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A New Assemblage of 'Private' Stamped Jar Handles from the Mordot Arnona Excavations, Jerusalem

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The site of Mordot Arnona is located c. 750 m northeast of Ramat Raḥel, on the eastern outskirts of the Arnona neighborhood of Jerusalem. Recent salvage excavations at the site showed that in the late eighth and the first half of the seventh century BCE, Mordot Arnona held great significance in the physical and political landscape of the area south of Jerusalem, serving as an administrative center, as evidenced by its monumental structures and the dozens of stamped jar handles. In this paper we present for the first time a rare corpus of 17 jar handles bearing 'private' stamp impressions, one of the largest exposed in excavations in the region of Judah, alongside 124 *lmlk* stamped jar handles and 33 handles incised with concentric circles. Furthermore, we discuss their role, function and significance in Judah's administration system on the eve of Sennacherib's campaign.

Keywords: Jerusalem, Judah, Iron Age II, administration, lmlk stamped impressions, 'private' stamp impressions, Sennacherib's campaign

Introduction

The Iron Age stamp impressions, generally termed 'private,' are oval or round impressions (square or rectangular examples appear in rare instances), stamped on handles of large storage jars. The impressed handles usually have two vertical ridges, resembling the *lmlk* storage-jar handles in ware and shape. The impressions range in dimensions, being 10–15 mm high and 15–20 mm long on average. Although exhibiting great variety, they generally comprise four components: an upper field, in which a private name is written in paleo-Hebrew script, usually interpreted as the seal owner's name; a lower field, with another private name, also in paleo-Hebrew script, usually interpreted as the seal owner's patronym; a divider, consisting of one or two lines engraved across the length of the seal to separate between the upper and lower fields; and a rounded frame (bezel), circumscribing the seal

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around its margins. Most 'private' stamp impressions do not contain any figurative elements, nor do they bear any additional titles. In very few instances the word בן ("son of") appears between the two names, either at the end of the first or at the beginning of the second row.

Interestingly, a few officials held in their possession more than one seal bearing their name, as can be deduced from impressions bearing the same name, albeit with different morphological features (Lipschits, Sergi and Koch 2010:22–27; Lipschits 2021:49–50). In addition to the 'private' stamp impressions on storage-jar handles, numerous seal impressions were found on bullae, usually smaller in size, yet comprising the same four components noted above. There is no congruity between the seals appearing on the bullae and those on the storage-jar handles, suggesting that they belonged to distinct administrative systems, managed by different personnel.

The affinity between the 'private' and the *lmlk* stamp impressions was better understood following the Lakhish (Lachish) excavations, where handles of both types were found in the same assemblages (Diringer 1949:71, 73, Figs. 2, 3). A handle uncovered in the Ramat Raḥel excavations bears both a *lmlk* and a 'private' impression (Aharoni 1962:16–17, Pl. 6:2). Complete storage jars with two handles bearing 'private' stamp impressions and two bearing *lmlk* stamp impressions were found in the renewed excavations at Lakhish (Ussishkin 1976:1–3, Figs. 1–4). Handles bearing both a 'private' stamp impression and concentric circle incisions were found in Jerusalem (Avigad and Barkay 2000:247–248, No. 51).

Prior to the excavations at Mordot Arnona, 175 'private' stamp impressions were found in archaeological excavations and surveys, most from the Shephelah (125 handles, roughly 71.5% of the finds): 72 in Lakhish, 18 in Bet Shemesh, 12 in Tel Goded, seven in Sokho (Socho) and four each at Tell eṣ-Ṣafi/Gath and 'Azeqa (Azekah). The remaining handles were found at different sites, including Tel Burna, Tel Baṭash, Tel 'Erani and Maresha, none yielding more than two such artifacts. In all, 33 handles (19% of all finds) were discovered in the area of Jerusalem, 19 of which were unearthed at Ramat Raḥel, 13 in Jerusalem and one in Umm Ṭuba. Eleven handles bearing 'private' stamp impressions were found in the region of Benjamin, seven at el-Jib (Gibeon; Giv'on) and four at Tell en-Nasbeh (Miẓpa). The few remaining 'private' stamp impressions were found in different sites in the Judean hills (Teqo'a and Khirbat Rabud-Debir), in the Negev ('Arad), and one in Gezer, outside the borders of Judah (Lipschits 2021:50–55, and see further references therein).

Considering variations (such as abbreviations or different spellings of the same name), the names of 32 individuals are known from the 'private' stamp impressions. To date, 45 seal types have been uncovered, 22 of which were found at Lakhish, mainly in the Level III destruction layer; thus, we can assume with high probability that they all date to the eighth century BCE (for further details on these impressions, see Lipschits 2021:50–51, Table 4.5). Fourteen types were found in other Shephelah sites destroyed in 701 BCE: Tel Goded, Tell Beit Mirsim, Bet Shemesh, Tell eṣ-Ṣafi/Gath, 'Azeqa, Maresha, Tel Burna and Tel Baṭash (Lipschits 2021:50, 52, Table 4.6). Even if there was a short-term effort to rebuild and resettle these sites after the destruction following Sennacherib's campaign (Finkelstein

and Na'aman 2004), the area as a whole was not resettled and did not become part of Judah again in the first decades of the seventh century BCE (Dagan 2000:207–212; Koch and Lipschits 2010:18–21; Lipschits 2018; 2021:105–106). Thus, the storage jars stamped with these seals must have been manufactured and used prior to Sennacherib's campaign.

Nine types of 'private' stamp impressions were found in sites that were not destroyed in Sennacherib's campaign (for further details on these impressions, see Lipschits 2021:52, 54, Table 4.7). Handles stamped with these seals were only found at sites in the hill country. Of the nine types, five bear names (including the owner and patronym) that also appear on the stamp impressions from Lakhish Level III; therefore, assuming they belonged to the same individual, they too can be dated to the late eighth century BCE. Four other names appear on storage-jar handles found at Ramat Raḥel, Jerusalem and Umm Ṭuba, all recovered from fills with no clear stratigraphic context (Aharoni 1962:18–19; Nadelman 1989:131; Shoham 2000:82), with no parallels in Lakhish Level III or the other Shephelah sites. Since there are very few such types, and the vast majority are dated with high probability to the end of the eighth century BCE, we may assume that all the storage jars with 'private' stamp impressions were manufactured and used prior to Sennacherib's campaign and the destruction of the Shephelah sites in 701 BCE (see also Vaughn 1999:97–98). Thus, this classification is crucial for the dating of the production and use of the 'private' stamp impressions to the period preceding Sennacherib's campaign in 701 BCE (Lipschits 2021:50–53; 159–165).

The Iron Age Remains at Mordot Arnona

Between 2017 and 2020, a stratified site was exposed in two salvage excavations carried out near the site of Ramat Raḥel, south of the Arnona neighborhood, Jerusalem (Fig. 1).[2] The previously unknown site is situated on the fairly flat bedrock surface of a spur that descends toward an unnamed wadi, which is a tributary of Naḥal Darga. The excavations exposed

[2] The excavations were conducted on behalf of the Israel Antiquities Authority, funded by the Israel Land Authority, and directed by Neria Sapir and Nathan Ben-Ari, with the assistance of Kfir Arbiv, Barak Monnickendam-Givon, Rotem Cohen, Benyamin Storchan, Yana Tchekhanovets, Zubair Adawi, Yaakov Bilig, Marion Sindel, Moran Balila, Annette Landes-Nagar and Mohammad Samhuri (area supervision); Riki Zalut Har-Tuv (assistant area supervisor); Nissan Nehama, Raed Abu Khalaf (administration), Mendel Kahan (drafting); Yaakov Shmidov, Shay Halevi, Alexander Wiegmann, Emil Aladjem (surveying, aerial photography, photogrammetry); Assaf Peretz (photography) and Shay Leshem, Sivan Mizrahi (preliminary inspections). Assisting in the excavations were various staff members of the Israel Antiquities Authority: Rebecca Cohen-Amin, Oriya Amichay, Inga Litvak, Michael Chernin, Mercedes Cohen, Joe Uziel and the staff of the Dead Sea Scrolls Unit; Yehiel Zelinger, Amit Re'em and Yuval Baruch. The still ongoing analysis of the finds is a joint collaboration between the Israel Antiquities Authority and the Institute of Archaeology at Tel Aviv University, with the assistance of Elisheva Kamaiski (pottery restoration); Semyon Gendler, David Tanami (metal detecting); Rifka Ben Chelouche and Aliza Riar (educational program); Yotam Asscher (analytical laboratory); Yoel Roskin (geology; OSL); Aliza van-Zuiden (plaster analysis); Yuval Gadot and Nitsan Ben-Melech (OSL); Yael Gorin-Rosen and Tamar Winter (glass analysis); Liora Freud, Alon De Groot, Debby Sandhaus, Salome Dan-Goor (pottery analysis); and Oded Lipschits (stamped handles).

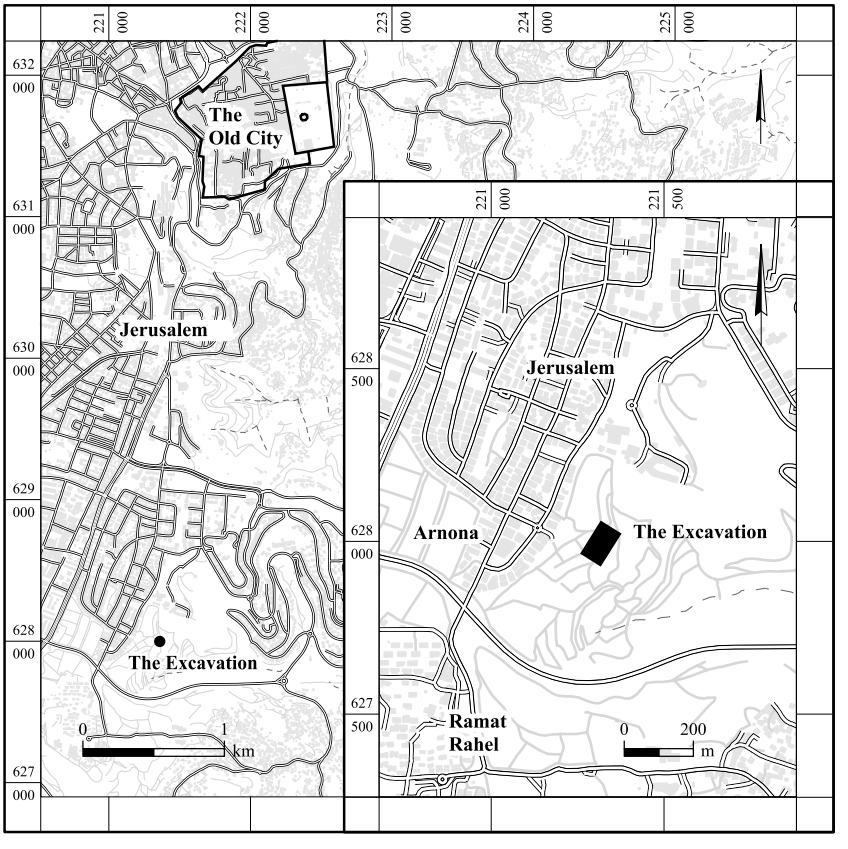

Fig. 1. Location map (drafting: Or Zakaim).

the remains of six strata (Table 1; Fig. 2), spanning Iron Age IIA–C and the Persian, Early Hellenistic, Hasmonean, Early and Late Roman periods (Strata 6–1; cf. Ben-Ari et al. 2021; Sapir et al. 2022).

Stratigraphy and Archaeology of the Site

Four different phases were discerned in Stratum 6, labeled Phases 6d–a (Fig. 3). Below is a brief description of the Iron Age IIA–C remains at the site.

The only secure context attributed to Phase 6d was a sealed pit. It was exposed under the eastern wall of the Phase 6b public structure. A preliminary analysis of the pottery sherds found within the pit point to an early Iron IIA date. These are the earliest pottery sherds found on site, and no similar pottery was found in other excavated areas.

Phase 6c comprised a narrow strip of terra rosa soil sealed beneath the Phase 6b remains. This feature yielded a rich pottery assemblage containing a high concentration of early types of *lmlk* stamp impressions and private impression stamped on jar handles, dated to the eighth century BCE (Lipschits 2021:50–53; 159–165). To this we can add several monolithic ashlars reused in a massive Phase 6b wall, as is clear from the contrast between them and

Table 1. Stratigraphic Overview of the Site

Stratum/ Phase	Period	Main Features
1	Late Roman (3rd–4th c. CE)	Continued use of the storage cave and massive construction within it
2	Early Roman (1st c. BCE–1st c. CE)	Columbarium, rock-cut installations and quarrying in the northwestern part of the site
3	Late Hellenistic–Hasmonean (2nd–early 1st c. BCE)	Partial levelling of the Persian/Early Hellenistic compound ruins; a storage cave containing *in situ* storage jars
4	Early Hellenistic (late 4th–3rd c. BCE)	Complex of rock-cut winepresses, probably built in an earlier phase, and the continued use of the compound founded in the Persian period
5	Babylonian–Persian (6th–late 4th c. BCE)	Several activity phases of a compound dug into the stone heap, and multiple *ṭabuns*, including in one of the winepresses
6a	Iron Age IIC (late 7th c. BCE)	Two longitudinal structures on the western edge of the stone heap
6b	Iron Age IIC (early mid-7th c. BCE)	Massive stone heap constructed in three technical stages and the construction of a large platform on top, probably for a public building
6c	Iron Age IIB (late 8th c. BCE)	Monumental structure and a concentration of 'private' and early *lmlk* stamped jar handles, together with some early and (mainly) late 8th c. BCE pottery
6d	Iron Age IIA (10th–9th c. BCE)	Pottery in a water reservoir

Fig. 2. Plan of the remains, divided according to strata (drafting: Or Zakaim).

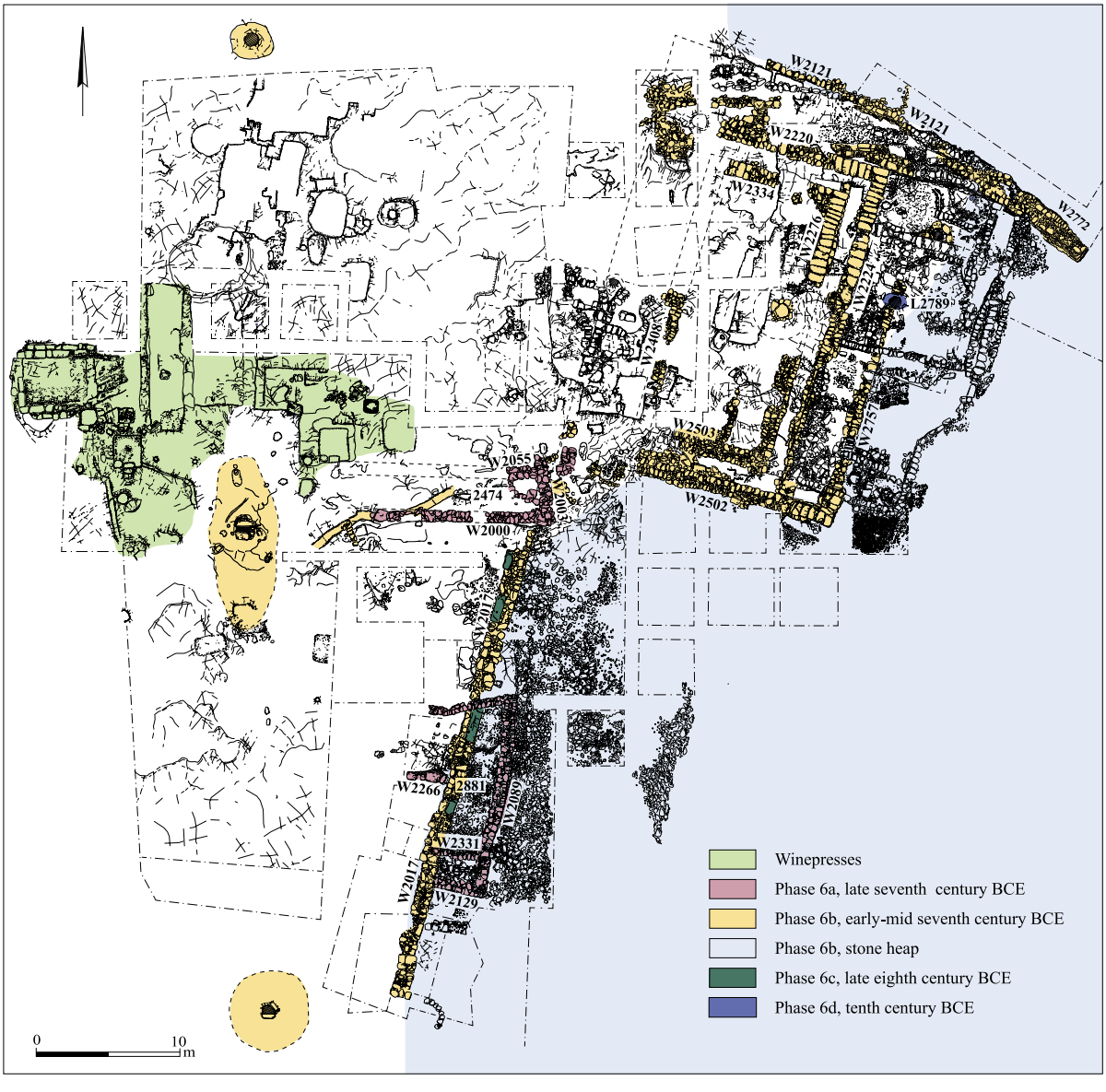

Fig. 3. Detailed plan of the remains, divided according to strata (drafting: Or Zakaim).

the local flint stones used in the later wall's construction and found abundantly at the site. Both the stamped impressions and the monolithic ashlars suggest that an administrative monumental structure stood at the site in Phase 6c.

Phase 6b consists of a huge, massive stone heap that was delimited by massive walls. The stone heap covered an estimated area of four dunam. We presume that the construction of this heap led to the deliberate dismantling of the earlier remains. A set of thick, well-built walls were built on the northern part of the heap. It seems that these walls, together with the stone heap, served as a raised platform, on which a monumental ashlar building

Fig. 4. Schematic reconstruction of the large structure at the top of the stone heap as seen from the agricultural area to its east (reconstruction: Yakov Shmidov).

probably stood, overlooking the agricultural fields surrounding the site and visible from a great distance (Fig. 4). This, together with the high concentration of late types of *lmlk* stamp impressions found in the construction fills surrounding the platform walls, suggest that a new monumental administrative structure was built in Phase 6b, most probably in the early part of the seventh century BCE.

To the latest phase, Phase 6a, we attribute two broad-room structures that were built upon the western margins of the stone heap. In their foundation trenches, which were dug into the heap and sometimes even into the underlying terra rosa layer, a rich pottery assemblage dated to the mid-seventh century BCE was found. The pottery assemblage contained dozens of jar handles bearing stamped impressions, mainly late types of *lmlk* stamp impressions and concentric circle incisions.

The rich Iron Age IIb–c pottery assemblage yielded 17 new jar handles with 'private' stamp impressions. Several were found in Phase 6c, beneath the western margins of the Phase 6b stone heap, particularly in a narrow strip of terra rosa exposed along a massive wall that delimited the stone heap from the west. Others were found in the foundation trenches of the southern broad room of Phase 6a that cut the stone heap and the underlying layers. None were exposed in secure Stratum 6b–a contexts, indicating that the jars with 'private' stamp impressions were in use prior to these phases, at the end of the eighth century BCE.

The Stamped Impressions

In the Mordot Arnona excavations, 186 stamped or incised handles were found (*178, as 6 concentric circle incisions appeared on the stamped *lmlk* handles, and one *yehud* and one lion stamp impression appeared on a body sherd of a jar and not on a handle). In addition to the 17 'private' stamp impressions published here, some 124 *lmlk* stamp impressions, 33 concentric circles (27 incised handles and 6 concentric circle incisions on the same handle with *lmlk* stamp impressions), 4 rosette, 2 lion, 3 *yehud* and 3 *yršlm* stamp impressions were retrieved from the site.

These high numbers, surpassed only by the finds at four other sites: Ramat Raḥel, with 808 stamped or incised handles and body sherds, and 11 handles with both concentric incisions and *lmlk* stamp impressions; Jerusalem (755), Lakhish (511) and Bet Shemesh (c. 200). Two sites in Benjamin yielded a similar number of such finds: Tell en-Nasbeh–Miẓpa (149) and el-Jib–Giv'on (122). All the above-mentioned sites, except for Ramat Raḥel and Mordot Arnona, were important cities in Judah during the First and Second Temple periods.

If only the *lmlk* and the 'private' stamped handles are considered, dated to the late eighth and early seventh centuries BCE, then their quantity in Mordot Arnona is even larger, as 124 of a total of 180 stamp impressions belong to these types. Only in Lakhish (485), Jerusalem (315), Ramat Raḥel (243) and Bet Shemesh (c. 180), more stamp impressions of these types were found, and in Giv'on (99) and Miẓpa (92), their number is similar.

The number of concentric circles incised on the jar handles from Mordot Arnona, either alongside *lmlk* stamp impressions or without them, is also great (33), surpassed only by the finds in Jerusalem (162) and Ramat Raḥel (40). In Giv'on, an equal number of concentric circle impressions was found (33), while in Miẓpa (17) and Khirbat el-Burj (15), their number is much lower than in Mordot Arnona. In all other sites in Judah, especially around Jerusalem (since there are almost no incised handles in the Shephelah), only few handles of this type were discovered, if at all.

These numbers emphasize Mordot Arnona's significant contribution to the study of the stamped and incised jar handles from the late eighth and early seventh centuries BCE. Moreover, the proximity of this site to Ramat Raḥel is important for understanding the role of these two sites in the administration and economy of Judah. Unlike Ramat Raḥel, which continued to play a major role in the jars' administration in the late seventh century BCE, becoming the "capital" of stamped jars under Babylonian and Persian rule, and later in the Early Hellenistic period (Lipschits, Gadot and Oeming 2020), Mordot Arnona lost its administrative and economic importance during these periods, serving as a rural production site for agricultural produce, like other sites in the Refa'im Valley and the region of Benjamin.

The 17 new 'private' stamp impressions on storage-jar handles from Mordot Arnona (Table 2) raise the total number of such stamped handles found in Judah to 192, thus representing nearly 10% of the total assemblage. The assemblage also increases the number of 'private' stamp impressions in the region of Jerusalem to 50, making up 26% of the

Table 2. Types and Quantities of ‘Private’ Stamped Impressions from Mordot Arnona and Their Respective Representation in Other Sites

Type	No. from Mordot Arnona	No. from Other Sites	Other Sites
lmnḥm/ywbnh	1	10	Lakhish (4), Giv‘on (1), Ramat Raḥel (2), ‘Adullam (1), Khirbat ‘Abbâd (Sokho) (2)
lmšlm/’lntn	1	3	Lakhish (1), Giv‘on (2)
lnḥm/‘bdy	5	15	Lakhish (13), Tel Goded (1), Naḥal ‘Arugot (1)
lnḥm/hṣlyhw	1	3	Giv‘on (1), Jerusalem (1), Ramat Raḥel (1)
lṗqḥ/tbr’	1	1	Ramat Raḥel (1)
lṣpn.’/bm’ṣ	1	5	Tell es-Ṣafi (2), ‘Azeqa (1), Tel Baṭash (1), Jerusalem (1)
ṣpn.‘/zryhw	2	5	Lakhish (5)
lšbn/‘.šḥr	1	10	Lakhish (3), Miẓpa (3), Ramat Raḥel (3), ‘Azeqa (1)
yhwḥl/šḥr	1	2	Ramat Raḥel (1, Sokho (1)
ṡbnyh/‘zryh	1	2	Lakhish (1), Tel Goded (1)
lšlm/‘ḥ’	1	9	Lakhish (1), ‘Arad (1), Bet Shemesh (1), Jerusalem (1), Khirbat Rabud (Debir) (2), Ramat Raḥel (1), Tel Goded (2)
?	1		

collection. These new finds, together with the many early *lmlk* stamp impressions, also dated to the late eighth century BCE, testify to the centrality and importance of the early phase of Mordot Arnona, which calls for a rethinking of the role of this site in the immediate vicinity of Jerusalem on the eve of the 701 BCE Assyrian campaign to Judah.

Corpus of the ‘Private’ Stamp Impressions[3]

1. Permit No. A-8660, L2174, B22553

Context: Phase 6a, accumulation in Structure 2881, adjacent to Enclosure Wall 2017.

Description: The upper part of a jar handle with a central ridge, made of pinkish-orange clay with gray and white inclusions in different sizes. There is a deep scratch on the handle just below the stamp impression that was made when the clay was still soft, and there are also signs of slight squeezing of the handle by a finger, perhaps as part of the process of the stamping.

The impression was stamped on the upper flat area of the handle, slightly left of center, on the central ridge, facing up. There are two inscribed registers separated by a double line field-divider and a single border around the entire circumference (where the bezel impression remains). The angle of the stamping caused the lower left side to be deeper, but the entire bezel is clear, as are most of the letters. The central part of the impression was cleaned or wiped after it was impressed, so part of the double line field-divider and the two

[3] The stamped jar handles are presented on a scale of 1:3 and the impressions are presented on a scale of 1:1.

letters to the right of the upper row, as well as the second and third letters in the lower row are less clear. A large white inclusion in the center of the lower row damaged the impression of the third letter.
Size: Diam. 13 mm.
Inscription: lmnḥm/ywbnh. As in the example from Ramat Raḥel (Aharoni 1962:18), the *waw* is unique, having a long diagonal stroke that intersects the double field-divider.
Parallels: Lakhish (4; Diringer 1953:341, Pl. 47B:6; Barkay and Vaughn 1996:36–38, Nos. 7–9); Giv‘on (1; Pritchard 1959:28, Fig. 10:7, Pl. 11:7); Ramat Raḥel (2; Aharoni 1962:17–18, Fig. 14.3, Pl. 6:4); ‘Adullam (1; Vaughn 1999b:204, Nos. 60, 62) and Khirbat ‘Abbâd (Sokho) (2; Tsur 2015; Koch and Lipschits 2016:343–344).

2. Permit No. A-8577, L2450, B21339.

Context: Phase 6a, sealed fill in one of the foundation trenches of Structure 2881, adjacent to Enclosure Wall 2017.
Description: The upper part of a jar handle with one main ridge, made of pinkish-brown clay with white inclusions of different sizes. The round impression was stamped on the beginning of the rounded part of the handle, on the left side of the ridge, facing left. The angle of the stamping caused the impression to be deeper on the left, on the upper part of the handle, and much shallower on the right, but the entire circumference of the frame is clear. The frame, the double line field divider and all the letters are very clear.
Size: Diam. 12 mm.
Inscription: lmšlm/‘lntn.
Parallels: Lakhish (1; Diringer 1953:341; Barkay and Vaughn 2004:2162) and Giv‘on (2; Pritchard 1959:28, Fig. 10:5, 6, Pl. 11:5, 6).

3. Permit No. A-8660, L73, B4159.
Context: Phase 6c, sealed fill beneath the stone heap, abutting Enclosure Wall 2017.
Description: A complete jar handle, with two central ridges, made of pinkish-brown clay, with many white inclusions of different sizes. The rectangular impression was stamped on the upper part of the handle, between the flat area on the top, and the beginning of the round handle. The impression was stamped facing right, so the left side, which was impressed on the upper part, is much deeper than the right side, and the right bezel is hardly visible. There are clear signs of processing the upper part of the handle after the stamping, as well as pressure placed on the impression's left side with some clay that was pushed on the bezel, deforming it.
Size: 18 × 13 mm.
Inscription: lnḥm/'bdy.
Parallels: Lakhish (13; Tufnell 1953:341, Pl. 47A:10, 11; Barkay and Vaughn 2004:2163), Tel Goded (1; Bliss and Macalister 1902:120;), Naḥal 'Arugot (1; Hadas 1983). See also Nos. 4–7 below.

4. Permit No. A-8660, L59, B4156/1.
Context: Phase 6c, accumulation/fill of terra rosa between Enclosure Wall 2017 and W2000 of Building 2774.
Description: A nearly complete jar handle, with two ridges, made of pinkish-brown clay, with many white inclusions of different sizes. The rectangular impression was stamped on the upper rounded part of the handle, below the flat area on the top of the handle. The impression was stamped facing left, very deep, so the bezel and all the letters are very clear.
Size: 18 × 14 mm.
Inscription: lnḥm/'bdy.
Parallels: As No. 3.

5. Permit No. A-8660, L59, B4156/2.
Context: Phase 6c, accumulation/fill of terra rosa between Enclosure Wall 2017 and W2000 of Building 2774.
Description: A complete jar handle, with two ridges, made of pinkish-brown clay with many white inclusions of different sizes. The rectangular impression was stamped on the upper rounded part of the handle, below the flat area on the top of the handle. The impression was stamped facing left, very deep, so the bezel and letters are very clear, apart from the left side of the bezel that was stamped between the two ridges. There are clear signs for double stamping.
Size: 20 × 13 mm.
Inscription: lnḥm/'bdy.
Parallels: As No. 3.

6. Permit No. A-8660, L2143, B22538.
Context: Phase 6a–b, disturbed accumulation above Fill 2174 in Structure 2881, adjacent to Enclosure Wall 2017.
Description: A nearly complete jar handle with two ridges, made of pinkish-brown clay with only a few white inclusions of different sizes. The entire outer surface of the handle is brittle. A layer of grayish coating on the handle also peeled off. The impression was stamped on the upper rounded part of the handle, between the two ridges, facing left. The right and upper sides, on the upper part of the handle and the left ridge, are deeper than the lower and the left sides of the impression. The entire bezel is clear, as are the letters.
Size: 20 × 13 mm.
Inscription: lnḥm/'bdy.
Parallels: As No. 3.

7. Permit No. A-8577, L2450, B22181.
Context: Phase 6a, the top of the accumulation in Structure 2881, adjacent to Enclosure Wall 2017.
Description: The upper part of a jar handle, made of pinkish-orange clay with only a few white inclusions of different sizes. The rectangular impression was stamped in the middle of the upper flat surface of the handle, facing down. It was impressed very deep, and the frame and the letters are very clear. Only the upper frame, on the lower part and on the break of the handle, is partly missing.
Size: 20 × 13 mm.
Inscription: lnḥm/'bdy.
Parallels: As No. 3.

8. Permit No. A-8123, L55, B4115.
Context: Phase 6b, stone heap, abutting Enclosure Wall 2017.
Description: A nearly complete jar handle with two ridges, made of brownish-orange clay with many inclusions of different sizes. The impression was stamped on the upper rounded part of the handle, below the flat area, on the left ridge and on the gap between the two ridges, facing left. It is very deep and very clear on the right, on the upper part of the handle, and shallower on the left. The entire bezel is clear and all the letters can be identified.
Size: 13 × 10 mm.
Inscription: lnḥm/hṣlyhw.
Parallels: Giv'on (1; Pritchard 1959:27, Fig. 10:2, Pl. 11:2), Jerusalem (1; Nadelman 1989:131) and Ramat Raḥel (1; Aharoni 1964:61).

9. Permit No. A-8660, L2174, B22892.
Context: Phase 6a, accumulation in Structure 2881, adjacent to Enclosure Wall 2017.
Description: The upper part of a jar handle with two narrow ridges, made of pinkish-brown clay with medium-sized white inclusions. The impression was stamped on the beginning of the rounded part of the handle, on the left ridge, facing right. The left quarter of the impression toward the top of the handle is missing since it is broken, while the rest is blank, including the blurred frame, due to the processing and smoothing after the stamping. Only the three first letters in the lower row can be identified (cf. Lipschits and Koch 2016:345–346).
Size: Unclear.
Inscription: lṗqḥ/tbr'.
Parallels: Ramat Raḥel (1; Aharoni 1962:19, Fig. 14:5, Pl. 6:3; Koch and Lipschits 2016:345–346).

10. Permit No. A-8123, L58, B4137.
Context: Stratum 4 fill in a winepress containing mixed findings.
Description: A broken jar handle with one wide central ridge, made of pinkish-orange clay with many (mainly small) white inclusions. The impression was stamped on the center of the ridge, on the flat area on the top of the handle, facing right. However, after it was impressed, probably during the smoothing of the handle, most of the right and central parts of the stamp impressions were deleted, and some clay was pushed up and can be seen on the bottom left side of the impression.

On the left side of the impression, the end of one letter can be detected (the last one in the upper register), probably an *aleph*. The end of the lower register bears remains of a *samekh*. The double field divider is very narrow and elegant, and can be seen to the left, with some remains on the right side of the stamp impression.
Size: 11 × 10 mm.
Inscription: lṣpn.'/bm'ṣ.
Parallels: Identical stamp impressions were unearthed at Tell es-Ṣafi/Gath (2; Bliss and Macalister 1902:121), 'Azeqa (1), Tel Baṭash (1; Mazar and Panitz-Cohen 2001:194, No. 10) and Jerusalem (1; Vaughn 1999:211, Nos. 158, 160; Avigad and Barkay 2000:249).

11. Permit No. A-8660, L2767, B22561.
Context: Phase 6b–a, sealed fill in foundation trench of Structure 2881, adjacent to Enclosure Wall 2017.
Description: A very small and damaged jar handle, made of pinkish-brown clay, with few white inclusions. The handle is very worn and the outer layer of the coating has peeled off. The impression was stamped on the upper part of the central ridge, on the flat area on the upper part of the handle, facing right. Due to the angle of the stamping, the impression is deeper on the left and the upper part of the handle, while it is considerably shallower on the right, although the frame is completely visible. There are smoothing marks on the top center of the impression so that the first three letters in the upper row were deleted, the single line field divider in the center of the impression disappeared, and the top of the second and third letters in the lower row are missing.
Size: Unclear.
Inscription: ṣpn.ʿ/zryhw. The letters *ṣ[---]ʿ/zryhw* are visible. Remains of the *ṣade* on the top row are faint, but the letter is clear, as is the *ʿayin* at the end of the row. The remains of the letters in the lower row are clear, even if some were only partially preserved.
Parallels: Lakhish (5; Diringer 1953:341, Pl. 47A:1, 2; Barkay and Vaughn 2004:2164). This stamp impression, and No. 12, are the only examples of this type of stamp impression discovered outside Lakhish.

12. Permit No. A-8660, L2856, B22959.
Context: Stratum 3 accumulation on floor of Cave 2240.
Description: The upper part of a jar handle with two ridges, made of pinkish-brown clay, with white inclusions of different sizes. The impression was stamped on a small piece of clay that was attached to the already dry handle. As such, the remains of the impression survived only on the small attached piece of clay, and the frame is missing, as well as the right side of the impression on the upper part of the handle, as are part of the upper part of the letters in the upper row, atop the central ridge.
Size: Unclear.
Inscription: ṣpn.ʿ/zryhw. The letters *ṣpn.[ʿ]/zryhw* can be discerned. Remains of the legs of the three first letters in the upper row are clear, and only the *ʿayin* at the end of the row is almost completely missing. All the letters in the lower row are clear.
Parallels: As No. 11.

13. Permit No. A-8123, L56, B4230.
Context: Phase 6b stone heap abutting Enclosure Wall 2017.
Description: A broken jar handle with one central ridge, made of brownish-orange clay with many inclusions of different sizes. The impression was stamped on the flat area on the top of the handle, on the central ridge, facing right, with a slight downward angle. The impression is very clear. The bezel can be identified mainly on the upper and left sides and the letters can be easily identified.
Size: 9 × 12 mm.
Inscription: lšbn/'.šḥr.
Parallels: Lakhish (3; Diringer 1953:341, Pl. 47B:1; Tufnell 1953:341, Pl. 47B:1), Miẓpa (3; McCown 1947:160–162), Ramat Raḥel (3; Aharoni 1964:60; Barkay and Vaughn 2004:2164) and ʻAzeqa (1; Koch and Lipschits 2016:352).

14. Permit No. A-8123, L53, B4073.
Context: Phase 6b stone heap, abutting Enclosure Wall 2017.
Description: A broken jar handle with two ridges, made of pinkish-orange clay with a few white inclusions of different sizes. The impression was stamped on the right ridge on the flat area at the top of the handle, facing left. The lower left part of the impression, outside the right ridge, is missing, since in the final preparation of the handle it was smoothed and deleted. Therefore, only three letters in the lower row can be observed. The double field divider is clear as are the four letters in the upper row.
Size: 11 mm in length, height unclear.
Inscription: yhwḥl/šḥr.
Parallels: Ramat Raḥel (Aharoni 1962:44, Fig. 31:2, Pl. 27:2); Sokho (Lipschits and Amit 2011:183).

15. Permit No. A-8123, L53, B4059.
Context: Phase 6b stone heap, abutting Enclosure Wall 2017.
Description: A broken jar handle with two ridges along the center of the handle, made of pinkish-orange clay with white inclusions of different sizes. The impression was stamped on the upper rounded part of the handle, below the flat upper part, facing halfway left and down, between and on the two ridges. It was probably stamped when the clay was still wet, so the letters are a bit wide and unclear. The upper bezel on the left ridge and the double line field divider are clear.
Size: 12 × 12 mm.
Inscription: šbnyh/'zryh.
Parallels: Lakhish (1; Tufnell 1953:341; Barkay and Vaughn 2004:2161) and Tel Goded (1; Bliss and Macalister 1902:120).

16. Permit No. A-8660, L2839, B22876.
Context: Phase 6b stone heap.
Description: A broken jar handle made of pinkish-brown clay, with a few large white inclusions. There are signs of smoothing the handle before stamping. The impression has a unique shape of a cone with rounded corners. It was stamped on the right side of the handle, below the flat upper part, facing left. The angle of the stamping caused the impression to be very deep on the right, located on the upper part the handle, while its left side was not impressed, so the left frame is missing. The lower right corner of the seal reached beyond the handle's edge, so it was not stamped. All the letters are very clear and deep, as seen on other examples of this well-known type.
Size: Unclear
Inscription: lšlm/'ḥ'.
Parallels: Lakhish (1; Ussishkin 2004:2138, No. 90), Khirbat Rabud (Debir) (2; Kochavi 1974:18, Pl. 4:3, 4), 'Arad (1), Bet Shemesh (1), Jerusalem (1), Ramat Raḥel (1) and Tel Goded (2; Vaughn 1999b:214, Nos. 195, 196, 197, 201, 214; Ben-Dor 1948:66–67).

17. Permit No. A-8660, L2174, B22527.
Context: Phase 6a accumulation in Structure 2881, adjacent to Enclosure Wall 2017.
Description: The upper part of a jar handle with two ridges, made of pinkish-brown clay, with a few large white inclusions. The impression was stamped on the flat area on the upper part of the handle, between the two ridges, but it was probably stamped when the clay was still very wet, so other than the double line field divider and minimal remains of illegible letters, no reading or clear identification of the type or the inscription could be made.

Discussion

The 17 jar handles bearing 'private' stamp impressions unearthed at Mordot Arnona are an important addition to the corpus of stamp impressions of this type, particularly in light of the large size of the assemblage, with only Lakhish (72), Ramat Raḥel (19) and Bet Shemesh (18) yielding more (Table 3). It is noteworthy that more such handles were found at Mordot Arnona than in Jerusalem, where 13 'private' stamp impressions were found.

Further significance stems from the diversity of this corpus, with eleven different types of 'private' stamp impressions, most of which are well-known from other sites, particularly Lakhish (see Table 2). Eight of the eleven types were also found in Lakhish Level III, including the interesting predominance of the seal of *lnḥm/'bdy*, with a concentration of five stamped handles from Mordot Arnona and 13 stamped handles from Lakhish. Another type of 'private' stamp impression, bearing the name *ṣpn.'/zryhw*, appears twice at Mordot Arnona, with five examples in Lakhish. One type of 'private' stamp impression (*lṗqḥ/tbr'*) is rare, with only a single identical stamp impression found on a handle from Ramat Raḥel.

The similar number of 'private' stamp impressions discovered in Mordot Arnona and nearby Ramat Raḥel is also important, as both are administrative sites, built in the late eighth century BCE, on a ridge that was not previously inhabited. These sites are in close proximity to one another, roughly 4 km south of Jerusalem and near the road leading from Jerusalem southward toward Hebron and the junction leading through the Refa'im Valley westward to Bet Shemesh. The structures perched on the two hills dominated the tributaries of Naḥal Darga that descend eastward toward the Judean Desert and the Dead Sea. The unusual concentration of 'private' stamp impressions at both sites, specifically compared to the Judean Hills, accentuates the variation in the types of stamp impressions, as only six of the eleven types from Mordot Arnona were found in Ramat Raḥel, four of which are also fairly common at other sites: *lšbn/'.šḥr*, with one stamped handle at Mordot Arnona and three identical ones at Ramat Raḥel; *lmnḥm/ywbnh*, with one stamped handle at Mordot

Table 3. Comparison of All Stamp Impression Systems between Mordôt Arnona and Other Major Sites

Region	Site	Systematic Stamp Impressions[i]									Ad Hoc Systems		
		Early *lmlk*	Late *lmlk*	Unid. *lmlk*	Conc. circles	Rosette	Lion	Early *yhwd*	Middle *yhwd*	Late *yhwd*	Private	*mwṣh*	*yršlm*
Jerusalem Environs	Mordot Arnona	39	53	32	33	4	2	1	2	-	17	-	3
	Ramat Raḥel	46	133	45	40	57	73	127	212	33	19	1	33
	Jerusalem	90	180	32	162	108	31	17	59	86	13	4	58
Benjamin Region	Miẓpa	27	38	23	17	2	5	1	18	-	4	30	1
	Giv'on	17	63	12	33	2	2	-	-	-	7	4	-
Judahite Shephelah Region	Lakhish	378	4	31	4	24	-	-	-	-	72	-	-
	Bet Shemesh	57	18	c. 105	-	3	-	-	-	-	18	-	-

[i] Unid.= unidentified, Con. = concentric.

Arnona and two identical ones at Ramat Raḥel; *yhwḥl/šḥr*, *lnḥm/hṣlyhw* and *lšlm/'ḥ'*, with one stamped handle of each type found at both sites; and *lnḥm/hṣlyhw*, with two stamped handles at Mordot Arnona and three at Ramat Raḥel. Only one stamp impression, *lṗqḥ/tbr'*, has thus far been exclusively found in Ramat Raḥel and Mordot Arnona, with no parallels from other sites.

It is noteworthy that many *lmlk* stamp impressions were found at both sites (224 at Ramat Raḥel and about 124 at Mordot Arnona), in quantities comparable to only Lakhish and Jerusalem. The large number of concentric incisions on jar handles is also noteworthy (40 at Ramat Raḥel and 33 at Mordot Arnona), comparable only to Jerusalem (162 incised handles) and several sites in the region of Benjamin (33 from Giv'on, 17 from Miẓpa and 15 from Khirbat el-Burj). However, in contrast to the flourishing of Ramat Raḥel later in the seventh century BCE, reflected in the large number of rosette stamped handles (57) and the intensification of use of stamped handles from the sixth to the second centuries BCE, there is a dramatic drop in the importance of Mordot Arnona, which, from the last third of the seventh century BCE onward yielded only a few stamped handles of all the known later types.

Conclusions

Lipschits has recently raised the possibility that the system of storage jars, whose handles were stamped with the 'private' impressions, served as a replacement or an addition to the *lmlk* jar system during the preparations of the Kingdom of Judah for the Assyrian 701 BCE military campaign (Lipschits, Sergi and Koch 2010:7; Lipschits 2021:185–188). The 'private' stamp impressions were perceived as one of three ad hoc systems that operated occasionally for a brief period and probably for a specific purpose, alongside the various "regular" systems that existed in Judah throughout a period of about 600 years (from the last third of the eighth to the last third of the second century BCE). The production of the jars with the 'private' stamp impressions may have been connected to the preparation for Sennacherib's military campaign

in the same way that the *mwṣh* stamp impressions production commenced after the Babylonian destruction of Jerusalem, when there was a need to provide supplies to the governor stationed at Tell en-Nasbeh–Miẓpa and the *yršlm* stamp impressions production commenced due to the need to strengthen Jerusalem's status in the early Hasmonean days (Lipschits 2021:185–188). In these three defined historical periods, the well-known system of stamped jars was used in an unusual manner to fulfill a specific task that arose, in some cases parallel to the standard systems that continued to operate.

In the case of the 'private' stamp impressions, we consider that this system served the specific need to collect food supplies before the Assyrian 701 BCE campaign, mainly along Judah's western border, and probably also around Jerusalem. If this assumption is correct, then it reflects a short period of time in which the existing system of *lmlk* stamped jar handles was used and adapted to Hezekiah's preparations for the Assyrian military campaign against Judah. The system was in operation since the outbreak of the revolt, around 704 BCE, and probably did not continue in use after 701 BCE. In light of this, the significantly smaller scope of the 'private' stamp system in compared to the *lmlk* system, the concentric circle incisions and the rosette stamp impressions system, can be understood. The distribution of 'private' stamped jar handles is also more limited than that of other systems, with the main concentration of 'private' stamp impressions in the Shephelah. The jars continued to be produced in the same production center in the Shephelah, probably Sokho, and individual jars were even sealed with both *lmlk* and 'private' impressions. It is possible that seals were added in preparing for the revolt against the Assyrian empire naming the recipient of the produce from the royal estate. This new system was probably used to transport the royal-estate produce to office-bearers in the kingdom, who received supplies and were responsible for their redistribution. After Sennacherib's campaign, with the reestablishment of Assyrian hegemony in the Southern Levant and Judah in particular, the system of 'private' stamp impressions ceased to exist. In contrast, the *lmlk* system, which was part of the economic and administrative reorganization of Judah under Assyrian rule, was adapted to the new geopolitical, administrative and economic reality, continuing in use for several more decades (Lipschits 2021:158–164).

The finds from Mordot Arnona may support a limited timeframe of use for the 'private' stamp impressions. These stamp impressions may also attest to the role of the early phase at the site, and the date and reasons for the total destruction and sealing of the monumental structure that most probably functioned as an administrative center in the late eighth century BCE (Ben-Ari et al. 2021; Sapir et al 2022).

The handles bearing the eighth-century BCE stamp impressions , including the early *lmlk* and the 'private' stamped handles, must be attributed to the early phase of activity at the site. This phase was dismantled and sealed in the late eighth century BCE. The huge stone heap that overlay it was meant to cover it completely. The abundance of 'private' and early *lmlk* stamp impressions from this early phase likely indicates that the earliest structure played a major part in the administration established in Judah after it became an Assyrian vassal kingdom in the days of King Ahaz (734 BCE), perhaps forming part of a chain of administrative buildings south of Jerusalem, headed by Ramat Raḥel. As Sennacherib did

not conquer Jerusalem in the 701 BCE military campaign, and Hezekiah surrendered to him and paid him a heavy tribute, the demise of the administrative center at Mordot Arnona can be linked to the Assyrian presence in the vicinity of Jerusalem during the siege of the city, as well as the new arrangements made in wake of the Assyrian renewed rule over the kingdom in the early seventh century BCE.

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