# SUBTERRANEAN STORAGE CHAMBERS OF THE EARLY BRONZE AGE IB AT GIV'AT QESEM

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#### INTRODUCTION

Southwest of the modern village of Kafr Qasim and approximately 2 km east of Tel Afeq, an excavation was conducted in a series of subterranean chambers exposed during construction along Highway No. 5.¹ The site is located in the southern bedrock face of the western slope of Giv'at Qesem, at an elevation of 51 m above sea level (Fig. 1; map ref. NIG 196160–190/668490–515, OIG 146160□90/168490–515). The Turonian geological formation in this area consists of limestone layers covered by alluvium. In the survey map of Rosh Ha'Ayin, evidence of Chalcolithic and EB I sites are recorded in the vicinity of the site (Kochavi and Beit-Arieh 1994: Site Nos. 4, 15, 38).

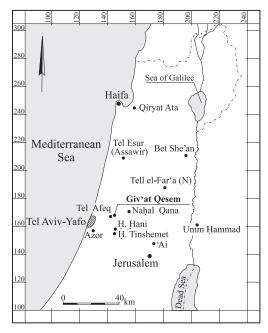
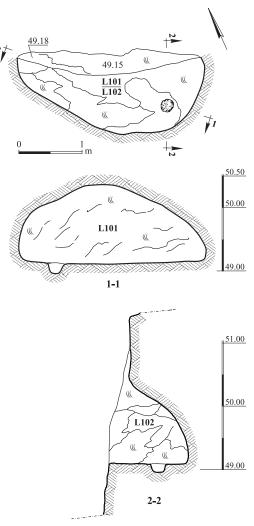


Fig. 1. Location map, showing EB I sites.

#### THE EXCAVATIONS

Cave 1 (Plan 1; Fig. 2)

Cave 1 is a rock-hewn chamber measuring 3.1 m in diameter and a maximum height of 1.5 m. It was most probably accessed by way of



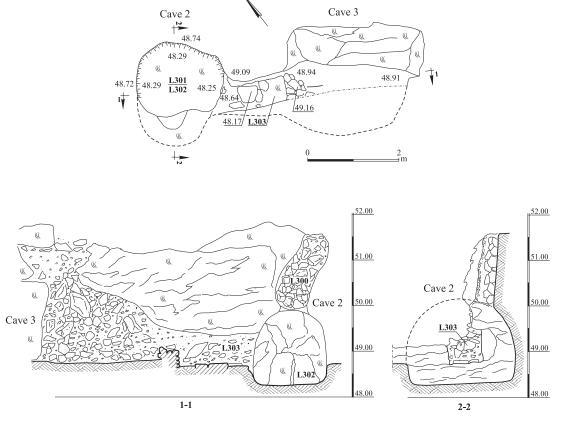
Plan 1. Plan and sections of Cave 1.



Fig. 2. Cave 1, looking south.



Fig. 3. Cave 2, looking south.



Plan 2. Caves 2 and 3, plan and sections.

a vertical shaft (based on Cave 2; see below), which was not preserved due to damage on the western side by road construction. A complete pithos was seen in the section of the cave, resting on a thin layer of gray soil and a small stone fill (L102). The fill around and above this vessel (L101) probably derived from gradual erosion of soil into the cave and the breakdown of the surrounding bedrock. Calcite encrustation, resulting from exposure to water, was found on nearly all of the ceramic sherds recovered from the chamber, as well as on flint artifacts. Finds included fragments of ceramic jars and smaller vessels, as well as flint tools and flakes, and faunal remains.

## Cave 2 (Plan 2; Fig. 3)

In the bedrock section, part of a hewn shaft was visible, leading into a bell-shaped chamber measuring 2.4 m in diameter and 1.9 m in height. The shaft (L300; diam. 0.8 m, height 1.8 m) was filled with small stones and a gray colored soil. It is unclear whether this blockage was intentional or the result of erosion. Approximately one-third of the cave was damaged by the road construction. The upper fill of the cave (L301) was a grayish conglomerate resulting from slow erosion and reaction of water with the bedrock. The lower fill of the cave (L302) was a dark brown loose fill with a few stones at the base of the chamber, perhaps denoting a living surface.

A passage (L303; Fig. 4), measuring 1.7 m in length and 0.7 m in height, and containing a fill of small- to medium-sized stones, extended from the eastern section of the chamber into Cave 3.

## Cave 3 (Plan 2)

This cave, also exposed in the bedrock section (Plan 2: Section 1–1), was connected to Cave 2 via L303. The entrance to the cave was by way of a short hewn shaft, which opened into a chamber. There was a fill of small to large stones in the section. Cave 3 was not excavated out of safety considerations.



Fig. 4. Passage between Caves 2 and 3, looking east.

#### **FINDS**

The ceramic repertoire was assembled from the fills found inside Caves 1 and 2 and from the passage between Caves 2 and 3. Though derived from three different locations, the pottery repertoire is homogeneous and is presented here according to types. With the exception of one pithos, all the vessels were fragmentary. The pottery was generally handmade using the coil technique; however, some rims were formed on a slow wheel. The decoration found on almost all of the vessels includes burnishing, red slip, grain wash, and plastic rope-like bands.

## Small Bowls (Fig. 5:1–5)

These small, handmade bowls are common in Early Bronze Age assemblages throughout the country. They generally appear with simple pointed or everted rims, and splayed, rounded, or upright walls. Figure 5:1 appears with a red slip and is wheel-burnished on the interior and

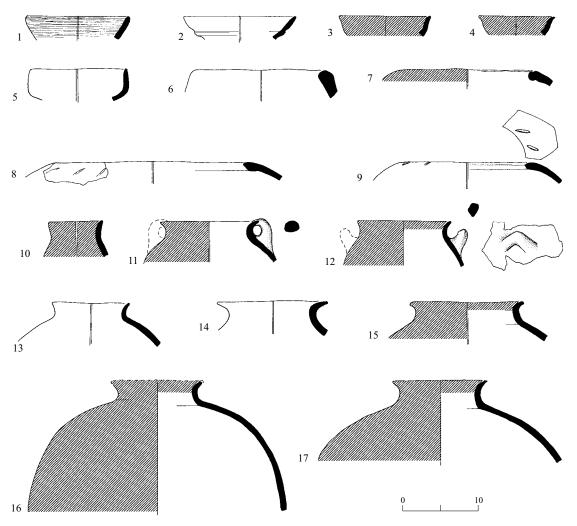


Fig. 5. Pottery vessels.

exterior surfaces, in the northern tradition of the EB I culture. Figure 5:2 was incised below the rim, thereby creating a groove. Figure 5:5 has an upright rim and slight carination, typical of small bowls in EB I assemblages at sites such as Nahal Qana (Gopher and Tsuk 1996:131). Such types of small bowls were often used as oil lamps; however, no soot marks were detected on the bowls from this site.

## Krater (Fig. 5:6)

The shape of this krater, represented by a fragmentary infolded, simple thickened rim, is difficult to reconstruct.

## Holemouth Jars (Fig. 5:7-9)

The ware of these jars contains large inclusions as temper, indicating their use as cooking vessels. Figure 5:7 has a rounded, grooved rim, red-slipped on the outer surface to the underside of the rim. Figure 5:8 has an infolded, pointed, thickened rim. Figure 5:9 has a cut rim. Both Figs. 5:8 and 5:9 are decorated with diagonal, incised lines (c. 1.5 cm in length) around the openings. A similar incised decoration around the rim is known from sites such as Qiryat 'Ata Stratum II (Golani 2003: Fig. 4.20:12) and Tell el-Far'a North (de Vaux 1961: Fig. 2:3).

**←** Fig. 5

				9		
No.	Type	Locus	Basket	Description	Comparisons	
1	Bowl	101	1001	Buff ware, no inclusions, red-brown burnish on int. and ext.	Tel Afeq, Str. B VIII—Beck 2000: Fig. 8.1:1	
2	Bowl	101	1001	Dark gray ware, small to medium white inclusions	'Ai, Phase II—Callaway 1972: Fig. 16:11	
3	Bowl	302	3009	Pink-orange ware, small to medium white and gray inclusions, red slip on all surfaces	Horbat Hani (West)—Lass 2003: Fig 20:8; Gezer—Dever 1988: Fig. 1:31	
4	Bowl	102	1003	Beige ware, small white and gray inclusions, red slip on all surfaces		
5	Bowl	102	1002	Coarse ware, red-brown outer, gray core, small to large white and gray inclusions	Horbat Hani (West)—Lass 2003: Fig. 20:32; Naḥal Qana—Gopher and Tsuk 1996: Fig. 4.31:1	
6	Krater	102	1005/ 11	Orange-brown outer, gray core, small to medium white and gray inclusions	Tel Afeq, Str. B VIII—Beck 2000: Fig. 8.2:29	
7	Holemouth jar	304	3013/7	Light orange outer, dark gray core, with small to medium white and gray inclusions, red slip ext.	'Ai, Phase II—Callaway 1972: Fig. 20:4; Kabri, Str. 9—Scheftelowitz 2002: Fig. 5.5:9; 'En Shadud—Braun 1985: Fig. 21:22; Tell en-Nasbeh—Wampler 1947: Pl. 11:173	
8	Holemouth jar	302	3010	Brown outer, gray core, medium white inclusions	'Ai—Callaway 1980: Fig. 37:2; Qiryat Ata, Str. III–II—Golani 2003: Fig. 4.5:6	
9	Holemouth jar	304	3013/ 15	Brown outer, gray core, small to medium white inclusions, incised decoration	Tel Afeq, Str. B VIII—Beck 2000: Fig. 8.1:22; Bet She'an, Str. XIV— Fitzgerald 1935: Pl. IV:5	
10	Cup	304	3013/ 13	Beige-light orange ware, few tiny black inclusions, red slip on all surfaces	Tel Esur—Dothan 1970: Pl. 1:27; Kabri, Str. 9—Scheftelowitz 2002: Fig. 5.5:1	
11	Amphoriskos	302	3005	Light-medium brown ware, small to medium white and gray inclusions, red slip ext.	Horbat Hani (West)—Lass 2003: Fig. 21:7; Bet She'an, Str. XIV—Fitzgerald 1935: Pl. VI:5; Azor—Ben-Tor 1975: Fig. 9:11	
12	Amphoriskos/teapot?	303	3012	Brown-orange outer, dark gray core, small to medium white and gray inclusions, red slip ext. and on int. surface of rim	Azor—Ben-Tor 1975: Fig. 9:3; Jericho—Kenyon 1960: Fig. 18:17	
13	Jar	102	1005	Medium brown outer, thin gray core, small to medium white and gray inclusions	Gezer—Dever 1988: Pls. 4:6, 5:2; 'Ai, Phase II—Callaway 1972: Fig. 17:11; Qiryat Ata, Str. III—II—Golani 2003:4.12:6	
14	Jar	102	1004/7	Light orange-pink outer, thin gray core, small to medium white inclusions	Azor, Installation C—Ussishkin 1961: Fig. 41:10; 'Ai, Phase II—Callaway 1972: Fig. 17:10; Tell en-Nasbeh— Wampler 1947: Pl. 8:123	
15	Jar	102	1002/2	Red-brown outer, thick dark gray core, small to medium white inclusions, red slip ext. and on int. surface of rim	'Ai, Phase II—Callaway 1972: Fig. 17:17; Tell en-Nasbeh—Wampler 1947: Pl. 10:149	
16	Jar	101	1001/2	Brown outer, dark gray core, small to medium white inclusions, red slip ext. and on int. of rim	'Ai, Phase II—Callaway 1972: Fig. 17:18	
17	Jar	303	3012/ 10	Red-brown outer, gray core, small to medium white inclusions, red slip ext. and on int. surface of rim	Qiryat Ata, Str. III–II—Golani 2003: Fig. 4.9:4	

#### Cup (Fig. 5:10)

Although only a rim fragment remains of Fig. 5:10, it may be identified by the proportions as a high loop-handled cup. This vessel has a red slip on both the interior and exterior surfaces.

## Amphoriskoi/Kettles (Fig. 5:11, 12)

Both vessels display everted, pointed rims: Fig. 5:11 with a vertical loop handle attached at rim and shoulder, and Fig. 5:12 with a horizontal loop handle attached to the shoulder. Both vessels are red-slipped on the exterior surfaces. They may be identified as amphoriskoi or kettles depending on the presence or absence of a spout similar to the example in Fig. 7:5.

#### Jars (Fig. 5:13-17)

The jars in the assemblage may be divided into two types: those with short, curved necks (Fig. 5:13–15), and those with upright necks (Fig. 5:16, 17). Both jar types have simple, everted, flaring rims which generally characterize southern EB IB assemblages. They were probably ovoid, as indicated by the shoulders on Fig. 5:16, with flat bases (fragments of which were found). Though only the specimens in Fig. 5:15–17 show vestiges of red slip on the inner surfaces of the rims, as well as on the

exterior surfaces, it is likely that all of the jars had this surface treatment. These jars usually appear with plain, thumb-indented or wavy ledge handles, as in Fig. 7:2, 3.

#### Pithoi (Fig. 6)

The pithoi of the assemblage have thick, rounded rims formed on a slow wheel. The only complete vessel (Fig. 6:1) is ovoid, reaching a height of 71 cm, with a flat, wide base. The coilbuilt body resulted in distorted proportions. A slight bulge on the interior surface identified the point of attachment of the rim. The outer surface was grain-washed with lines extending from left to right, indicating that the potter was probably right-handed. The decoration and the general shape of the pithoi are characteristic of northern EB IB ceramic repertoires.

#### Miscellaneous Fragments

The base of a handmade vessel (Fig. 7:1) is marked by even-spaced concentric lines. These may have been effected by a technique of separating vessels with a string from the work surface, as is known from other EB I assemblages (Brandl 1989: Fig. 12:14; Braun 2000:123–125). The example presented is unusual in that the pattern left on the base

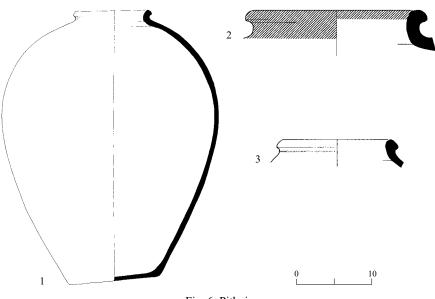


Fig. 6. Pithoi.

4	Fig.	6

No.	Locus	Basket	Description	Comparisons
1	102	1006	Light orange outer, light gray core, small to medium white and gray inclusions, grain washed	Megiddo, Level J-4—Joffe 2000: Fig. 8.4:21
2	302	3004	Light brown-orange outer, thick gray core, small to medium white and black inclusions, red slip ext. and on int. surface of rim	Tel Afeq—Beck 2000: Fig. 8.1:14; Bet She'an, Str. XIII—Fitzgerald 1935: Pl. IV:8
3	302	3009	Brown to gray ware, small to medium white and gray inclusions	Bet She'an, Str. XIV—Fitzgerald 1935: Pl. IV:17

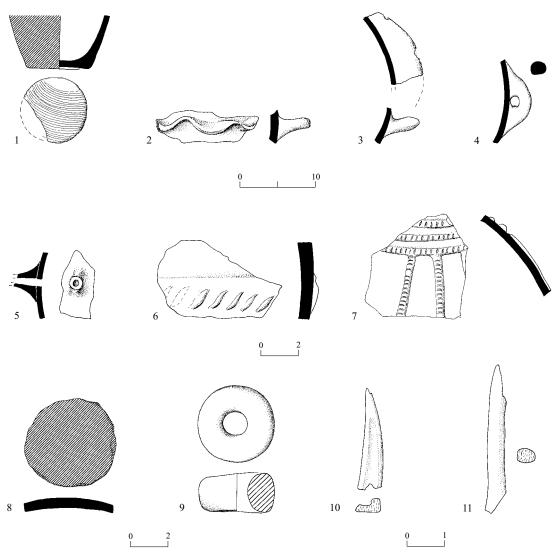


Fig. 7. Miscellaneous pottery, spindle whorl, bone tools.

**←** Fig. 7

NI.	Т	T	D14	Description	Parallels	
No.	Туре	Locus	Basket	Description		
1	Base	301	3008	Light yellow-beige ware, small to medium white and gray inclusions, red slip ext. String cut?	Tel 'Erani C—Brandl 1989: Fig. 12:14	
2	Ledge handle	302	3011	Medium brown-orange outer, gray core, small to medium white and gray inclusions, red slip ext.	Naḥal Qana—Gopher and Tsuk 1996: Fig. 4.31:26	
3	Ledge handle	302	3011	Light orange-pink outer, gray core, small to medium white and gray inclusions, red slip ext.	Naḥal Qana—Gopher and Tsuk 1996: Fig. 4.31:24; 'Ai—Callaway 1980: Fig. 37:29; Azor—Ben-Tor 1975: Fig. 12:3	
4	Handle	302	3009	Orange-brown outer, gray core, small white inclusions, red slip ext.		
5	Spout	303	3012	Orange-brown outer, gray core, small white inclusions, red slip ext.		
7	Decorated sherd	302	3009	Dark orange-brown ware, small to medium white inclusions, incised plastic bands		
6	Decorated sherd	301	3008	Dark gray ware, small black and white inclusions, finger indented plastic band	Azor, Installation C—Ussishkin 1961: Fig. 41:21; Naḥal Qana—Gopher and Tsuk 1996: Fig. 4.31:21	
8	Lid	102	1002	Beige ware, small to medium white inclusions, red slip ext.		
9	Spindle whorl	302	3015	Unknown stone, polished, browngray color	Me'ona—Shamir 1996: Fig. 13; Qiryat Ata—Golani 2003: Fig. 7.5:9–11; Tell Umm Ḥammad, El Sherqi—Leonard, 1992: Pl. 33:18, 19; 'En Shadud—Braun 1985: Fig. 38:1, 3; Bet She'an, Str. XIV—Fitzgerald 1935: Pl. VI:23, 25	
10	Bone tool	302	3010	Awl on animal rib, polished		
11	Bone tool	302	3007	Awl on boar canine, polished	Gezer—Dever 1988: Pl. 5:8	

indicates that the vessel was static—rather than wheel-turned—when separated.

Two ledge handles (Fig. 7:2, 3) and a pierced lug handle (Fig. 7:4) probably belonged to jars. A spout (Fig. 7:5) testifies to at least one amphoriskos in the assemblage.

## Plastic Decoration (Fig. 7:6, 7)

One sherd has a finger-indented band (Fig. 7:6). Another is a fragment of a storage jar (Fig. 7:7) with a unique decoration formed by three horizontal and two vertical incised rope-like bands. This type of decoration is common in Chalcolithic assemblages from the Golan region (Epstein 1998:160–161) and at a few sites in the Galilee region, such as Tel Te'o and Peqi'in (Eisenberg, Gopher and Greenberg 2001: Fig. 6.6:2, 3; Gal, Smithline and Shalem 1997:147,

Fig. 5). However, unlike this fragment, the examples from the north are on basaltic ware. In EB I contexts, such plastic decoration resembles Umm-Ḥammad Ware (Leonard 1992: Pls. 28:21, 29:8) in the Jordan Valley. The distribution of this type west of the Jordan River is sporadically known from sites, such as Afeq (Beck 2000: Fig. 8.2:14) and Tell el-Far'a North (de Vaux and Stève 1948: Fig. 5:12; de Vaux 1961:580, Fig. 3:14–17). The origins of this ware and its connection to an earlier culture, have not, to date, been thoroughly investigated.

## Lid (Fig. 7:8)

This lid, 12 cm in diameter, was fashioned from a broken sherd. Judging from its size, thickness and traces of red slip on the surface, it probably belonged to a storage jar or pithos.

#### Spindle Whorl (Fig. 7:9)

This doughnut-shaped weight is fashioned from unidentified stone (possibly basalt), and drilled from both sides. This example corresponds to Type 4 whorls classified by Shamir (2003: Fig. 7.5:9–11) that are common finds in all Early Bronze Age contexts (Shamir 2003:214).

#### Bone Tools (Fig. 7:10, 11)

Two tools were uncovered in the excavation. Figure 7:10 is an awl made from a worked rib, probably of a pig (*Sus scrofa*). Figure 7:11 was shaped from a boar canine and was probably also used as an awl.

## Flint Artifacts Hamoudi Khalaily

The excavation of the fills from Caves 1 and 2, as well as surface collection, yielded 434 flint artifacts. Most of the pieces identified are waste material, and only 12 are considered tools (Table 1). The artifacts were produced from two types of raw material: most of the waste material is of dark gray flint of Senonian formation, while the tools are of a fine grain, gray flint of Eocenean origin.

Cave 1 yielded four formal and three expedient tools. Among the formal types, three Canaanean retouched sickle blades were identified (Fig. 8:1, 2). All of them were produced from light

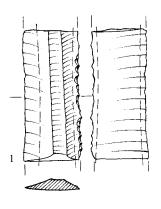
gray flint, broken distally and proximally, indicating use as composite tools. One sickle blade has two active working edges with heavy luster. The fourth formal tool is a fragment of a tabular scraper (Fig. 8:3) with whitish cortex on the dorsal side. The expedient tools are two retouched flakes and one retouched blade knapped from various kinds of flint.

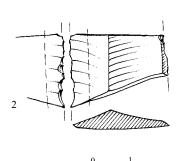
The tools from Cave 2 included two formal tools—both retouched Canaanean blades—and two expedient tools—a retouched flake and retouched bladelet.

The presence of a Canaanean blade industry in both caves indicates occupation during EB I. These artifacts were not produced on site and were probably imported from a centralized production center in the vicinity. Such tools have been found at nearby Tel Afeq (Mozel

**Table 1. Flint Frequencies** 

	Cave 1	Cave 2	Surface	Total
Primary elements	6	3	1	10
Flakes	19	34	4	57
Blades	4	5	1	10
CT	1	1		2
Cores	2	3		5
Chips	137	149		286
Chunks	25	27		52
Tools	7	4	1	12
Total	201	226	7	434





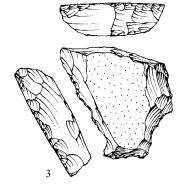


Fig. 8. Flint tools.

2000:257) and Horbat Hani (Khalaily 2003: Fig. 2). The low ratio of tools to waste indicates that the tools were for domestic use and not burial offerings.

#### DISCUSSION AND CONCLUSIONS

The ceramic repertoire is characteristic of the central region of the country, with influences from both northern and southern EB I assemblages. In terms of surface treatment, the assemblage reflects aspects of the pottery attributed to the northern EB IB culture, especially evident in the use of red slip and grain-wash. However, the shapes of the vessels also indicate a southern influence, though typical surface treatment and decoration, namely lime wash and incised handles, are markedly absent. On the basis of the ceramics and their parallels we attribute the site to EB IB.

The caves at Giv'at Qesem probably served as subterranean storage chambers for a settlement located in the immediate vicinity. The chambers themselves are unusual in that the entrances were vertical shafts—unlike Early Bronze Age burial caves, which have entrances from the side. No human bones or vessels commonly associated with burial assemblage, such as personal serving dishes, were found. Hence, on the basis of their entrances and finds, as well as their size, the caves are identified as storage chambers.

Although well documented in the Chalcolithic period, dwelling caves of the EB IB are a relatively uncommon phenomenon outside of the Judean Desert. A few examples are known

from sites in the north and south of the country. At the site of Qiryat Ata, a small subterranean chamber was uncovered within a curvilinear building dated to EB IB (Golani 2003:21-22). Complete vessels were not uncovered there and the ceramic assemblage did not show a bias for one form or another (storage jars). The entrance from the floor level was directly into the main chamber, without any shaft (Golani 2003: Plan 2.1, Section 1–1). At Nahal Qana, the excavators considered the finds from the EB IB level in the cave characteristic of a dwelling rather than of a burial (Gopher and Tsuk 1996:135). At Azor, Installation C was established above the collapse of a large Chalcolithic burial cave (Ussishkin 1961:20). After the partial collapse of the roof, a small covered area remained and was utilized during EB I as a dwelling. A roof built above the collapsed area incorporated the rock escarpment. Ussishkin identified the remains as early EB I, hinting at a phase immediately following the Ghassulian occupation (Ussishkin 1961:21). However, in the light of subsequent discoveries, the pottery should be attributed to a later stage in EB IB, on the basis of incised decoration on necks and handles, typical of southern EB I sites, such as 'Erani Layer C (Kempinski and Gilead 1991: Fig. 12:15-17). The ceramic assemblage at Azor is domestic in nature, implying dwelling activities rather than burial.

The artifacts from the Giv'at Qesem caves support the survey findings (Kochavi and Beit-Arieh 1994:XX), that an EB IB site existed in the area. This excavation helps shed light on domestic and storage activities practiced in a rural settlement dated to the fourth millennium BCE.

#### Note

<sup>1</sup> The salvage excavation was conducted on August 15–21, 2001, under the auspices of the Israel Antiquities Authority (Permit No. A-3483). The participants included Deborah A. Sklar-Parnes (excavation director), Yehezkel Dangor

(administration), Avraham Hajian (surveying and plans), Elisheva Kamaisky (pottery restoration), Irena Lidsky-Reznikov (artifact drawing), Clara Amit (studio photography), and workers from Umm el-Fahm and East Jerusalem.

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