Salvage Excavation at Kh' Marmita (Hartuv Quarry) 2008 Final Report

Excavation Permit: G – 63/2008
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Figure 1: Ancient quarrying works (E) in the excavation area (from north).



Figure 2: Hartuv location map (1492/1296; ESI 9).

Introduction

Kh' Marmita is situated north of Hartuv quarry. Previous salvage excavations on the site were conducted by the Israel Antiquities Authority (IAA) under the direction of Dr. Lilly Gershuny. In these excavations – carried out mainly in the eastern part of the total site – were exposed water cisterns, buildings, a *mikveh* (Jewish ritual bathing installation), wine presses and other structures and features. The area that required our IAA-stipulated salvage excavation is further west, to the east of the line of fig trees which constituted the development area limit.

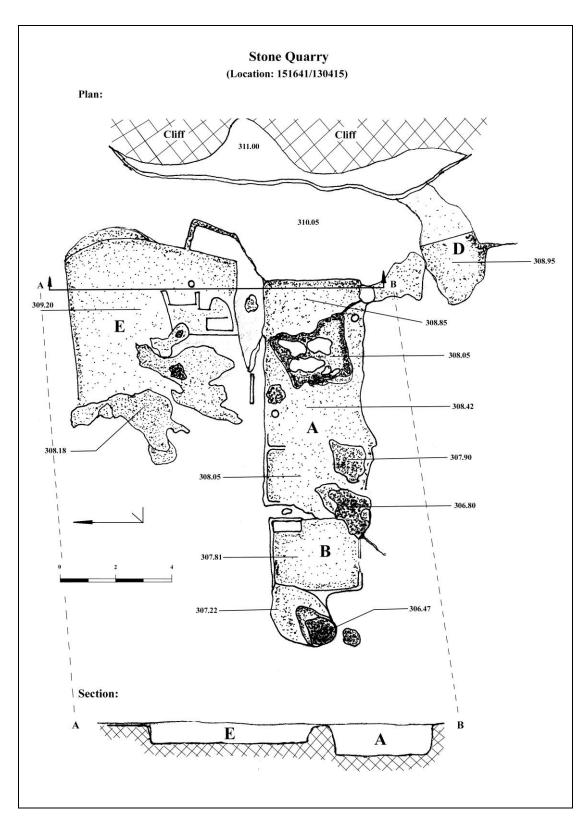
Machine-dug test sections put into our site at various locations did not reveal any archaeological remains. We could therefore focus on recording the details of those installations and features found carved in extant surface rocks. Most of these archaeological features are quarrying sites, wine presses and cup marks.

Excavation

1. Quarrying platforms (see Fig. 3 plan overleaf):

On the higher section of the site were found a number of quarrying platforms for the production of building stones. These platforms extend along an east-west line of rock. The eastern platform's (A) size was 8 x 3m and the depth of quarrying at its upper part was 0.8m. At the centre of the platform there was at some point a rock collapse, which probably brought quarrying here to an end (Fig.4). On top of the platform – that is, in the carved upper surface – were found two cup marks (L15, 16) with a diameter of about 0.35m and a depth of about 0.3m (L15 and 16).

The centrally-placed (part of A) platform's size was 1.9 x 2.25m. At its southwestern corner a karstic hole was opened and found filled with soil. In the upper levels of this fill we found potsherds from the Roman Period. At a depth of approximately 0.8m the soil became archaeologically sterile.



The western (B) quarrying platform's size was 3.2 x 2.9m. At its northeastern corner a fragment of quarried stone was found. At the western end of the platform we excavated a karstic hole filled with rocks and soil, together with a large number of sherds from the Roman Period. Inside the hole were also a number of large stones that were probably thrown into it. Close to the southwestern corner of the platform grew a tree at the time of excavation. Its roots used the karstic cavities and penetrated into

them. There appeared to be a karstic passage between the hole that was excavated and the one in which the tree grew.

An additional quarrying platform (E) was found a short distance to the north (Fig.5). The size of this platform was 6.2 x 5.4m and its depth was 0.4m. At its eastern end are a number of deep detachment slots defining the slabs that were next to be quarried from the platform (see Fig.1). At the western extremity of the platform natural depressions in the rock were found and in them were discovered sherds of Roman date. It appears that quarrying here was discontinued in mid-operation, due to the relatively poor quality of the rock in this area.

An final quarrying platform (D) was located southeast of A. This platform was excavated only at its western side due to a large crack in the rock that constituted a safety hazard. A 3 x 3m section was dug down to the layer of rock, about 0.8 m deep. In the friable earth from this section a number of sherds of the Roman Period were found.



Figure 4: The eastern quarrying platform (A), the floor of which collapsed (from east).

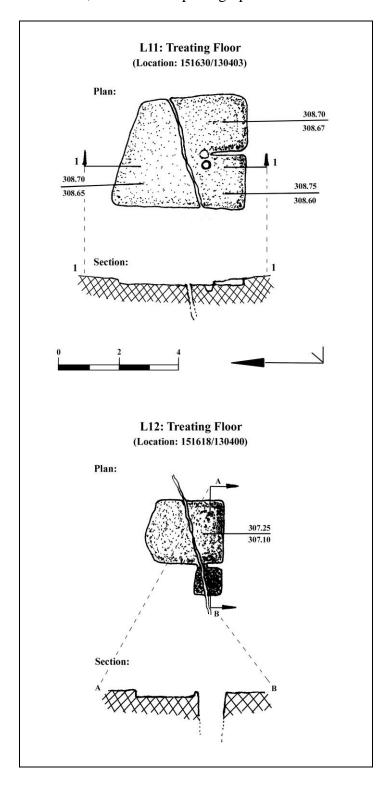


Figure 5: The northern quarrying platform (E) (from east).

2. <u>Treating Floors:</u>

Two small platforms were found carved into the rock very close to the edge of the southern cliff (Fig. 6 below):

- The first was an installation (L11) that was completely exposed to the surface. This was probably a treating floor within the wine production process. The floor was cracked and dangerous. The site was measured and photographed.
- An additional treating floor (L12) was found to the west of the first one. This was also measured, recorded and photographed.



3. Cup marks:

A number of cup marks carved into the rock were found close to the edge of the southwestern cliff. The eastern cup mark (L7, waypoint 130401-151595, altitude 307m) had a diameter of 0.5m and a depth of 0.4m. Approximately 4m west of L7 were two adjacent cup marks (L8 and 9, waypoint 151591-130402, altitude 305m) were found. The eastern one's diameter was 0.5 m and 0.35 m deep. The diameter of the western one was 0.6 m and 0.45 m deep. An additional cup mark (L10, waypoint 151585-130402, altitude 304m) was found 6m west of these. Its diameter was 0.6m and its depth 0.5m. There was a carved socket surrounding mostly the southeastern edge of the cup (Fig.7). The bottom of the cup was spherical.



Figure 7: The western cup mark (L10). Note the carved socket around the cup.

Conclusions

This site was part of an ancient quarry surrounding the Roman and Byzantine settlement of Khirbet Marmita. Our opinion is that the quarry also dates to these periods.

Further Reading

Ayalon, E., R. Frankel and A. Kloner (eds.). 2009. *Oil and Wine Presses in Israel from the Hellenistic, Roman and Byzantine Periods, BAR International Series* 1972 (Oxford: British Archaeological Reports).

Billig, Y. 2008. Abstract of IAA follow-up to Lilly Gershuny's excavation at Khirbet Marmita: http://www.antiquities.org.il/Dig_Item_eng.asp?id=964

Cuomo, S. 2007. *Technology and Culture in Greek and Roman Antiquity*. Cambridge: Cambridge University Press.

Frankel, R. 1999. Wine and Oil Production in Antiquity in Israel and Other Mediterranean Countries. JSOT/ASOR Monograph Series 10 (Sheffield: Sheffield Academic Press).

Humphrey, J.W., Oleson, J.P., and Sherwood, A.N. (eds.) 1998. *Greek and Roman Technology: a sourcebook*. London and New York.

Mayerson, P. 2000. 'The Meaning and Function of ληνός and Related Features in the Production of Wine' in *Zeitschrift für Papyrologie und Epigraphik* 131: 161-165.

McGovern, P.E, S.T Fleming and S.H Katz (eds.) 1995. *Origins and Ancient History of Wine, Food & Nutrition in History & Anthropology Series* II (The University of Pennsylvania Museum of Archaeology and Anthropology; Amsterdam: Overseas Publishers Association).

Sa'id, K. and 'Ad, U. 2011. 'Horbat Siv: quarries, burial caves, kilns, agricultural installations, roads and a columbarium'. '*Atiqot* 65: 65–87 (Hebrew); 68*–69* (English summary).

Waelkens, M. (ed.) 1990. Pierre éternelle du Nil au Rhin. Carrières et préfabrication. Bruxelles.

Waelkens, M., Herz, N., and Moens, L. (eds.) 1992. Ancient Stones: Quarrying, Trade and Provenance: interdisciplinary studies on stones and stone technology in Europe and Near East from Prehistoric to the Early Christian Period. Acta Archaeologica Lovaniensia Monographiae 4. Leuven: Leuven University Press.