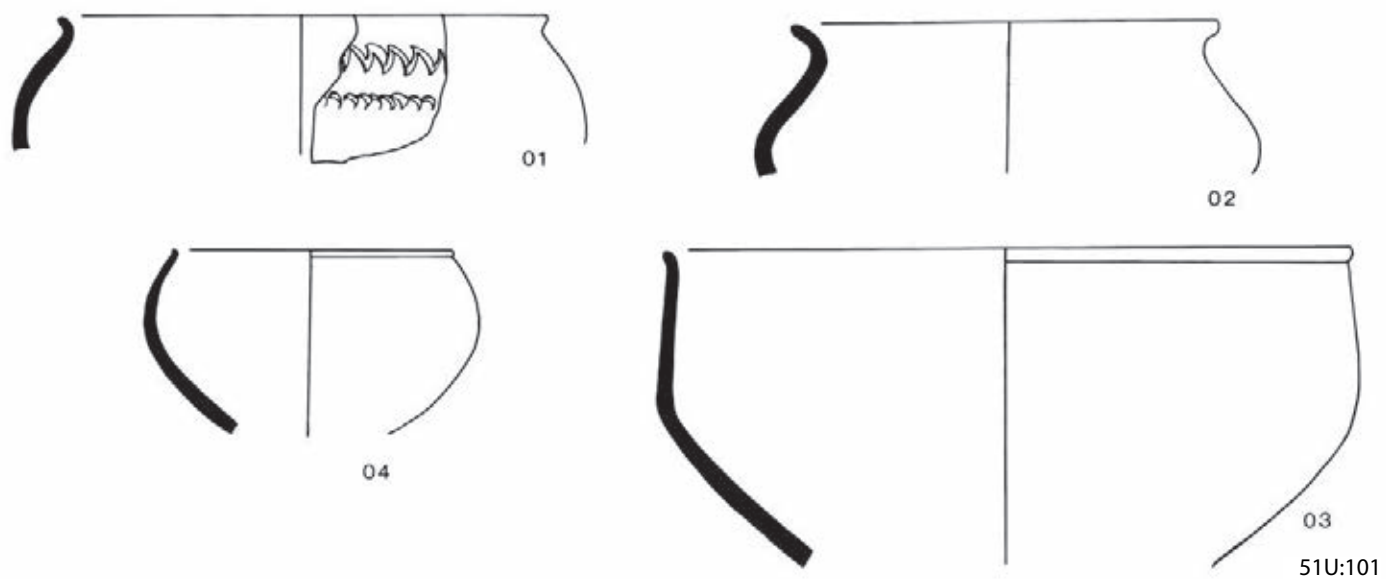
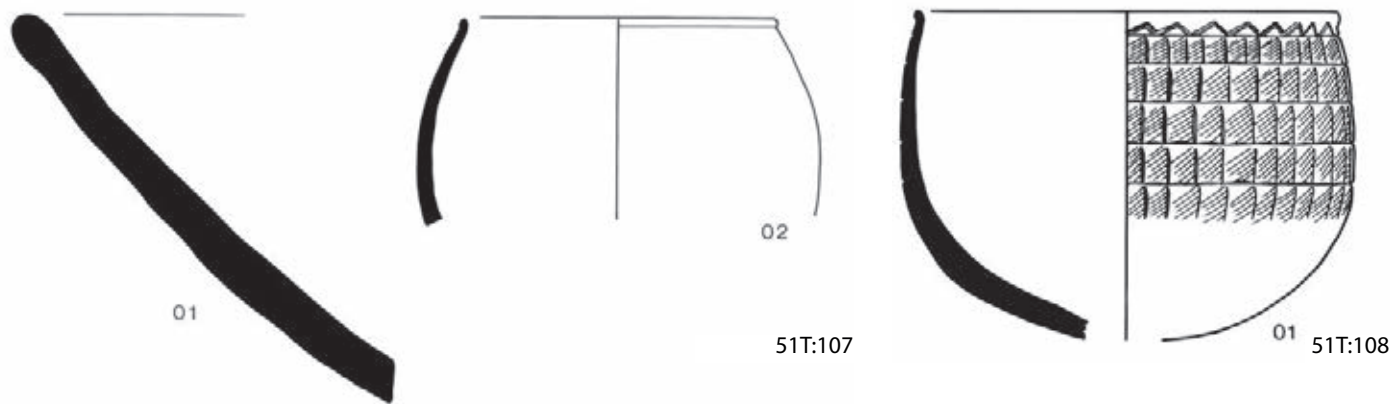


51T:105

51T:105 (LEVEL A)

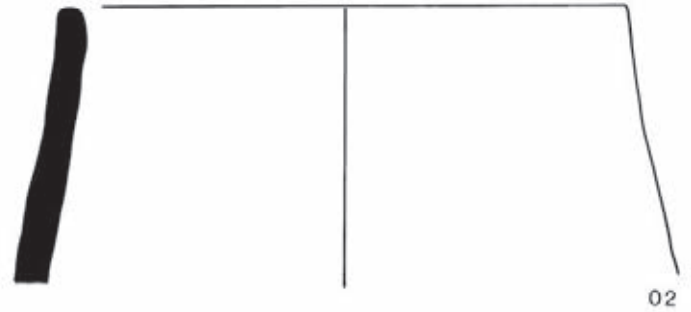
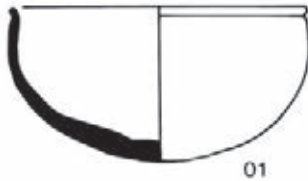
- 01 Clay: green. Temper: veg. & sand. Rim di. 7.8.
 02 Surface: red/brown. Temper: fine veg. Rim di. 18.
 03 Clay: grey. Temper: none visible. Rim di. 11. Single profile.
 04 Surface: brown. Clay: pink. Temper: none visible. Rim di. 21. Single profile.
 05 Clay: brown/buff. Temper: fine veg. Rim di. 12. Single profile.
 06 Surface: grey. Temper: none visible.
 07 Clay: grey. Temper: veg. Base di. 7.
 08 Clay: grey. Temper: none visible.
 09 Surface: brown. Clay: pink. Temper: veg.
 10 Surface: greenish. Clay: pink. Temper: medium white grit & veg. Rim di. 11.
 11 Clay: green. Temper: medium veg. Rim di. 13. Handmade.
 12 Clay: pink. Temper: veg. white slip.
 13 Surface: greenish/buff. Clay: pink. Temper: veg. & v. sparse medium white grit. Rim di. 15.
 14 Surface: pink. Core: black. Temper: rough veg. Rim di. 14. Handmade.

- 15 Clay: buff. Temper: medium veg.
 16 Surface: brown/buff. Clay: black. Temper: heavy veg. & sparse medium grit.
 17 Clay: pink. Temper: coarse grit & veg. Handmade. [51T:105 cont'd.](#)
 18 Surface: cream slip. Clay: pink. Temper: veg. Rim di. c.42. Handmade.
 19 Surface: greenish/buff. Clay: pink. Temper: heavy white grit & heavy medium veg. Rim di. c.53.
 20 Surface: brown/red. Core: black. Temper: straw. Rim di. c.35.
 21 Surface: pink. Core: green. Temper: hard veg. Rim di. 30. Handmade.
 22 Clay: pink. Temper: rough veg. Handmade.
 23 Surface: pink. Core: grey. Temper: medium veg. Rim di. 28. Handmade.
 24 Surface: red. Clay: black. Temper: grog. Handmade, rough burnishing marks.
 25 Clay: brown/buff. Core: black. Temper: heavy veg. Base di. ?
 26 Surface: buff. Core: black. Temper: veg. Handmade, finger impressions on outer surface.

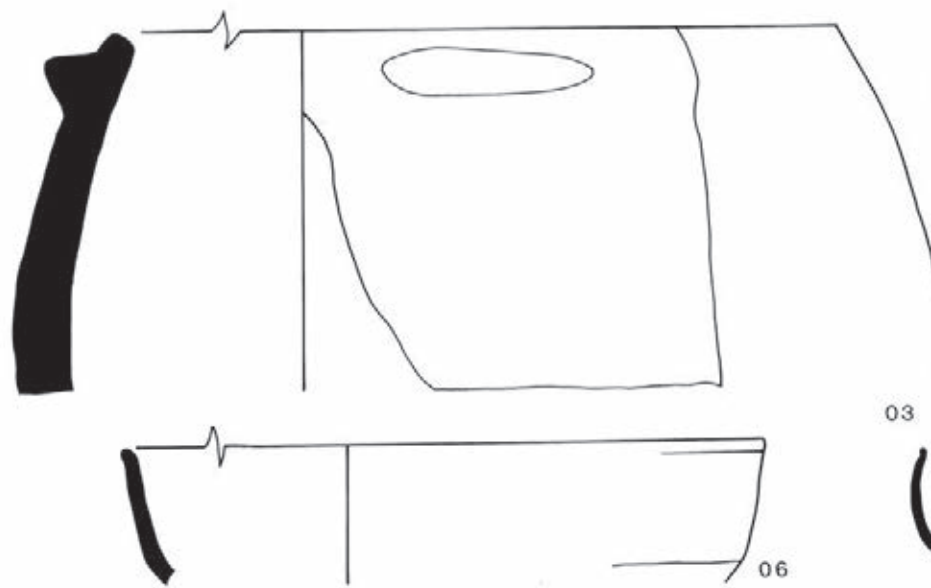




51U:105



02



03



04



05



06



07

51U:108

51T:107 (LEVEL A)

01 Surface: brown. Clay: pink. Temper: heavy coarse straw. Rim di. 27. Handmade.

02 Surface: buff/brown. Clay: brown. Temper: sparse fine white grit. Rim di. 8.

51T:108 (LEVEL A)

01 Clay: grey. Temper: none visible. Rim di. 11.

51U:101 (LEVEL A)

01 Clay: green. Temper: fine grit. Rim di. 12. Incised rocker pattern decoration.

02 Surface: buff. Clay: pink. Temper: fine veg. Rim di. 11.

03 Clay: brown. Temper: fine grit/sand. Rim di. 18.

04 Clay: brown. Temper: fine sand. Rim di. 7-8.

51U:102 (LEVEL A)

01 Clay: green. Temper: veg. Rim di. 10.

02 Surface: brown/buff. Clay: pink. Temper: coarse veg. Rim di. c.17.

03 Surface: brown. Core: black. Temper: coarse veg. Rim di. c.10.

Handmade, finger impression decoration.

04 Clay: grey. Temper: none visible. Rim di. c.18.

05 Clay: buff. Temper: coarse veg. Handle.

06 Clay: buff. Temper: none visible. Rim di. c.12. Incised rocker pattern decoration.

51U:105 (LEVEL A)

01 Surface: brown. Clay: black. Temper: none visible. Rim di. 9.

51U:108 (LEVEL A)

01 Clay: buff. Temper: grit. Rim di. 8.

02 Surface: green. Clay: pink. Temper: sparse white & coarse grit. Rim di. c.14.

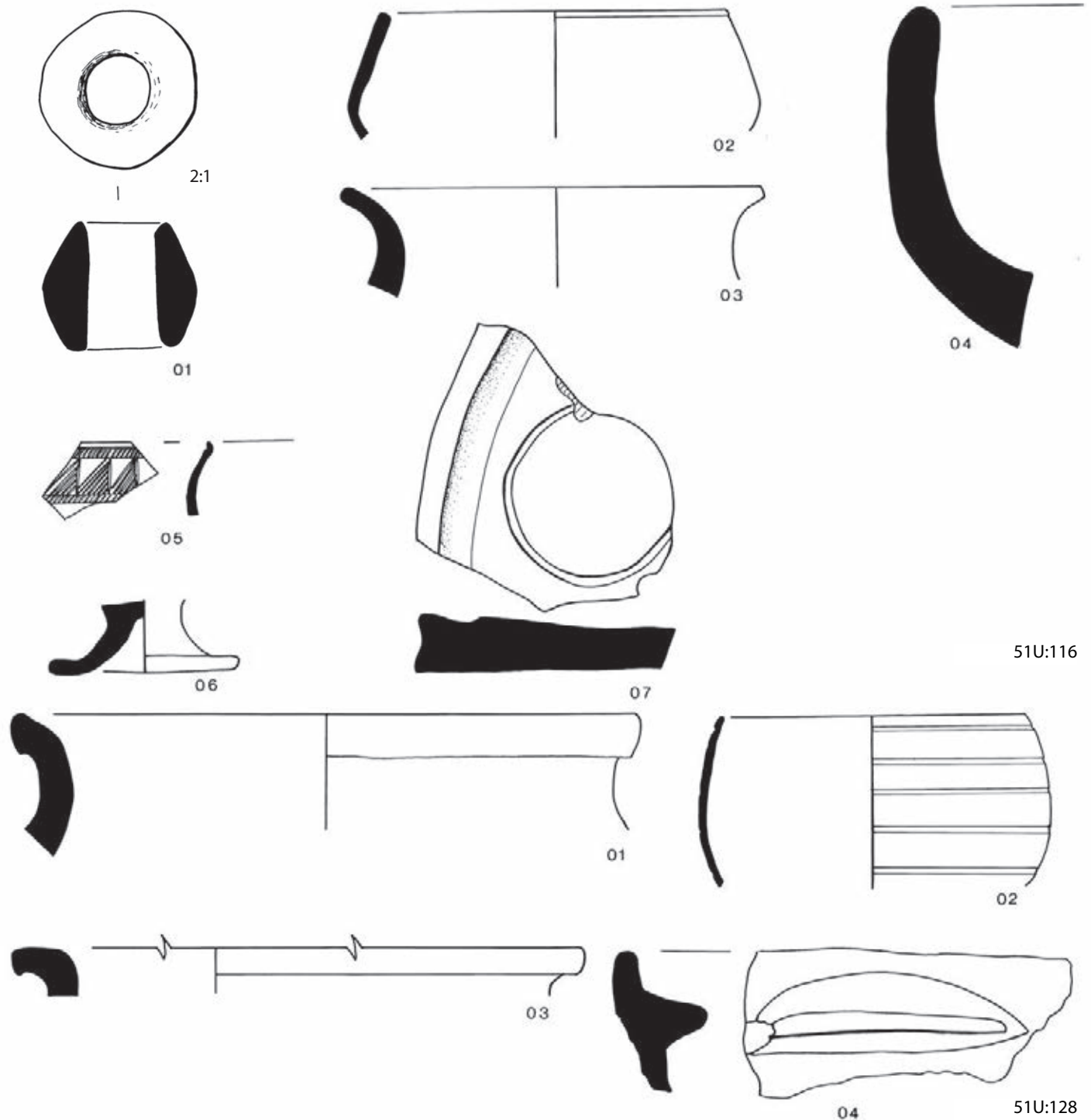
03 Surface: brown. Core: black. Temper: heavy veg. Rim di. c.28.

04 Clay: pink. Temper: sparse fine grit.

05 Surface: green. Clay: pink. Temper: fine white grit & veg. Rim di. c.26.

06 Clay: green. Temper: fine veg. Rim di. 22.

07 Clay: brown. Temper: none visible. Rim di. 7.5.

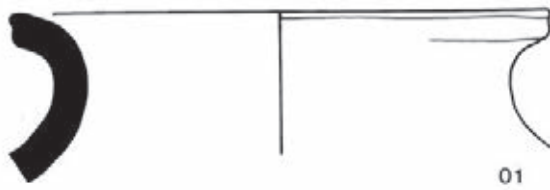


51U:116 (LEVEL A)

- 01 Stone bead. Biconical, olive green stone bead. Ht. 1.04. Di. 1.38. Di. of perforation: 0.62.
 02 Clay: green. Temper: none visible. Rim di. c.12.
 03 Clay: brown. Temper: heavy grit. Rim di. 14.
 04 Surface: brown. Core: black. Temper: heavy coarse veg. Handmade.
 05 Clay: grey. Temper: none visible.
 06 Clay: grey. Temper: some fine veg. Base di. c.6.
 07 Surface: buff. Clay: brown. Temper: heavy veg.

51U:128 (LEVEL A/B)

- 01 Clay: buff. Temper: medium veg. Rim di. c.21.5.
 02 Clay: green. Temper: none visible. Rim di. 10.
 03 Clay: brown. Temper: quartz. Rim di. 36. Burnished outer rim.
 04 Surface: pink. Core: black. Temper: coarse veg. Handmade.

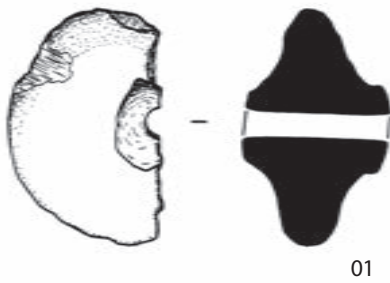


01

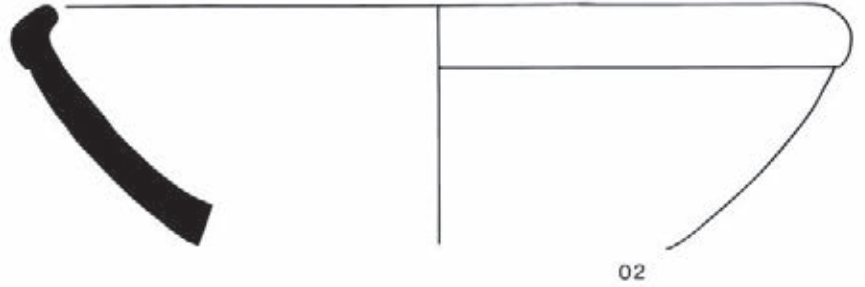


02

51V:103



01



02

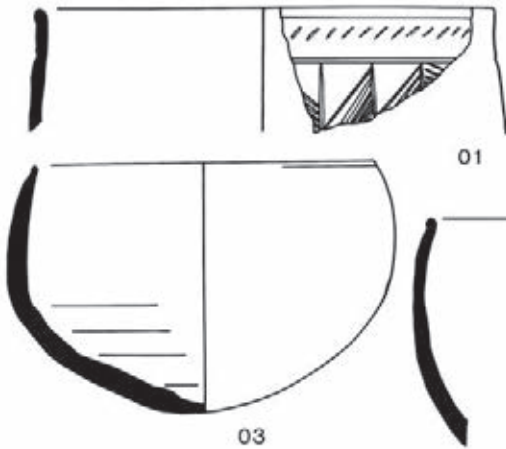


03

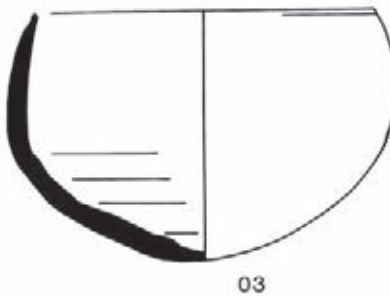


04

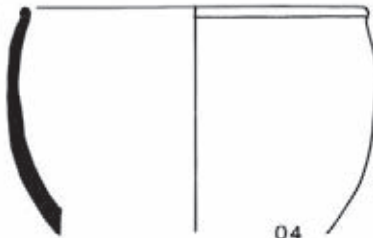
51V:105



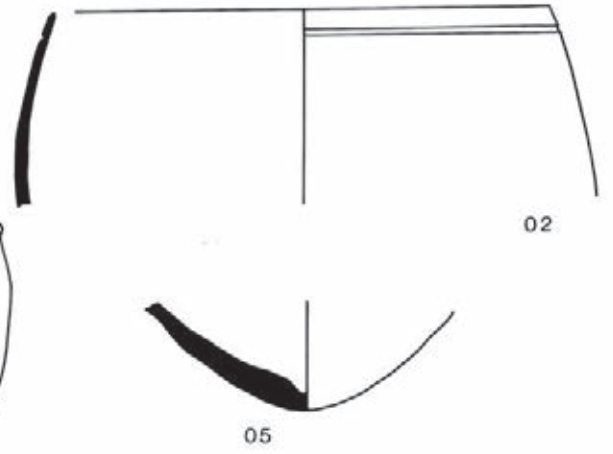
01



03



04



02

05

51V:106

51V:103 (LEVEL A)

01 Surface: green. Clay: pink. Temper: fine veg. Rim di. c. 14.

02 Surface: buff. Clay: buff. Temper: heavy veg. Rim di. c. 26.

51V:105 (LEVEL A)

01 Clay wheel. Partly baked. Pierced through centre. Max. di. 6.3.

02 Surface: cream slip. Clay: red. Temper: fine veg. Rim di. 20–22.

03 Clay: grey. Temper: veg. Base di. c. 8.

04 Clay: buff. Temper: veg. Handmade

51V:106 (LEVEL A)

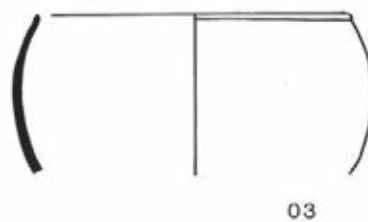
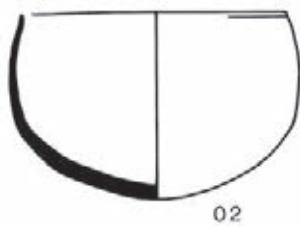
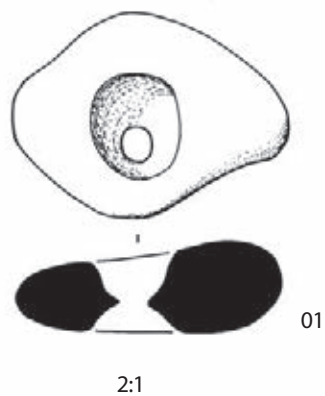
01 Clay: grey. Temper: none visible. Rim di. c. 12.

02 Clay: grey. Temper: none visible. Rim di. c. 13.

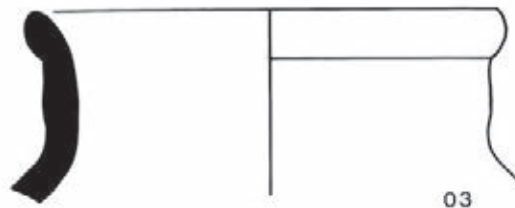
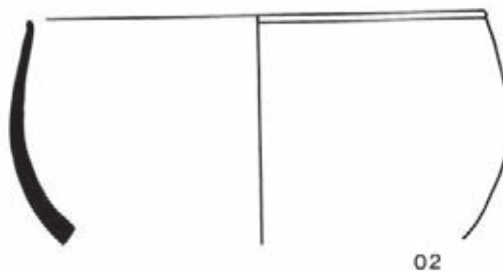
03 Clay: grey. Temper: none visible. Rim di. 9.

04 Clay: grey. Temper: veg. Rim di. c. 9.

05 Clay: grey. Temper: none visible.



51V:107



51V:109

51V:107 (LEVEL A)

01 Bead? Black river pebble with drilled hole. L. 1.97. W. 1.38. Ht. 0.57.

02 Clay: light green. Temper: sparse veg. Rim di. 7.

03 Clay: grey. Temper: none visible. Rim di. 8.

51V:109

01 Surface: buff/brown. Core: black. Clay: brown. Temper: heavy medium veg. Rim di. c.41.

02 Clay: grey. Temper: none visible. Rim di. 12.

03 Surface: buff/brown. Core: brown. Clay: pink. Temper: medium veg. Rim di. c12.

Arabic Summary

ولم يتم العثور على أي دليل على تخزين الحبوب بشكل جماعي ولكن هذا لا يعني أنه لم يكن هناك أي دليل. وتُشيرُ صناديق التخزين الموجودة في الفناء في المستويين D و C إلى أنه تم تخزين بعض السلع على مستوى الأسرة ، في حين يُشيرُ وجود أرضية البيدر أو الدُراس المُحتمل في المستوى (G) مرةً أخرى إلى وجود عملية معالجةٍ محلّيةٍ للأغذية. كما وتم العثور على تركيبٍ بثلاثةٍ جدرانٍ متوازيةٍ ربما كانت مرتبطةً بعمليةٍ تجفيف الحبوب على طول مقطع الجرف ، ولكن هذا الأمر كان في مستويات تَلِّ محمد عرب فترة الوركاء المُتأخّرة) رواف 1984 : 155 ؛ أنظر زاغنيي Zaccagnini 1993b لمناقشة هذه الهياكل الجدارية المتوازية . (وبما أنه من المُفترض أن يكون حصاد الحبوب نشاطاً رئيسياً فإنّ الغياب شبه الكامل للحجر المكسور وخاصة شفرات المِنجل كان أمراً غير متوقّع. وهذا الأمر يتناقضُ بشكلٍ واضحٍ مع ماتمّ تجميعه من تَلِّ كرانة 3 القريب حيث تمّ تسجيلُ أكثر من ألفٍ وثلاثمائة قطعةٍ بما في ذلك النوى لإنتاج الرقائق والشفرات وأكثر من 200 قطعةٍ من شفرات المِنجل (براولتخت 1993: 150) وقد يُشيرُ إلى أنّ مدينة كرانة بالإضافة إلى كونها مركزاً متخصصاً في إنتاج أدوات الصوان كان لديها إستراتيجية معيشية مُختلفة.

وأظهر التحليلُ الأولي لتنشيط النيوترونات لبقايا القطع الأثرية لتَلِّ محمد عرب أنّ أنماطاً مختلفة من فخار فترة نينوى الخامسة بما في ذلك الفخار المطلي والمنقوش والمستبعد والفخار الرمادي الناعم ربما تمّ تصنيعها باستخدام مصادر الطين المحلية (كامبل 2003أ). ومع ذلك لا يوجد أي دليل على تصنيع الفخار في قرية تَلِّ محمد عرب.

وعلى الرغم من صغر عيّنة النحاس من تَلِّ محمد عرب (13 قطعةً) إلا أنّ التوزيع يُشيرُ إلى أن المعدن أصبح متاحاً بسهولةٍ كبيرةٍ في نهاية فترة نينوى الخامسة ولكنه لا يوجد ما يُشيرُ إلى أنّ العمل في صناعة المعادن كان يجري في القرية بأي شكلٍ من الأشكال ، وأنّ ندرة هذه المعادن يدعمُ الملاحظة التي مفادها أنه لم يكن هناك أي تجارة كبيرة في هذه السلعة في ذلك الوقت (موهلي وستيش 2003: 422).

كانت مستويات الإستيطان التي تمّ التحقيقُ فيها في مجسّات فترة نينوى الخامسة هي مستويات قرية زراعية. ولم تكن هناك أي علامة على وجود أي نشاط صناعي ينتجُ سلعاً لا يتمّ استهلاكها محلياً. وتشهدُ لوالب المغزل على إنتاج الخيوط ربما من الصوف أو الكتان ، وعلى الرغم من عدم العثور على أيّ مُعدّاتٍ أخرى مثل أوزان النول لصنع المنسوجات فمن المُرجح أنّ النسيج كان يتمّ في القرية. ومن المُحتمل أيضاً أن تكون حصيرة القصب التي وجدت في بعض القبور مصنوعةً محلياً. هذا ولم يتمّ إنتاجُ الفخار والأختام والمجوهرات وأدوات الحجر الصوان والأدوات المعدنية والأسلحة وغيرها من المواد، مثل البيتومين (الإسفلت) والملح في القرية على حد علمنا ومن المُفترض أنه تمّ الحصولُ عليها مقابل المنتجات الزراعية.

وبصرف النظر عن الفخار الذي تغيّر بمرور الوقت هناك عددٌ قليلٌ من المعالِم المشتركة الأخرى التي قد تُمثّلُ جوانب من ثقافة فترة نينوى الخامسة. فكانتُ المجوهراتُ والأحجار المكسورة والقطع الحجرية المطحونة والأختام وطبعات الأختام والأعمال المعدنية والتمائيل الصغيرة وأنواع أخرى من الإكتشافات الصغيرة هي من الأنواع المنتشرة على نطاقٍ واسعٍ خارج المنطقة التي كان يُستخدمُ فيها فخار فترة نينوى الخامسة. وبالتالي قد يكون من الحكمة تجنّب عبارة ثقافة فترة نينوى الخامسة في المُستقبل.

المتأخر موجوداً فقط في سوريا. ويُشيرُ فحصُ توزيعِ وتواترِ هذه الأساليبِ إلى أنَّ التقسيمِ الزمنيِّ المعقولِ للنصفِ الأولِ من الألفية الثالثة في شمال غرب العراق سيتكون من أربع فتراتٍ رئيسية: محمد عربٍ وأخر فترة أوروک (MALU) وفترة نينوى الخامسة المطلية وفترة نينوى الخامسة المبكرة المطلية والمنقوشة وفترة نينوى الخامسة المنقوشة والمستبعدة المتأخرة.

ولم يُقدّمْ تلُّ مُحمّدِ عربٍ أي دليلٍ مباشرٍ على التسلسلِ الزمنيِّ المُطلقِ لهذه الفتراتِ ولكن يُمكنُنّا من خلالِ إعادةِ فحصِ تقديراتِ نتائجِ الكربونِ المشعّ من مواقعٍ أخرى وتقديرِ مدةِ تسلسلِ البناءِ في تلِّ مُحمّدِ عربٍ (الجدول 5.8) إقترَاحِ تواريخٍ تقريبيةٍ وهي: لفترة 3100-3000 MALU قبل الميلادِ ولفترة نينوى الخامسة المرسومة 3000-2900 قبل الميلادِ ولفترة نينوى الخامسة المبكرة المطلية والمنقوشة 2900-2800 قبل الميلادِ ولفترة نينوى الخامسة المنقوشة والمستبعدة المتأخرة بما في ذلك المرحلة السورية المتأخرة المستبعدة 2800-2550 قبل الميلادِ.

لا يزالُ تحديدُ مواقعِ فترة نينوى الخامسة إشكالياً إذ إنّ الظهورَ العرضيِّ لبقايا قطعٍ فخاريةٍ لفترة نينوى الخامسة المزخرفة على سبيلِ المثالِ في ماري وتل الخويرة وتل موزان لا يكفي لتبريرِ تسميةِ هذه المواقعِ باسمِ فترة نينوى الخامسة ، وعلاوةً على ذلك أطلق علماء الآثار في كثيرٍ من الأحيانِ على المواقعِ إسمِ فترة نينوى الخامسة في حين أنّ غالبيةَ القطعِ الأثريةِ تنتمي إلى أنماطٍ أخرى. وهذا هو الحال على سبيلِ المثالِ مع المواقعِ في مشروعِ إنقاذِ سدِ اليسو في تركيا (رينيت 2019: 43 ، الجدول 2.4). وينبغي على الأقلِّ ربما تسميةِ المجموعةِ باسمِ فترة نينوى الخامسة فقط إذا كان من الممكنِ تحديدِ غالبيةِ بقايا القطعِ المزخرفة على أنّها من فترة نينوى الخامسة .

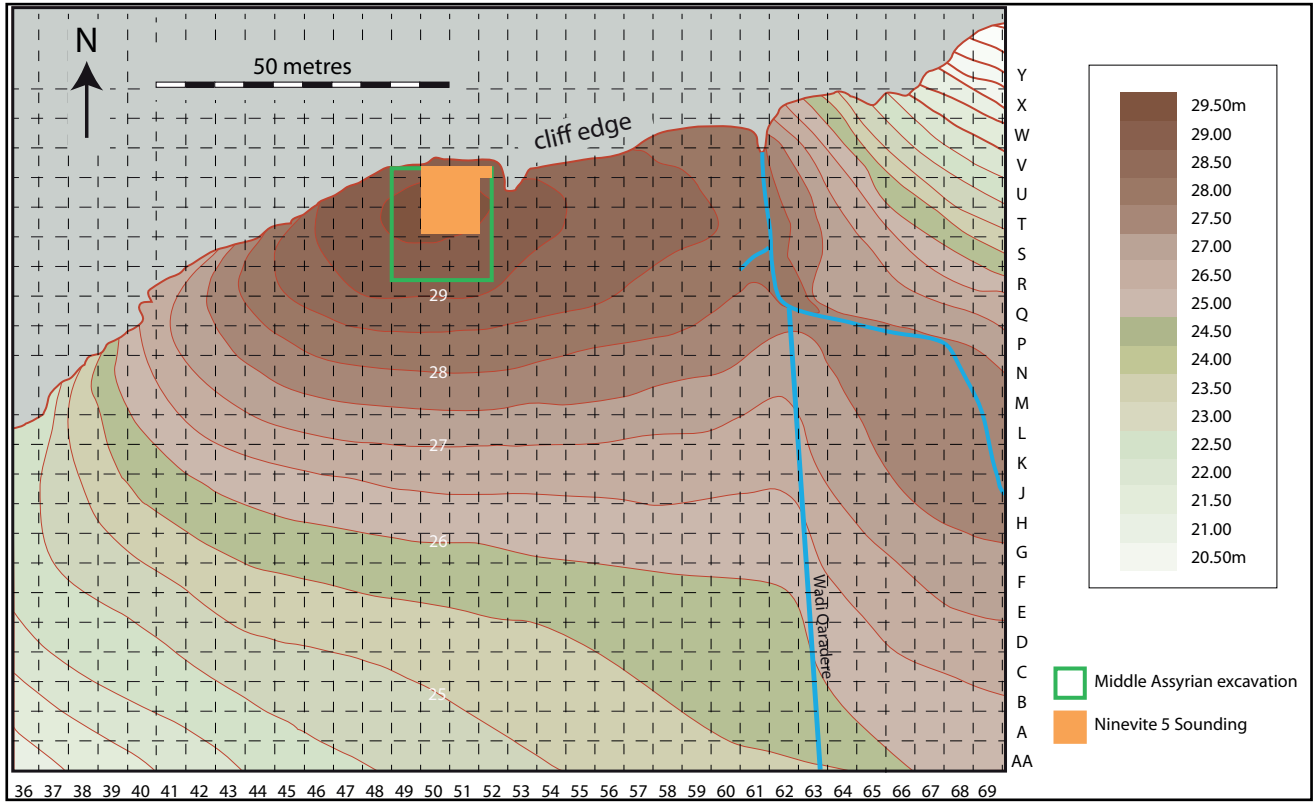
ويصعبُ لهذا السببِ ولأسبابٍ أخرى تقييمُ المدى أو الحجمِ الحقيقيِّ لمواقعِ فترة نينوى الخامسة في أيِّ وقتٍ. ويبدو في الوقتِ الحاليِّ أنّه في بدايةِ الفترةِ ربما لم تكن هناك سوى مستوطناتٍ صغيرةٍ ولم تظهرِ المستوطناتِ الأكبرِ إلا في وقتٍ لاحقٍ.

عندما تمّ التنقيب عن مجسّاتِ فترة نينوى الخامسة لم يكن هناك سوى القليل من الأدلة على وجودِ أي بنيةٍ أخرى لِفترَةِ نينوى الخامسة. وأظهرتِ الأعمالُ الأخيرةُ في باسيتكي وفقاً للمُنقِبِ (Pfälzner 2025) أنّ سورَ المدينةِ تمّ بناؤه في فترة نينوى الخامسة المبكرة وأعيد بناؤه عدّة مراتٍ حيث تنتمي المرحلة الأخيرة إلى فترة نينوى الخامسة المنقوشة والمستبعدة المتأخرة. وكما تمّ تشييدُ مبانٍ ضخمةٍ بجوار سورِ المدينةِ ويبدو أنّها كانت تُستخدمُ لتخزينِ الأغذية وإنتاجها بشكلٍ مشتركٍ. وتبدو هذه الاكتشافاتِ مختلفةً تماماً عن تلك التي تمّ التوصلُ إليها خلالِ أعمالِ التنقيبِ في مشروعِ إنقاذِ سدِّ صدامِ وسوف تتطلّبُ إعادةَ تقييمٍ لطبيعةِ مستوطنةِ فترة نينوى الخامسة.

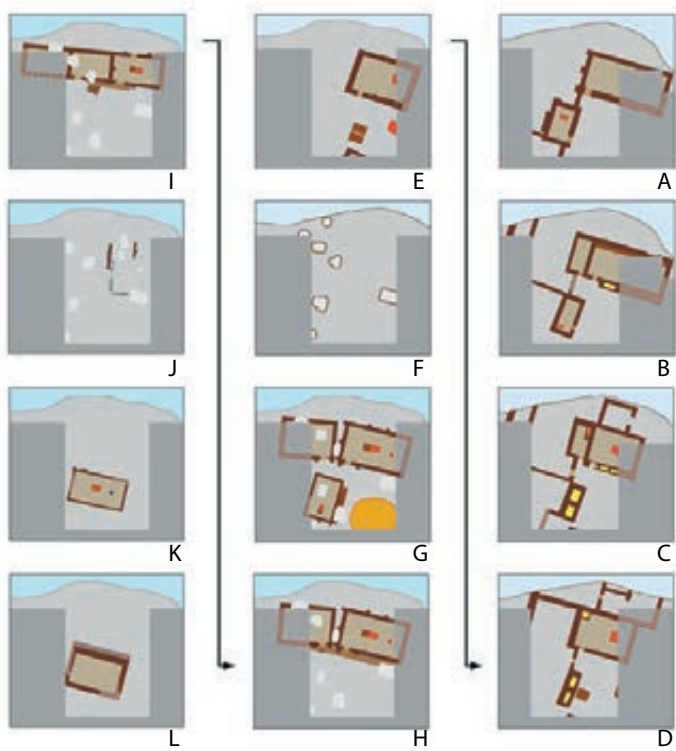
هذا ومن الصعبِ قولُ المزيدِ عن طبيعةِ مستوطنةِ فترة نينوى الخامسة في تلِّ مُحمّدِ عربٍ وذلك بسببِ طبيعةِ قيودِ العملِ لأعمالنا التنقيبية هناك. ومن الواضحِ أنّنا نتعاملُ مع مُستوطنةٍ ريفيةٍ صغيرةٍ مُماثلةٍ في الحجمِ والغرضِ للعديدِ من المُستوطناتِ الأخرى في المنطقةِ مثل تل كوتان وتل رجم. وكانَتْ هذه المستوطناتِ جزءاً من التسلسلِ الهرميِّ للإستيطانِ الذي شملَ تل جيكان والذي قُدِّرَتْ مساحتهُ في ذلك الوقتِ بحوالي 20 هكتاراً (نوموتو 2003: 44).

وتُشيرُ أمراضُ الأسنانِ من الهياكلِ العظميةِ الموجودةِ في مقبرة (MA3a) (م 3أ) إلى أنّ سكانِ القريةِ التي هي محلُّ دراستنا كانوا منخرطين بشكلٍ كبيرٍ في العملِ اليدويِ ويتمتعون بنظامٍ غذائيٍّ متوازنٍ لم يكن يميلُ في الغالبِ إلى المنتجاتِ النباتيةِ أو الحيوانيةِ (بولت ، هذا المجلد).

وكانتِ الحبوبُ الأكثرُ شيوعاً المزروعة هي القمحِ الصمغي بشكلٍ رئيسيٍّ قمح الإيمر ولكن أيضاً أحادي الحبة ويليهِ الشعيرِ المقشّرُ المكون من صقّين والقمح ذو البيدر أو الدُرّاسِ لحر الأقلِ شيوعاً مثل المعكرونة وقمح الخبز. وتمّ زراعة هذه الحبوبِ في الخريفِ وحصادها في أواخرِ الربيعِ أو أوائلِ الصيفِ (كيم 2019: 235-7).



1. خريطة كنتورية لتلّ محمد عرب موضَّح فيها المناطق التي تمّ التنقيب فيها.



4. حُطّ بيانية لِمباني المُستويات ل-أ.

Mohammed 'Arab Period	Date
MA 6	Sassanian
MA 5	Hellenistic
MA 4	Middle Assyrian
MA 3	Late Ninevite 5
MA 2	Early Ninevite 5
MA 1	'Late Uruk'

2. فترات الاستيطان في تلّ محمد عرب.

Mohammed 'Arab Period	MA Sounding Building Level
MA3b	A
	B
	C
	D
	E
MA3a Cemetery	F
MA2	G
	H
	I
	J
	K
MA1	L
	M

3. فترات ومستويات البناء في المَجسّات.

هناك صفًا من ثلاثِ عُرفٍ مبنية في الشمال منه أكثر من تلك الموجودة في المستويات (L/K). هذا ولم تُكُنْ هذه المباني مرتبطةً ببعضها البعض إذ كانتُ الغرفة الأكبر تحتوي على منصبةٍ مستطيلة من الطابوق الطيني وموقدٍ في المنتصفِ منها، كما توجدُ أيضاً بعض المعالِمُ في المستويات اللاحقة. وقد تمَّ إستبدالُ هذا المبنى الفردي بوحدين مُفصلتين في المستوى (H) وتمَّ لاحقاً إضافة مبنى ثالث مُكوّناً من عُرفٍ واحدةٍ تمَّ بناؤه بزوايا قائمة (المستوى G). وقد تمَّ في نهاية المستوى (G) التخلّي عن المنطقة وإستخدامها كمقبرة (المستوى F). تُمثّلُ المستويات الخمسة العليا (المستويات E-A) إعادةَ بناء نفس الهياكل الواقعة على طول الجانبين من مساحةٍ مفتوحةٍ أو فناءٍ. وكان هناك في البداية مبنىً مكوناً من غرفةٍ واحدةٍ هنا في الموقع (المستويات D-E) ثمَّ تمَّ توسيعه إلى غرفتين (المستويات B-C)، ثمَّ أُعيدَ بناؤه أخيراً كغرفةٍ واحدةٍ كبيرةٍ جداً (المستوى A). وقد كانتُ تقعُ سلسلةٌ من الصناديق في المُستويات (D-C) بزوايا قائمةٍ على هذه الطوابق والتي أُعيدَ بناؤها وتوسيعها إلى عُرفٍ فرديّةٍ في المُستويات (A-B).

3. الثقافة المادية

تشملُ الإكتشافات التي تمَّ التوصلُ إليها من خلالِ المجساتِ عدداً صغيراً من الأدوات النفعية مثل الأدوات المصنوعة من العظام واللوايب المغزلية وآلات دقّ الحجارة والمطاحن والتي توثقُ مجموعةً من الأنشطة المحلية. وتشتملُ قطعُ الملابس على دبابيسٍ من العظامِ واللُحاس وكان أكثرها زخرفةً وتزييناً هي قطعةٌ من أغراض القبرِ وقلادتين مُحتملتين. وقد كانتُ الطوابق والأختامُ نادرةً على الرغم من أنّ ختمَ اليدِ الكامل قد يكون فريداً من نوعه في فترة نينوى الخامسة (الأشكال 3.1-7).

جاء القليلُ جداً من هذه المواد من داخل المباني حيث يبدو أن الأرضيات فيها قد ظلتُ نظيفةً. وقد عُثِرَ على معظم الأشياء في المساحات المفتوحة وخاصةً إلى الجنوب منها. وبالنظرِ إلى صغر حجم العينة فإنّه من غير الحكمة قراءة الكثير عن التوزيع الرأسي لفئات الأدوات المختلفة بإستثناء ملاحظة الميل العام إلى وجود كميات أكبر من العظام والأدوات المعدنية لتكون موجودة في المستويات اللاحقة فوق مقبرة المستوى (F).

ويمكنُ العثورُ على موادٍ مُقارَنة للعديد من العناصر محلياً في المواقع المُعاصرة مثل تل الكرانة 3، وكذلك في أماكن أبعد على سبيل المثال: في تلّ الرقيعي في الخابور العلوي.

4. الفُخار

كان من أهم المساهمات التي قدمتها أعمال التنقيب في تلّ محمد عرب لدراسة فترة نينوى الخامسة في شمال بلاد ما بين النهرين هو توضيحُ تسلسل الفُخار لاسيما العلاقة بين أنماط فخار فترة نينوى الخامسة المطلية والمنقوشة. وقد أثبت التسلسل الطبقي أنّ الفخارَ المطلي لفترة نينوى الخامسة كان له سابقاته في الفخار المطلي في فترة الوركاء المتأخرة (MA1: الأشكال 4-4.1). واحتوتُ المستويات السفلية لفترة نينوى الخامسة على الفُخار المطلي (MA2: الشكل 4.7 - 10) والفخار المنقوش بمجموعةٍ محدودةٍ من الزخارف (MA2: الشكل 4.14). كما وقد كان الفخار المطلي غائباً في المستويات العليا حيث كانتُ هناك أواني فخارية منقوشة مُتطورة تماماً (MA3: الأشكال 4.22-26، كما شهد (MA3) أيضاً التعريف بالفُخار المُستخرج (الأشكال 4.27-29).

5. المُناقشة

أظهرتُ الحفرياتُ في تلّ محمد عرب أنّه كانتُ هناك فترات كان فيها الفخار المطلي قيدَ الإستخدام بدون فخار منقوش وعندما كان الفخار المطلي والمنقوش موجوداً وكان الفخار المنقوش قيدَ الإستخدام ولكن لم يتمّ طلاؤه. ومن الممكن في الواقع إكتشاف إحدى عشرة مرحلةٍ مختلفة في تطوّر أنماط الفخار هذه (الجدول 5.1) ومرحلةً أخيرةً إضافية عندما كان الفخار المستأصل

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1. الْمُقَدِّمَةُ

جرث أعمال التنقيب المذكورة هنا في هذا الموقع بين عامي 1982 و1985 والتي أجرتها البعثة الأثرية البريطانية إلى العراق كجزء من مشروع إنقاذ سدّ الموصل (إسكي الموصل). إقتصَرَ عملُ الفرق الأجنبية في بداية المشروع ونتيجةً لأسبابٍ أمنيةٍ على الركن الجنوبي الشرقي من المنطقة التي ستغمرها المياه لاحقاً. وقد تمَّ اختيارُ تلِّ محمد عرب للتنقيب لأنه كان واضحاً من حافة الجرف المتآكلة على ضفةِ النهر أنّ هناك رواسب كبيرة تنتمي إلى فترة نينوى الخامسة. وكانت هذه الفترة في ذلك الوقت واحدةً من الفترات غير المعروفة نسبياً لتأريخ شمال بلاد ما بين النهرين مع وجود سلسلةٍ من الأواني الفخارية والتي مازالت غير مُفسَّرةٍ منذ تحديدها لأول مرةٍ في نينوى في ثلاثينيات القرن العشرين. وقد بدأت أعمال التنقيب في تلِّ محمد عرب في أواخر عام 1982 واستمرَّت حتى عامي 1983 و1984، ثمَّ في ربيع عام 1985 اختفى الموقع تحت تأثير زيادة مياه نهر دجلة عندما امتلأ السدُّ بشكلٍ غير متوقَّعٍ ودون سابق إنذارٍ مما أدى إلى توقُّفِ أعمالِ التنقيب بشكلٍ مُفاجئٍ.

وغمرت البقايا الموجودة في تلِّ مُحَمَّدَ عَرَب حوالي 1.2 هكتاراً منه وتمتدُّ على طولِ ضفةِ النهرٍ لمسافةٍ نحو 150 متراً و180 متراً إلى الجهة الخلفية منه. هذا ولا نعلم مقدار حجم الأرض التي قد جرفها النهر، كما ويبدو نجاةً أكثر من نصفها قليلاً والذي بدوره ساهم في زيادة الحجم الإجمالي إلى نحو 2_3 هكتاراً مما يجعلها قرية متواضعة الحجم .

وقد ساهم العملُ الأولي على طول حافة الجرف المتآكلة على ضفاف النهر إلى تحديد تأريخ وعمق الرواسب الموجودة (رواف: 1983:86). وقد أدت أعمال التنقيب اللاحقة في الموقع إلى تحسين المخطط الزمني إلى ست فتراتٍ مُميَّزةٍ من الاستيطان تمَّ تصنيفها من الأسفل إلى الأعلى بعلامة (MA1 إلى MA6). ويعودُ تأريخُ أقدم الرواسب إلى فترة الوركاء المتأخرة (MA1) وكانت مُقتصرَةً على الأجزاء الوسطى والشرقية من مقطع الجرف. كما وقد فصلَ سطحٌ تلِّ مُتآكِلٍ منطقة (MA1) عن منطقة إعادة الاستيطان في وقتٍ مُبكرٍ من فترة نينوى الخامسة (MA2) والتي تميَّزت بإدخال الفخار المطلي والمنقوش في أوائل فترة نينوى الخامسة. وتمَّ العثورُ على بقايا هذه الفترة على طولِ مقطع الجرفِ بالكامل. وكذلك تمَّ استخدامُ المنطقة المركزية للمستوطنة كمقبرة (MA3a) في وقتٍ لاحقٍ حيثُ تحتوي القبورُ فيها على نماذجٍ من الأدوات والأواني الفخارية المُستخرجة من فترة نينوى الخامسة. كما يُعرَفُ ما إذا كانت المستوطنة بأكملها قد تمَّ التخلي عنها وإستخدامها كمقبرة في هذا الوقت ولا يُعرَفُ أيضاً مقدارُ الوقت الذي مضى قبل ظهور المباني مرةً أخرى. هذا وكانت فترةُ الإستيطن اللاحقة لاتزال ضمن فترة نينوى الخامسة (MA3b). وكان هناك بعد ذلك إنقطاع واضح في التسلسل الأثري حيث أُقيمت مباني آشورية مُتوسطة فوق قمة تلِّ من فترة نينوى الخامسة (MA4) تلاها حُفْرٌ من الفترة الهلنستية (M5) ومقبرة من العصر الساساني (MA6). ومن أجل فحص هذا التسلسل الأثري بمزيدٍ من التفصيل فقد تمَّ إجراء أعمال تنقيب في الجزء الأوسط والأعلى من التلِّ المُجاورٍ للقسيم (48- V52) على طول حافة الجرف (مجسَّات فترة نينوى الخامسة).

2. مَجَسَّاتُ فَتْرَةِ نَيْنَوَى الْخَامِسَةِ

تمَّ تمييزُ أحد عشر مستوى بناء في عملية التنقيب عن المجسَّات في المنطقة ، كما تمَّ تخصيصُ مستوى مُنفصلاً للطبقات الواقعة بين الحجر الأساسي والجدران الأولى (المستوى M) وكذلك مجموعة من القبور (المستوى F) ليصبح المشروع ثلاثة عشر مستوى تمَّ تحديدها من (A) إلى (M) من أعلى إلى أسفل.

كانت المباني الأولى (المستويان L و K) عبارة عن مبانٍ من غرفة واحدة لم يتبق منها سوى القليل وتبع ذلك أربعة مستوياتٍ من المبانٍ (المستويات J-G) قبل فترةٍ من الإهمال. ولأيمكُن فهمُ بعض الفنِّ المعماري في الموقع إلا في المستوى الأول عندما كان

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