

# Salvage Excavation at Hatrurim Mine - 2005 Final Report

Excavation Permit: B - 304/2005 Excavating Archaeologist: Yehuda Govrin Y. G. Contract Archaeology Ltd Academic Sponsor: Hebrew Union College



## Introduction

In 2005 Y.G Archaeology conducted a salvage excavation at Hatrurim in the northern Negev. The client was Rotem Emprat Negev Company Ltd, who wished to expand mining operations in the area. Prior to our work, an Israel Antiquities Authority (IAA) survey located three sites of archaeological value, covering 175m² (Area 4: 62.5m²; Area 5: 25m²; Area 6: 75m²). The subsequent Y.G Archaeology excavation of these areas, in November 2005, was directed by archaeologist and company executive Yehuda Govrin.

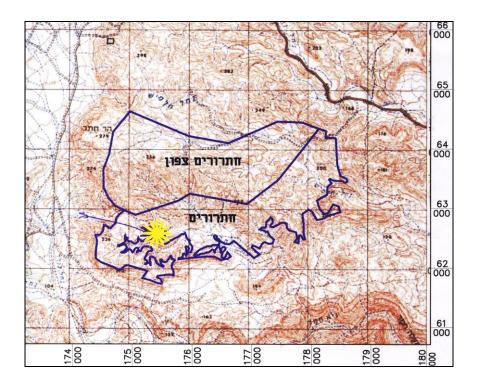


Figure 1: Hatrurim archaeological investigation area (31°11'54.36''N / 35°16'46.37''E).

# Area 4

In this area ten stone-built features were inspected. These were found on the south bank of a small stream. Six of the features were circular and irregular stone arrangements. Also found were two walls, an enclosure and a possible symbolic feature.

## **Site 4a: Irregular Stone Feature**

Location: 175733 – 062683

Here, beside a stream, a 2 x 2m square was excavated to a depth of 0.1m. At the center of the excavated square was a small pile of stones. The stones were small and medium-sized, and placed directly on the ground without foundation cut. The concentration was irregular in form (Fig.3).

No artifacts of any sort were found and the site therefore cannot be dated. However, two concentrations of ash were found 0.05m below surface adjacent to the feature's south side. This ash suggests perhaps that the purpose of the stone concentration was for lighting a fire.



Figure 2: Site 4a before excavation (from west).



Figure 3: Site 4a after excavation (from west).

# **Site 4b: Ovoid Stone Feature**

Location: 175730 - 062681

Approximately 2.5m west of Site 4a, on the slope above the stream's south bank an additional concentration of stones was found. In this area a 4 x 4m square was excavated to a depth of 0.2m. The feature, arranged directly on the natural soil, was circular and built of large stones interposed with small and medium-sized stones. It measured 2m long and 1.5m wide (Fig.4). In our excavation square area – especially close to the feature's northwest corner – a number of ceramic sherds from a cooking pot and a lid were found (Fig.5), probably dating to the Byzantine or Early Islamic periods (ca.330-1099 CE).

It appears that this man-made feature functioned as a cooking place.



Figure 4: Site 4b (from south).



Figure 5: Sherds of a cooking pot and a lid from Site 4b.

#### **Site 4c: Stone Features**

Location: 175723 – 062682

Approximately 4.5m west and upstream of Site 4b a concentration of stone-built archaeological features were found. An area of 8 x 5m was excavated to a depth of ca.0.3m.



Figure 6: Site 4c before excavation (from north).



Figure 7: Site 4c after excavation (from north).

Our excavation defined a number of ovoid and circular features, with diameters of 0.7-2m. These features were built of one course of stones, again directly on the natural soil. No artifacts were recovered.

At the center of the excavation square was found the largest feature (2 x 1.5m). In the interior of this ovoid stone structure a concentration of ash was found.

Again, this feature seems to have been a fire place and cooking installation used by a non-sedentist population.

At the south end of the excavation area were found three stones on an east-west axis, *in situ* and standing erect (except for the central stone which had probably fallen over) (see Figs. 8-9). The eastern stone stood out, being a large limestone. The western stone was split, probably by heat (ash was found adjacent). These unusual standing stones had no apparent functional value, and may therefore have served a symbolic or ritual purpose (as 'stelae').

A wall built of small stones and 1.5m in length was found northeast of the standing stones. This wall ran northeast-southwest, diagonal to the axis of the 'stelae'.

0.7m northwest of the row of 'stelae' a circular concentration of stones was exposed. This latter feature (and the abovementioned wall) may have functioned as part of a cultic area centered on the 'stelae' (Fig.9).

In the northwest corner of the excavation square we found a wall section, 1.2m long, built of small and medium-sized stones, and surviving to one course high.



Figure 8: The Site 4c 'stelae' before excavation (from north).



Figure 9: The Site 4c 'stelae', wall and circular stone concentration at the south end of the excavation square.



Figure 10: General view of Site 4c after excavation (from north).

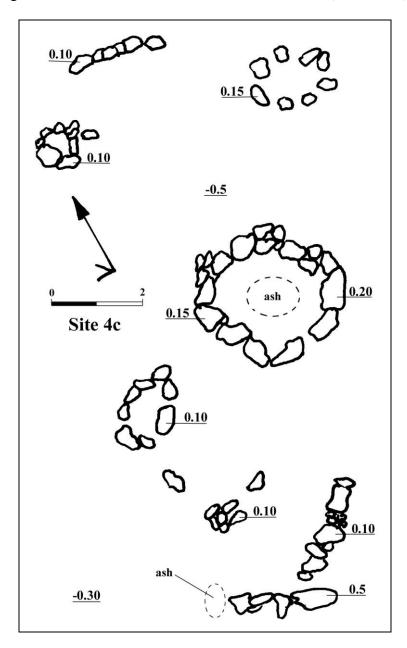


Figure 11: Plan of Site 4c (relative elevations).

#### **Site 4d: Circular Structure**

Location: 175697 – 062663

Approximately 40m southwest and upstream of Site 4c were found the remains of a circular structure ca.10m in diameter, the eastern half of which had been damaged by modern activity. The structure was built of large and medium-sized stones, some set on end, placed on the natural soil without foundation trench and surviving to one course high. The site was not excavated and no artifacts were found, but we interpreted this site as an enclosure.



Figure 12: General view of the Site 4d possible enclosure (from south).



Figure 13: The Site 4d possible enclosure remains (from south). Notice the stone in the left foreground placed on its narrow side.

#### **Site 4e: Stone Concentration**

Location: 175688 - 062650

Approximately 10m south of the Site 4d structure was found a concentration of medium-sized stones placed on the *hamada* (soil) surface above the stream's bank. Here a 1.5 x 1.5m square was excavated to a depth of 0.1m. The stone concentration was most likely man-made but its nature is unclear. No other remains were found in the excavation. It is possible that this feature was used as some sort of a mark and not an actively-used installation.



Figure 14: Site 4e before excavation (from west).



Figure 15: Site 4e after excavation (from west).

## Area 5

Here was found a concentration of stones (Site 5a) on the north bank of a small stream running west-east. When excavated, this feature was revealed as originally elliptical in shape.

#### Site 5a: Built Fire Place

Location: 175617 - 062865

We excavated this stone concentration, located on a slope above a stream, with a 5 x 5m excavation square. We uncovered an elliptical wall measuring 2.6 x 1.8m, built from local fieldstones of various sizes (max. 0.4m diameter). Between these stones lime bulbs and stone chips were found. The wall survived to two courses in places. The south side was better preserved, it appearing that the north end at some point collapsed and its stones were scattered outside the structure. Due to large ash quantities in the interior, we interpreted this feature as a fire place.



Figure 16: Site 5a before excavation (from east).



Figure 17: Site 5a after excavation (from east).



Figure 18: Site 5a. Notice the ash deposit in the interior.

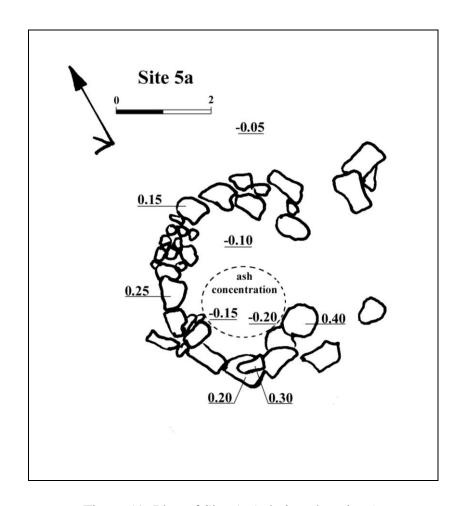


Figure 19: Plan of Site 5a (relative elevations).

#### Area 6

Here two stone concentrations were found on *hamada* surfaces in a saddle of Hatrurim ridge. Three 5 x 5m excavation squares were opened here and an additional square was non-intrusively investigated.

#### Site 6a: Two Stone Features

Location: 174948 – 062859

A 5 x 5m square was here excavated around two stone concentrations. Two structures were revealed, built from small and medium-sized stones, some set on their narrow sides.

The first structure was rectangular in plan and measured 1.5 x 1m along a southeast-northwest axis (Figs.18-19). The walls were laid directly on natural soil. The interior was found to be devoid of artifacts or features.

An additional feature built of small stones, similar in size to the first, was found in the southwest corner of the square (part of it was outside the square). This structure was also empty and no artifacts were found around it.

These features were undoubtedly man-made but their nature remains unclear.

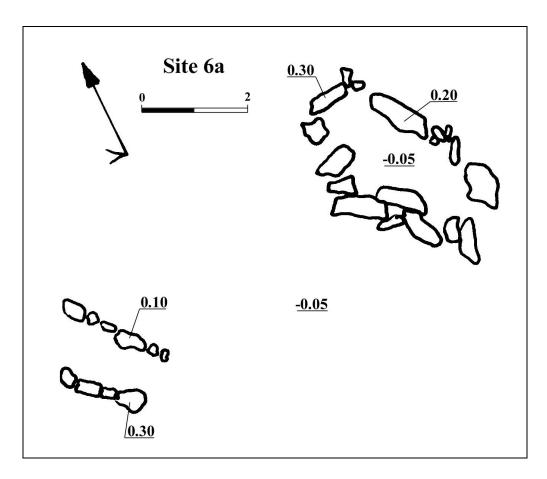


Figure 20: Plan of Site 6a (relative levels).



Figure 21: Site 6a.1 before excavation (from east).



Figure 22: Site 6a.1 (from east) after excavating its exterior but before opening its interior.

#### Site 6b: Stone Feature

Location: 174925 – 062867

Here a stone-built structure was uncovered. The feature was U-shaped, its opening facing south. The walls were mostly built with large and medium-sized stone slabs set into the ground on their narrow sides. The structure's length and width were both ca.1.2m. The north side consisted of three large upright stones (perhaps stelae?) noticeable by their size (up to 0.5m taller than the other wall stones). The west wall (1.3m long) was also built from a single course of upright slabs. On the west interior of the feature a section of natural rock was exposed.

The purpose of this feature is unclear, but it may have served as a ritual compartment and the upright slab row on the north side as stelae.

Our excavation continued down to ca.0.3m below surface. No artifacts were recovered and the soil was sterile. There is no doubt that the installation was manmade but there is no way to date it. It is possible that this installation was used in a ritual context, as a compartment wherein the upright slabs on the north side served as stelae.



Figure 23: Site 6b (from south).



Figure 24: Site 6b (from east).



Figure 25: Site 6b from above. Notice the bedrock outcropping inside the west wall.

#### **Site 6c: Concentration of Fieldstones**

Location: 174904 – 062859

Here we investigated by clearing the surface of debris, but neither artifacts nor features were found and therefore the site was interpreted as non-archaeological.

#### **Site 6d: Small Stone Feature**

Location: 174910 - 062826

Close to the northeast corner of this square a small ovoid feature was found. This was built of brown and gray stones. The stones were leaning inward and some of them were cracked. No artifacts were found after digging both the interior and exterior. Not only do the date and function of this feature remain unclear, but neither can we be sure that it was in fact man-made.



Figure 26: Site 6d (from south).



Figure 27: Site 6d (from west).

## **Summary**

Most of the features described here were simple installations, probably built by nomads and used as temporary installations for a very brief period of time. The lack of artifacts in almost all of the sites makes it very difficult to date them. However, based on the few potsherds discovered (Site 4b), and the nature of the possible ritual activity (Sites 4c and 6b), it appears that many of the features may be attributed to a pre-Islamic nomad population.

# **Further Reading**

Finkelstein, I. and Perevolotsky, A. 1990. 'Processes of Sedentarization and Nomadization in the History of Sinai and the Negev.' *Bulletin of the American Schools of Oriental Research* 279: 67-88.

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Rosen, S. A. and Avni, G. 1993. 'The edge of the empire: the archaeology of pastoral nomads in the southern Negev highlands in Late Antiquity.' *The Biblical Archaeologist* 56: 189-199.