Transport Stirrup Jars from Israel

An appendix to "Transport Stirrup Jars from the Southern Levant: New Light on Commodity Exchange in the Eastern Mediterranean," by David Ben-Shlomo, Eleni Nodarou, and Jeremy B. Rutter (*AJA* 115 [2011] 329–53).

Examples not directly examined by one of the authors are marked with an asterisk (*). Surfaces are presumed unfinished (i.e., simply smoothed) unless otherwise specified. The presence of colored slips on vessel exteriors is noted when applicable.

PAM = Rockefeller Museum, Jerusalem, inventory number FM = Furumark Motif (Furumark 1941)

| Site and Excavation No. | Inv. No. | Sample No. | Archaeological Context | Portion Preserved | Fabric | Description (Make, Shape, Slip, Decoration, Measurements [cm]) | Reference(s) |
|-------------------------------|----------|------------|--|------------------------------------|-------------------|--|--|
| Akko P8600/91 | - | Akko1 | - | lower body sherd | medium- coarse | broadly looping horizontal Wavy Band (FM 53:14) with three broad horizontal bands below; probably pieced (evidence of two deep, handmade grooves on interior at probable point of junction on lower body, with significant thickening of body wall at same point to 1.4); exterior burnished after painting | Ben-Shlomo et al.2011, fig.4a |
| Akko P8600/1 | _ | Akko2 | - | handle (marked) and shoulder | medium- coarse | broken at top, at point of attachment to false neck disk; thickened vertical strap handle (2.9 x 2.0); wheelmade body(?); vertical band down middle of handle back; ring around handle base | Raban 1988, fig. 13, bottom left; Ben-Shlomo et al. 2011, fig. 4b |
| Akko P8588/28 | - | Akko3 | - | base and lower body | medium- coarse | hollowed splaying base (diam. 10.2), beveled at edge; piriform lower body profile; broad band beginning just above bevel, thin band above; possibly pieced, but interior surfaces heavily eroded; exterior slipped (including base underside) and burnished before application of paint on exterior body | Raban 1988, fig. 13, upper right; Ben-Shlomo et al. 2011, fig. 4c |
| Akko P10001/9 | - | Akko4 | - | spout | medium- fine | diam. near base of spout ca. 5.0; ring around spout base, band at mid-height(?) above; burnished on surviving portions of exterior after painting | unpublished |
| Ashdod H2246 | - | Ashdod1 | 13th century B.C.E.; stratum XIV | base and lower body | medium- coarse | base diam. ca. 12.0; hollowed splaying base fragment, beveled at bottom; cream-slipped; lustrous black paint; single band at base | Dothan and Ben-Shlomo 2005, fig. 3.1.11, pl. 3.1; Ben-Shlomo et al. 2011, fig. 4d |

| Site and Excavation No. | Inv. No. | Sample No. | Archaeological Context | Portion Preserved | Fabric | Description (Make, Shape, Slip, Decoration, Measurements [cm]) | Reference(s) |
|---------------------------------|--|---------------|--|---|---|--|--|
| Ashdod, South Beach | - | - | 13th century B.C.E. | false neck and handle | medium- coarse | plain; disk diam. ca. 7.5 | Nahshoni (forthcoming), fig.6.1; Ben-Shlomo et al.2011, fig.4f |
| Ashdod, South Beach 103/1 | - | Ashdod Beach1 | 13th century B.C.E. (Locus 1008/1) | shoulder fragment | medium- coarse | heavily worn; exterior originally coated in black(?) paint (now crackled), then overpainted in white with closely spaced horizontal bands (at least five) and two "bands" in the middle at roughly the same level (one tapers to a point, the other becomes much thinner); decoration reconstructed as light-on-dark; pattern unconventional | Nahshoni (forthcoming), fig.6.3; Ben-Shlomo et al.2011, fig.4e |
| Ashdod, South Beach 2330 | - | - | surface find | false neck and handle (marked) fragment | fine | disk diam. ca. 7.0; broad ring at disk edge; surfaces heavily worn; decoration of handle and surface treatment uncertain | Nahshoni (forthcoming), fig. 10.7 |
| Ashkelon 38.75.L512 B228 | - | Ashkelon1 | 13th century B.C.E.(?); phase 10 | false neck, handles (one marked), and shoulder fragment | fine (spout), medium- coarse (body), coarse (handles) | disk diam. 7.0–7.5; framed vertical wavy band on handle backs; band around false neck at mid-height | Cross and Stager 2006, fig. 22; Ben-Shlomo et al. 2011, fig. 4g |
| Ashkelon 38.74.L1079 B117 | - | Ashkelon3 | 13th century B.C.E.; phase 21 | handle and shoulder fragment | medium- fine | wheelmade; thickened vertical strap handle stump (wdth. 3.7, thickness 2.5) on incurving shoulder; handle side painted; three or more horizontal bars running across handle back; reddish-brown to very dark gray, crackled, slightly lustrous paint (5YR 3/1–4/3); light burnish on very pale brown slipped (10YR 7.5/3) shoulder and lowermost part of handle back | unpublished |
| Beth Shean 33-11-16 1726 | PAM 34.1237 | - | - | handle (marked) and false neck | fine | est. disk diam. 5.5; broad, thin vertical strap handle (3.4 x 1.15) with single medial rib; handle outlined; three concentric circles on disk; polished exterior surfaces | Hankey 1967, 127–28, fig. 4, pl. 28c.1 |
| Deir el-Balah | Jerusalem, Israel Museum, inv. no. IMJ 82.2.606 | DB1 | tomb (14th century B.C.E.?) | complete | medium- coarse | ht. 30.0, max. diam. 20.0, base diam. ca. 7.2; flat-bottomed torus disk foot; plump piriform body with indentation in lower body profile suggestive of piecing; spout rim painted; band at spout mid-height; single curving band around spout bases, handles, and false neck; shoulder otherwise plain(?); broad upper body zone with six degenerate lilies (i.e., vertical lines capped by two antithetical spirals of two to three revolutions framed by two pairs of narrow bands; pair of bands on lower body; plain foot | Dothan 2008, 127 |
| Deir el-Balah 2631/1* | _ | - | - | handle and lower attachment on shoulder | medium- coarse | handle back outlined; ring around lower handle attachment | Dothan and Nahmias-Lota 2010, fig. 7.2.1 |

| Site and Excavation No. | Inv. No. | Sample No. | Archaeological Context | Portion Preserved | Fabric | Description (Make, Shape, Slip, Decoration, Measurements [cm]) | Reference(s) |
|-------------------------------|-----------------------|------------|---------------------------|--|-------------------|---|---|
| Deir el-Balah 2784/1* | - | - | _ | body sherd | medium- coarse | horizontal Wavy Band (FM 53:14) | Dothan and Nahmias-Lotan 2010, fig. 7.2:2 |
| Deir el-Balah 3580* | - | - | - | false neck | fine | disk diam. 7.8; two concentric rings on disk (one at edge, one inside), with irregular solid blob coating low conical knob at disk center; band at false neck base | Dothan and Nahmias-Lotan 2010, fig. 7.2.3, pl. 46.14 |
| Gezer* | - | - | - | false neck disk | medium- coarse | disk diam. 7.0; cross painted in circle on disk top | MacAlister 1912, 178–79 |
| Tell Abu Hawam | PAM 37.320 | TAH2 | Building 37 | handle (marked) with attachments to false neck and shoulder | coarse | handle back outlined; band ringing false neck disk edge; ring around handle base; very pale brown slip (10YR 8/2–3) coating exterior surfaces, burnished after painting | Hamilton 1935, 49, no. 306a; 53, fig. 310A(b), pl. 19a; Balensi 1980, 77; cat. nos. 501, 505, pl.131.18; Ben- Shlomo et al. 2011, fig. 3a |
| Tell Abu Hawam | PAM 37.321, 37.322 | TAH23 | outside Room 44 | body fragment (nine joining sherds) | coarse | max. diam. 31; part of Parallel Chevron (FM 58) group on shoulder in quadrant flanking spout; broad horizontal Wavy Band (FM 53:14) in broad body zone; three bands between shoulder and body zone; lower body and base not preserved; very pale brown slip (8.75YR 8/4), burnished after painting | Hamilton 1935, 49, nos. 306b 306c, pl. 19b, c (three sherds, two fragments); Balensi 1980, 77, cat. nos. 306b, 306c, 501, 505, pls. 33.7, 155.2; Ben-Shlomo et al. 2011, fig. 2a, upper |
| Tell Abu Hawam | PAM 37.322/2 | TAH24 | - | lower body fragment (two joining sherds) | coarse | three bands below broadly looping horizontal Wavy Band (FM 53:14) in broad body zone; fabric as TAH23 | Balensi 1980, pls. 33.7, 155.3; Ben-Shlomo et al. 2011, fig. 2a, lower |
| Tell Abu Hawam | PAM 37.322/1 | TAH25 | - | false neck and handle stump | medium- coarse | disk diam. 6.8; simple ring at false neck disk edge | see TAH23 Ben-Shlomo et al. 2011, fig. 3e |
| Tell Abu Hawam | PAM 37.322/2 | TAH26 | - | body sherd | medium- coarse | paint applied after exterior surface burnished | see TAH23 |
| Tell Abu Hawam | PAM 37.403 | - | - | false neck, shoulder, and handle fragment (four joining sherds) | fine | disk diam. 7.5; rib at false neck base; broad thin vertical strap handle (4.30 x 0.95); handle outlined; three concentric circles on false neck disk; band at false neck base; handle base not ringed; polished exterior surfaces | Hamilton, 1935, 52, cat. no. 309n, pl. 22n; Balensi 1980, 103, 436, pls. 37.32, 131.8 |
| Tell Abu Hawam | PAM 37.417 | - | Room 64 | handle (marked) with attachment at shoulder | fine | handle wdth. 2.7; handle outline painted; possibly from same vase as base and body fragment PAM 47.1618/1–8 | Hamilton 1935, 53, fig. 310A(d); Balensi 1980, 108, 436, pls. 37.33, 149.53, 154.10 |
| Tell Abu Hawam | PAM 47.1594 | - | - | false neck and handle fragment | fine | disk diam. 5.6; broad, thin vertical strap handle (2.8+ x 0.9); handle back painted with opposed solid semicircles at top; large solid circle ringed by band on false neck disk; exterior surface polished on top of false neck disk and on handle backs | Balensi 1980, 220, 436, pls. 37.31, 139.44 |

| Site and Excavation No. | Inv. No. | Sample No. | Archaeological Context | Portion Preserved | Fabric | Description (Make, Shape, Slip, Decoration, Measurements [cm]) | Reference(s) |
|-------------------------------|---------------------|------------|---------------------------|---|---|---|--|
| Tell Abu Hawam | PAM 47.1595 | - | - | false neck, shoulder, and handle fragment | fine | disk diam. 6.2; rib at false neck base; false neck solid above mid-height; handle outlined; three concentric circles on false neck disk; band at false neck base; traces of curvilinear pattern on shoulder; broad vertical strap handle (2.4 x 1.15); exterior surface polished on disk top, handle backs, and shoulder | Balensi 1980, 220, 436, pls. 37.35, 141.13 |
| Tell Abu Hawam | PAM 47.1596 | ТАНЗ | - | base and lower body | medium- coarse | base diam.ca.11.0; splaying base with flat bottom, beveled at bottom edge; band at base | Balensi 1980, 220, 501, pls. 33.5, 166.30; Ben-Shlomo et al. 2011, fig. 3h |
| Tell Abu Hawam | PAM 47.1597 | TAH4 | - | shoulder fragment with handle scar | medium- coarse (body), coarse (handle) | est. shoulder diam. ca. 30.0; loop around handle base; traces of undeterminable pattern to right of handle in quadrant flanking spout; thin band above broad band (latter not fully preserved) below shoulder; very pale brown (10YR 8/3) exterior surface, slipped and polished | Balensi 1980, 220, 501, pls. 33.3, 166.31 (single sherd) |
| Tell Abu Hawam | PAM 47.1598/1 | TAH5 | - | base and nonjoining lower body sherd | medium- coarse | base diam. 9.0; handmade; raised flat base; conical lower body; broad horizontal Wavy Band (FM 53:14) above two bands on lower body; single band at base; white exterior surface, slipped but unfinished | Balensi 1980, 220, 501, pls. 33.8, 166.32; Ben-Shlomo et al. 2011, fig 3i (base only) |
| Tell Abu Hawam | PAM 47.1598/2 | TAH6 | - | spout and shoulder fragment | medium- coarse (body), medium-fine (spout) | handmade spout; body possibly handmade; rim painted, band ringing spout base; band at spout mid-height; unidentifiable curvilinear pattern to left of spout; spout base diam. ca. 5.0 | Balensi 1980, 221, 501, pls. 33.2, 124.15; Ben-Shlomo et al. 2011, fig. 2c |
| Tell Abu Hawam | PAM 47.1599 | - | - | base and body sherds (six fragments) | fine | max. preserved ht. 28.0, max. diam. 26.0, base diam. 8.8; flat raised base; wall thickens at mid-height, suggesting vase was pieced; three bands on shoulder, single band just above max. diam., two broad bands on lower body, two bands at base; fine fabric and oddities in wall thickness cast doubt on identification as transport stirrup jar | Balensi 1980, 221, pls. 34.11, 140.5 |
| Tell Abu Hawam | PAM 47.1615 | - | - | false neck and handle (marked) | fine | disk diam. ca. 6.0; broad vertical strap handle (2.3+ x 0.8); handle outlined; three or more concentric circles on false neck disk; polished exterior surfaces | Balensi 1980, 226, 436, pls. 37.34, 143.49 |
| Tell Abu Hawam | PAM 47.1615/1 | - | - | lower handle segment (marked) | fine | broad vertical strap handle; handle outlined; handle larger (wider and thicker) than TAH 47.1615 | Balensi 1980, 226, 436, pls. 32.10, 147.24 |
| Tell Abu Hawam | PAM 47.1618/ 1-8 | - | - | base and body sherds (eight non- joining fragments) | fine | max. preserved ht. 25.0, max. diam. 26.0, base diam. 8.8; hollowed raised base; body thrown as one piece; three bands on shoulder, three bands at max diam., single band on lower body, no banding at base; probably from the same vase are marked handle PAM 37.417 and possibly one of the false necks (TAH 47.1594 or 47.1595) | Balensi 1980, 227, 436, pls. 34.3, 150.61 |

| Site and Excavation No. | Inv. No. | Sample No. | Archaeological Context | Portion Preserved | Fabric | Description (Make, Shape, Slip, Decoration, Measurements [cm]) | Reference(s) |
|-------------------------------|--------------------------------|------------|---------------------------|---|---|--|---|
| Tell Abu Hawam | PAM 47.1622 | TAH21 | - | spout and shoulder fragment | medium- coarse (body), medium-fine (spout) | rim diam. 5.2; rim painted, loop around base extending toward false neck but omitting handles | Balensi 1980, 229, 501, pls. 33.6, 129.8; Ben-Shlomo et al. 2011, fig. 2d |
| Tell Abu Hawam | PAM 47.1629 | - | - | false neck and handle | fine | disk diam. ca. 6.4; broad vertical strap handle with medial rib (wdth. 3.6, max. thickness 1.5); handle outlined; band at edge of false neck disk; polished exterior surfaces | Balensi 1980, 230, 436, pls. 37.30, 148.44 |
| Tell Abu Hawam | PAM 47.1639, 1639/1 | TAH8 | - | body sherds (two nonjoining) | medium- coarse | horizontal Wavy Band (FM 53:14) below one horizontal band (at base of shoulder) and above three horizontal bands (on lower body); sudden change in wall thickness of lower body indicative of piecing; exterior slipped very pale brown (10YR 8/3) and burnished | Balensi 1980, 236–37, 501 pls. 130.25, 164.98; Ben-Shlomo et al. 2011, fig. 3b |
| Tell Abu Hawam | PAM 47.1640, 1640/1 | TAH7 | - | lower body sherds (two nonjoining) | medium- coarse | max. preserved diam. 18.0; base diam. ca. 11.0; piriform lower body profile, broken at point of attachment to base disk; band-line-band on lower body, line-line-band at base; slipped very pale brown (10YR 8/3.5) and polished | Balensi 1980, 501, pls. 33.4, 122.3; Ben-Shlom et al. 2011, fig. 3j |
| Tell Abu Hawam | PAM 47.1641, 1641/1, 1641/2 | TAH9 | - | spout, shoulder fragment, and body sherds (three nonjoining fragments) | medium- coarse (body), fine (spout) | max. diam. 26.0; broad band looping around spout and handle base on shoulder; broad horizontal Wavy Band (FM 53:14) in broad body zone separated from shoulder by single band | Balensi 1980, 237, 502, pls. 33.1, 145.76; Ben-Shlon et al. 2011, figs. 2b, 3d |
| Tell Abu Hawam | PAM 47.1746/1, 115,120,125 | TAH10 | - | body sherds (four nonjoining) | medium- coarse | horizontal Wavy Band (FM 53:14) above a single preserved band | Balensi 1980, 328, 436, pls. 135.81, 135.81bis, 142.43, 145.95; Ben-Shlom et al. 2011, fig. 3c (single sherd) |
| Tell Abu Hawam | PAM 47.1746/7 | TAH12 | - | lower body sherd | medium- coarse | horizontal Wavy Band (FM 53:14); possibly from same vase as PAM 47.1746/173 | Balensi 1980, 307, 436, pl. 145.96 |
| Tell Abu Hawam | PAM 47.1746/21 | TAH19 | - | shoulder fragment | medium- fine | shallowly looping horizontal Wavy Band (FM 53:14) below another band at point where shoulder begins to flare up to false neck; burnished before genuinely matte gray-black paint applied | Balensi 1980, 310, pl. 148.47 |
| Tell Abu Hawam | PAM 47.1746/43 | TAH18 | - | shoulder fragment | medium- coarse | horizontal Wavy Band (FM 53:14) making contact with single preserved horizontal band | Balensi 1980, 314, 436, pl. 129.21; Ben-Shlomo et 2011, fig. 3f |
| Tell Abu Hawam | PAM 47.1746/44 | TAH16 | - | shoulder fragment | medium- coarse | single band preserved at bottom of sherd | Balensi 1980, 315, 436, pl. 143.55 |
| Tell Abu Hawam | PAM 47.1746/60 | TAH17 | _ | shoulder fragment | medium- coarse | three horizontal bands; very pale brown (8.75YR 8/4) slipped exterior | Balensi 1980, 318, 436, pl. 138.24, left |

| Site and Excavation No. | Inv. No. | Sample No. | Archaeological Context | Portion Preserved | Fabric | Description (Make, Shape, Slip, Decoration, Measurements [cm]) | Reference(s) |
|-------------------------------|--|------------|---------------------------|---|---|--|--|
| Tell Abu Hawam | PAM 47.1746/62 | TAH11 | _ | lower body sherd | medium- coarse | horizontal Wavy Band (FM 53:14) above two bands; sudden thickening of interior body profile indicative of piecing | Balensi 1980, 318, 436, pl. 138.24, right |
| Tell Abu Hawam | PAM 47.1746/63 | TAH13 | - | lower body sherd | medium- coarse | sudden thickening of interior body profile at bottom preserved point, possibly indicative of piecing; very pale brown (10YR 8/3–4) exterior, slipped and burnished before painting | Balensi 1980, 318, 436, pl. 138.26 |
| Tell Abu Hawam | PAM 47.1746/118 | TAH15 | - | shoulder fragment | medium- coarse | two bands on shoulder | Balensi 1980, 329, 436, pl. 142.41 |
| Tell Abu Hawam | PAM 47.1746/173 | TAH14 | - | lower body sherd | medium- coarse | horizontal Wavy Band (FM 53:14); possibly from same vase as PAM 47.1746/7 | Balensi 1980, 340, 436, fig. 3.7; pl. 117.3 |
| Tell Abu Hawam | PAM 47.1746/175 | - | - | lower body sherd | fine | two broad bands; sudden thickening in body wall indicative of piecing; burnished before painting; fine fabric in combination with evidence for piecing casts doubt on identification as transport stirrup jar | Balensi 1980, 341, pl. 117.6 |
| Tell Abu Hawam* | Paris, Musée du Louvre, inv. no. 49-86-46 | - | - | handle (marked) and false neck disk | - | vertical wavy band on handle back | unpublished |
| Tell Abu Hawam* | Paris, Musée du Louvre, inv. no. Louvre 9-86-06 | - | - | handle (marked) | - | plain | unpublished |
| Tell Abu Hawam* | Paris, Musée du Louvre, inv. no. Louvre 49-86-61 | - | - | handle (marked) | - | plain | unpublished |
| Tell Abu Hawam 5105/14 | - | - | - | shoulder fragment | medium- coarse | horizontal Wavy Band (FM 53:14) | unpublished (M. Artzy, pers. comm. 2009 |
| Tell Abu Hawam 6035/1 | - | - | - | false neck and handle | medium- coarse (false neck), coarse (handle) | disk diam. 6.5; vertical wavy band on handle back; linked hooks on disk top; very pale brown slip | unpublished (M. Artzy, pers. comm. 200 |
| Tell Abu Hawam 5527/1 | - | - | - | body sherd | medium- coarse | linear banding; white-slipped exterior | unpublished (M. Artzy, pers. comm. 200 |
| Tell Sera 37613 | - | _ | Locus 502 | upper body and shoulder | medium- coarse | triple wavy stem (FM 19?) on shoulder opposite spout, above two or more horizontal bands at base of shoulder, preserving trace of U-shaped loop around one handle base and connecting to ring around false neck base; white/very pale brown slipped exterior | unpublished |

Published online July 2011 (*American Journal of Archaeology* 115.3) DOI: 10.3764/ajaonline1153.BenShlomo.suppl

Works Cited

Balensi, J. 1980. "Les Fouilles de R.W. Hamilton à Tell Abu Hawam." Ph.D. diss., Université des Sciences Humaines.

Cross, F.M., and L.E. Stager. 2006. "Cypro-Minoan Inscriptions Found in Ashkelon." IEJ 56(2):129-59.

Dothan, M., and D. Ben-Shlomo. 2005. Ashdod VI: The Excavations of Areas H and K (1968–1969). The Fourth and Fifth Seasons of Excavation. Israel Antiquities Authority Reports 24. Jerusalem: Israel Antiquities Authority.

Dothan, T. 2008. Deir el-Balah: Uncovering an Egyptian Outpost in Canaan from the Time of the Exodus. Israel Museum Catalogues 545. Jerusalem: Israel Museum.

Dothan, T., and T. Nahmias-Lotan. 2010. "Mycenaean and Minoan Pottery." In *Deir el-Balah: Excavations in 1977–1982 in the Cemetery and Settlement*, by T. Dothan and B. Brandl, 117–35. *Qedem* 50. Jerusalem: Institute of Archaeology.

Furumark, A. 1941. The Mycenaean Pottery: Analysis and Classification. Stockholm: Svenska Insitutet i Athen.

Hamilton, R. 1935. "Excavations at Tell Abu Hawam." QDAP 4:1-69.

Hankey, V. 1967. "Mycenaean Pottery in the Middle East: Notes on Finds Since 1951." BSA 62:107-47.

MacAlister, R.A.S. 1912. The Excavations of Gezer, 1902–1905 and 1907–1909. London: Palestine Exploration Fund.

Nahshoni. Forthcoming. "A 13th Century BCE Site on the South Beach of Ashdod." 'Atiqot.

Raban, A. 1988. "The Constructive Maritime Role of the Sea Peoples in the Levant." In *Society and Economy in the Eastern Mediterranean (c. 1500–1000 B.C.): Proceedings of the International Symposium Held at the University of Haifa from the 28th of April to the 2nd of May 1985*, edited by M. Heltzer and E. Lipinski, 261–94. Leuven: Peeters.

