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Polish Archaeology in the Mediterranean 19, 114-130

2010

Artykuł został opracowany do udostępnienia w internecie przez Muzeum Historii Polski w ramach prac podejmowanych na rzecz zapewnienia otwartego, powszechnego i trwałego dostępu do polskiego dorobku naukowego i kulturalnego. Artykuł jest umieszczony w kolekcji cyfrowej bazhum.muzhp.pl, gromadzącej zawartość polskich czasopism humanistycznych i społecznych.

Tekst jest udostępniony do wykorzystania w ramach dozwolonego użytku.

GLASS FROM HOUSES 1 AND 2 IN MARINA EL-ALAMEIN

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Excavations preceding conservation works in Houses 1 and 2 in Marina el-Alamein unearthed considerable quantities of glass fragments (for the work, see above, report by S. Medeksza *et alii* in this volume). Both buildings were apparently occupied for a long time as evidenced by associated dateable finds. The recorded glass material represents well-known types, ranging in date from the 1st to the mid 5th century AD. This builds on to the body of evidence for continued habitation of the central part of the town into the 4th and 5th centuries despite the apparent overwhelming destruction and abandonment of most of the buildings excavated so far in Marina by the end of the 3rd century (see Daszewski *et alii* 2007: 84).

Of great interest is the assemblage originating from House 1, particularly from the eastern of the two cisterns sunk below the courtyard. It yielded a sizable group of objects from the late 4th to mid 5th centuries. This is in direct contrast to the limited number of similarly dated finds from the western cistern. House 2 yielded only a small quantity of glass, originating mostly from the fill.

The glass assemblage from the eastern tank is consistent in date with the associated pottery finds dated to the late 4th to mid-5th century AD. Most of the recorded forms belong to imported amphorae LRA 2 and LRA 3, as well as LRA 4. A profuse presence of Aswan-made costrels was also noted. Well-dated imported tableware, namely African Red Slip bowls (forms 60,

61 and 67) and Cypriot Red Slip (form 1), complete the assemblage and provide sound chronological brackets.

Undecorated free-blown wares intended for domestic consumption account for a major part of this assemblage. Utilitarian household containers and storage vessels in the form of jugs, flagons and large bottles appeared in significant numbers, similarly to conical lamps.

Toilets flasks and bottles for perfumes, ointments and the like were also observed in a variety of types and sizes. Next came a wide range of tableware (beakers, deep bowls and shallow dishes) for serving liquids and foodstuffs. All the vessels are represented mainly by bases, fragments of necks and rims.

Only a few decorated shards were recorded. The methods of embellishment comprise indents, incisions, simple applied elements such as threads and blobs in contrasting colors and a few odd examples of wheel-cut and wheel-abraded motifs, plus an occasional mould-blown ornament. The small number of luxury glass is still surprising. Some of the gaming pieces and jewellery were formed by the non-blowing technique.

Most vessels were made of noticeably poor-quality bluish-green glass with bubbles and impurities, commonly used for household wares; yellow and green glass has also been recorded. Uniform, advanced, black and flaking weathering and iridescence conceals the actual color and wall thickness

of many vessels. This is especially visible in the case of fragments originating from the cisterns. In a few cases of decolorized glass with slightly yellowish or greenish tinge from the Early Roman period, weathering has resulted in a milky-white coating and peacock iridescence.

While there is still no firm evidence of glassworking at the site (circumstantial proof includes a badly deformed bottle neck and a segment of uncut beads), the sheer quantity of glass finds, the striking simplicity of shapes and ornamentation, the colour and quality of the glass (in many cases extremely poor) may point to the same origin, namely a local glass workshop

satisfying a local demand. Common vessels of this kind were not likely to have been traded very far. The finer pieces on the other hand could have been acquired either in Alexandria, Italy or the Syro-Palestine region.

The glass recovered from these two houses contributes to a growing body of published data on glass from North African sites (Sternini 1977; Price 1985; Hayes 1986; Fünfschilling 1999; Foy 2003). Moreover, it contributes significantly to our knowledge of tableware, household vessels and containers used in domestic contexts from the Early Roman to the Late Roman periods.

GLASS FROM HOUSE 1

Types current in the 1st through the mid-5th century AD make up this assemblage. The Early Roman group is limited to a few sherds of indented beakers (not illustrated). Almost square, sometimes heavy bases and very thin walls characterize this popular drinking vessel which was common in the 1st century AD. A single fragment belongs to a hemispherical pillar-molded bowl (Isings 1957: 17–21, Form 3) [*Fig. 1:1*]. The fragments recovered at the site represent most probably imports from the Syro-Palestine region (cf. Foy 2005, 11–26 and Jennings 2006, 37–42). Both forms have already been observed at the site (cf. Kucharczyk 2005: 94, *Fig. 1:1,7*) and also on many other Egyptian sites, including Karanis (Harden 1936: 376, indented beaker) and Medinet Madi (Silvano 1999: 13, *Figs 4–5*, indented beakers). These two forms are fairly numerous at Quseir al-Qadim (Meyer 1992: 27–28, Pl. 8:149–161, indented beakers, 17–18, Pl. 1:2–25, pillar molded bowls) and at Berenike (Kucharczyk forthcoming b). They have been attested

also at Elephantine (Rodziewicz 2005: Pl. 3:44–53, indented beakers) and Mons Porphyrites (Bailey 2007: 249–250, *Fig. 8.10*, indented beaker). The polychrome and plain hemispherical pillar-molded bowls have been found likewise as far away as Poland (Stawiarska 1999: 236, 240–242).

Among the recorded pieces there is a fragment of colorless glass with cut decoration, coming likely from an open vessel such as a hemispherical cup or shallow bowl. These shapes were a preferred vehicle for decoration consisting of bands of tiny-short rice-grain facets popular in the 2nd and early 3rd century [*Fig. 1:2*]. In Egypt, comparable material is offered by a number of sites, such as Karanis (Harden 1936: Pl. XIV:317), Medinet Madi (Silvano 2003: 120), Didymoi (Brun 2003b: 385–386, *Fig 9:4–5*), and Elephantine (Rodziewicz 2005: 88, Pl. 6:100). Vessels with decoration of wheel-cut lines and rice-grain facets have been attested, among others, in Sudan (Sedeinga, cf. Cool 1995: 204–205, *Fig. 3:3, 5*), Turkey (Lightfoot 1991: 93, *Fig. 1:9–11*,

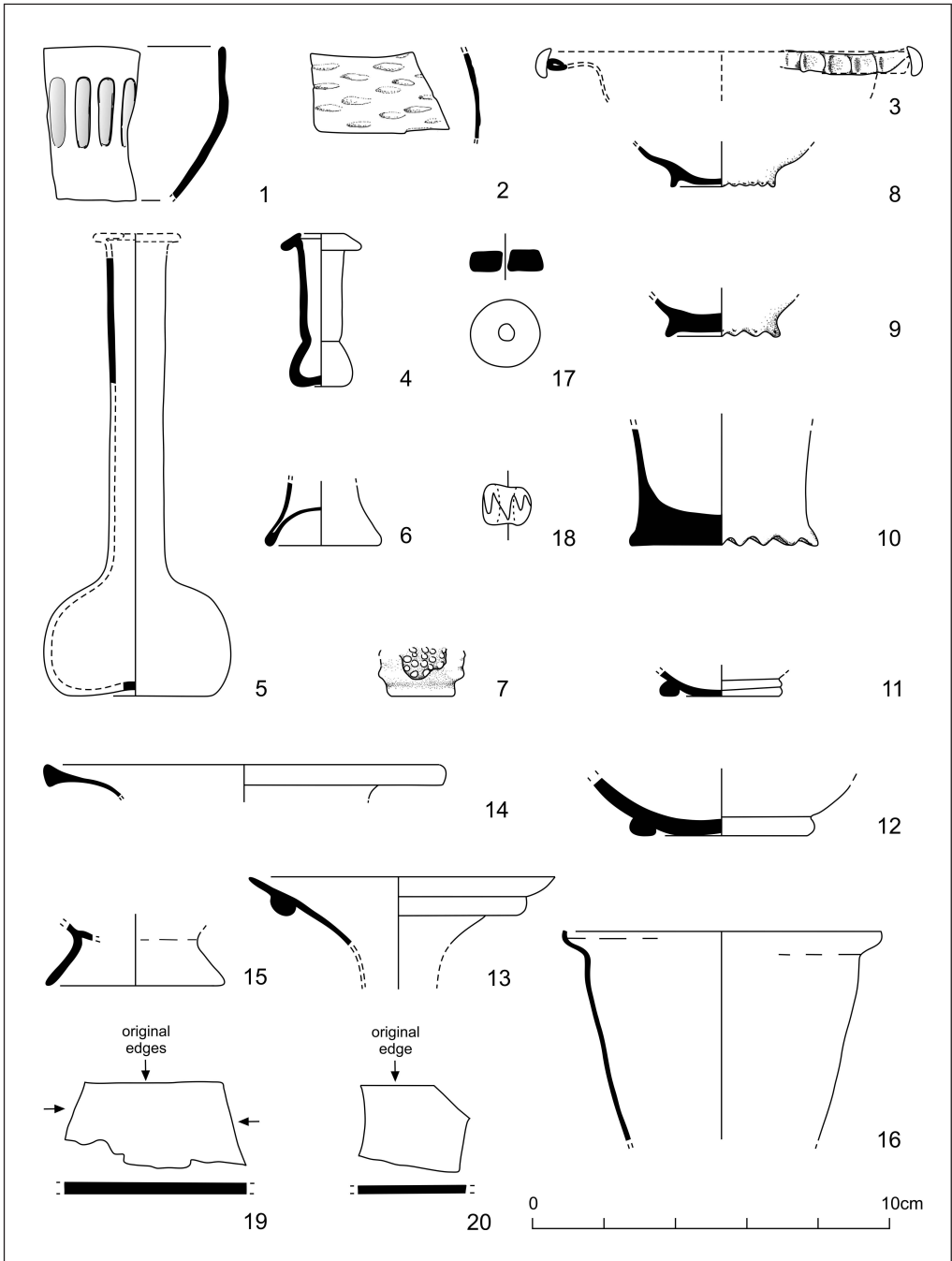


Fig. 1. Glass fragments from House 1 (All drawings R. Kucharczyk, digitizing E. Czyżewska, K. Juszczak and R. Mahler)

13–15, 17, 19), Syria (Dura Europos: Clairmont 1963: 66–67, Pl. VIII:312–316, 323–326). Numerous vessels with vertical rice-shaped facets appeared on north Pontic sites (Sorokina 1978: 111–122). Vessels adorned with rice-grain facets were also found in Poland (Stawiarska 1999: 265–266, no. 84).

Another apparent bowl fragment comprises a hollow outfolded rim with horizontally applied trail, tooled into a series of vertical ribs on the outer rim edge. It represents part of one of two crimped grip handles [Fig. 1:3]. Vessels equipped with such handles, characteristic of the mid 1st to 2nd century AD, quite rare in Egypt, have been observed at the site previously (Kucharzyk 2005: 94–95, Fig. 1:8). Similar fragments were excavated recently at Berenike (unpublished) and Ptolemais in Libya (Kucharzyk forthcoming a). As a point of interest, one complete vessel has been published from Poland (Stawiarska 1999: 246, no. 22).

Fragments of toilet articles abound, but considering the rareness of complete examples from the archaeological record in Egypt one should take note of two vessels in particular. One of these is a small thick-walled specimen belonging to a short candlestick-bottle. The body is triangular, the neck short and nearly cylindrical, somewhat constricted at the base. The rim is thickened, sloping down and outwards [Fig. 1:4] (cf. Brun 2003a: 521, Fig. 245:92). The second nearly complete vessel belongs to a long-candlestick bottle [Fig. 1:5]. Apparently the domed, hollowed base also represents the same type [Fig. 1:6] (Winter 1996: 96–98, Fig. 5.4.6; cf. small unguent vase from the Ontario Museum, 2nd or early 3rd century AD, Hayes 1975: 53, 167; Fig. 2:117). These two types of candlestick

bottles are dated in general from the late 1st to the mid-3rd century AD.

Other toilet bottles are exemplified by the bases alone. There are two fragments of a head flask, possibly double-faced, assigned to the 2nd through 3rd centuries AD [Fig. 1:7], some pinched-out bases dated to the 3rd–4th century AD [Fig. 1:8–10] and coil-wound bases occurring in the 4th–5th century AD [Fig. 1:11–12].

Also found were a jug or flagon with thick applied trail, wound round once just below the plain flaring rim [Fig. 1:13], a ring base [Fig. 1:15] and a segment of a bowl with characteristic solid rim, triangular in section (4th century AD) [Fig. 1:14]. The rim fragment finds parallels among the Aila (Aqaba) finds (cf. Jones 2003: 138, Fig. 3:3). A few fragments of side walls with cracked-of rims representing conical lamps were also observed [Fig. 1:16]. All the vessels are carelessly made. Finally, there were some fragments of loose-twist stirring rods, domed gaming counters and beads (one of spherical shape, core-formed with irregular marvered white zigzag trail). A few oblate discs with both sides very smooth and well-made perforation have also been recorded. They could have been used either as beads or discs, or apparently as spindle whorls for fine yarn [Fig. 1:17–18].

In addition, two edge shards of flat, either rectangular or square windowpanes have come to light. The edges are cut straight [Fig. 1:19–20]. Advanced black weathering has obscured their original color. Apparently they were produced in the roller-moulded technique. They are indicative of windows being set somewhere in the walls, but there is no way to specify their precise location. This material can be dated to the first and second centuries AD.

GLASS FROM THE EASTERN CISTERN IN HOUSE 1

As said in the introduction, the eastern of the two cisterns in the courtyard of House 1 yielded an important assemblage of glass finds representing several well-known types current from the 1st through the mid 5th century AD. They are comparable to examples found at Kom el-Dikka.

The bulk of the Early Roman assemblage is made up of different types of bottles. Toilet receptacles include the following:

— unguentaria, mostly types with conical body and thick base [Fig. 2:1–2]. This shape had been already attested at the site in 2nd century AD context (cf. Kucharczyk 2005: 96–98, Fig. 3:1–3 and references);

— neck made of decolorized glass (second half of 1st to 2nd century AD) [Fig. 2:3];

— part of a childlike face with knobby hair at the side of the face, and a roughly square base, possibly double-faced (2nd to 3rd century AD, not illustrated);

Flasks and jugs used in bathing or as tableware are represented in this assemblage by different types of bases alone:

— Thickened bases with characteristic small pulled out “toes”, irregular in shape and height, sometime barely projecting. None of these bases have a pontil scar [Fig. 2:5–6]. They are characterized by poor workmanship, the quality much worse compared to the

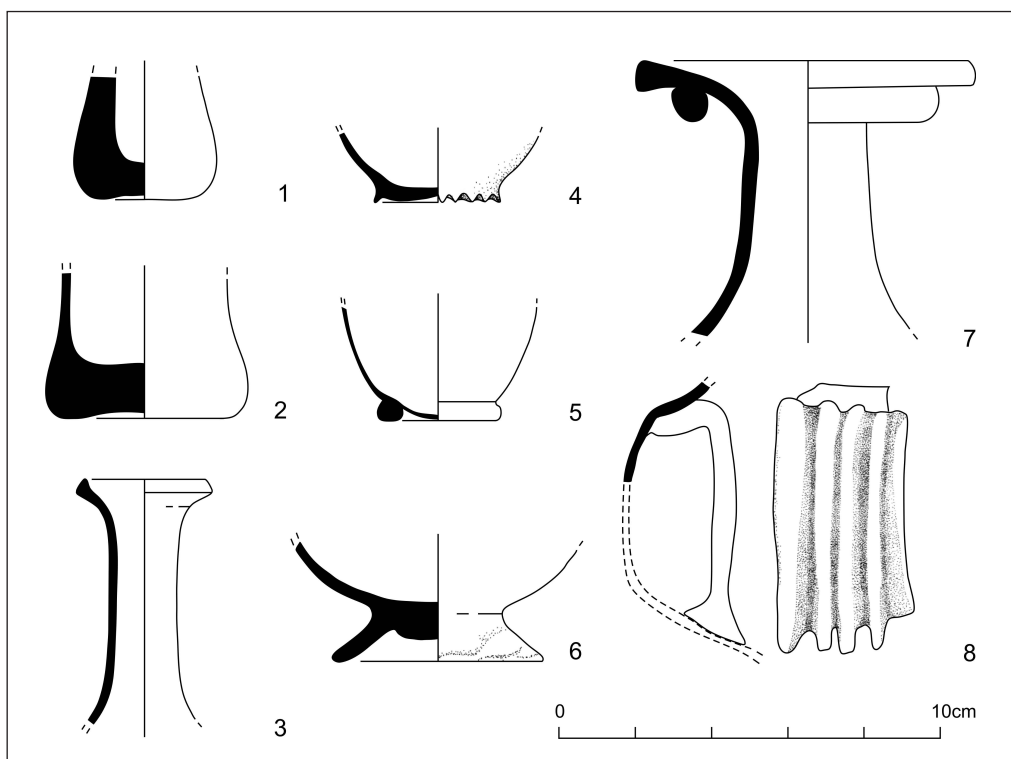


Fig. 2. Glass fragments from the eastern cistern in House 1

recently found examples from Alexandria (cf. the author's report above, in this volume).

— Coil-wound bases; in a few cases the coil was applied very carefully, once around the bottom of the vessel [*Fig. 2:4, 7–8*]; in one case, an appealing green was thread attached to a colorless body.

— Noticeably thick bases with widely spaced diagonal jack marks around the footring and ring base (associated with the 4th–5th century AD) [*Fig. 2:9–11*].

Household containers are represented by a few different types of bottles. They include fragments of large, probably square or cylindrical thick-walled flagons, made of thick green and yellowish glass. They feature a cylindrical neck and flaring, thickened rim, strengthened by a single self-colored thick trail, wound round beneath the rim [*Fig. 2:12–13*]. These vessels belong to a large group of containers use for the transport and storage of perishables, such as olive oil, wine and garum. They came into use in the 3rd century and persisted through much of the 4th century (cf. Brun 2003b: 385–386, *Fig. 9:6*). Additionally, a few fine ribbed handles were also found [*Fig. 2:14–15*].

Other glass finds from the 4th–5th century AD assemblage include a large cylindrical bottle with wide horizontal shoulder and concave bottom without pontil mark [*Fig. 3:1*], bottles with thick flaring neck and tooled rim edge [*Fig. 3:2–3*], a specimen with long cylindrical neck, funnel-shaped mouth and apparently pear-shaped body [*Fig. 3:7*] and some fragments of small flasks with short necks and infolded rims [*Fig. 3:4–6, 8–9*]. None bears any evidence of a handle.

Also associated with the 4th–5th century AD is an isolated fragment blown into a simple, grooved mold, the decoration consisting of vertical ribs in relief on

a cylindrical body, forming a well-defined sunken pattern in between [*Fig. 3:10*]. The vessel was not inflated further after its removal from the mould. The precise nature of this exceptional, thick-walled example cannot be determined. Its fine workmanship could suggest a cosmetic vial, but it could have also been used for storing and dispensing pharmaceuticals (cf. toilet containers from the 5th–7th century, characterized by a long narrow tube, heavily tooled to twisted ribs, Auth 1976: 147:189; von Saldern *et alii* 1974: 256–257, Nos 751 and 752).

An assortment of dishes and bowls was also recorded in addition to the closed receptacles. The cistern produced a fragment of cast and lathe-cut colorless bowl with plain overhung rim and probably base ring [*Fig. 4:1–2*]. It represents a well known type assigned from the late 1st to the 2nd century (Grose 1991: 12–16). Significant quantities of vessels with overhung rims, both plain and decorated with facet-cutting, have been excavated at Berenike (Hayes 1995: *Fig.16*; Kucharzyk forthcoming b). A close match for the rim is provided also by examples from Karanis (Harden 1936: 60, Pl. XI:73), the Krokodilô and Maximianon (Brun 2003a: 518–519, *Fig. 242:49–51, 54–57*), Quseir al-Qadim/Myos Hormos (Meyer 1992: 19, Pl. 2:28–30, 34–37, 38–47) and Mons Porphyrites (Bailey 2007: 236–239, *Fig. 8.2:3–11*).

The sidewall of a large, shallow plate combining two decorative techniques deserves note. The inner side of the outfolded hanging rim is ornamented with a row of deep elongated facets running probably along the whole circumference. The exterior surface features a band of abraded connected ovals [*Fig. 4:3*]. Dishes are represented by ring bases, some of them of noticeably large diameter, and thickened rim forms ranging from horizontal and rounded [*Fig. 4:5–6*] though everted to

hooked [Fig. 5:1]. The ring base is the most frequently encountered shape in the assemblage, indicating use for a wide variety of shapes and sizes. It is distinguished by diagonal impressions from tooling on the outside and inside [Fig. 5:2]. Significant quantities of such bases excavated in the Alexandrian region, for example, in the Kom el-Dikka assemblage (Kucharczyk 2007: 51–52, Fig. 3:6–12 and references to other sites in Egypt), may point to a local glasshouse.

Deep bowls have side walls tapering down (some slightly concave) with either inside looped, vertical [Fig. 5:3, 5] or horizontal rims [Fig. 5:4], some with solid triangular section [Fig. 5:6]. They were furnished probably with ring bases. The most characteristic feature of this group of tableware is its poor workmanship.

The most frequent type and the largest typological group represented in the glass material recovered from the eastern of the cisterns are vessels with cracked-off rims.

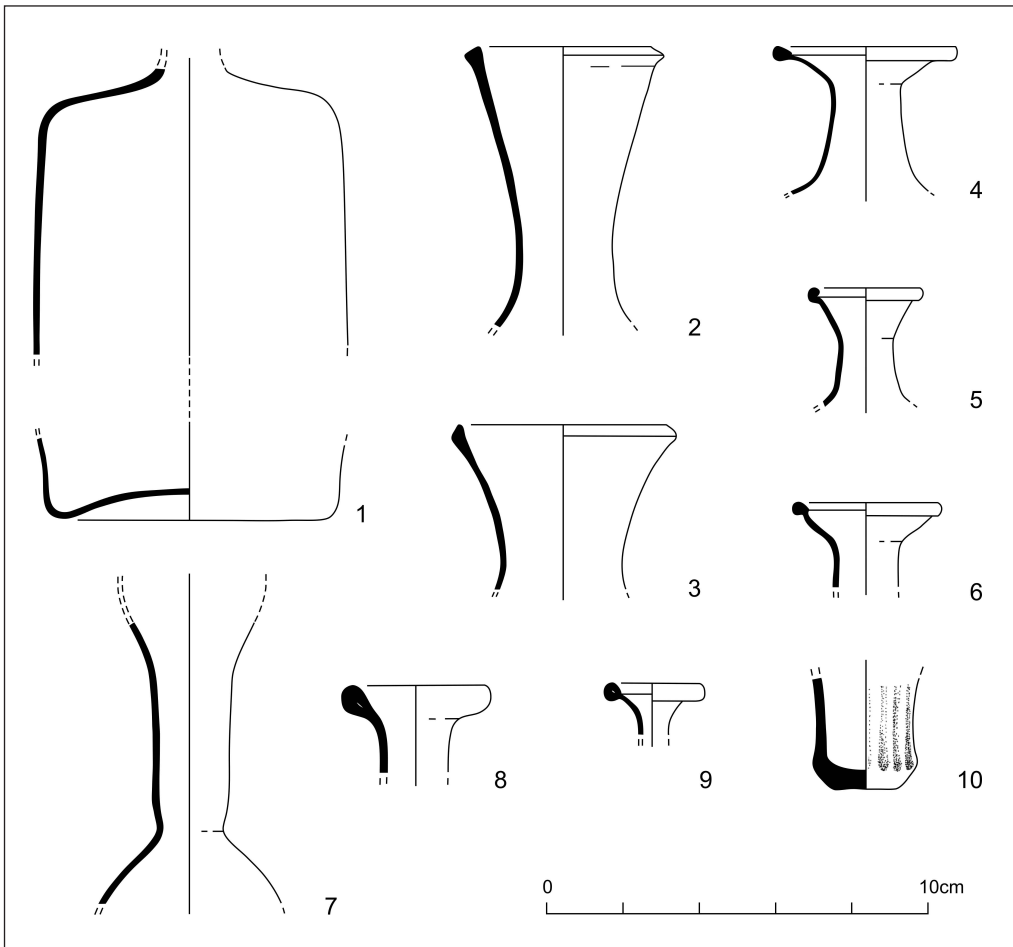


Fig. 3. Glass bottles from the eastern cistern in House 1

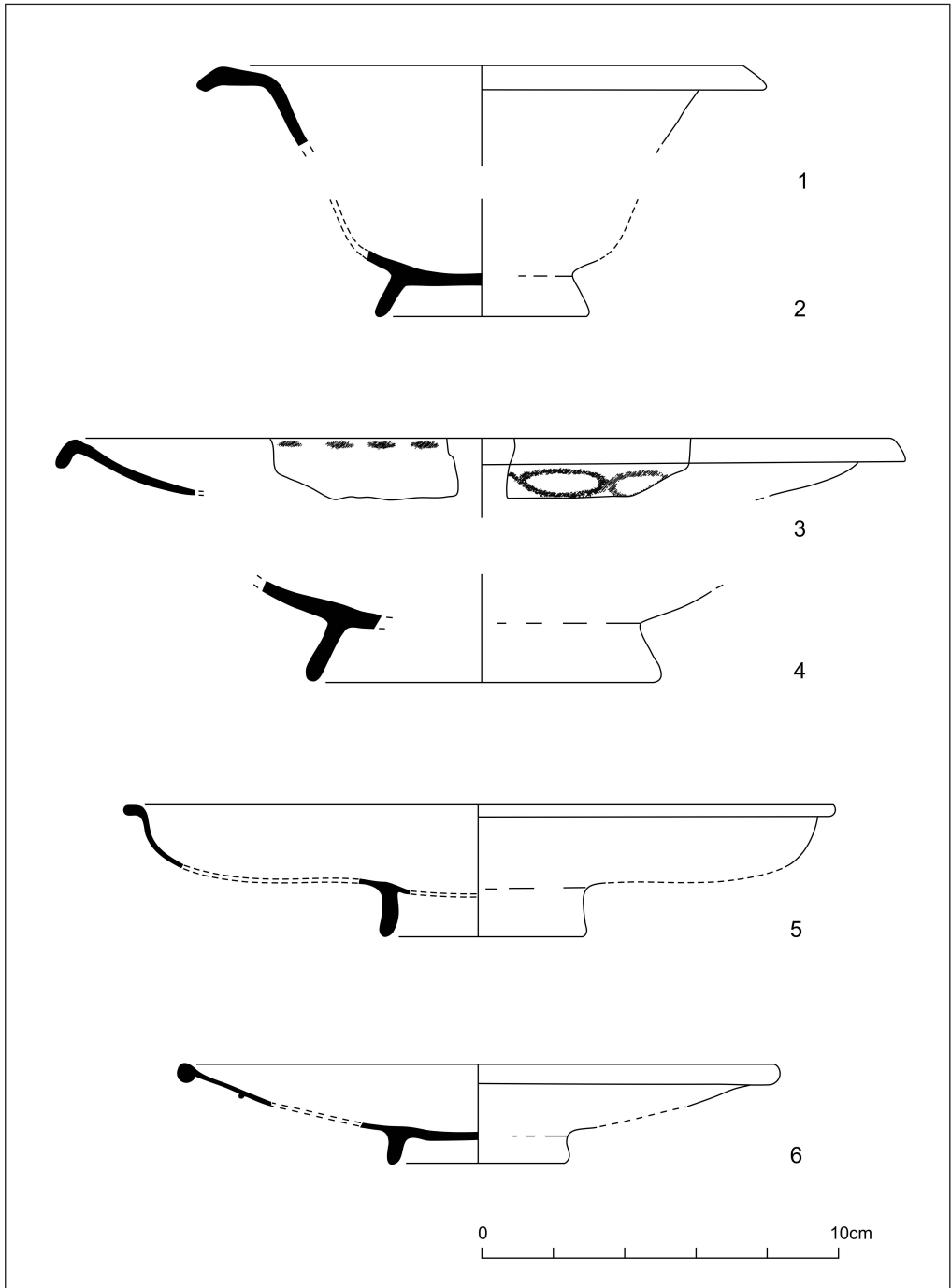


Fig. 4. Glass dishes and plates from the eastern cistern in House 1

Included here are conical lamps/beakers and bowls, the most common forms in the 4th and 5th centuries [Figs 6, 7:1–5].

The lamps/beakers are represented by fragments of “S”-shaped cracked-off, unpolished rims which are often thicker than

the rest of the vessel. The diameter, 13 cm in a few cases, is noteworthy. Wall thickness varies, being noticeably thick on occasion. Signs of horizontal incision below the rim suggest holding fixtures for suspension. The walls taper to different shapes of bases. They

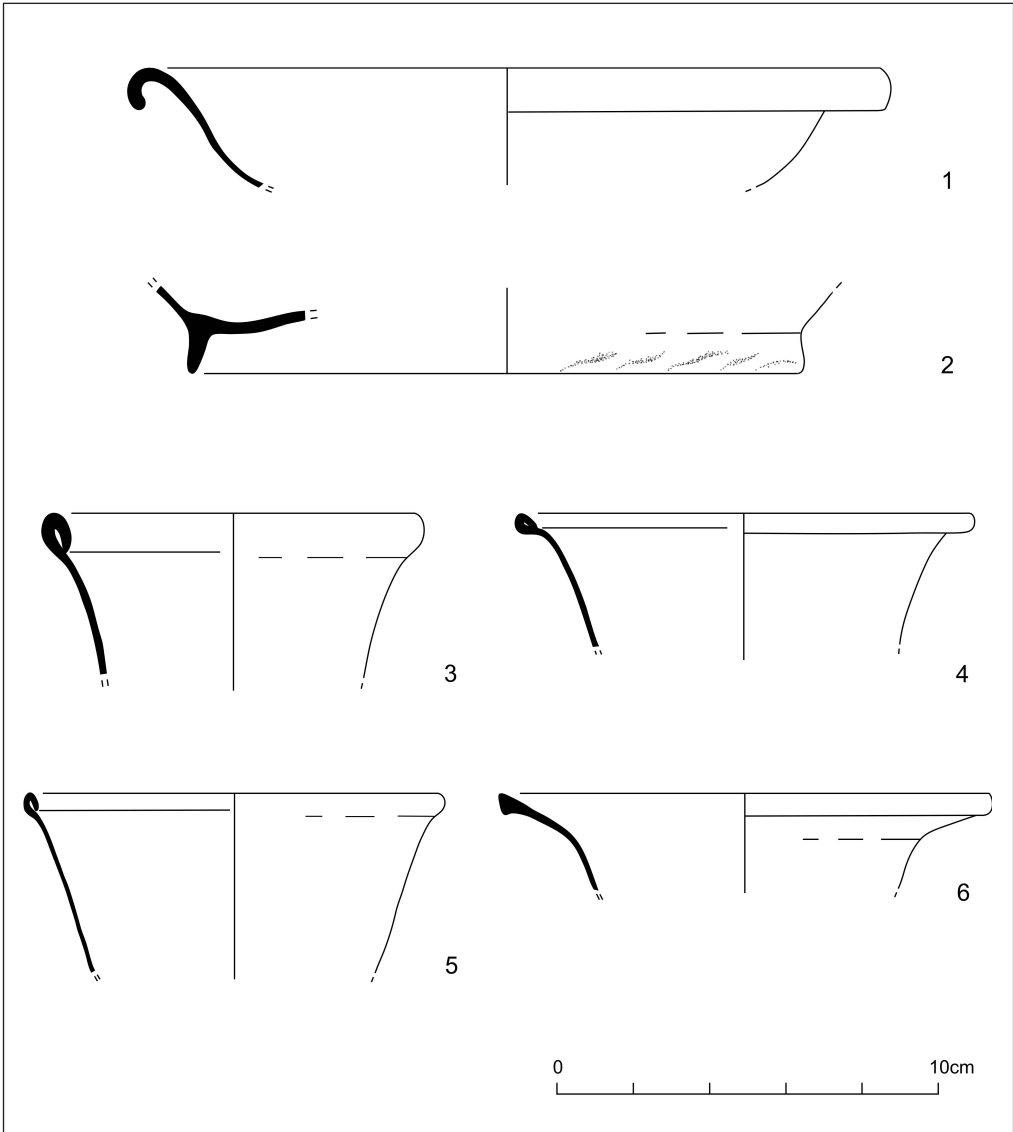


Fig. 5. Glass dishes from the eastern cistern in House 1

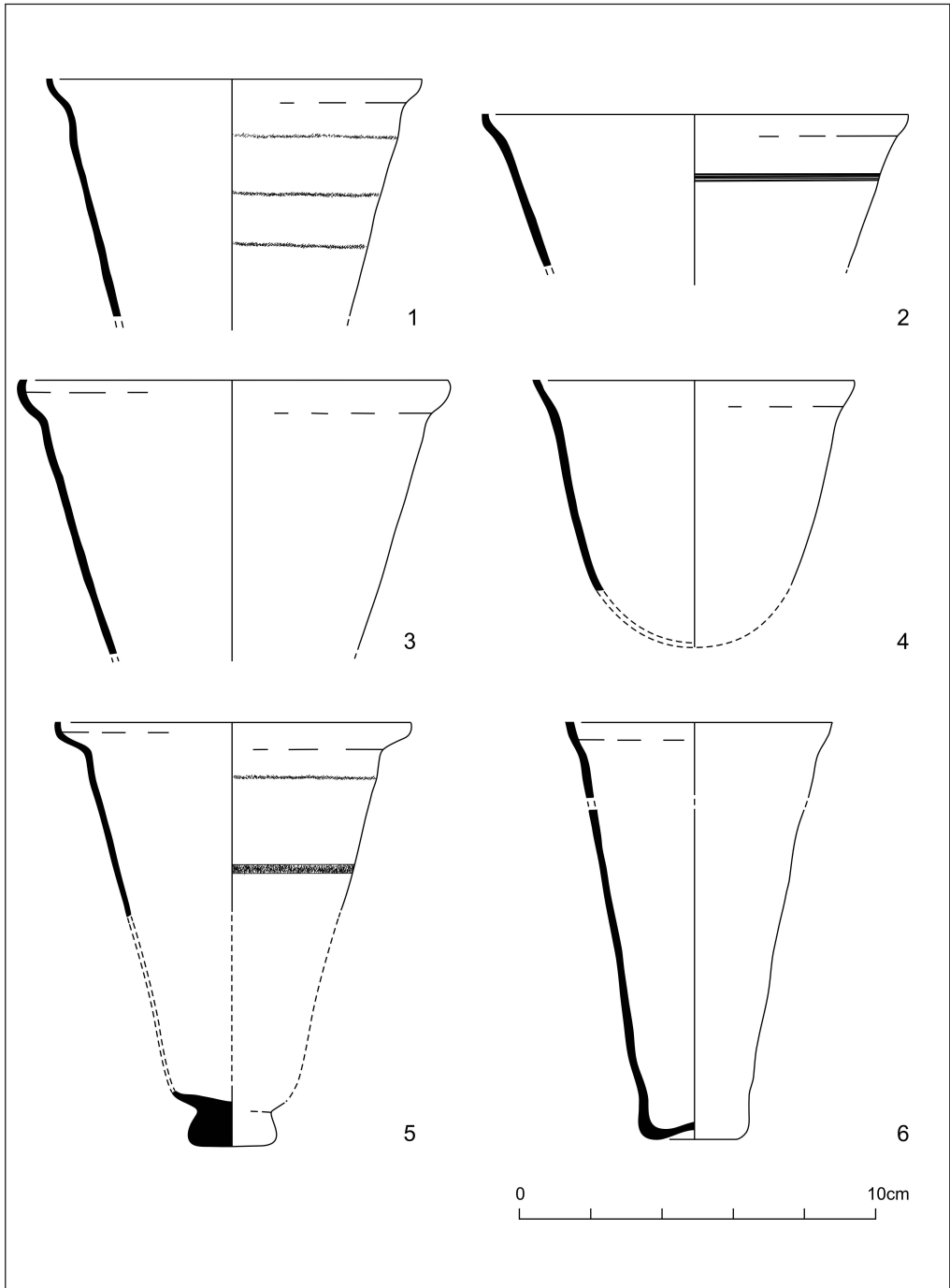


Fig. 6. Glass goblets from the eastern cistern in House 1

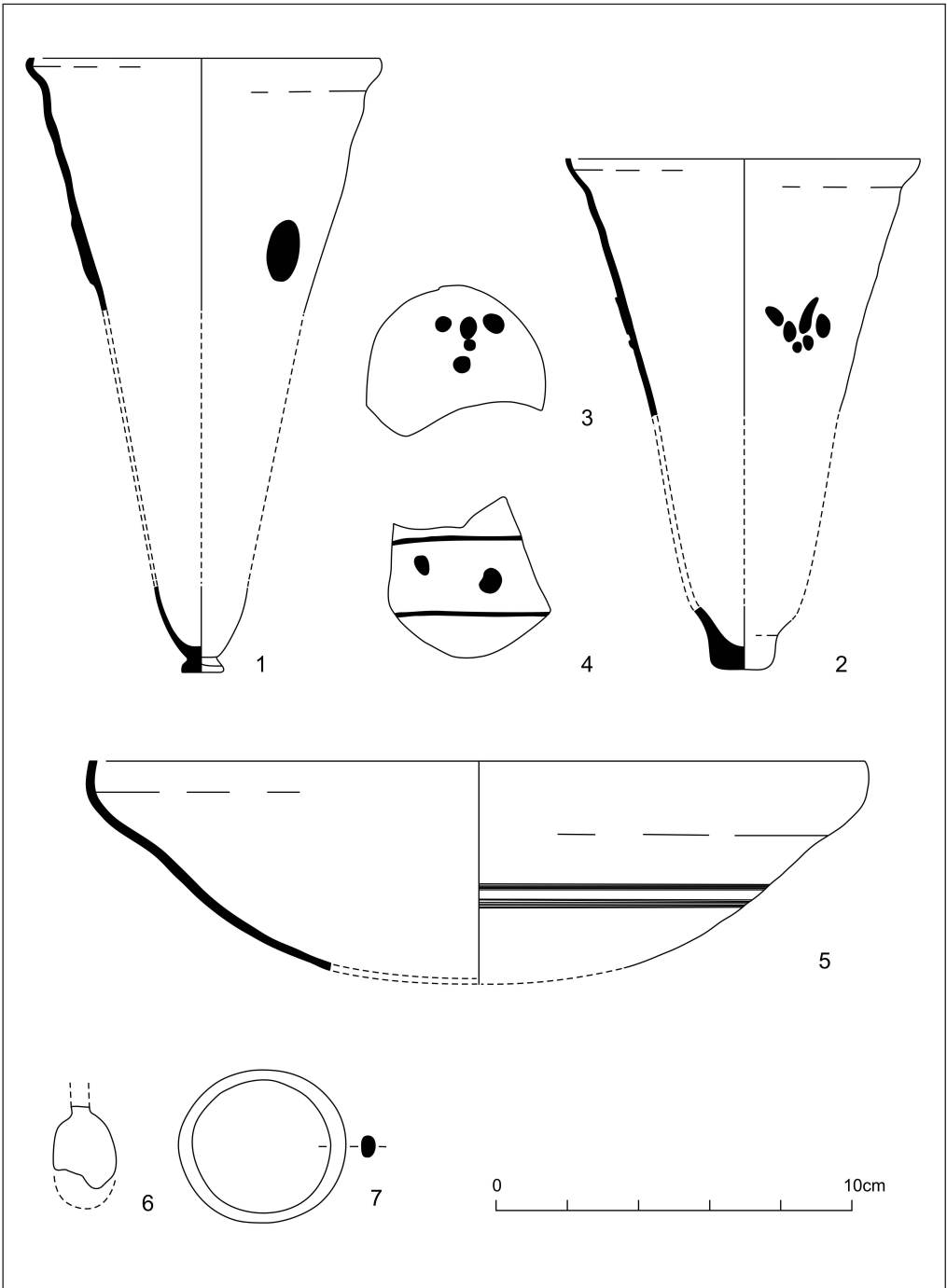


Fig. 7. Conical lamps from the eastern cistern in House 1

can be very narrow or thickened, slightly concave without pontil mark [Figs 6:5–6, 7:1–2].

Most of the recorded fragments are plain, but some ornamentation has been observed. Fine, slightly abraded lines have been recorded in conjunction with one of the most simple embellishments of the Roman period — protruding, elongate, round and oval blobs of green and dark blue glass fused onto the outer surface in uncomplicated patterns [Fig. 7:1–4]. In the West, the color scheme eventually moved beyond dark blue–green to include various combinations of green, brown and colorless. Commonly used as lighting fixtures in the Eastern Mediterranean, in the West they probably represent tableware.

The applied blobs on the fragments from the cistern are of different dimensions (ranging from less than 0.5 cm to approx. 2 cm) set in a single register and spaced out along it in roughly symmetrical way. They are arranged either in a simple line pattern or in groups forming roughly triangular forms, sometimes alternating with a single large blob. Alexandria offers the nearest parallel to the Marina finds (Kom el-Dikka, cf. Kucharczyk 2007: 46–48, Fig. 1 and references to other Egyptian sites). Fragments with applied colored blobs are also richly represented in the glass assemblage from Ptolemais in Libya (Kucharczyk forthcoming a).

This specific type of decoration is confined mostly to vessels with cracked-off rim, although fragments of bottles with applied oval blobs have also been observed (Gorin-Rosen 2004: 115–117, Fig. 2:12; Hayes 1975: 93, Pl. 22:312, three pairs of small turquoise prunts, early–mid 4th century AD).

In addition to the lamps, the cistern also produced a nearly complete shallow bowl

with cracked-off rim. The thickness of the vessel wall is fairly even with only minimal tapering towards a presumably rounded base. The decoration is confined to groups of narrow, finely abraded lines, arranged in pairs around the body [Fig. 7:5]. Recently, a similar vessel was excavated in Alexandria (cf. also Jennings [ed.] 2006: 92–93, Fig. 5.8, two bowls with fragmentary inscriptions on the lower wall/base).

Among the glass from the cistern there were some pieces formed by the non-blowing technique. Examples from the Early Roman period include utensils such as a fragment of spatula [Fig. 7:6] and a section of loose twisted spirally monochromatic rod (not illustrated). Such implements, fashionable in the 1st–2nd century AD, were used generally for cosmetic and pharmaceutical purposes, such as mixing and applying perfume and ointment stored in small glass flasks and jars. Additionally, the assemblage contained two pierced buttons, two small balls and some domical glass astragali. These forms have already been attested at the site, as well as on Kom el-Dikka in Alexandria (Kucharczyk 2005: 98–99, Fig. 3:10–11).

Finally, there are a few articles of personal adornment, like beads and a bracelet. A small, intact bracelet of opaque black glass belongs to Spaer's Type A2a: monochrome, undecorated, semi-circular section, rounded (Spaer 1988: 54). The bracelet is seamed and of uneven width, the inside bears signs of tooling [Fig. 7:7]. Of the two heavily weathered beads one represents *millefiori* glass: yellow canes in a green matrix. They are apparently of Alexandrian origin. Semi-products for *millefiori* glass manufacture, as well as many fragments of mosaic tiles used for decorating wall and furniture have been excavated at Kom el-Dikka in Alexandria (personal observation of the author).

GLASS FROM THE WESTERN CISTERN IN HOUSE 1

By contrast with the significant quantities of glass from the eastern cistern, the assemblage from the western one was limited in number and repertoire. The material attributed to the Early Roman period included a thick-walled colorless toilet bottle [Fig. 8:1], a thick-walled unguentarium base [Fig. 8:2], a tubular ring-base [Fig. 8:8], a segment of stirring rod, two balls and one button [Fig. 8:4-5]. One should mention also a few body fragments with cut decoration [Fig. 8:3] and ring bases from plates or bowls [Fig. 8:6-7].

large flat ovals and short, elongated cuts [Fig. 8:3].

Later forms include a fragment of flagon used for the transport and storage of liquid and semi-liquid substances. It features a plain flaring rim with rounded edge and thick, applied trail beneath the rim. The fragment preserves remains of two ribbed handles of the same color as the vessel [Fig. 8:6-7]. Moreover, bases with applied foot-ring trails [Fig. 8:9-10] and ring bases from plates or bowls [Fig. 8:11].

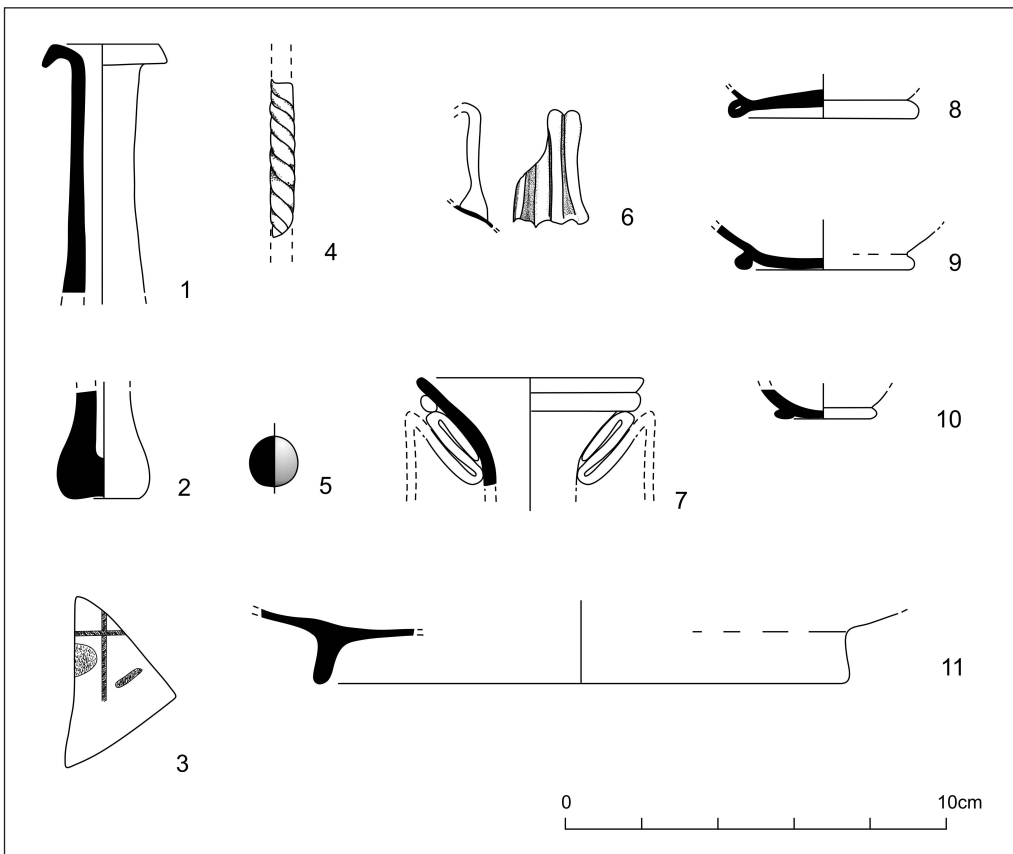


Fig. 8. Glass from the western cistern in House 1

GLASS FROM HOUSE 2

The small glass assemblage of the 1st–2nd century AD found in the fill in this building includes three fragments of pillar-molded bowls [Fig. 9:1, heavily corroded, made of strong colored purple glass], fragments of long-necked unguentaria [Fig. 9:4, 6, 9] and a small ball [Fig. 9:2].

Specimens associated with the 4th–5th century AD include the neck of a small toilet flask [Fig. 9:5], a deep bowl with horizontal looped rim [Fig. 9:10], a ring base [Fig. 9:11], and finally a sidewall of a conical lamp with applied green blobs and two types of bases [Fig. 9:3, 7–8].

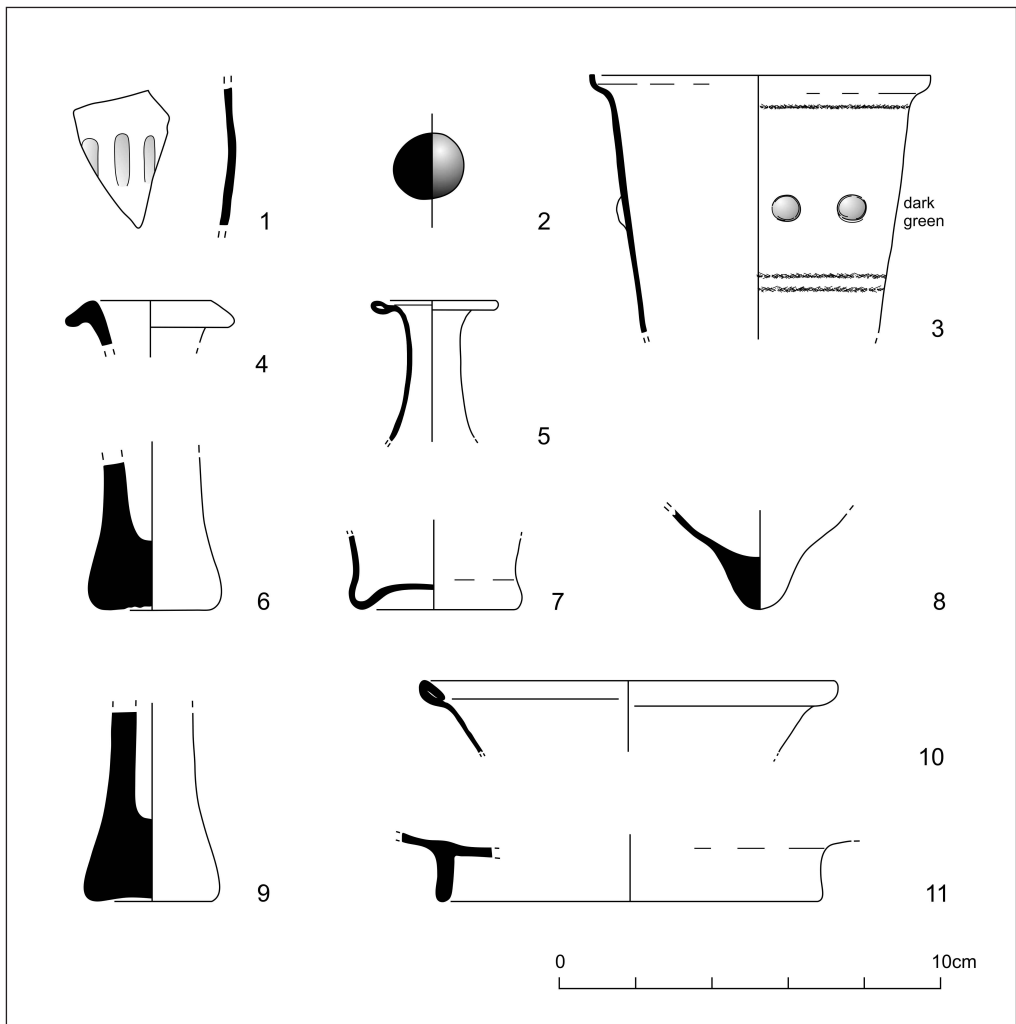


Fig. 9. Glass from House 2

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