*'Atiqot* 106, 2022

# "(Work) of CILO": An Impression of a Roman-Period Private Stamp from the Western Wall Tunnels

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## Introduction

A fragment of a clay tile impressed with a rectangular private stamp was discovered in the Western Wall Tunnels, approximately 50 m west of the Herodian Temple Mount and west of Wilson's Arch (Fig. 1; Plan 1).[1] The tile was found within a fill in a narrow, elongated vaulted tunnel (Tunnel 230; Plan 2: Section 1–1) and dated by its context to the time of Aelia Capitolina, in the Roman period.

### *The Archaeological Context*

Tunnel 230 (length 7 m, width 2.7 m, depth >5 m; bottom not reached; Plan 2)—the western of two adjacent, parallel elongated vaults (230, 240)—is integrated into the core of a wide dam wall built across the Tyropoeon Valley, at its confluence with its tributary, the Transversal Valley (Plans 1; 2). The dam wall (width 14 m, length >100 m) was probably built during the reign of King Herod or slightly later.[2] Tunnels 230 and 240 are located immediately north of the western hall of the magnificent Herodian building (21) constructed at the foot of the dam wall in the first third of the first century CE (Onn, Weksler-Bdolah

[1] Salvage excavations in the Western Wall Tunnels (Permit No. A-8276) were conducted on behalf of the Israel Antiquities Authority, at the initiative of the Western Wall Heritage Foundation and funded by it. They were directed by Shlomit Weksler-Bdolah, with the help of Vadim Essman (surveying) and Elena Delerzon (drafting). The small finds were treated in the IAA laboratories by Avshalom Karasik and Argita Gyerman-Levanon (digital documentation), Clara Amit (photography), Yoseph Bukgenholtz (tile cleaning) and Carmen Hersch (plate preparation). The site was previously excavated by Alexander Onn during 2007–2012 (see Onn, Weksler-Bdolah and Bar-Nathan 2011; Onn and Weksler-Bdolah 2016; Onn, Weksler-Bdolah and Patrich 2019), revealing a monumental ashlar building of the Herodian period (first century CE), which had been partly investigated in the past (Warren and Conder 1884:200–202; Bahat 2013:113–127).

[2] The dam wall (W5006 in Onn's excavations) was dated to King Herod's reign in the preliminary report (Onn, Weksler-Bdolah and Bar Nathan 2011) and, more recently, to the period from Herod's reign to the early first century CE (Weksler-Bdolah, forthcoming).

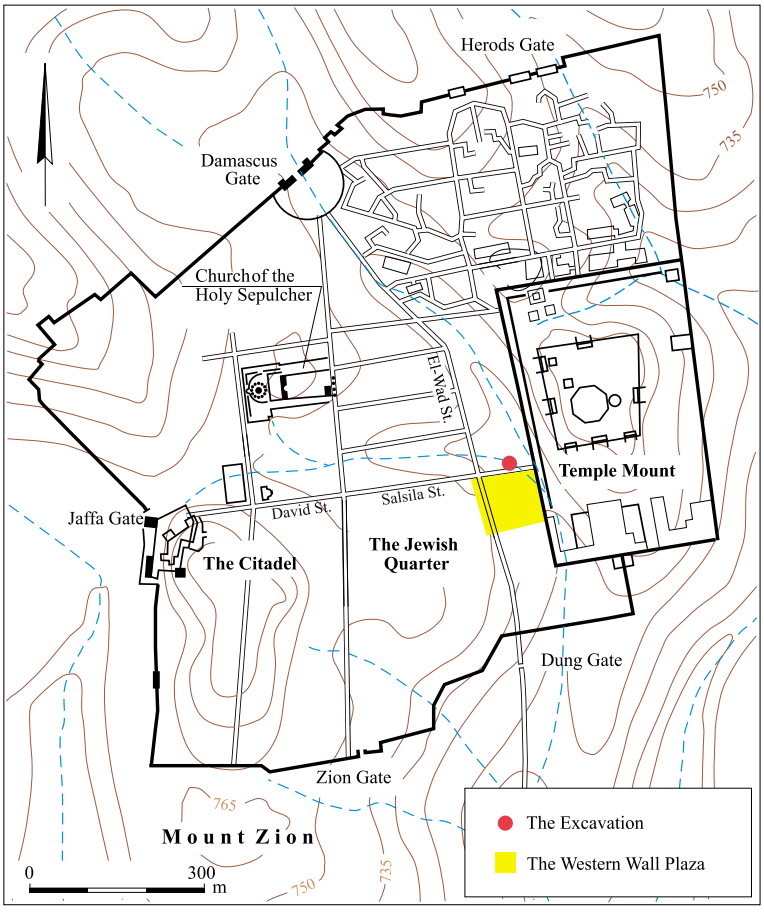
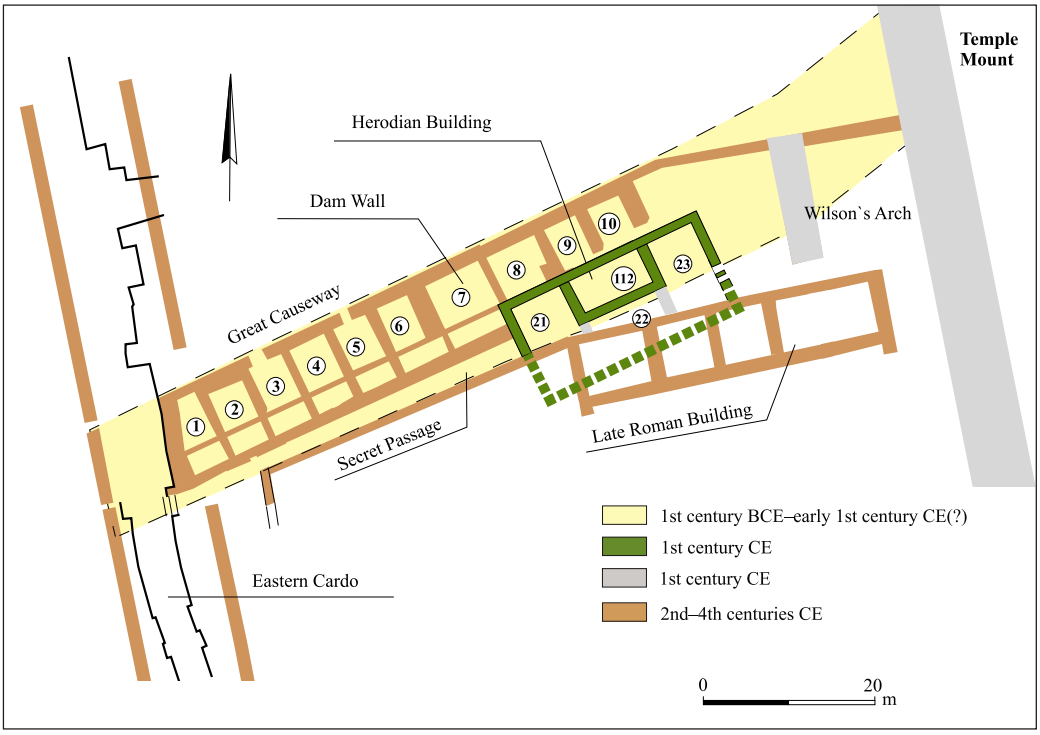



Fig. 1. Location map.

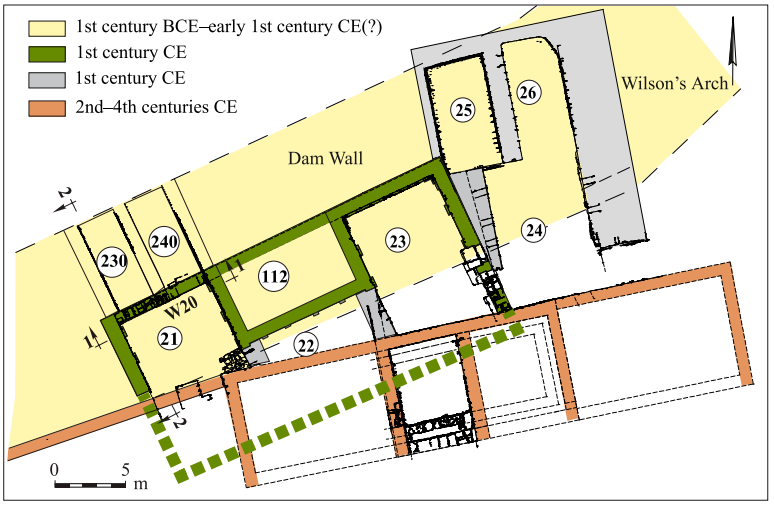
and Patrich 2019; Weksler-Bdolah, forthcoming). During the later decades of the Second Temple period, the Herodian building was divided into three separate rooms (Plan 2:21, 22, 23), and a spacious stepped water pool, identified as a ritual bath (*miqveh*), was installed in the westernmost one (Room 21). This *miqveh* and Tunnel 230 are connected by a narrow arch (W20; width 0.7 m, length 2.7 m; Plan 2: Section 2–2) built across the lower part of the southern end of Tunnel 230. It thus seems that Tunnel 230 and the *miqveh* were used contemporaneously in the final days of the Second Temple period. After 70 CE, and especially from the second century onward (during the time of Aelia Capitolina), a fill accumulated in the *miqveh* and in Tunnel 230. In the Byzantine period, two industrial pools were built in Room 21, above this fill, covering the room's entire area. In Onn's excavations, a packed floor (L23003; 722.10–722.25 m asl) was reached in Tunnel 230. This floor was found below a fill containing sixth–eighth-century CE potsherds and coins (Ariel, forthcoming: IAA Nos. 135044–135048, 135050–135051; Cat. Nos. 6.3–6.9), setting the floor's *terminus ante quem*.

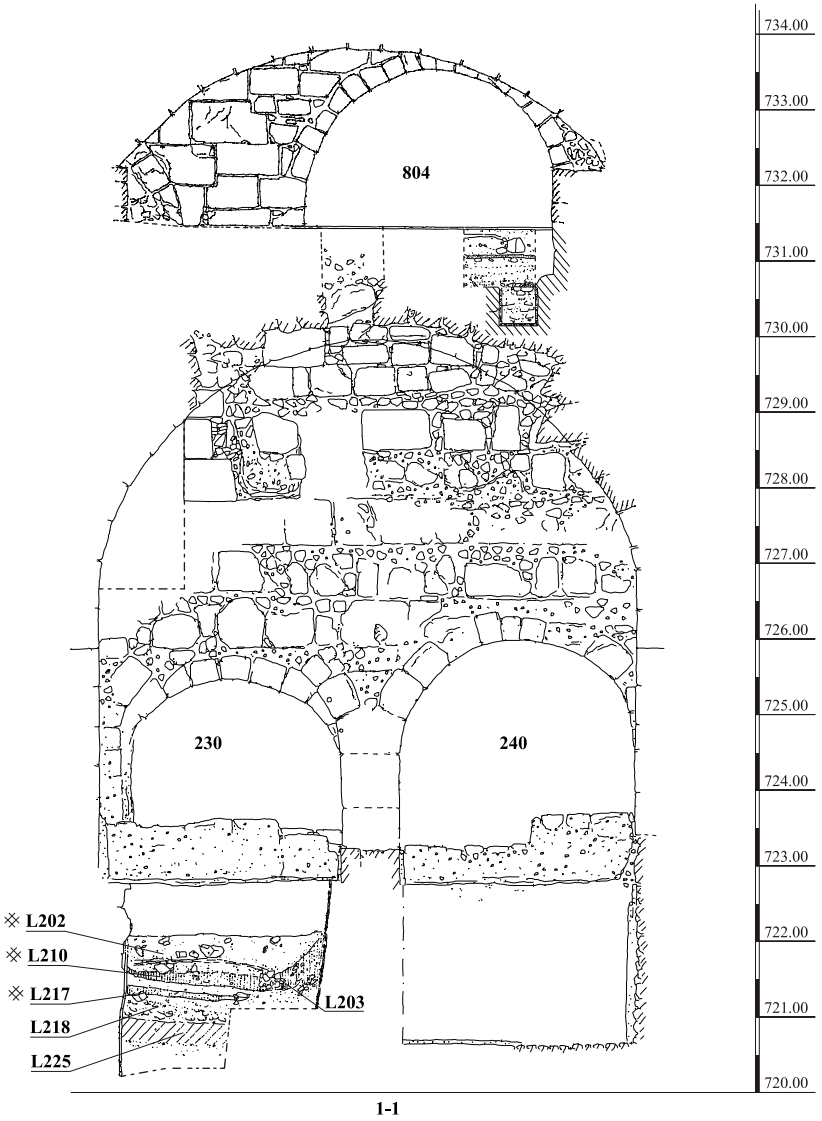



Plan 1. The Great Causeway and Wilson's Arch.

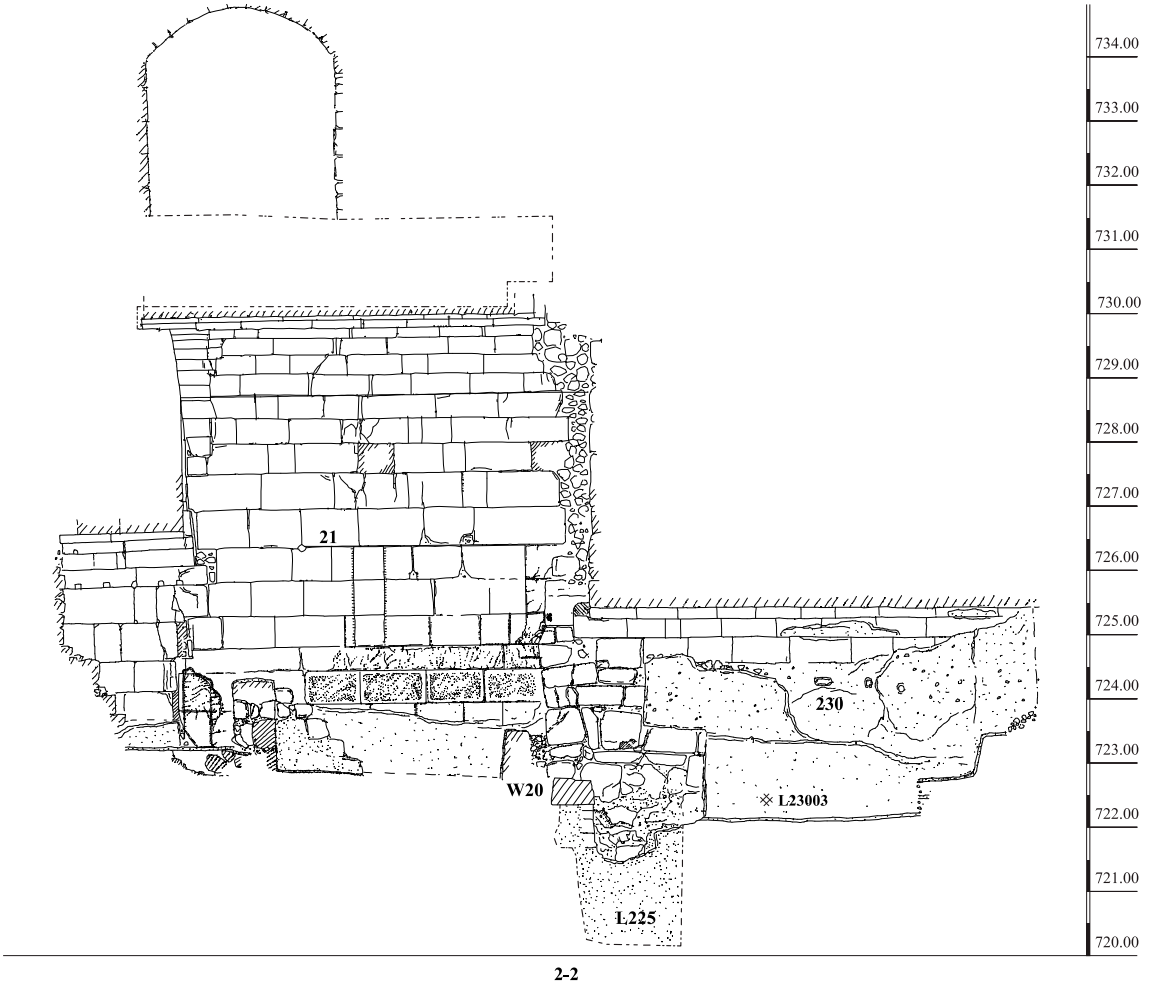
During 2018, the excavation within Tunnel 230 was deepened about 2 m below the elevation of Onn's excavations. A small probe at the southern end of Tunnel 230 (Plan 2: Sections 1–1, 2–2; 2.7 × 1.5 m), immediately north of and adjacent to Archway 20, cut through fill layers but did not reach the bottom of the tunnel. Patches of three whitewashed, possibly plastered, consecutive surfaces—L202 (721.8 m asl), L210 (721.6 m asl) and L217 (721.3 m asl)—were uncovered. Between L202 and L210 a layer containing roof-tile fragments and some stones (L203), possibly the remains of an undefined installation near the eastern wall of the tunnel, was uncovered, protruding slightly above the level of L202. Below Floor 217 was another fill layer (L218). Due to the high moisture content of the sediments, we could not determine whether these layers were the remains of floors or installations, or destruction debris of undetermined features. The near absence of animal bones—though possibly due to the moisture—may indicate that the fill in Tunnel 230 was deposited deliberately. Nevertheless, the patches of whitish floors, and possible remains of installations, suggest that some activity was carried out inside the vaulted tunnel, perhaps for tamping down the fills.

The ceramic assemblage from these levels included fragments of imported amphorae and plain household vessels, reflecting daily life: basins and cooking utensils, casseroles and lids, jars and jugs, typical of the third/early fourth century CE (see below).




Plan 2. Tunnel 230 in its architectural context, plan and sections.




Plan 2. (cont.).

## The Stamped Impression

One of the broken roof tiles from Fill 203 (Fig. 2) is impressed with a stamp in Greek, marking the name of the potter, or the owner of the workshop in which this tile was manufactured. The fragment measures max. 18 × 18 cm and is 2 cm thick. The stamp is 9.7 cm long and 3 cm wide, and the letters stand in relief against the sunken background (depth 0.3–0.4 cm).

The inscription consists of six letters, 2.5–3.0 cm high, divided into two groups of three. There is almost no space between the letters in the first and second groups, only a slight gap (c. 0.8 cm; measured at the foot of the letters *iota* and *lambda*). The letters read ΚΕΙΛΛΟ. The *epsilon* is lunate; the *omicron*, whose bottom half is lost in the break, is narrow; the two *lambdas* are in ligature, with the smaller one attached to the left leg of the larger one.

The diphthong -ει- represents the common spelling in the Roman period and in late antiquity of a long-accented /I/ (e.g., Μαρεῖνος for Marînus). The name can be interpreted

Fig. 2. The stamped CILO tile.

in two different ways: it may be the Greek name Κίλλος or Κίλλης, found in Asia Minor and in the Aegean (see *SEG* 42: No. 1780; 63: No. 914), in which case the name on the stamp should be read in the genitive Κίλλο(υ). Alternatively, and more likely, it may be the Latin name Cilo, genitive Cilonis (pronounced Kilo, Kilonis), rendered in Greek as Κίλων, genitive Κίλωνος, with one *lambda*, or Κίλλων, Κίλλωνος, with two, for the reduplication of L in the Greek transcription of Latin names is not unknown (e.g., Παῦλος/Παῦλλος, Ἰοῦλος/Ἰοῦλλος). Also common is the exchange of the *omega* with *omicron* in the declined name: see, for instance, Ζήνων (Latin Zeno, genitive Zenonis), Ζήνωνος or Ζήνονος and so on. The Latin name Cilo is a *cognomen*, the last of the *tria nomina* of a Roman citizen, and the one that distinguished him from the other male members of his family since the first century CE. Examples abound in Latin inscriptions of the first three centuries, from Rome, Italy, Spain and Portugal, belonging to private citizens, senators and provincial governors.[3] There were also soldiers with this *cognomen*: Aulus Rutilius Cilo, *optio speculatorum* (a soldier assigned to administrative tasks, in this case in a unit of legionary scouts), who set up an inscription in the Delta of Egypt, honoring the prefect of Egypt in 117–119 (*AE*

[3] For some examples (out of many), see *AE* 1936: No. 124; 1969/70: No. 138; 1982: No. 90; 1983: No. 476; 1984: No. 41; 1985: No. 530; 1988: No. 30. A famous Cilo was Lucius Fabius Cilo Septiminus Catinius Acilianus Lepidus Fulcinianus, twice consul in 193 and 204 CE, governor of several provinces and urban prefect. He was a friend of Septimius Severus and is mentioned in several inscriptions as well as in literary sources. Cassius Dio (*Historia Romana* LXXVII:4–5) gives a bloodcurdling account of his attempted murder at Caracalla's orders. For his career, see *PIR*$^2$: F 27.

1898: No. 91); and another, mentioned on a bronze military tag dated to the second–third centuries CE, found in Yorkshire (Britain), reading I *(centuria) Q(uinti) Atti Cilo(nis)* (*AE* 1988: No. 849). A Roman citizen with this *cognomen* is attested also in Greek in an inscription from Athens where the *demos* honors one Λεύκιος Γράττιος Κίλων (*SEG* 3: No. 241).[4] While the Greek name Κίλλος or Κίλλης is rare, the Latin *cognomen* is common, and given the circumstances, the potter is more likely to have had a Latin name transcribed in Greek, which was more easily read than Latin in Jerusalem at the time. In this particular case, another reason may have been that had Cilo stamped his name in Latin letters, the initial C might have been confused with a lunate *sigma*, and his name would have been mispronounced Silo.[5]

We therefore suggest reading the stamp Κείλλο(νος), "(Work) of Cilo". This indicates that the tile was the product of a private workshop, unconnected to the legionary kilns. This is not the only example of the private production of ceramic building material. At least eight workshops that stamped their products with Greek names (*CIIP* I/2:568–569, App. 52*) flourished in the first half of the fourth century CE, in the burst of activity following Constantine's decision to build churches in Jerusalem and to transform the Roman colony into the focus of Christian religious life. And, even before that, bricks stamped with IUL (Aharoni 1962:26, Pl. 23:9, Fig. 19:2; Tepper, Bocher and Koch 2016:470) and an example of a roof tile stamped in Greek with the name Ἰούλι(ο)ς (Mazar 2011:158–160; Di Segni 2011; *CIIP* I/2:554) point to the activity of earlier, private workshops. Their role in the history of rebuilding Jerusalem will be discussed below.

## Petrographic Analysis of the Stamped Tile

The raw material of the stamped CILO tile is characterized by an optically active matrix with optically active clayey nodules. The nonplastic components comprise c. 30% of the paste and include abundant fine silt-sized rhombohedral dolomite crystals and a few sand-sized dolostone fragments (Fig. 3). This raw material is derived from a marl unit of the Moẓa Formation—a c. 10–20 m thick stratum consisting of clay and marl units (Arkin, Braun and Starisky 1965:18; Sass and Oppenheim 1965; Bentor 1966; Scarpa 1990). This formation is exposed over vast areas in the Judaean and Samarian Mountains (Arkin et al. 1997; Sneh, Bartov and Rosensaft 1998; Sneh and Avni 2011) and was extensively used for pottery production (e.g., Cohen-Weinberger, Levi and Be'eri 2020). Two groups derived from the Moẓa Formation were identified in petrographic studies of pottery from

[4] Lucius Gratius Cilo—another example of reduplication of a consonant in the transcription of a Latin name to Greek.

[5] Cilo may have stamped some of his products also in Latin. A tile fragment from the Giv'ati Parking Lot excavation (Stratum VI, sealed by the 363 CE earthquake) shows the upper half of two letters, possibly CI -. They may be a lunate E and an L, and, if so, part of a stamp of the type reading [Col(onia) A]el[ia C(apitolina (Mazar 1971:5, 11, Fig. 6:1–3; Bahat 2013:368–369, Pl. 10:13); however, it cannot be excluded that they represent the beginning of the name Ci[lo] in Latin (Di Segni, forthcoming).

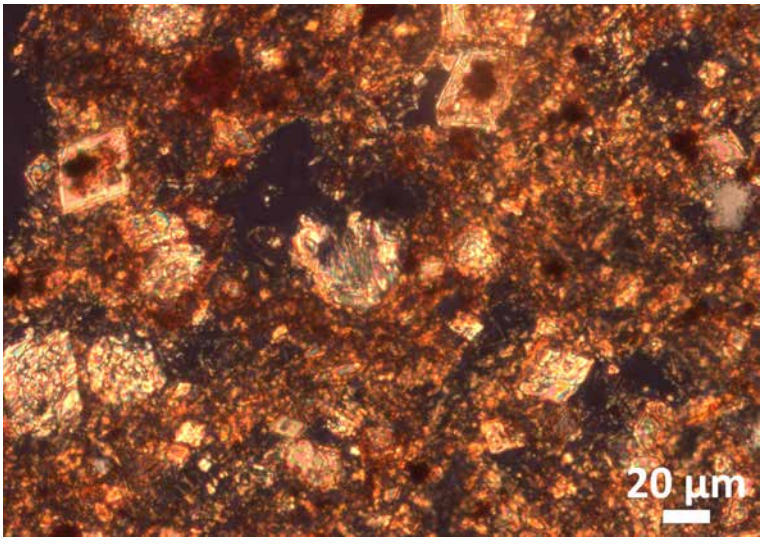



Fig. 3. Photomicrograph of the CILO tile; silt-sized dolomite crystals embedded in the matrix (cross polarized light).

the Jerusalem area: Moẓa clay and Moẓa marl.[6] The Moẓa marl, characterized by abundant silt-sized rhombohedral dolomite crystals (e.g., Goren 1995), was used for the production of the stamped tile.

A previous study pointed out that the legionary/military workshop at Binyene Ha-Umma and Crowne Plaza Hotel used a specific geological marl unit of the Moẓa Formation and a unique clay recipe, based on the addition of quartz grains to the paste in the production of ceramic building materials (Cohen-Weinberger, Levi and Be'eri 2020). Notably, the marl unit used for our tile is different from that used by the legionary potters at Binyene Ha-Umma, clearly indicating that the tile was not produced in their workshop. This may be either of chronological significance, suggesting the tile was produced later than the legionary products, or, alternatively, may point to a different, contemporary workshop of ceramic building materials.

The marl unit of which the stamped tile was produced was widely used for ceramic production in the area of Jerusalem. Fine ware, as well as utilitarian vessels, both found in the Roman dump at the Western Wall Plaza and attributed to Roman soldiers of the Tenth Legion, were made of this marl (Cohen-Weinberger and Rosenthal-Heginbottom 2019). The use of Moẓa marl, therefore, is not sufficient to identify Cilo's specific workshop but indicates that it was not part of the military workshop that operated at Binyene Ha-Umma.

[6] Detailed geological columns of the Moẓa Formation point, however, to a more complex picture of its composition, which includes various clay and marl units with intercalations of thinly bedded fossiliferous limestone, and to the existence of facial changes between different sections of the formation (e.g., Arkin, Braun and Starinsky 1965:16–17; Bentor 1966; Rosenfeld and Hirsch 2005).

## The Pottery Assemblage (Figs. 4, 5)

The pottery assemblage found together with the stamped tile in Fill 203 and the assemblages recovered above and below it in Loci 202, 210, 217 and 218 are homogenous in nature, with potsherds in all five loci spanning the same period of time. This may indicate that the different contexts were formed or deposited shortly one after the other. The pottery assemblage is characterized by local vessels—especially basins, cooking ware and storage jars—but presents a few imported amphorae as well.

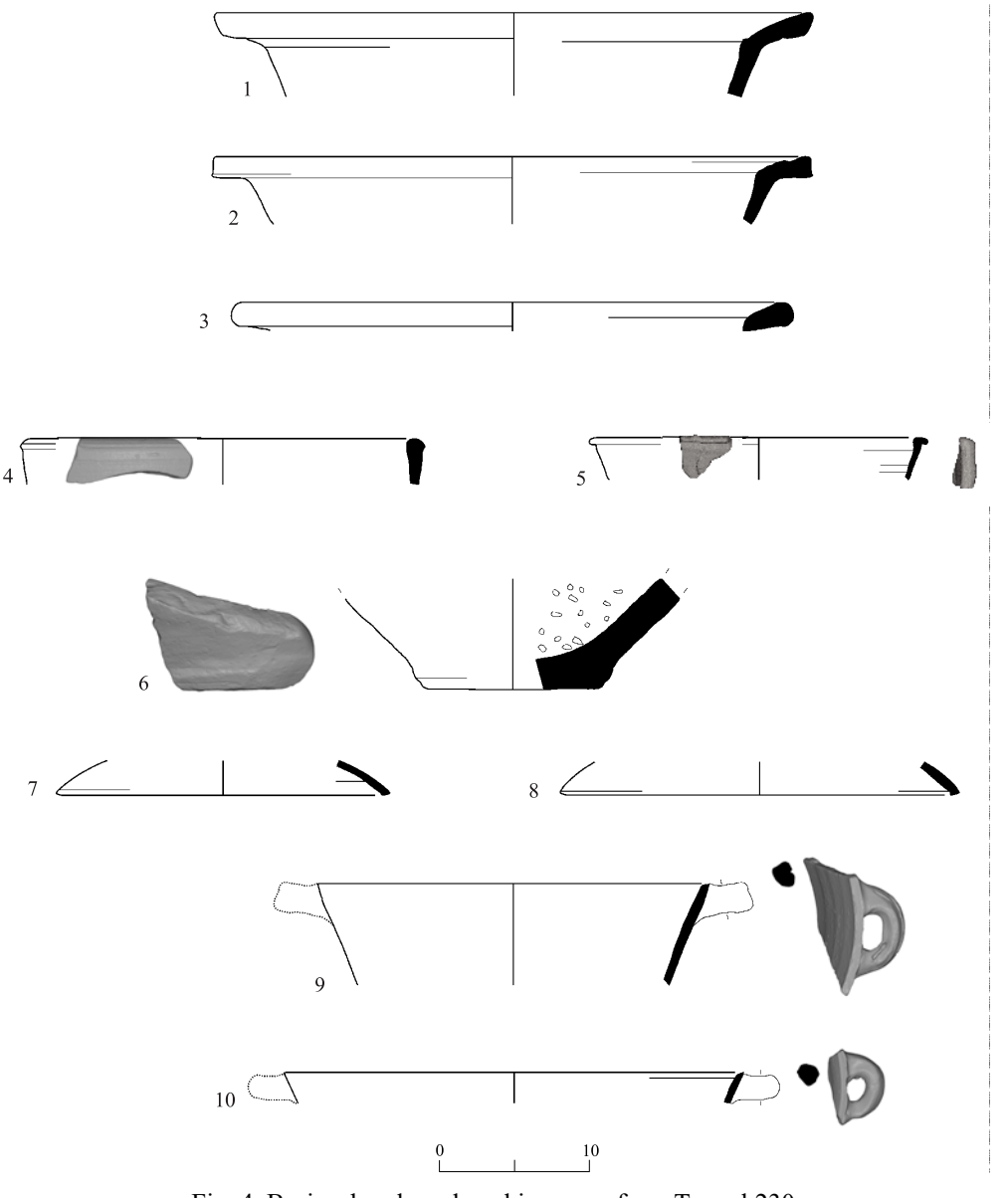



Fig. 4. Basins, bowls and cooking ware from Tunnel 230.

◂ **Fig. 4**

| No. | Vessel | Locus | Basket | Description | Parallels and Dates |
|---|---|---|---|---|---|
| 1 | Basin | 203 | 2005 | Light red (2.5YR 6/6) | Magness 1993:202, Shelf-Rim Basins (late 1st/2nd to 3rd c. CE)<br>Binyene Ha-Umma (Magness 2005:147, Fig. 27:3, 4; 2nd c. CE) |
| 2 | Basin | 218 | 2035/2 | Pink (7.5YR 7/4), gray core | As No. 1 |
| 3 | Basin | 218 | 2039/6 | Pinkish gray (7.5YR 7/2) | As No. 1 |
| 4 | Basin | 218 | 2036/10 | Very pale brown (10YR 7/3) | Western Wall Plaza (Rosenthal-Heginbottom 2019:173, Cat No. 353; 75–125 CE) |
| 5 | Bowl | 218 | 2035/4 | Light red, thin wall, gray core (2.5YR 6/6) | Western Wall Plaza (Rosenthal-Heginbottom 2019:170, Cat. Nos. 244, 245, 249; 75–125 CE)<br>Wilson's Arch (Uziel, Lieberman and Solomon 2019: Fig. 10a:2, Stratum 5b; 2nd–3rd c. CE) |
| 6 | Mortarium | 203 | 2005/1 | Light red (2.5YR 6/6), gray core, basalt grits on int. | Binyene Ha-Umma (Magness 2005:151–152, Fig. 30:6; 2nd c. CE) |
| 7 | Casserole lid | 203 | 2028 | Red (2.5YR 5/6) | Western Wall Plaza (Rosenthal-Heginbottom 2019: Cat. Nos. 695–700; late 1st/early 2nd–3rd c. CE) |
| 8 | Casserole lid | 218 | 2095/5 | Red (2.5YR 5/6) | As No. 7 |
| 9 | Casserole | 218 | 2036/4 | Red (2.5YR 5/6) | Western Wall Plaza (Rosenthal-Heginbottom 2019: Cat. No. 680; late 1st/early 2nd–3rd c. CE)<br>Binyene Ha-Umma (Magness 2005: Fig. 19:8; 2nd c. CE)<br>Caesarea (Bar-Nathan and Adato 1986:164, Fig. 2:15; 2nd–3rd c. CE) |
| 10 | Casserole | 203 | 2028/4 | Red (2.5YR 5/6) | As No. 9 |

The deep basins (Fig. 4:1–3) have a thick, oblique shelf rim. Another basin (Fig. 4:4) has a slightly rounded body and a combed band decoration on its exterior wall. Figure 4:5 is a fine ware bowl with thin walls and an out-turned rim, and Figure 4:6 is a mortarium with a flat base and thick walls. It is made of coarse, gritty ware, with basalt particles that protrude from the interior surface, making the vessel fit for grinding.

The cooking ware includes casseroles/frying pans with horizontal handles and a beveled rim (Fig. 4:9, 10) and lids with a beveled rim (Fig. 4:7, 8).

There are several storage-jar types in the assemblage: Figure 5:1, 2 have an out-folded rim. Another jar (Fig. 5:3) has a vertical neck with a ridge at its base and a slightly incurved simple rim, and yet another (Fig. 5:4) is wide-necked with an everted, hook-shaped rim. Figure 5:5 is a ridged-necked jar with no parallels, and Fig. 5:6, 7 presents Gaza jars, with a simple, thickened rim that has a ridge at its base. In the assemblage is also a large pithos

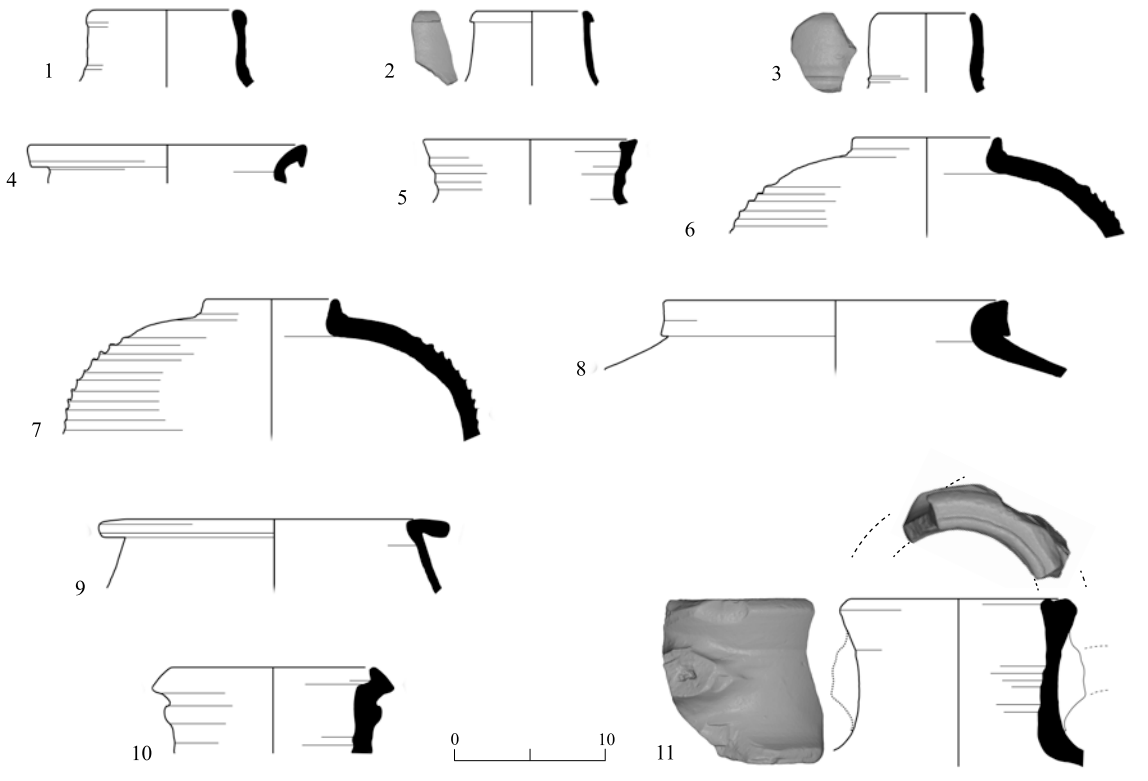



Fig. 5. Storage jars, pithos and amphorae from Tunnel 230.

| No. | Vessel | Locus | Basket | Discription | Parallels and Dates |
|---|---|---|---|---|---|
| 1 | Storage jar | 203 | 2028/2 | Light red (2.5YR 6/6) | Western Wall Plaza (Rosenthal-Heginbottom 2019:584; 75–125 CE)<br>Wilson's Arch (Uziel, Lieberman and Solomon 2019: Fig. 10b:7; Stratum 5b, 2nd–3rd c. CE) |
| 2 | Storage jar | 203 | 2028/3 | Pink (5YR 7/4) | As No. 1 |
| 3 | Storage jar | 218 | 2039/9 | Pink (7.5YR 7/4) | Magness 1993: Form 4a (3rd and 4th c. CE) |
| 4 | Storage jar | 217 | 2053/5 | Light red (2.5YR 6/6) | Magness 1993:235–236, Wide-Necked Jars, Form 2 (3rd–5th c. CE) |
| 5 | Storage jar | 202 | 2004/1 | Light red (2.5YR 6/6) | |
| 6 | Storage jar | 210 | 2019/4 | Reddish brown (2.5YR 5/3) | Oked 2001:233–236, Type 3 (2nd–3rd c. CE)<br>Majcherek 1995:166–168, Form 2 (300–450 CE)<br>Onn's excavations in the Great Causeway (Bar-Nathan, forthcoming; 2nd c.–363 CE) |
| 7 | Storage jar | 203 | 2028/1 | Reddish brown (2.5YR 5/3) | As No. 6 |
| 8 | Pithos | 218 | 2039/1 | Pink (5YR 7/4) | Cave of Letters (Yadin 1963: Fig. 43:12a, Pl. 33:12a; late 1st–early 2nd c. CE)<br>Wilson's Arch (Uziel, Lieberman and Solomon 2019: Fig. 10b:6; Stratum 5b; 3rd c. CE) |
| 9 | Storage jar | 218 | 2085/1 | Pink (5YR 7/4) | Magness 1993:235, Wide-Necked Jars, Form 1 (3rd to 5th c. CE) |
| 10 | Amphora | 218 | 2036/8 | Reddish yellow (5YR 6/6) | Ashqelon (Johnson 2008:168–169, San Lorenzo Amphora 7: Nos. 472–475; suggested range: 3rd/4th–6th c. CE) |
| 11 | Amphora | 218 | 2036/1 | Very pale brown (10YR 8/3) | Ashqelon (Johnson 2008:185, No. 529; unclassified amphorae; "Roman–Late Roman periods" [sic]) |

(Fig. 5:8) with a wide mouth and a thick folded rim. Figure 5:9 has a wide yet very short, splayed neck that terminates in an everted ledge rim.

The imported amphoras (Fig. 5:10, 11) have no good parallels but share some similarities with types from Ashqelon. The Roman nature of the assemblage in which they were discovered dates them to the third or fourth century CE.

The pottery assemblage from Tunnel 230 is similar to characteristic Late Roman pottery assemblages from Aelia Capitolina that date to the second and third/early fourth century CE. Similar assemblages were recently studied: from Onn's excavations in the Great Causeway (Bar-Nathan, forthcoming) and from Wilson's Arch Stratum 5 (Uziel, Lieberman and Solomon 2019). As all types from Tunnel 230 find parallels in second- and third-century CE assemblages, and types common in assemblages of the Early Byzantine period (fourth century CE) are distinctly absent, the chronological range of our assemblage narrows down mainly to the third century CE. The stamped tile, which was found broken and dumped in this fill, was probably produced during the second or early third century CE at the latest.

## Discussion

The use of ceramic building materials was introduced in Jerusalem by the Tenth Legion and became common after the year 70 CE. Hundreds of roof tiles, bricks and ceramic pipes, which were manufactured in the legionary workshop at Binyene Ha-Umma, are known from Aelia Capitolina and its hinterland. Many of them are stamped with the abbreviated form of the name of the Tenth Legion (Legio X Fretensis)—LXF, LEGXF (Barag 1967; Geva 2003; Adler 2011; Levi and Be'eri 2011; Goldfus and Arubas 2019 and references therein). However, as the military workshop at Binyene Ha-Umma stopped manufacturing around the late second–early third centuries CE (according to Geva 2003:411; Magness 2005:104; Be'eri and Levi 2019:204–205), it is reasonable to assume that private workshops, possibly of veterans who served as soldiers in the Binyene Ha-Umma workshop, began to supply construction products to the city.

The tile bearing the name Cilo—a name not previously encountered in Jerusalem's archaeological record—marks either the name of the potter, (work of) Cilo, or the name of the owner of the workshop that manufactured this tile. The CILO impression joins a few other private stamps of the Late Roman period (second and third/early fourth century CE) reported from Jerusalem and its environs in the past. A roof tile impressed with a large stamp (25.0 × 5.7 cm) bearing a retrograde impression reading ΙΟΥΛΙΣ, Ἰούλι(ο)ς (Julius), in Greek, was discovered in B. Mazar's excavations, on the floor of the Roman bakery near Robinson's Arch, together with small finds dated to the third and fourth centuries CE (Di Segni 2011; Mazar 2011:158–160; *CIIP* I/2:554).[7] According to Di Segni (2011:235–236), Julius may have been a veteran soldier who had learned the tile-making trade during his

[7] Another possibility is that the large impression of Julius was actually mold-made and not stamped.

army service, and, after being discharged, had settled in Aelia Capitolina or in its vicinity and set up his own business. Cilo may have taken the same path. Another IUL impression on a brick—possibly an abbreviated form of the same name, Julius, though not necessarily of the same workshop as the tile from Robinson's Arch—was found in a Roman bathhouse at Ramat Raḥel, dated to the second half of the second century or to the early third century CE (Aharoni 1962:26, Pl. 23:9, Fig. 19:2). Three more fragments of bricks impressed with the letters IUL, which were incorporated into the bathhouse floor at Ramat Raḥel, are mentioned in the final report of the site (Tepper, Bocher and Koch 2016:470). Six more IUL impressions were petrographically analyzed and discussed by Cohen-Weinberger, Lieberman and Szanton (2022). These finds should not be confused with the aforementioned later production of tiles inscribed with Greek names, which flourished in the early fourth century (*CIIP* I/2:568–569, App. 52*).

The private stamps of the Roman period, which have so far been a rare find (particularly in comparison with the large quantities of building materials impressed with Tenth Legion stamps), can be cautiously assigned to private workshops that operated in Jerusalem after production had ceased in the military workshop at Binyene Ha-Umma. It is possible, however, that private workshops were founded even before 200 CE, contemporary with the military workshop.

In addition to personal stamps, carrying the name of either the potter or the workshop owner, another group of stamps, impressed with the letters CO[L..]—possibly noting the colony of Aelia Capitolina—was found in late third–fourth-century CE fills along the Great Causeway. Such impressed tiles were found in Onn's excavations (Room 8, Stratum 8, L8015, L8039; Bar-Nathan, forthcoming), and one fragment, impressed with CO AEL[C], was found by Bahat (2013:368–369, L552, Pl. 10:13). A larger group of similar impressions was recently reported from Wilson's Arch excavations (Lieberman et al. 2022), and a few bricks impressed with C(olonia) AEL(ia) C(apitolina) were reported in Mazar's excavations to the south of the Temple Mount (Mazar 1971:5, 11, Fig. 6:1–3).[8] A broken tile with the letters OL—part of a possibly similar impression of which the beginning and end are apparently lost—was recovered from the 'Ofel (Macalister and Duncan 1926:167–168, Fig. 170).

## Summary

The CILO tile joins a growing group of impressed building material fragments that have been discovered in Jerusalem and dated to the period of Aelia Capitolina, adding to the well-known corpus of legionary stamps from the workshop at Binyene Ha-Umma. Several stamp types from this period have been identified so far in the area of Jerusalem: legionary

[8] Bar-Nathan thanks Peretz Reuven for drawing her attention to these stamp impressions from Mazar's excavations at the 'Ofel.

stamps, IUL stamps and COL AEL[C] stamps, as well as the CILO stamp and a ΙΟΥΛΙΣ stamp. Notably, most stamps are inscribed in Latin, or bear Latin names spelled in Greek.

At this stage, it is not yet possible to determine whether the various private workshops were contemporaneous or appeared one after the other. The stratigraphic contexts from which the finds were retrieved at the various sites, and their chronological affiliation, indicate an increase in the prevalence of private impressions in the third century CE. It can therefore be cautiously suggested that the cessation of building material production in the legionary kilns at Binyene Ha-Umma sometime in the late second/early third century CE, and the growing need for building materials in the new developing city, encouraged the emergence of private pottery workshops from the third century CE onward. Nevertheless, as stated earlier, it is possible that a few private pottery workshops existed as early as the second century CE.

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