

THE “COMMODUS GATE” AT UMM AL-JIMĀL, EXCAVATION IN PREPARATION FOR PRESERVATION: UMM AL-JIMĀL PROJECT FIELD SEASON, MAY 28-JUNE 20, 2015

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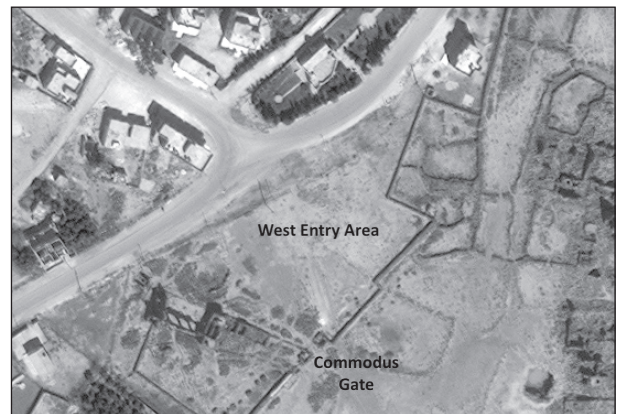
Introduction

The excavation and documentation of the ‘Commodus Gate’ at Umm al-Jimāl is part of a larger scheme: the development of the West Entry Area, a triangle that comprises the Commodus Gate, West Church and an open piece of land between the ancient Roman-Byzantine wall and the modern community. These three features combined will be developed as a landscaped park that will serve as a two-way gateway: an entrance from the community into the ancient site and from the ancient site into the community. The Commodus Gate itself will serve as the doorway onto an interpretive trail that will lead visitors on a signed tour of the antiquities, with a stop at the Interpretive and Hospitality Center that is being created at House 119 in the SSE sector of the antiquities.

The Commodus Gate excavation and conservation was carried out by the Umm al-Jimāl Project Team (Appendix A) in cooperation with Open Hand Studios and the people of Umm al-Jimāl, with funding from the USAID through the ACOR-SCHEP [The Sustainable Cultural Heritage through Engagement of local communities Project (usaidschep.org)] and Calvin College Archaeology Field School. [The Umm al-Jimāl Project staff is grateful to USAID, ACOR and the SCHEP organization for funding the West Gate Area and Eastern Trail preservation, presentation, and development program as a medium for preparing members of the Umm al-Jimāl community for careers in archaeological site management. We appreciate the helpful cooperation of the Department of Antiquities of Jordan staff in ‘Ammān and al-Mafraq. We thank the local staff, their community and the municipality for their warm and secure hosting of our team].

A Purposeful Preservation of the West Entry Area

The West Entry Area includes the open space immediately north of the West Church and east of modern Umm al-Jimāl’s main business intersection (*Midan*). On the east this space is bordered by the ancient Roman-Byzantine town wall, in which a 2nd century Roman gate, known as the Commodus Gate, provides entrance into the antiquities (**Fig. 1**). The area serves community members who pass from the *Midan* through the gate to sections of the community that lie on either side of the ancient site. It is therefore a natural location for the development of a formal entrance from the community onto the ancient site. A major goal of the work itself was the training of 15 site managers in the theory and practice of archaeological conservation to qualify them for long-term employment in managing and maintaining the site grounds. These trainees joined seven students enrolled in the Calvin College Field School. Archaeologically, this study of one of the few surviving pieces of Roman imperial architecture at Umm al-Jimāl brings understand-



1. West Entry Area showing the Commodus Gate and Umm al-Jimāl business center.

ing to the radical transition from imperial Roman to Late Antique culture at Umm al-Jimāl.

Previous Exploration: What H.C. Butler Saw

A photograph taken in 1905 (Fig. 2) shows the North Tower with walls surviving up to 13 courses high. We, however, found the west façade of this tower preserved only two courses high, with very few of the stones remaining in the collapse debris. The same is true of the piers, of which only the two impostes and two arch springers can presently be located. The West Tower, on the other hand, was already badly collapsed during the Princeton expeditions: the west façade survived only two courses higher than we found it. The *voussoirs* of the collapsed arches visible in the picture were no longer there in 2015.

The gate's dedication inscription (Fig. 3) was lying among the arch collapse in the mid-

dle of the gateway when Butler and his team visited in 1905. Today this basalt stone has also disappeared, and rumors that it has reappeared in the archaeological museum at as-Suwayda, Syria cannot be verified at this time. Littman's transliteration and restoration (Littman *et al.* 1913: 131) of the abbreviations is as follows:

1. Imp(eratore) Caes(are) M(arco)
Aur(elio) Antonino
2. Aug(usto) Arm(eniac) Part(hico)
Med(ico) Germ(anico) Sarm(atico)
3. ret Imp(eratore) Caes(are) L(ucio) Aur(elio)
Commodo Aug(usto) Germ(anico)
4. Sarm(atico)] Opus valli perfectum sub...
5. ...Severo leg(ato) Aug(ustorum) pr(o)
pr(aetore) co(n)s(ule) des(ignato)

The text clearly puts the dedication of the gate's construction during the father-son co-regency of Emperors Marcus Aurelius and Lucius



2. View of Commodus Gate from the west, 1905. From the archive of the H.C. Butler led Princeton University Expedition to South Syria in 1905 and 1909 (courtesy of the Princeton University Archive).



Inscr. 232. Scale 1 : 20.

3. The Commodus Inscription (Littman *et al.* 1913: 131).

Aurelius Commodus, dated to 176-180AD. From this we derive the popular designation of the structure as “The Gate of Commodus.”

Butler’s restoration drawing is extremely helpful for our preservation planning, especially because his shading of the surviving masonry matches that of his photograph. Two small corrections result from our documentation. The base molding shown in the elevation drawings is not present, and the perimeter wall Butler shows attached to the east corners of the towers was in fact bonded into the centers of the north wall of the North Tower and the south wall of the South Tower, respectively.

From 1905 to 2015: What Remains after 110 Years of Collapse and Spoilage

The already damaged façade in the North Tower likely collapsed in the earthquake of 1926, turning the entire gate area into a *rujm* of collapsed building materials. A local informant who visited Umm ar-Rumman, located *ca* 20km northeast in Syria, learned from a local there that the beautiful basalt facades on the main street of the village consisted of stone taken from Umm al-Jimāl. The story is that from 1940 to 1942, two caravans commuted regularly between Umm al-Jimāl and Umm ar-Rumman,

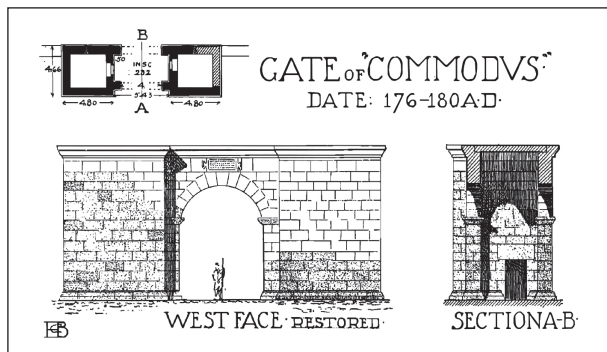
one going north loaded with stones and the other headed south to pick up more stones. The looted stones were the beautifully finished blocks from the west façade of the Commodus Gate and the exterior face of the north wall of the West Church (Fig. 5). This anecdotal evidence ‘explains’ the fact that the good building blocks from both buildings disappeared from the site, including the famous dedicatory inscription and the *voussoirs* of the arches.

This story punctuates the unfortunate scarcity of original building blocks. There are not enough stones available to complete the extensive rebuilding necessary in order to replace the surviving imposts and springers in their original positions, according to Butler’s photograph. Such interesting architectural fragments will therefore have to be displayed on the ground and explained with illustrated signs.

Documentation and Excavation of the Commodus Gate and West Entry Area

Mapping of the West Entry Area and Documentation of the Commodus Gate

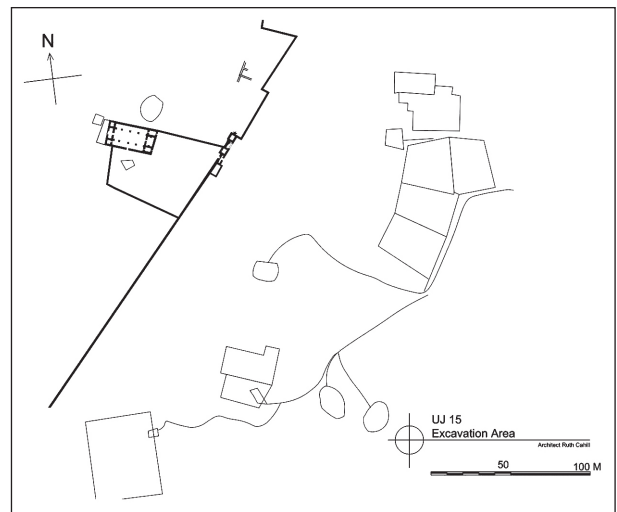
The Commodus Gate was the central element of a substantial segment of Roman wall shown as the dark line at Fig. 6. Later, in the sixth century, the South Tower of the gate became part of a new doorway on the south side, which gave access to the West Church compound - constructed *extra muros* (see also Figs. 14 and 15). The structures to the east, shown in outline at Fig. 6, include Byzantine houses straight to the east, six reservoirs, and the Cathedral and



4. H.C. Butler’s restoration of the Commodus Gate (Butler 1913: 57, Ill. 133).



5. West façade of North Tower with only remnants of the lower two courses remaining. 17 June 2015. (photo: Bert de Vries).



6 West Entry Area in relation to structures to the east (map and drawing: R. Linnaea Cahill).

Praetorium to the south.

The Commodus Gate itself (**Fig. 7**) consisted of a central gate chamber flanked by two guard-tower rooms, entered from inside the chamber. The north tower remained intact, but the south tower had its original door blocked and a window added on the west side as part of its incorporation into the West Church Complex entry.

Excavation of the Commodus Gate and Environs (Area EE)

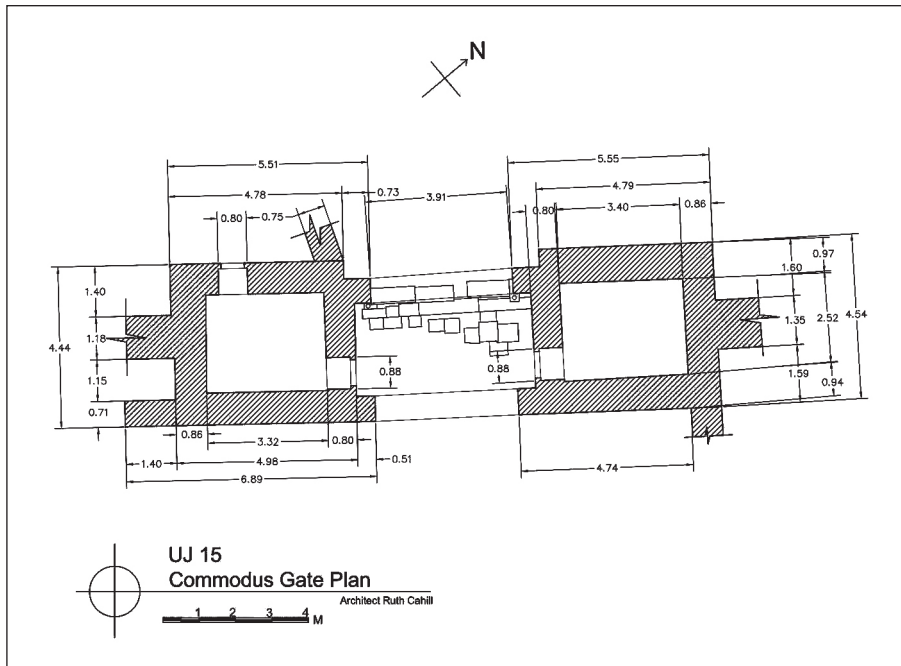
Six trenches were laid out in the Commodus Gate area (**Fig. 8**). The stratigraphic summary of each is presented below.

EE.1. North Half of the Commodus Gate Entry Chamber (**Fig. 9**)

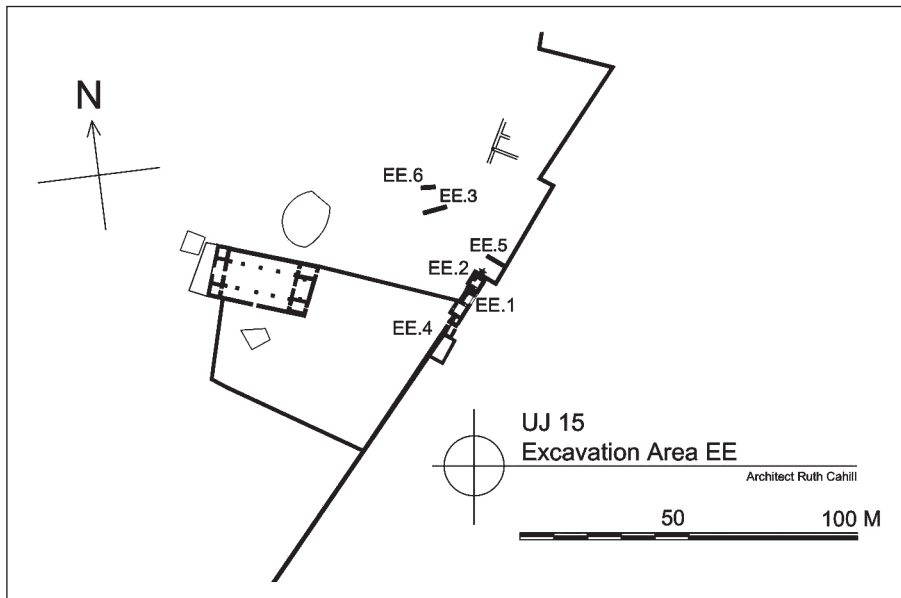
Excavation revealed that the bedrock was near to the surface in the gateway; therefore, no stratified occupation reflecting the traffic through the gate survived.

EE.2. Interior of the North Tower of the Commodus Gate

Beneath the topsoil [L:001] lay a fine cobble floor, constructed on an imported soil layer [L:005] which yielded only six undiagnostic sherds (**Fig. 10**). An ashy levelling layer beneath this soil and floor contained fragments



7. Commodus Gate (map: R. Linnaea Cahill).



8. Excavation Area EE (Commodus Gate), Trenches 1-6 (map: R. Linnaea Cahill).

of plaster and brick, as well as several tesserae [L:006]. The pottery in this layer was sparse and there were no diagnostics; however, none of the wares had a certain post-Early Byzantine date. Beneath was more ashy soil [L:007] and two firepits [L:008, 011]. Fourteen body sherds were associated with this activity, which is probably Late Roman in date. Below was the original cobble floor of the tower [L:009], which lay over a few foundation stones and undisturbed soil.

The later cobble floor cannot be dated by the finds within Locus 005; however, based on similar cobble floors set in soil at the site, such as one in the Praetorium dated to the Umayyad period, an Early Islamic date is possible.

EE.3. Probe Trench to Locate the Roadway Leading West from the Gate

The loose, ashy topsoil ranged 20-27cm thick across the trench [L:002]. Below, a hard-packed sub-pavement was revealed, consisting of basalt chips, soil and pottery fragments [L:005]. Curbstones and a few stones of a cobble pavement survived on the west end of the packed underlayment (**Fig. 11**). This sub-pavement was constructed on top of another loose,



9. Entry gate paving stone on the left, bedrock under the scale stick (photo: Bert de Vries).



10. EE.2. Early Islamic (?) cobble floor (photo: Bert de Vries).

ashy layer (20cm thick) containing many small pebbles and pottery fragments [L:007]. The latest date for the ceramic finds in both Locus 005 and 007 was the Late Byzantine period (mid 6th to early 7th century), though given the small number of diagnostics the date could possibly extend into the Early Umayyad period.

A second packed sub-pavement of similar composition [L:008], slightly thinner by 3cm, was found below the ashy deposit. There were fewer ceramics in this layer, and no diagnostic sherds; the wares, however, are Late Roman in date, and include Hauran ware (see Section C below) and Eastern Sigillata A. This sub-pavement was constructed on top of a 72cm-deep dark, ashy layer [L:009] containing Nabataean/Early Roman to Late Roman pottery, the deposit of which is dated to the late 3rd/early 4th century AD (*ca* 300). Hauran ware dominated the finds from this ashy layer by count (58%) and weight (61%). Directly beneath lay undisturbed soil and bedrock.

EE.4. Trench Across the Gate into the West Church Courtyard Immediately South of the Commodus Gate South Tower

The gate was created by dismantling the Roman wall running south from the Commodus Gate down to its founding course, which was used as the foundation for a wide doorstep (**Fig. 12**). Most of the soil layers were topsoil [L:001, 003, 004, 006, 008] and subsoil [L:010,



11. EE.3. Road curb with adjacent paving stones in foreground; clay underlayment in background from paving stones to far (east) balk (photo: Bert de Vries).



12. Fallen lintel from doorway into West Church courtyard. Shown upside down, as it appeared when installed above the door. Note the 'hand-drawn' nature of the Byzantine crosses (photo: Bert de Vries).

011, 013]. The exterior doorstep of the church courtyard gate was founded on a layer containing mostly undiagnostic body sherds of Roman through Byzantine date [L:014]. Therefore, its construction is likely contemporary with that of the West Church itself in the sixth century. Perhaps also at this time the south tower of the Commodus Gate was converted into a guardhouse for the church: the previous main entrance into the tower from the gateway was blocked off and a door was added that opened into the churchyard (Figs. 13-15).

EE.5. Trench North of the North Gate to Locate the 'Roman' Wall Running from the Center of the North Wall of the North Tower

The founding course of this perimeter wall was discovered under topsoil [L:002, 003]. The wall itself was laid on undisturbed soil and bedrock. Accumulated soil layers adjacent to the wall contained mostly Roman to Early Byzantine pottery, with few diagnostics [L:005, 006]. Therefore, it is probable that this wall was constructed in the Roman period, perhaps contemporary with the construction of the Commodus Gate. At the east end of the trench there was



13. EE.4. Pre-excavation photo showing Byzantine doorway from inside West Church courtyard. Doorway enabled entry to the churchyard from inside the Byzantine town. 28 May 2015, view to the east (photo: Bert de Vries).

a heavily reconstructed wall that abuts the east wall of the Commodus Gate's North Tower. The accumulated soil against this later wall [L:004] contained a small number of sherds of Byzantine date (*ca* 5th-6th? century). This later wall was also built on bedrock.

EE.6. Probe Trench Five Meters North of EE.3 to Test the Roadway's Extension

Removal of the topsoil revealed the presence of the packed upper roadway sub-pavement (as seen in Trench EE.3, L:005), whereupon excavation was discontinued. This result confirmed the hypothesis that the Roman-period road continues north towards the modern town and the bridge across Wādī az-Za'tarī.

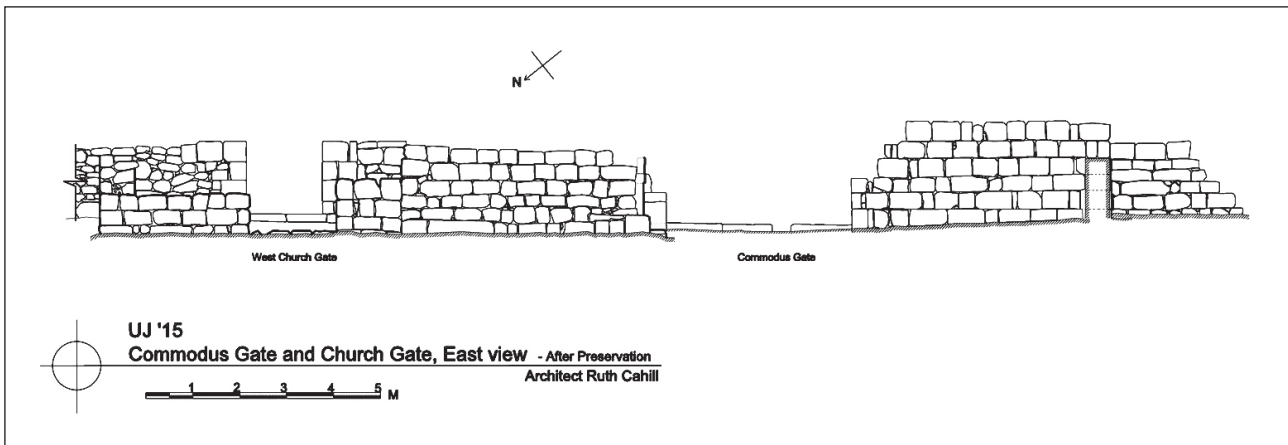
The Ceramic Corpus

Methodology and Quantification

During the excavation season, each sherd - regardless of size - was recorded by ware and fabric and weighed. [The ware and fabric system was developed by Elizabeth Osinga (2017) during doctoral research at the University of Southampton, and is supported by preliminary petrographic analysis by the groups. For the



14. West façade of the Commodus Gate South Tower before preservation. The wall in the bottom left corner of the photo is the West Church courtyard wall constructed in the 6th century. The doorway to the right of the scale stick was also inserted in the Byzantine remodeling to adapt this tower room as a churchyard outbuilding. 17 June 2015 (photo: Bert de Vries).



15. View of church enclosure gate in relation to the Commodus Gate (drawing: R. Linnaea Cahill).

purpose of this report, only the groups relevant to this publication are briefly presented]. The results show that the corpus is overwhelmingly Nabataean/Roman to Early Islamic in date: only one Middle/Late Islamic sherd was found (**Fig. 16**).

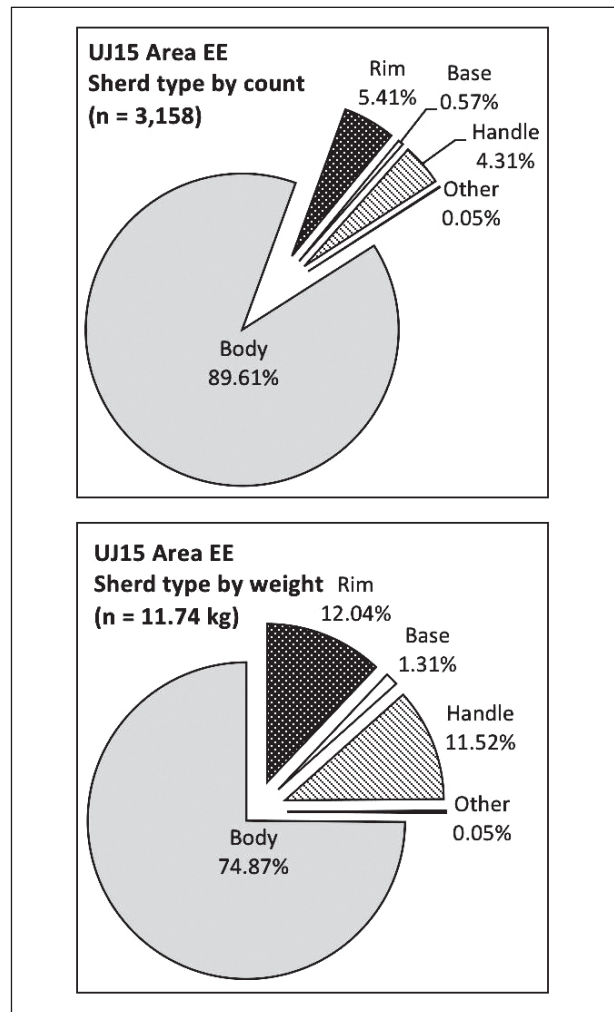
Information about sherd type (rim, base, handle *etc.*) was also included in the database, and the specific form (cooking pot, casserole *etc.*) was recorded when known. By a large margin, the majority of sherds by count and weight were body fragments (**Fig. 17**). Thus, it was not always possible to distinguish between, for example, thinner-walled table and cooking wares in the absence of usewear evidence. The small size of the average sherd further compounded identification; as shown in **Fig. 16**, the average sherd weight for the corpus is less than four grams. Furthermore, of the rims and bases, less than 1% (20 sherds) could be assigned a diameter.

Of the trenches, EE.3 yielded the most pottery by a large margin (**Fig. 18**). However, many of these sherds were in very poor condition, particularly those within the packed sub-surfaces [L:005, 008] and in the ashy layer above bedrock [L:009].

With so many undistinguishable body sherds, owing to size and/or wear, it was not possible to quantify the corpus by specific forms, particularly in terms of the common terracotta wares. Thus, the pottery has been divided into five broader formal groups (**Fig. 19**): (1) cooking, table and thin-walled storage wares; (2) thick-walled storage wares (*e.g.* dolia and basins); (3a) amphorae and (3b) bag-shaped jars; (4) finewares; (5) lamps and lanterns.

Period	Sherds	Weight (g)	% Sherds	% Weight	AVG sherd weight (g)
NAB/R-EIS	3157	11711.75	99.97%	99.76%	3.71
MIS/LIS	1	28	0.03%	0.24%	28
TOTAL	3158	11739.75	100%	100%	3.72

16. Area EE ceramic periodization.



17. Area EE sherd types by count and weight.

Pottery Production and Trade

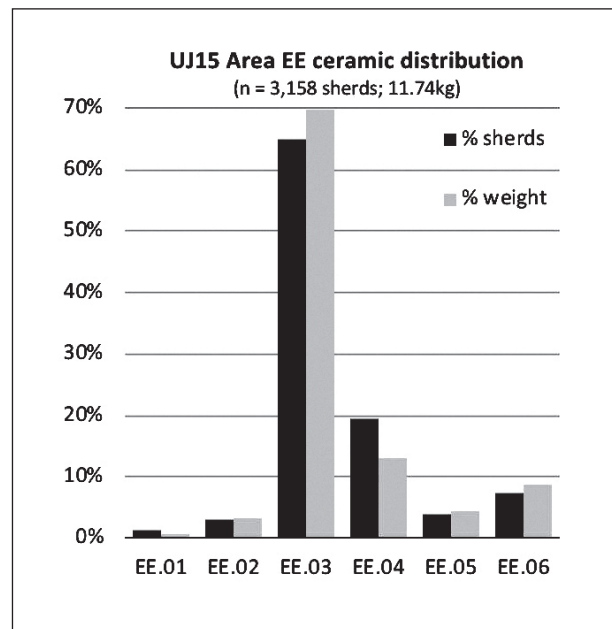
With no evidence of local pottery production at Umm al-Jimāl or at other settlements in northeastern Jordan (particularly for the Nabataean/Roman to Early Islamic period), everyday pottery was imported from production centers in other regions of Jordan, Syria and Palestine, and of course amphorae and finewares could come from more distant production sites.

In terms of a general quantification of pottery import, the corpus can be broken down into three categories: (1) local, in which the ceramics are made from basaltic clay [This group is distinguished from pottery which contains the occasional secondary basalt fragments that are sometimes found, for example, in wadi sand]; (2) regional, where the clay is non-basaltic and the pottery was imported from up to *ca* 150km away, though generally within about 60-100km; (3) supra-regional, which includes all wares imported from distances over 150km. Despite its location on the basaltic plateau, the majority of Umm al-Jimāl's pottery, when considering all periods, is overwhelmingly regional in origin (Fig. 20).

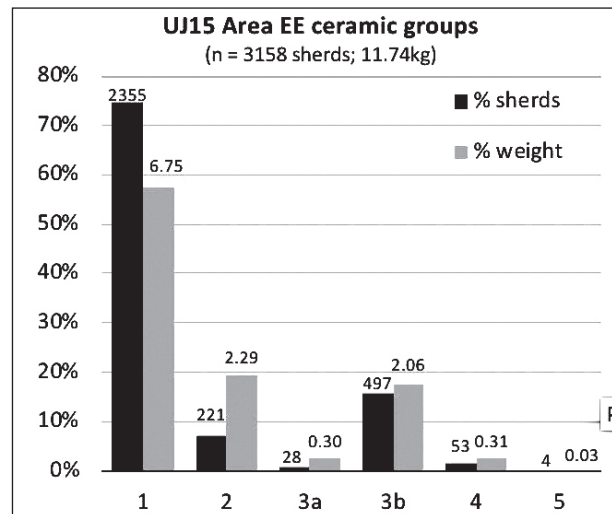
This methodology can also be applied, for example, to each of the pottery groups in Fig. 19 (broken down into wares and/or smaller periods when possible), or can be used to compare the Nabataean/Roman to Early Islamic and Middle/Late Islamic corpora. [The sole MIS/LIS sherd from Area EE is local in origin. When comparing the two periods in House XVII-XVIII, where more MIS/LIS pottery was available for study, the local pottery dominates the MIS/LIS period by a large margin in count and weight. It was produced in a number of fabrics, and both hand-/mold-made and wheel-made vessels were present (Osinga 2017)].

Pottery Wares

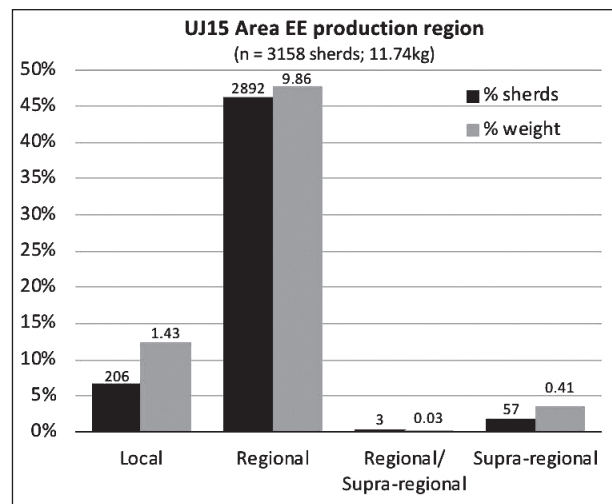
In addition to the well-published finewares and transport vessels, there are several other wares illustrated in the pottery plates that require brief explanation. These are presented here in simplified form, often amalgamated into one ware/fabric for the purpose of this publication. More detailed ware information, including petrological analysis, is available in a recent thesis (Osinga 2017) and article (Osinga, 2020).



18. Distribution of pottery per trench.



19. Distribution of pottery per formal group.



20. Umm al-Jimāl's pottery provenance.

Hauran Ware

[Published parallels come from Si': Groupe A (Villeneuve *et al.* 1981: 47-9), Catégorie A (Barret *et al.* 1985b: 224-6), Pâte A (Orssaud *et al.* 2003); Bostra: Pâte 1 (Joly and Blanc 1995: 112); southern Syria: Pâte basaltique claire (Renel 2010: 524); Umm al-Quttayn and environs: Hauran Ware (Kennedy *et al.* 1995: 63)].

This pottery is made of basaltic clay and is commonly reddish, brownish or purplish in color. It is nearly always oxidized, though dark cores are not uncommon. The generally well-sorted fabric ranges from very well-levigated and fine to medium-coarse, depending on the size of the basalt. The grey or black rock fragments are often visible by eye or with a hand lens. In rare cases, there are inclusions of rounded (probably ferrous) red/dark nodules, including probable magnetite. Most sherds are self-slipped.

Several types of decoration occur: most common is line burnishing on the inside of bowls or the outside of jars/jugs, but finger-pinched decoration also appears frequently, particularly along or under the rim of jars and bowls.

One production site, identified by kiln furniture and soil studies, was at Si' in southern Syria (Barret *et al.* 1985a: 225; Renel 2010: 524). The ware dates from the Nabataean/Roman to Early Byzantine period at Umm al-Jimāl (ca 1st-5th century). Current evidence suggests that it probably declined during or slightly before the Early Byzantine period (Osinga 2020).

Jarash Terracotta

[Principal published parallels are from Jarash: Type C (Clark and Falkner 1986: 251), Type δ (Uscatescu 1996: 46), Reddish/Red brown ware (Lichtenberger *et al.* 2015: 15); Pella: Ware C (Watson 1992: 236-7), Ware 11 and 11A (Walmsley 1995: 661, 664)].

In Jordan, Gerasa/Jarash was the closest urban center and known pottery production site to Umm al-Jimāl at around 60km away via known routes - about the same distance to Si'. The presence of pottery from Jarash at sites in the basaltic plateau was first noted by R. Falkner during the Southern Hauran Survey (Kennedy *et al.* 1995: 63, "Metallic Ware" and "Jarash White-on-Red ware").

This slipped pottery ranges a great deal in

color, from red to brown, grey or sometimes orangey hues, depending it seems primarily on firing. Table and cooking wares were typically oxidized, except in the Early Islamic period, where reduced cooking wares become common. The clay is quite distinct in that it is usually well levigated and contains few visible elements, typically only bits of limestone, quartz and sometimes small, rounded clay nodules (most <0.5mm in size). Larger limestone fragments can spall on the exterior surface. Particularly in the Early Islamic period, quartz grains are larger and more abundant and can be easily seen macroscopically. Petrologically, no additional elements were observed in our samples; however, recent analysis of the clay and its components identified feldspar inclusions in a minority of examples (Merkel 2019).

Coarse Reduced Storage Ware

[Selected published parallels come from Jarash: Type ζ (Uscatescu 1996: 46), Grey ware (Lichtenberger *et al.* 2015: 15); Pella: Ware D (Watson 1992: 237); Bostra: Pâte 5, 1-2 (Joly and Blanc 1995: 112)].

These reduction-fired large bowls/basins and dolia were produced at Jarash using the same base clay as described above. [The addition of a grog fragment was found during petrological examination of one of the basins]. The bodies of the vessels were usually coil-made, and the rims were added on the wheel. At Umm al-Jimāl, only one dolia rim and one certain dolia body sherd have been found since 2012, and thus it appears that the open forms were considerably more common at the site.

Pellet Ware

This is a medium-fine to coarse ware that ranges broadly in terms of inclusion size (<0.05-2mm) and sorting (poorly to moderately well). The fabric is striking to the eye due to the common and generally rounded or subrounded clay pellets, either dark or reddish in color. The other primary inclusion is limestone, which can be 1mm or larger. The vessels can be oxidized or reduced, with the latter being more common; in addition, darkened cores and/or interior margins on oxidized sherds are typical. The ware is slipped, typically rather thickly, and the color tends to be pinkish, grey, or brown.

The most common form in this ware is the bag-shaped jar, usually Roman to Early Byzantine in date. Rare cooking and tableware fragments have been found, along with a larger number of thick, coil-made body sherds and a few dolia rims. There is no exact published parallel for this ware, but it is probably a northern Palestinian import. [The forms are consistent with the general corpus of Palestinian-produced bag-shaped jars, and the microscopic composition of the fabric has affinities with that of a Roman fabric from the Galilee, to which nodules of terra rossa soil were added to calcareous clay (Wieder and Adan-Bayewitz 2002: 404-6, Fig. 10)].

Miscellaneous Terracotta

This is a catch-all category for cooking, table and thin-walled storage wares that are not

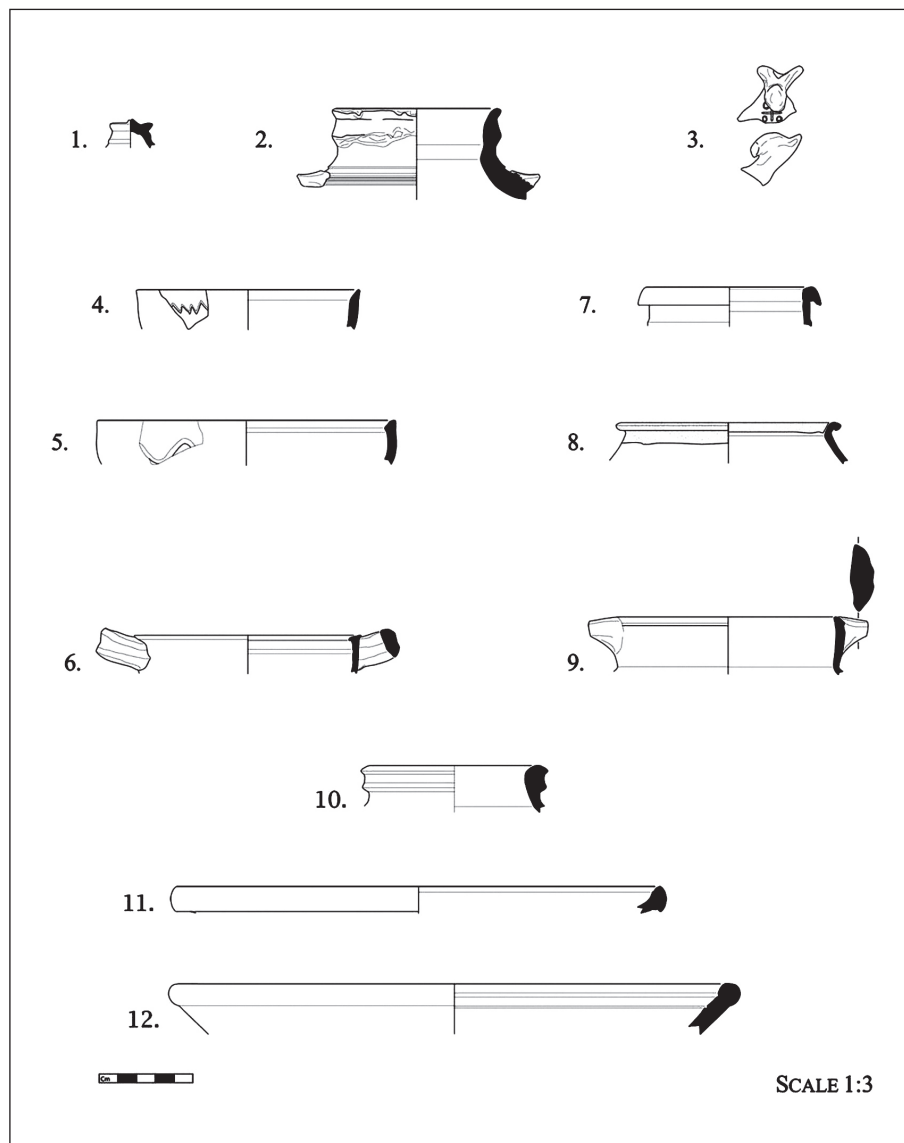
consistent with fabrics from Jarash. The fabrics of this ware are generally, but not always coarser. The typical elements seen microscopically, apart from limestone and quartz, are rock fragments, such as siltstone and sandstone, and in rare cases shell.

Pottery Drawings (Figs. 21-23; Tables 1-3)

A guide to the pottery tables is available in Appendix B.

Interpretation of the West Gate Area Excavations

The construction date of the Commodus Gate in the late 2nd century was confirmed by the excavations. This gate survived the wider destruction at Roman Umm al-Jimāl in the late 3rd century (at the time of the wars of Zenobia,



21. Ceramics from the topsoil.

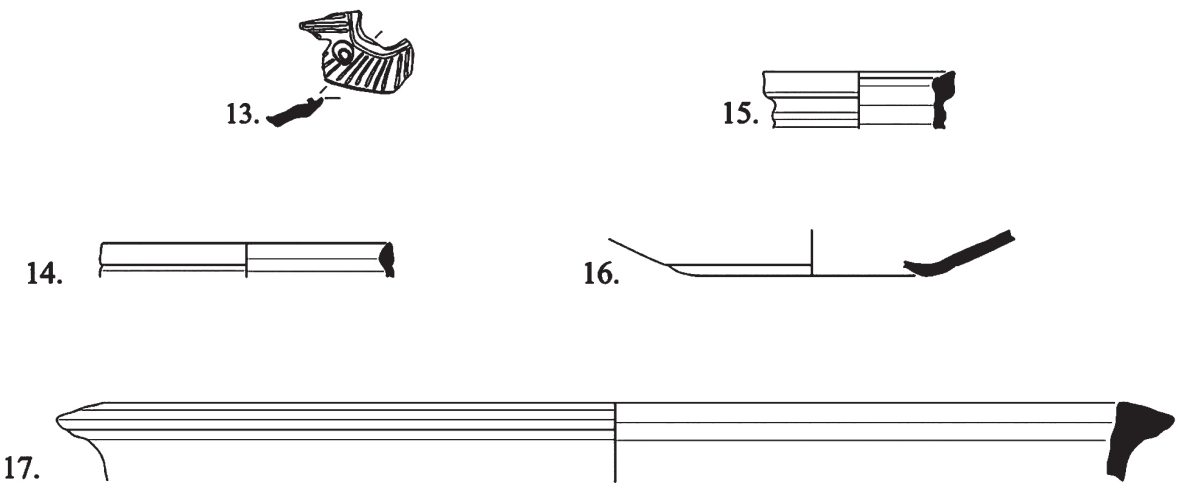
Table 1: Description of ceramics in Fig. 21.

No.	Context	Form	Ware	Munsell	Date	Selected parallels
1	EE.2:001.9.1	Lid knob	Jerash tc.	<i>Ext S</i> : 2.5YR 6/6 <i>Int</i> : 10YR 6/2 <i>Fab</i> : 2.5YR 5/4	LBYZ (or later)	Jerash (Uscatescu 1996: Fig. 76, nos. 408, 410).
2	EE.2:001.9.2	BSJ	LRA 5	<i>Ext S</i> : 10YR 8/3 <i>Int, Fab</i> : 7.5YR 7/4	c. 7 th –8 th cen.	Piéri Type 4C (Piéri 2005: Fig. 79); Pella (Watson 1992: Fig. 10, no. 83).
3	EE.3:002.4.3	Lamp	Jerash lamp	<i>Ext/int S</i> : 5YR 7/4 <i>Fab</i> : 7.5YR 5/3	LBYZ–UM	Selected parallels: Jerash (Scholl 1986: Fig. 1, no. 4; Kehrberg 1989: Fig. 5, nos. 25–6); Bostra (Guidoni 1990: nos. 23–4); Pella (da Costa 2010: Fig. 25); Umm el-Jimal (Lapp 1995: Figs. 1–2).
4	EE.3:002.4.2	Cup/bowl	Jerash tc.	<i>Ext S</i> : 10R 5/6 <i>Int S?</i> : 2.5YR 6/6 <i>Fab</i> : 10R 6/6	LBYZ–EUM	Jerash (Uscatescu 1996: Fig. 68, no. 338; Fig. 100, no. 687). Form, not fabric, as FBW 1A (below).
5	EE.3:002.4.4	Bowl	FBW	<i>Ext S/B</i> : 10YR 5/1, 5/2 <i>Int S</i> : 10YR 5/1 <i>Fab</i> : 5YR 4/1		Jerusalem FBW Form 1A (Magness 1993: 193–4).
6	EE.4:008.10.3	CASS	Misc. tc.	<i>Ext S</i> : 5YR 6/3 <i>Int S</i> : 5YR 6/6 <i>Fab</i> : 5YR 6/4, 6/6	R/BYZ	A long-lived form with numerous variants (discussed by Parker 2006).
7	EE.4:008.10.4	BSJ	Jerash tc.	<i>Ext, Int</i> : 2.5Y 5/1 <i>Fab</i> : GLEY N5	LBYZ	Probably a variant of Jerash (Uscatescu 1996: Fig. 94, no. 612). Several examples were found in House XVII–XVIII, and one at the “Barracks” (Parker 1998: Fig. 16)
8	EE.4:006.7.3	Jar	Jerash tc.	<i>Burned and worn</i> <i>Ext S</i> : 10YR 5/1 <i>P</i> : 5Y 8/2 <i>Fab</i> : 5YR 6/6, 7.5YR 6/1		Jerash (Uscatescu 1996: Fig. 84, no. 522).
9	EE.4:008.10.2	CP	Misc. tc.	<i>Ext S</i> : 5YR 6/6 <i>Int</i> : 5YR 7/6 <i>Fab</i> : 5YR 5,6/6	EBYZ–early LBYZ	Jerash (Falkner 1985: no. 355).
10	EE3:010.21.4	Jar	Hauran ware	<i>Ext S</i> : 2.5YR 4/1,2; 5/2 <i>Int</i> : 2.5YR 4,5/2 <i>Fab</i> : 2.5YR 4/4	NAB/R/EBYZ	St' (Orssaud and Blanc 2003: Pl. 147, no. 20).
11	EE:001.5.3	Bowl	Jerash bowl	<i>Ext S</i> : 2.5YR 6/4 <i>Int S</i> : 2.5YR 6/4, 6 <i>Fab</i> : 2.5YR 6/6	LBYZ	Jerash (Watson 1989: Form 7b; Uscatescu 1993: Form 11B).
12	EE6:001.5.2	Bowl	ARS	<i>Ext S</i> : 2.5YR 5/6, 8 <i>Int S</i> : 2.5YR 5/8 <i>Fab</i> : 2.5YR 5/6	mid-6 th to mid-/late 7 th cen.	Form 104C (Hayes 1972: Fig. 30, no. 23; Reynolds et al. 2011).

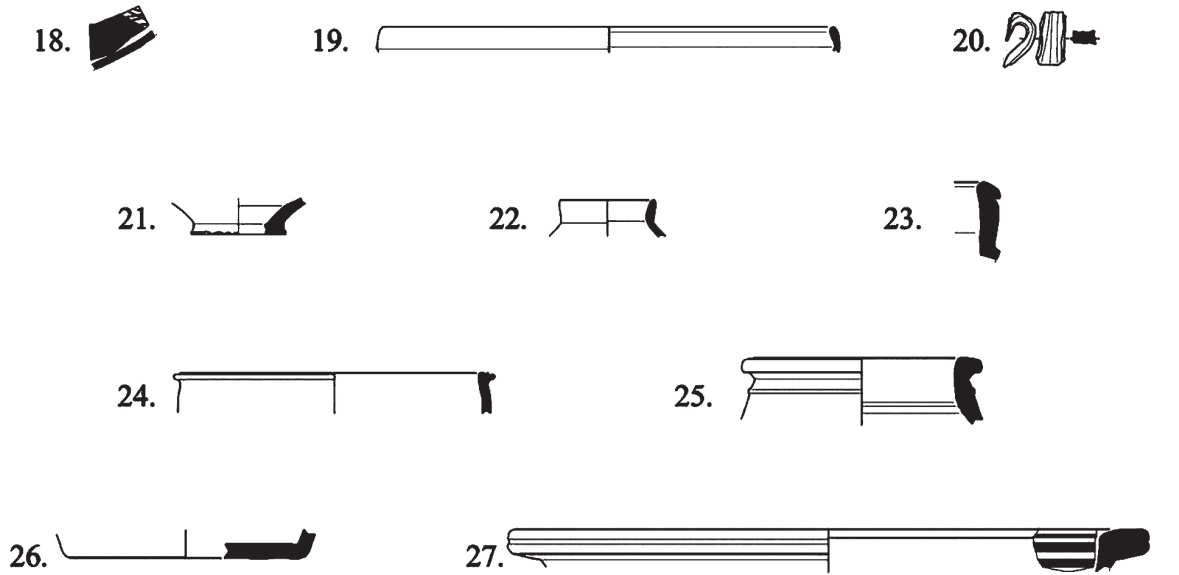
Ghadima and Aurelian), which is hinted at by the deep ashy layer of EE.3. During the Tetrarchic recovery, the road leading from the gate toward the Via Nova was reconstructed as part of the Roman defensive buildup, which also included the construction of a fort: the Roman castellum on the east side of Umm al-Jimāl. After the degeneration of the Roman military frontier in the 4th

century, the roadway was resurfaced and paved again in the Late Byzantine or Early Umayyad period (*ca* late 6th–7th century). Perhaps also at this time, the North Tower of the Commodus Gate was repaved with cobble stones. This may represent a general remodeling of the site in the Late Byzantine/Umayyad period, also evident in the Praetorium and House XVII–XVIII Complex.

Between the two sub-pavements of the roadway



Beneath the early sub-pavement of the roadway

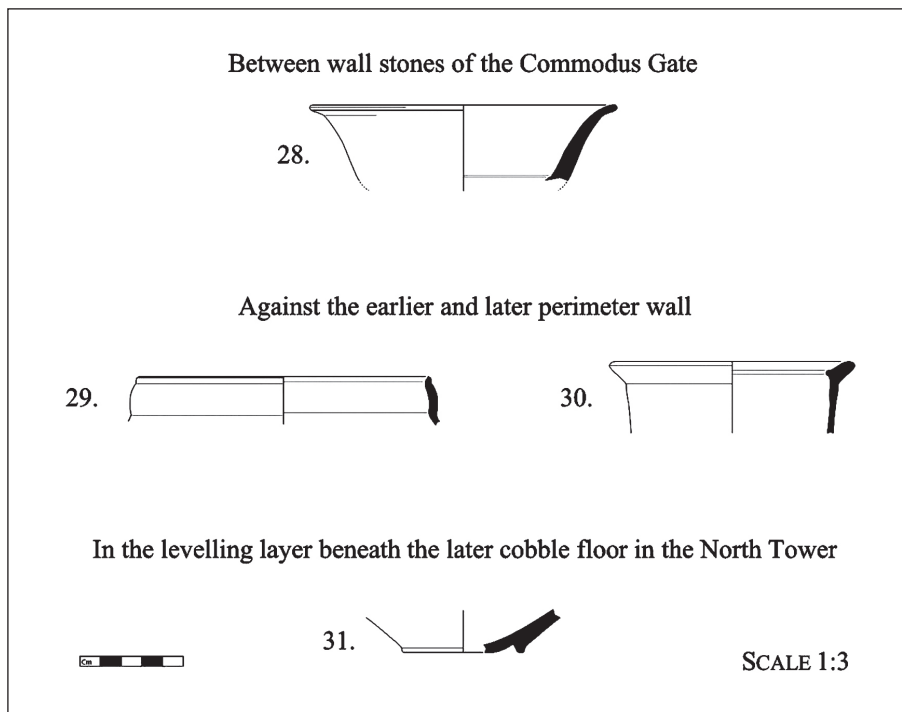


SCALE 1:3

22. Ceramics from the roadway.

Table 2: Description of ceramics in Fig. 22.

No.	Context	Form	Ware	Munsell	Date	Selected parallels
13	EE.3:007.16.4	Lamp	Jerash lamp	<i>Ext/int S</i> : 5YR 6/4 <i>Fab</i> : 5YR 5/4	LBYZ–EUM	Nozzle end, perhaps with half-volutes, e.g. Jerash (Kehrberg 1989: Fig. 5, no. 25).
14	EE.3:007.14.1	CP/jar	Jerash tc.	<i>Ext/int S</i> : Burning, 5YR 5/3 <i>Fab</i> : 5YR 5/4	LBYZ	Jerash (Uscatescu 1996: Fig. 86, no. 540–41).
15	EE.3:007.16.2	BSJ	Jerash tc.	<i>Discoloured</i> <i>Ex, int S?</i> : 10YR 5/1, 6/2 <i>Fab</i> : 10YR 5/1		Jerash (Uscatescu 1996: Fig. 94, no. 609).
16	EE.3:007.14.6	BSJ	Jerash tc.	<i>Ext</i> : 10YR 5/1, 6/2 <i>Int</i> : 7.5YR 5/3, 5/4 <i>Fab</i> : GLEY N4		An omphalos base is typical of these bag-shaped jars, e.g. Jerash (Uscatescu 1996: Figs. 93–94, nos. 594, 598, 599, 600, 618).
17	EE.3:007.16.5	Basin	Coarse redu st. ware	<i>Ext, int</i> : 10YR 5/1 <i>Fab</i> : 10YR 5/1, 5/2		Jerash (Uscatescu 1996: Fig. 87, no. 557).
18	EE.3:009.18.12	Bowl	NPFW	<i>Ext</i> : 10R 5/4 <i>Int S, Fab</i> : 2.5YR 6/6 <i>P</i> : 10R 5/3	NAB (c. AD 70/80–100)	NPFW Phase 3b (Schmid 2000: Abb. 91, Farbtafels 3–4, nos. 7–11)
19	EE.3:009.18.4	Bowl	NP?FW	<i>Burned through, post-deposit</i>		Probably also N(P)FW Phase 3b (e.g. Schmid 2000: Abb. 91, no. 89).
20	EE.3:009.18.8	Cup	ESA	<i>Ext S</i> : 10R 4/8 <i>Fab</i> : 7.5YR 7/4	NAB/R (early 2 nd cen.)	Form 61 (Hayes 1985: Pl. VII, no. 15).
21	EE.3:009.19.4	Bottle?	Misc. tc.	<i>Ext S, Fab</i> : <i>Burned</i> <i>Int</i> : 5YR 5/4	NAB/R	String-cut base, e.g. Lejjûn (Parker 2006: Figs. 51, 144). Possibly the same vessel as no. 22.
22	EE.3:009.19.12	Bottle?	Misc. tc.	<i>Ext S</i> : 2.5YR 6/4 <i>Int S?</i> : 5YR 6/4 <i>Fab</i> : 7.5YR 5/4		No certain parallels. Possibly the same vessel as no. 21.
23	EE.3:009.18.6	BSJ	Misc. BSJs	<i>Ext/int</i> : 7.5YR 8/2 <i>Fab margins</i> : 10YR 7/2; <i>core</i> 5YR 7/4	LR	Capernaum (Loffreda 2008: DG75, no. 17; DG 79, nos. 34, 48); similar to: Jerash (Falkner 1985: Fig. 31, no. 253) and Bostra (Wilson and Sa'd 1984: Fig. 162).
24	EE.3:009.18.16	CP	Hauran ware	<i>Ext S</i> : 2.5YR 5/4 <i>Int</i> : 10R 5/4 <i>Fab</i> : 2.5R 5/6	NAB/R	Sṭ (Orssaud and Blanc 2003: Pl. 151, nos. 52–63); form, not fabric, as Kefar Hananya (Adan-Bayewitz 1993: Pl./Form 4B).
25	EE.3:009.18.11	Jar	Hauran ware	<i>Ext/int S</i> : 2.5YR 5/6 <i>Fab</i> : 2.5R 4/6		Sṭ (Orssaud and Blanc 2003: Pl. 147, nos. 30–31).
26	EE.3:009.19.7	Dish?	Hauran ware	<i>Ext/int S</i> : 2.5YR 5/3 <i>Fab margins</i> : 2.5YR 5/4; <i>core</i> 5YR 4/2		Similar to Sṭ (Orssaud and Blanc 2003: Pl. 129, no. 26).
27	EE.3:009.19.11	Bowl	Hauran ware	<i>Ext/int S</i> : 2.5YR 5/4 <i>B</i> : 2.5YR 4/4 <i>Fab</i> : 2.5R 5/6		Sṭ (Orssaud and Blanc 2003: Pl. 139, nos. 55–57).



23. Ceramics from foundation contexts.

Table 3: Description of ceramics in Fig. 23.

No.	Context	Form	Ware	Munsell	Date	Selected parallels
28	CG WALL.1	Bowl	ESA	<i>Int/ext S:</i> 2.5YR 4/8, 6/8 <i>Fab:</i> 10YR 8/3	LR (2 nd cen.)	Form 58 (Hayes 2008: Fig. 7, no. 165).
29	EE.5:005.9.3	CP	Jerash tc.	<i>Ext S:</i> 7.5YR 6/4, 7/4 <i>Int:</i> 7.5YR 7/4 <i>Fab:</i> 5YR 7/4	LR	Jerash (Falkner 1985: nos. 336, 338). This form is part of the broader tradition of LR grooved rim cooking pots (summarised by Parker 2006: 335–6).
30	EE.5:004.5.1	BSJ	Pellet ware	<i>Ext/int S:</i> 10YR 7/3 <i>Fab margins:</i> 7.5YR 5/2; <i>core:</i> 7.5YR 5/1	LR/ EBYZ	Lejjûn (Parker 2006: Fig. 34); similar to Capernaum (Loffreda 2008: DG77, no. 3).
31	EE.2:006.14.1	Bowl	Hauran ware	<i>Discoloured</i> <i>Ext/int S:</i> 2.5YR 5/3 <i>Fab:</i> 2.5YR 4/3	NAB/R	Similar to ST' (Orssaud and Blanc 2003: particularly Pl. 131, no. 45).

Appendix A: Project Staff (Fig. 24)

Senior staff

Bert de Vries	Calvin College	director; architect
Sally de Vries	Calvin College	administrator
Paul Christians	Open Hand Studios	visual documentation
Jeff DeKock	Open Hand Studios	visual documentation
Muaffaq Hazza	Al al-Beit Univ.	field director
Mohammad Bashtawi	Yarmouk Univ.	
Elizabeth Osinga	U of Southampton	stratigrapher; ceramics
Jobadiah Christiansen	Kent State Univ.	objects; samples



24. Team Photo, 17 June 2015. By Jeff DeKock.

Lauren Coughlin	American U at Rome	community education
Representative	Dept. of Antiquities	

Field School Students

Bryan Burke	Calvin College	excavator
Ruth Cahill	Calvin College	architect
Rebecca Lawson	Calvin College	excavator
Brianne Lynn	Calvin College	excavator
Elijah Morton	Calvin College	expediter
Jessica Petrie	Calvin College	excavator

Local Staff

Ali Aqil	foreman
Ahmed Hussein Fakhri	site management trainee
Ahmed Hassan Eid (Abu Leith)	site management trainee
Ahmad Hassan es-Serour	site management trainee
Mohammad Hazza' Suwan	excavation trainee
Abdullah Suleyman Ighveli	site management trainee
Awda Halal Hassan al-Masa'eid	mason
Awda Mifleh Awda al-Ghveir	site management trainee
Abdu er-Razak Faris al-Masa'eid	site management trainee
Abd ar-Rahman Hasan Za'al	excavation trainee
Awad Hussein Matar al-hadeib	site management trainee
Bashar abd al-Majeed es-Salihi	site management trainee
Hamadeh Falah Mashwah	site management trainee
Majid Atica Fa'our	site management trainee
Fa'iz es-Senayan Awad	mason
Omar Ghazi Ariyan (Abu Lehyeh)	site management trainee
Mum'a Shatiy Jow'an	guard
Sened Ahmed Saalim ar-Rhaide	guard
Ahlam Kurdi	excavation trainee
Noor Ali	digital communication trainee

Appendix B

Context = Trench:Locus.Pail#.Sherd#.

Form abbreviations:

BSJ = Bag-shaped jar

CASS = Casserole

CP = Cooking pot

Ware abbreviations:

ARS = African red slip

ESA = Eastern Sigillata A

FBW = 'Fine Byzantine Ware'

LRA = Late Roman Amphora

NPFW - Nabataean Painted Fineware

tc. = terracotta

Munsell abbreviations:

S = Slip

P = Paint

B = Burnishing

Dating based on Parker's (2006) and Uscarescu's (2003) periodization, tailored to Umm al-Jimāl's known settlement history (**Table 4**). All dates AD.

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Table 4: Pottery periodization at Umm al-Jimāl.

<u>Abb.</u>	<u>Period name</u>	<u>Date range</u>
R	Roman	c. mid-1st cen.–324
ER	Early Roman	c. mid-1st cen.–135
NAB	Nabataean	c. mid-1st cen.–106
LR	Late Roman	135–324
BYZ	Byzantine	324–640
EBYZ	Early Byzantine	324–491
LBYZ	Late Byzantine	491–640
TRANS	Transitional	640–661
EIS	Early Islamic	661–c. 800
EUM	Early Umayyad	661–700
LUM	Late Umayyad	700–750
EAB	Early 'Abbasid	750–c. 800

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