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New Discoveries in the Temple of Apries at Bahariya Oasis: An Overview of Two Seasons of Excavation

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# New Discoveries in the Temple of Apries at Bahariya Oasis: An Overview of Two Seasons of Excavation

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AHMED KH. SAFINA, ALAA ELDIN AMAAR,  
AHMED MASHHOUT AHMED\*

*To the soul of Prof. Dr. Adel Farid Tobia*

## ABSTRACT

This paper focuses upon the results of the excavations conducted at the Temple of Apries at Bahariya Oasis. More recently, five seasons of excavations (2015, 2016, 2018, 2019 and 2020) have been undertaken at the site by the Egyptian Supreme Council of Antiquities (SCA) in an area measuring about 4.5 acres. In 2015–2016, the focus of this paper, the modern buildings were demolished and the architectural remains of the temple, three sandstone sanctuaries and associated mud-brick buildings, within the south-east corner were exposed and recorded. The remains of material culture that the team retrieved from the fill of the investigated archaeological areas are oil lamps, locally manufactured domestic pottery, a number of Late Roman Amphorae, oblong grinding slabs, a lunette stela of Amenhotep II, a group of graffiti inscribed in both demotic and abnormal hieratic, three Greek and three Coptic ostraca. The archaeological evidence collected so far, such as a heavy cylindrical millstone, two crushing basins and three plaster-lined sedimentation troughs, strongly suggest that different activities relating almost exclusively to the manufacture of olive oil took place here from the fourth century onwards.

**Keywords:** Bahariya Oasis, temple of Apries, Al-Qasr, olive oil manufacturing.

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## RÉSUMÉ

Cet article porte sur les résultats des fouilles menées dans le temple d'Apriès situé dans l'oasis de Bahariya. Récemment, cinq campagnes de fouilles (2015, 2016, 2018, 2019 et 2020) ont été menées sur le site par le Conseil suprême des antiquités de l'Égypte (CSA) dans une zone d'une superficie d'environ 4,5 hectares. Au cours de la campagne de 2015-2016, sur laquelle se concentre cet article, les bâtiments modernes ont été démolis et les vestiges architecturaux du temple, trois sanctuaires en grès et des bâtiments annexes en briques crues situés dans l'angle sud-est de la zone, ont été mis au jour et relevés. Les restes de culture matérielle recueillis par l'équipe dans le remblai des secteurs archéologiques étudiés comprennent des lampes à huile, des poteries domestiques de fabrication locale, plusieurs amphores de la fin de l'époque romaine, des meules oblongues, une stèle cintrée d'Amenhotep II, un groupe de graffiti en démotique et en hiéroglyphes anormal, trois ostraca grecs et trois ostraca coptes. Les découvertes archéologiques réunies jusqu'à présent, consistant en une lourde meule cylindrique, deux bassins de concassage et trois bacs de sédimentation enduits de plâtre, pointent fortement en direction d'activités diverses en lien avec la production d'huile d'olive à partir du IV<sup>e</sup> siècle de notre ère.

**Mots-clés :** oasis de Bahariya, temple d'Apriès, El-Qasr, production d'huile d'olive.



## INTRODUCTION

The principal temple of Apriès at Bahariya Oasis is situated in the middle of the ancient capital town of Al-Qasr (Fig. 1). Only one chapel in the south-west corner remains as a visible reminder of that temple, which was constructed and decorated during the Saite Period (Figs. 2-3). This temple was dedicated to the Theban triad Amun-Mut-Khonsu, like most local temples in the western Oases. Amun-Re bears a rare epithet not attested elsewhere, not even in his temple at Karnak, as “*Lord of the Great Mountain*”<sup>1</sup> while Khonsu is the one “*Who makes the Wadjet-eye perfect*”.<sup>2</sup> Early prominent visitors to the area described the ruins of the temple. Among them was the German botanist Paul Friedrich August Ascherson, whose voyage of 1879 took him past the temple. In a brief documentation, he made some preliminary observations of the remaining chapel by providing the dimensions of six limestone roofing slabs (7.25 × 2.40m). Georg Steindorff visited the site in 1900 and whilst there, recorded and described the chapel. The inscriptions incised on the ceiling (Fig. 4) prompted Steindorff's conclusion that the temple was built by the two best known and most powerful governors, Wahrenefer and Djed-Khonsu-*iu-ef-an*kh, during the 26th dynasty.<sup>3</sup> In 1938, some minor clearance was carried out

<sup>1</sup> LGG III, p. 793.

<sup>2</sup> LGG V, p. 343.

<sup>3</sup> FAKHRY 1950, p. 2; COLIN, LABRIQUE 2002; LABRIQUE 2004; SHERBINY, BASSIR 2014, p. 172.

by Ahmed Fakhry, who drew a plan and described the architectural features of the chapel and its texts. This chapel can be entered from the east side via one door with pivot holes cut into the floor and the upper threshold for two wooden leaves. Fakhry recorded its dimensions: 7.08 N/S × 2.81m E/W. The height of the wall measures 3.5m in ten courses of stone about two meters thick. Some rectangular windows still preserved in the façade, measuring 44 × 12cm, dimly illuminate the interior.<sup>4</sup> In Fakhry's time, no other architecture or buildings were visible because the temple was completely engulfed by a large quantity of rubble and was unexcavated. There have been a few observations in the meantime, among them Guy Wagner's edition of a Greek inscription replaced in this sector.<sup>5</sup> The temple, thereafter, was forgotten for along years and it turned into an outpost inhabited by Sheikh Abd El-Mawlas's family, who built several modern houses over the site and regularly used the chapel for domestic purposes, including grain storage and the stabling of sheep and cattle. In 2015-2016, the focus of this paper, the modern buildings were demolished and the architectural remains of the temple and associated mud-brick buildings within the south-east corner were recorded. The work was carried out by a team of archaeologists from the SCA Inspectorate of Bahariya Oasis under the supervision of Mohamed Aiady and Alaa Eldin Amaar. They included Rady Mohammed, Esam Abd El-Satar and Walid Fawzy. Clearance within the chapel revealed that the floor was paved with sandstone and the walls stood up to 5m in height. Decoration, unseen by Fakhry, was exposed on the east wall, showing a scene of a shaven-headed priest, perhaps named Djed-Khonsu-iu-ef-anhk, with his right arm raised in adoration. Vertical columns of hieroglyphs surrounding the image are almost unreadable (Fig. 5). The work brought uncovered an unknown secondary doorway in the eastern wall that leads to the outside, neighboring rooms. The absence of the lintel and the two jambs gives an indication that it had been cut later (Fig. 6).

## 1. MAJOR DISCOVERIES IN THE APRIES TEMPLE FROM 2015 TO 2016

The team chose an area in the south-east corner measuring 17.20 N/S × 8.30m E/W for a full archaeological investigation. Mudbrick buildings several courses high and three sandstone sanctuaries were exposed.

### 1.1. The Mud Brick Buildings

[FIGS. 7-8]

A mudbrick complex was revealed in the east corner. It measures approximately 17.20 N/S × 6.70m E/W, with walls preserved to a height of 90cm. It comprises a series of associated rooms. The principal rectangular building (B) occupied the southern side, measuring 6.70 × 4.80m. Access to it can be gained through the narrow north-south street (A), which measures 13.20 N/S long × 1.70m wide E/W. This street leads to an entrance flanked by one L-shaped wall resembling a doorjamb in the left side toward the east. It measures 1m

<sup>4</sup> FAKHRY 1950, p. 2; PM VII, p. 299.

<sup>5</sup> WAGNER 1974.



A new room (E), measuring approximately 3.65 × 3.65m, was delimited north of the troughs. It is built from mudbricks and has one sunken pottery vessel embedded in the ground measuring 45cm in diameter. A rectangular depression measuring 1.35 × 1.30m × 65cm in depth is located under it (Fig. 14). The sunken pottery vessel embedded in the ground is very similar to a particularly interesting group of storage vessels that were exposed during the 2020 season of excavation. They are somewhat surprising as one has never been found before elsewhere. These vessels have one round hole connecting with a spout fixed in the bottom. The mechanized idea of its work is filling these vessels with liquids, which were drained through the hole into the spout once a stopper was pulled on the other exit of the hole in front of the spout. Clementina Caputo found very similar vessel in the Late Roman fort of Umm al-Dabadib,<sup>8</sup> a fortified settlement, where all pottery is dated to the late 4th-early 5th century AD. They seem much more likely that they were used for oil or even wine. The discovery of some sacred items, described below, in this mudbrick building provides a clue that these items might have been left there when the area was abandoned. The architectural layout of this mudbrick complex recalls the mudbrick structures adjoining the stone Temple of Nadura in north central Kharga Oasis.<sup>9</sup> Unfortunately, the excavation work stopped after 2016 in this area and has not yet resumed, but the coming excavation seasons will concentrate on the unexcavated areas and will undoubtedly contribute greatly to our understanding of this region, which flourished during the fourth century onwards. The material culture remains found in the fill of the investigated archaeological area can be described as follows:

1. A broken ram's head with one horn preserved: this head is somewhat surprising as one has never been found before elsewhere in Bahariya Oasis (Fig. 15);
2. A finely crafted bronze statuette of Osiris, still in reasonably good condition, measuring 10cm in height was made using the hollow-cast method.<sup>10</sup> It has a reddish colour with some signs of corrosion visible on its lower metal surface, but the artistic features can still be seen as delicately modeled. The god is shown in a standing position, wrapped in a tight-fitting garment, and wearing an *Atef*-crown embellished with two feathers. He has a divine beard and holds the crook and the flail. Of interest here is a small projection under the feet that may have been for fastening the statue to a now-missing base or possibly indicates the casting technique. Similar small votive statuettes of Osiris were mass produced at various archeological sites dating back to the Late and Greco-Roman periods (Fig. 16);<sup>11</sup>
3. Part of a bronze *Atef* crown measuring 14.5m high × 9cm wide, consisting of one ostrich feather with several horizontal lines incised on the plume. The ostrich feather is fastened to a ram's horn and two uraei with a sun-discs on their heads in the left side (Fig. 17). Two separate uraei with typical artistic features, made of bronze alloy, were found in the same place, and may have formed part of the crown's right side (Fig. 18). Based on

<sup>8</sup> We really appreciate kindly cooperation of Clementina Caputo for providing us with photographs of a similar vessel. It is currently under study by the Italian Archaeological Mission of Umm al-Dabadib.

<sup>9</sup> KLOTZ 2013, p. 300.

<sup>10</sup> TAYLOR, CARDDOCK, SHERMAN 1998.

<sup>11</sup> For a close parallel from Kharga Oasis: WUTMANN, LAURENT, FLORENCE 2007; HILL 2001.

- the dimensions of this crown, it may be reasonable to classify it as a part of one of the medium size statues, which were placed in a temple sanctuary;
4. A part of an *Atef* crown measuring 8.5m high × 3cm wide made of bronze alloy decorated with nine rows of green faience paste and having three main colors: white, black and red (Fig. 19);
  5. Two chalice-shaped vessels of different types. The first one is a cylindrical basin with a thick profiled reinforced rim on a round central post, fastened vertically over a round base. It may have been used as a vessel for food or liquids. An offering table, No. BM EA125, dated to the Roman period, is depicting this kind of vessel filled with food. It measures 6cm in height and the circular rim is 9.50cm in diameter. One word is inscribed on one side. The first letter, which is a very large, awkwardly written alpha, or combination of  $\alpha$  and  $\rho$  may lead to the reading of the name *Harnouphis*, written without the Greek ending, thus, perhaps to be seen as Coptic. In fact, there is no other instance of this name in Coptic, or with the last letter as  $\pi$  rather than  $\phi$ , but the name is common in Greek and Demotic: “*the good Horus*” (Fig. 20). The second vessel was used as a censer, as can be seen from the smoke-blackened traces from use. It has the same shape but with an irregular square basin decorated with impressed ovals under the rim (Fig. 21);
  6. Three oblong grinding slabs with round pecked depressions in the center, a single deep basin for pounding and three dimpled, crushing fist-sized stones, were found scattered in situ near the groundwater well (Fig. 22). The shape of these rectangular slabs superficially resembles the circular holes for door pivots. Upon examination of the crushing basins, the small round depression on top makes its use for the floor crushing unlikely. Also, the deep basin for pounding is not common for this purpose. This leads to the suggestion that they were originally used for grinding small quantities of an unknown substance that has left no visible residue. They may have been used for fine grinding of dyes used in the textile industry. The third Coptic ostrakon found in the site, described below, has a small indication of this activity in line 3 of the text:  $\kappa\omicron\upsilon\gamma\iota$   $\nu\iota\beta\tau/\nu\beta\iota\nu\iota\beta\epsilon$  perhaps referring to some iron oxide used for the preparation of stains and dye liquors. It might be natural granules coming from the Oasis’s quarries such as the escarpment of Abu Madi in Harrah, which lies approximately 22 kilometers east of El-Bawiti on the road of the Bani Mazar area, El-Minia governorate;
  7. An amphora handle stamped in Latin, with ADUS clearly visible, maybe CADUS. After that it is less clear, with the first letter perhaps a combination of two or three letters (TA? TR?), then something that looks like an L with a diagonal line from its apex, possibly V, then FI. Roger S. Bagnall has suggested that it could refer to some high-quality wine from the Latin-speaking west, probably Italy, which made its way to the ancient oasis capital town of Al-Qasr (Fig. 23);
  8. Three Greek ostraka were retrieved from the area located north of the three plaster-lined sedimentation troughs. They were tentatively dated to the 6th and 7th centuries. All are written in black ink and the letters have ligatures with a slight rightward slant. The first ostrakon (Fig. 24) measures 12cm wide × 9cm long. It has a bright brown color and preserves six incomplete lines written on the recto (convex side). Although some letters have suffered discoloration or effacement and it has lost a small amount at the right side, it is largely decipherable. The text is written in black ink by a moderately skilled hand.

This Greek ostrakon sheds light on the presence of personal communications between the site as an industrial place and a church located elsewhere in the oasis. Although no church, nor any monastic establishment or structure with monastic architecture has been found near the site, one might consider the possibility that industrial activity at the site may have served the nearest churches, which dates back to the fourth to the seventh centuries, such as the Christian complex in Qasr Al-Agouz, some 4km south-east of El-Bawiti. This site comprises three churches and monks' cells.<sup>12</sup> Also, a nearby church is known in the Roman fortress at Qaret el-Tub, about 4km west of El-Bawiti.<sup>13</sup> Direct evidence pointing to the Christian milieu is satisfactory, including Christian personal names such as Menas, Joseph and Phanoup. The clerical titles and οἰκονόμος and πρ(εσβυτέρω) occur in the text.<sup>14</sup> The text reads:

1. + Μηνᾶς σύν θε(ω) οἰκονόμος <sup>a</sup> Ἰωσηφ(ίου)	+ <i>Menas, God willing, oikonomos of Joseph [in?]</i>
2. Φανουπ Ἰωσηφ(ίω) πρ(εσβυτέρω) οἰκο(νόμε) <sup>b</sup> της	<i>Phanoup, to Joseph priest and oikonomos of</i>
3. μεγά(ης) ἐκ(κλησίας)· παράσχ(ου) (ὑπέρ) ἐνο[ι-]	<i>the great church:</i>
4. κίου νηρού της οὔσι(ας) εἶχ θ[ύος]	<i>furnish for rent of drinking water of the estate</i>
5. χο( ) <sup>c</sup> β δύο(ὑπέρ) διακο(νίας) σύν θε(ω) ιβ	<i>two cho( ) of fish, for service of the, God willing,</i> <i>12th</i>
ἰνδικ(τίωνος).	<i>Indiction.</i>

### Comment

- Line 1: οἰκονόμος is the steward of a church or monastery; its Coptic equivalent is ϣᄁᄁᄁᄁ (Forster, WB, 563, P. Sarga, nos 177, 178, 1880). This office holder was responsible for all business transactions.<sup>15</sup> One supposes that a church or other religious establishment named after Joseph was meant, as in P.Wisc. 2.64; whether this refers to the biblical patriarch, the husband of Mary, or a later personage is unknown.
- Line 2: οἰκο: it is uncertain whether the tiny omicron over kappa is intended as a letter; if not, one would read οἰκ(ονόμεω).
- Line 5: χο: neither the choinix nor the chous is attested as a measure of fish, and the chous had disappeared from use in favor of the litra by the likely date of this ostrakon; it is unattested after AD 400. The litra is used to measure fish in Byzantine texts. It is, however, possible that the chous continued in use longer than previously known in the Oasis from which most of its latest attestations come.<sup>16</sup>

<sup>12</sup> It was discovered by the Norwegian-French archaeological mission directed by Victor Ghica in 2020.

<sup>13</sup> COLIN 2012.

<sup>14</sup> We wish to express our gratitude to R.S. Bagnall and M. Elmaghraby for their help in the reading of this piece, their useful comments and invaluable support.

<sup>15</sup> AHMED 2010, p. 136.

<sup>16</sup> Our thanks to R.S. Bagnall for his suggestions and comments in this part.

The second ostrakon (Fig. 25) is a shoulder sherd measuring 5.5cm × 4.2cm. There are not enough preserved words for it to be understandable. There are many ostraka written on shoulder sherds from Mut al-Kharab in Dakhleh. The text reads:

1. Φιλότη ( ) <sup>17</sup> καί	<i>Philotheos and [</i>
2. ητη ουερ τω[	<i>... ? [</i>
3. Πατε[	<i>.... ? [</i>

### *Comment*

– Line 1 may be an abbreviation of the Greek name Φιλότηος<sup>18</sup> but it is not evident. The third ostrakon (Fig. 26) measures 8.6cm × 6.6cm. The ink has been rubbed and the text is thus almost illegible.

9. Three Coptic ostraka were retrieved from the area located north of the three plaster-lined sedimentation troughs. They could be assigned to the 6th and 7th centuries AD. Some general affinities are shared between all of them; they were written in black ink, the letters have few ligatures and they were written in Sahidic dialect with a slight rightward slant. They are small fragments, and it is, of course difficult to interpret a single text fully without parallels but they may help facilitate future research<sup>19</sup>.

The first Ostrakon (Fig. 27) has a reddish-brown colour and measures 8cm in width × 10cm in length. The text is in black ink in a single fluid and practiced hand and written on the verso. It preserves five incomplete lines, being broken at the top and the right and left sides. The text reads:

1 ... ] ΙΑΞ ΝΜΟϢ ΕΠΣΤ[	<i>... ] measure (field) with him ..?[...]</i>
2 ... ] ϣϢ ΤΑΕΤΑΡΕΒΑΛΒ	<i>... ] So that he make him [...]</i>
3 ... ] ϣΒΙΑΞ ΝΜΟΝ ΠΑΡΑΠ̄	<i>... ] Measure(field) not beyond [...]</i>
4 ... ] ΚΤΟΝ ΑΛΛΑ ΠΕΤΕ Ε̄Ν	<i>... ] ... ? but [...]</i>
5 ... ] Τϣ ΝΤΟϢ ΕΩΑϢ̄	<i>... ] he used to do [...]</i>

### *Comment*

- Line 1: ΙΑΞ may refer to the word meaning “field”<sup>20</sup> or as the same word in line 3 λΙΑΞ and it could be a word λΑΞΗ<sup>21</sup> that applies to the measurement of commodities such as olive oil, wine, milk and honey. ΕΠΣΤ from ΕΠΕΣΤ “be cooked”.  
 – Line 2: perhaps the scribe made a mistake and then crossed out the word ΤΑ and rewrote it with Ε at the beginning of the word. ΤΑΡΕ (inferential) prefix of future

<sup>17</sup> PREISIGKE 1922, col. 463. Trismegistos tm nam 3263.

<sup>18</sup> This reading is by R.S. Bagnall.

<sup>19</sup> We would like to thank our colleagues Maher Eissa and Nesma Ibrahim for their help in reading these fragments.

<sup>20</sup> CRUM 1939, 89b.

<sup>21</sup> CRUM 1939, 149a.

conjunctive. ϩϥϣⲗⲗϣ: substitution between the letter ⲃ and ϣ is very common<sup>22</sup> ⲗⲗ of ⲉⲓⲣϥ<sup>23</sup> “become, do, make”.

- Line 3: ⲛⲙⲟⲛ of ⲛⲙⲛⲓ, ⲛⲛ<sup>24</sup> not to have. Παρᾶ<sup>25</sup> is a Greek preposition meaning “beside, from, by the side of, beyond.” Παρὰπαν παρὰ παν?? = altogether, absolutely, generally.<sup>26</sup>
- Line 4: ⲕⲓⲟⲛ probably is part of the Greek word found in documents relating to rented or leased land, πᾶκτον<sup>27</sup> “agreement, lease”. ἀλλά “but”; a Greek conjunction.<sup>28</sup>

The second Ostrakon (Fig. 28) is a reddish pottery. It measures 6cm wide × 8cm long. The text is written in black ink on the verso in a single hand with seven incomplete lines. It is broken at the top and on both sides. The text reads:

1 ]...[.....] ⲧⲁⲙⲟⲓ[	]...[.....] <i>Tamoi</i> [...
2 ] ⲟⲓ [...] ⲕⲁⲗ ⲛⲓⲡⲕⲉⲛ̄. [	] ..? <i>The other land ...?</i> [ ...
3 ⲧ]ϩϥϩϩϩϩϩϩ ϣϩⲱ ⲁⲣ[	] <i>his daughter and</i> [...
4 ]ϩϩϩϩϩ ϩⲟⲧ ⲛⲁϣ[	] <i>daughter go to him</i> [...
5 ] ⲛ ⲛⲓⲡⲉⲣⲙ ⲁⲗ ⲛⲙⲟϣ (ⲛⲧⲟϣ?)	] <i>of the man and he ....?</i> [...
6 ]ⲟⲟⲡ ⲧϩ̄ ⲛⲧⲟⲟⲧⲁϣ[	] <i>measure of corn sent by his hands</i> [...
7 ]ⲓ ⲉⲣϩⲟⲙⲉ[	] <i>to the man</i> [...

### Comment

- Line 1: ⲧⲁⲙⲟⲓ. This word appears in another Coptic text that has been published from El-Kharga Museum<sup>29</sup> (O. Kharga Mus. 2) as a toponym recorded in a private letter sent from two persons called Psumenais and Kanah to a man who could be a monk, named Phibamon, who lived in Tamoi. As was mentioned in the publication (AHMED 2009), this place could be the ancient name of El-Hesn and might be the same as ⲧⲁⲙⲉ<sup>30</sup> which is found in a Coptic text (CRUM, *Varia Coptica*, No. 66) as a place (ⲗⲓⲃⲟⲕ ⲉⲧⲁⲙⲉ), but its location is not known. The name of a place ⲧⲁⲙ was mentioned in another text,<sup>31</sup> possibly referring to the same place (HALL 1905, pl. 122).
- Line 2: ⲁⲗⲁ conjunction and, ⲁⲗ verbal prefix Perfect I.<sup>32</sup>
- Line 3: ϩϩϩϩ is the common form of the word in Theban<sup>33</sup> and Kellis documents.<sup>34</sup>
- Line 4: ⲟⲧ from ⲟⲩⲧ.<sup>35</sup>

22 For more details, see KAHLE (ed.) 1954.

23 CRUM 1939, 83b.

24 CRUM 1939, 167a.

25 FÖRSTER 2002, p. 609.

26 LIDDEL, SCOTT 1996, p. 1805.

27 FÖRSTER 2002, p. 601.

28 LIDDEL, SCOTT 1996, p. 108.

29 AHMED 2009, pp. 167–170.

30 TIMM 1984, 2481.

31 HALL 1905.

32 CRUM 1939, 24a.

33 P.kru 2, P.kru 4, P.kru 32, P.kru 34.

34 P. Kellis 19, 25, 31, 32, etc.

35 CRUM 1939, 274a.

- Line 6: ⲥⲠⲠ<sup>36</sup> ⲥⲁⲠ, ⲥⲠⲠ, ⲠⲠⲠ foot, sole of foot, cutting instrument ⲥⲠⲠ ⲧⲠ stand upon ⲕⲁⲠ ⲕⲁⲠ<sup>37</sup>, ⲕⲠⲠ,(S) ⲕⲠⲠ, ⲥⲠⲠ,(B) ⲭⲠⲠ= (F) ⲭⲁⲠ = size, string, strand, hair, receptacle or measure for corn, a cutting tool. ⲧⲠⲠⲉ in pronominal form ⲧⲠⲠⲧ<sup>38</sup> ⲧⲠ ⲉⲧⲠⲠⲧⲧ “I undertake”.

The third Ostrakon (Fig. 29) is a reddish pottery. It measures 4cm in width × 5.5cm in length. The text of nine incomplete lines, is written on the recto in black ink in a single hand. The text is broken on both sides. The text reads:

1 ].....[	] .....? [
2 ].....Ⲡ[	] .....? [
3 ]ⲕⲠⲠⲧ ⲛⲃ[	] some iron oxide [
4 ]ⲕⲠⲠⲠ[	] black [
5 ]ⲧⲉⲗⲗⲠ[	] red [
6 ]ⲗⲥ ⲛ Ⲡ-[	] old ... of ... [
7 ]Ⲡⲧⲉ ⲗⲠ[	] pit? They [
8 ]ⲓⲉⲠⲧ[	] demand [
9 ]Ⲡⲁⲓ[	] keep [

### Comment

- Line 3: ⲕⲠⲠⲧ “young, small” ⲕⲠⲠⲧ ⲛⲓⲃⲧ/ⲛⲃⲛⲓⲃⲉ “some iron nail, iron oxide, iron rust used for the preparation of stains and dye liquors”.<sup>39</sup>
- Line 4: ⲕⲠⲠⲠ from ⲕⲠⲠⲠ.
- Line 5: ⲧⲉⲗⲗⲠ from ⲧⲗⲉⲠⲗⲗⲠⲧ.
- Line 8: could be ⲉⲠⲧⲧⲣⲉⲠⲉ: this looks rather like the related verb ⲉⲠⲧⲣⲉⲡⲱ in the usual Coptic form ending in epsilon. ⲉⲠⲧⲣⲱⲡⲓ meaning “request”, “demand”, (document of) “commissioning”, “mandate”, “authorization”, ⲉⲠⲉⲧⲧⲣⲱⲡⲓ, ⲉⲠⲉⲧⲧⲣⲱⲡⲉ.<sup>40</sup> ⲉⲠⲧⲣⲱⲡⲱ “mountain, desert, monastery”, ⲉⲠⲧⲧⲛ “ground, earth, dust, rubbish”, ⲉⲠⲧⲧⲠⲱⲡⲱ “that place sanctuary, church”.
- Line 9: could be ⲗⲓⲥⲗⲓⲗ, ⲗⲓⲥⲠⲛⲓ, ⲗⲓⲥⲠⲧⲠ. Ⲡⲛⲧⲣ ⲗⲓⲥⲗⲓⲗ<sup>41</sup> ⲡⲣⲱⲉⲣⲗⲓⲥⲗⲓ, a word of a free-will clause<sup>42</sup> found in legal documents from Thebes<sup>43</sup> ⲗⲛⲧⲗⲁⲡⲣⲱⲡⲱⲣⲉⲓⲥⲓⲥ ⲛⲠⲛⲓ ⲛⲠⲠⲱ through my own free choice<sup>44</sup> ⲣⲗⲓⲥ “be awake, watch, Guard, keep, observe”<sup>45</sup> appeared in some texts from Kellis.<sup>46</sup>

<sup>36</sup> CRUM 1939, 824 b; STRASBACH, BARC 1976, p. 109.

<sup>37</sup> CRUM 1939, 825b, 113b.

<sup>38</sup> CRUM 1939, 425.

<sup>39</sup> RICHTER 2020, p. 175.

<sup>40</sup> FÖRSTER 2002, p. 289.

<sup>41</sup> P.KRU 18.

<sup>42</sup> CROMWELL 2012, p. 153, sb 1 5597, P.KRU 1, P.KRU 4.

<sup>43</sup> Sb 1 5597, P.KRU 1, P.KRU 4.

<sup>44</sup> P.KRU 12, 15–18.

<sup>45</sup> CRUM 1939, 300b.

<sup>46</sup> P.Kell, 25, 29, 31, 34, 42.

## 1.2. Three Sandstone Sanctuaries

[FIGS. 7-30]

Three sandstone sanctuaries adjoining the chapel of Apries have been revealed: (F), (G) and (H). They are aligned with the west of Street (A) and Building (B) and are accessible via an entrance flanked by two jambs. The southern jamb measures 1.45 wide × 1m in depth, while the northern one measures 1m wide × 1.5m in depth. The entrance between the two jambs is 90cm in width. The entrance is accessed from (B) and opens into a hall (F) measuring 3.70 long × 2m wide. Another doorway in its western end leads directly into the chapel of Apries. This doorway measures 2m high × 90cm wide. The hall is flanked by two sanctuaries on each side, one toward the north and the other to the south. The northern one (G) measures 5.5 long × 2.55 wide × 2.30m high. It has an entrance preserving two jambs. The left jamb measures 65cm wide × 1.85m in depth while the right one measures 40cm wide × 1.85m in depth. The entrance between the two jambs is 90cm wide. The south chapel (H) measures 2.90 long × 2.15 wide × 2.20m high. It has an entrance of which two jambs remain. The left jamb measures 30cm wide × 2.20m in depth while the right one measures 1m wide × 2.20m in depth. The entrance between the two jambs is 65cm<sup>47</sup> in width. The material culture remains found in the fill of the investigated archaeological area can be described as follows:

1. A lunette stela of limestone found reused as a lintel above the entrance leading to the hall (F) (Fig. 31). It measures 1.40m high × 70cm wide × 4.5cm thick. It is divided into three parts: A) The round-topped section is decorated with the winged sun-disk with a small title *Bḥdy nb pt* “*Behdite, Lord of sky*”. B) On the register is a scene of Amenhotep II in the presence of the god Seth. The king is in a traditional pharaonic pose wearing the red crown, smiting Egypt’s enemy, who is shown subdued and held by his hair as a dominated captive, kneeling with arms raised up and waiting for the blow of the mace. Amenhotep II’s titles, followed by his name, are written as *nṯr nfr nb tꜣwy nb irt-ihꜣt ꜥ hꜣprw Rꜥ mry stḥ nb Wꜥḥꜣt* “*the good God, Lord of the Two Lands, Lord of preparation of offerings, Great by the shape of Re, beloved of Seth, Lord of the Oasis*”. The lower part contains a text in 8 lines reading from right to left, framed by horizontal borders between each line.<sup>48</sup> The first line reads *nṯr nfr nb tꜣwy ꜥ hꜣprw Rꜥ sꜣ-Rꜥ Ḳmn ḥꜣp nṯr-ḥꜣꜣ-wꜣst mry Stḥ nb Wꜥḥꜣt* “*the good God, Lord of the Two Lands, Great by the shape of Re, son of Re Amenhotep, God and ruler of Thebes, beloved of Seth, Lord of the Oasis*”. This stela raises an important observation regarding the foundation of the temple. It suggests that if it originally belonged to the temple and was not quarried from elsewhere for reuse in a later modification, it would significantly alter our understanding of the site’s history—indicating that the cult complex may have been established much earlier than previously assumed. Although this hypothesis cannot be definitively confirmed at present, it opens a promising avenue for further archaeological investigation. Additional supporting evidence, such as the Ramesside fragments, reinforces the possibility of the lintel’s original use at the site.<sup>49</sup>

<sup>47</sup> These dimensions are unusually narrow: standard measurements for doorways at the archeological sites in Bahariya Oasis are 90 to 95cm.

<sup>48</sup> It is currently being studied by Ahmed Saed, Mansoura University.

<sup>49</sup> For the cult foundations at Bahariya in the New Kingdom, see in COLIN 2011, pp. 48–51.

2. A part of a limestone statue base measuring 95 long × 90cm high with only a left foot advanced. It is from a royal statue, as indicated by two adjacent horizontally shaped cartouches preserved on the front part. At the top of the cartouches double plumes and solar discs were placed. The royal names are partly damaged but can be read *Wsr mꜣꜥt Rꜥ* [...?] suggesting the throne name of either Ramesses II, Ramesses V or Ramesses VII (Fig. 32). Another sun disc sign is clearly visible in the right cartouche. This statue base was found reused among material of the Late Roman and Byzantine periods. It is thus not possible to suggest which king Ramesses was originally depicted. Another small fragment of a limestone block found near this base is decorated in incised relief with *nbw*-signs, presumably from the same feature and date (Fig. 33).
3. A sandstone block measuring 1.50m long × 70cm wide. Two horizontal lines of hieroglyphs running from left to right are preserved. They give the name and the official titles of Djed-Khonsu-iu-ef-ankh (Fig. 34). The texts are badly eroded from secondary use. Nonetheless, they can be reconstructed and read with the aid of parallel texts from the second chapel at Ain El-Muftella. The text reads:

[1] *ḥꜣty-ꜥ ḫꜣꜣt ḫm-nꜥr Ḥnsw-Dḫwty ḫm-nꜥr Ḥnsw pꜣ mdw ḫm-nꜥr Mntw ḫnmty Ḥn[sw].*

[2] *[pꜣ] ḫrd sꜥ ḫwt-nꜥr ꜣꜣ ꜣbd Dd-Ḥnsw-ꜣw.fꜥnh [...].*

[1] The Count of the Oasis, The Priest of Khonsu-Thot, The Priest of Khonsu the Stick, The Priest of Montu, The nurturer of Khon[su]

[2] [the] Child, The Scribe of the Temple, The Great of the month, Djed-Khonsu-iu-ef-ankh [...].

### Comment

The name and titles of Djed-Khonsu-iu-ef-ankh are known from other texts found in different places such as the chapels of Ain el Muftella,<sup>50</sup> the ceiling of the chapel in the temple of Apries, his coffin in his tomb in Sheikh Sope and two blocks in Bahariya Magazine (inventory numbers 30 and 145). His father is described in Ain el Muftella as: *r-pꜣy ḥꜣty-ꜥ ḫꜣꜣt Pꜣ-dꜣ-ꜣst ms (n) Nꜥs* “The Count of the Oasis, Padi-Isis, son of Naes”.<sup>51</sup>

4. Two blocks which may date to the Saite Period were reused in the entrance leading from the street into building (B). The first block originally represented a king wearing a striped linen headdress, *nemes* that drapes onto his shoulders, and a royal beard. He is shown between two deities. In front of him, a god is shown with his right hand behind the king’s back, while his left is upraised with an *ankh*-sign facing his nose. Behind the king, a figure of the other deity is destroyed with only his two hands preserved. The left hand is shown holding the king’s shoulder while the right hand is upraised with an *ankh*-sign (Fig. 35). The second block contains a scene of a white crown and fragmentary cartouches with the throne and birth names of the king Amasis. The birth name can be clearly read as *sꜣ-Rꜥ Ḥꜥms-sꜣ-[Nt]*. The throne name is completely missing and only double lines forming the left side of the cartouche are preserved (Fig. 36).

<sup>50</sup> FAKHRY 1942, pp. 150–172; LABRIQUE 2004.

<sup>51</sup> FAKHRY 1942, p. 163.

## 2. GENERAL OBSERVATIONS AND DISCUSSION

### 2.1. Manufacturing activity of the Site

The archaeological evidence collected so far strongly suggests different activities that almost exclusively relate to olive oil manufacturing. Although the site is ruined and excavation works are not completed, we can reconstruct many aspects of this activity based on parallel sites from the same era such as the area of Ain Al-Qurayshat, 30km east of Shali in Siwa Oasis, where there was a major center of oil production.<sup>52</sup> The archaeological evidence does not pertain only to one step of olive oil production, but rather to miscellaneous stages. Before discussing this evidence, it might be helpful to describe briefly the different stages of olive production to provide a better understanding of the evidence.

Based on the olive oil presses of Ain Al-Qurayshat, ancient methods for crushing olives and manufacturing olive oil followed several stages. First, ripe olives were poured into a flat stone cylindrical basin with a square socket hole cut in the center. This socket held a wooden post fixed vertically in the basin base and then a horizontal axle fastened over the vertical cylindrical central post, suspended vertically with the grinding stone. The grinding began when the horizontal axle was pushed by either laborers or animals to make the millstone rotate directly on its own axis and on the basin floor. Secondly, the crushed uniform paste was scooped out from the crushing basin and put into circular woven press-mats or nets to be ready for the next stage. They then were stacked, one on top of another, under a wooden lid with several hanging counterweights. The screw press was pulled down to release the fresh oil from the paste into a channel. This secondary stage was done in the pressing room, which is usually separate from the crushing room. Thirdly, the extracted fresh oil from the stacked heap was then drained through a runnel into plaster-lined sedimentation troughs adjacent to the pressing bed or to a collecting oil vat under it. Typically, at all oil producing sites, the pressing basins should be located relatively close to the troughs and the press bed which usually contains the collection tank.<sup>53</sup>

The presence of olive oil making is inferred here from the presence of a heavy cylindrical millstone (Fig. 9). It is one of the largest discovered in either Siwa or Bahariya. This may have been used to produce a greater amount of a high-quality olive pomace to cover the needs of the regional population. It has a square perforation hole in its center, so it is conceivable that a square wooden pipe was placed inside this hole. All the examined cylindrical crushing stones that have been found in Siwa and Bahariya were cut from limestone and have either a central square or round perforation hole in the middle.<sup>54</sup> Although it seems logical to assume that it was quarried from another place and reused in a later modification, the crushing basin in which this millstone rotated is missing and has not been found at the site. Nonetheless, the other associated evidence supports its initial use for olive crushing. Fortunately, two other crushing basins were found south of the plaster-lined sedimentation troughs (Fig. 12). Although none

<sup>52</sup> KUHLMANN 1998, p. 167.

<sup>53</sup> For Previous studies on ancient olive oil in ancient Mediterranean and North Africa, see FRANKEL 2016; BRUN 2003; MATTINGLY 1985; MATTINGLY, HITCHNER 1995.

<sup>54</sup> Three of them were found at Al-Hayz by the Czech Institute of Egyptology, Charles University, Prague in Tahuna 1, MUSIL et al. 2013, p. 22.

of them is fitted with its former millstone, they are considered further supporting evidence showing that the facility was used for oil-production. Both are fashioned from limestone and have a round hole in the middle with the inner diameter 1.30m. The presence of three plaster-lined sedimentation troughs (Fig. 11) remains the most reliable evidence for an olive oil installation. The process of sedimentation was done by filling the troughs with fresh water from the nearest groundwater source by hand (Fig. 10). The next step was to separate the clear oil from the residues and watery lees by using a ladle or cup. Another technique of sedimentation is shown by comparable vats of Ain Al-Qurayshat where Kuhlmann observed that they are stepped and the floor of the middle one, which functioned as a container for the olive mash, is raised up to 20cm higher than the other two. This allowed the clear oil to flow through runnels into the flanked vats under the influence of gravity, leaving the watery lees in the first one.<sup>55</sup> At this site, the press bed, which should be near the vats, is absent. It may have been removed for reuse elsewhere. There is a consensus among archaeologists that the former industrial elements constitute evidence for oil making. In addition, a remarkable similarity exists between Room (B), which contains square spiral-shaped, engaged columns with a bench at its end, and the administrative palace of the parallel site at Ain Al-Qurayshat, which was also composed of a large hall with a dais at its center and several benches running alongside the walls, each of which borders the manufacturing place and was likely dedicated to the workers who ran this industrial installation. The dais, missing in Bahariya, was used for the overseer while the benches were for the seating of the laborers.

## 2.2. General Characterisation of the Ceramic Material and Dating

The ceramics dated from the first half of the fourth century to the seventh century AD (Fig. 37), the latest phase of occupation and living of the Roman-Byzantine occupation, have led to the supposition that there was interaction between the oasis and the Nile Valley regime. The preliminary conclusions may be characterized as follows:

1. Three oil lamps that can be classified in two categories according to their visible characteristics and chronology. The first type is an 'Oasis-ware' red slip ware lamp with a low round body, small central filling hole and an elongated tubular nozzle splayed at the end for the wick. This type can be dated to the late third or early fourth century AD (Fig. 38).<sup>56</sup> The second type has a bottle-shaped body with slightly raised circular base, narrow neck, fill-hole surrounded by a moulded circular rim and one or two holes for the wick (Fig. 39). A faience example of the latter type, with a nozzle and loop handle broken off, was found;
2. Locally manufactured domestic pottery of various shapes and sizes made from iron-rich clay tempered with sand were an always-present staple of daily life. These can be classified as follows:

<sup>55</sup> KUHLMANN 1998, p. 167; the same technique was found in an oil pressing site in Western Galilee: FRANKEL 1992, p. 42.

<sup>56</sup> For similar examples retrieved from Douch see DUNAND, HEIM, HENEIN 1992, pp. 171–177, pl. 72–3; from Ain el-gedida, Dakhleh Oasis, see DIXNEUF 2013, p. 465, pl. 2; MUSIL et al. 2013, p. 44; PAWLIKOWSKA-GWIAZADA 2019, p. 586.

- a. Cylindrical dishes in two versions. The first comes with a thick or thin profiled reinforced rim flaring outwards. The second has a rounded rim with no projecting ridge on the exterior but with a slight internal bulge. The rim diameters are from 6.6cm to 17cm, while the average height is between 2.5cm and 7.5cm. It is noticeable that some dishes of this type are entirely plain without any decoration while others are painted with invariably red geometric designs in pyramidal shapes on four corners or with black painted bands on the interior. The approximate dating is between the first half of the fourth century to the seventh century AD (Fig. 40);
  - b. Uncoated shallow medium bowls with a round rim and either a ring or a flat string-cut base. They have a rim diameter averaging between 6.5cm and 10cm with a height from 3.5cm to 17cm (Fig. 41);
  - c. Cooking pots used to serve and prepare food: these have a rounded body, a projecting rim and a short neck. They are frequently smoke-blackened from use and left uncoated. These vessels often preserve the remains of handles that attached directly from the top or the bottom of the rim to the lower neck. The rim diameter ranges from 15cm to 18cm and the height is between 23cm and 26cm (Fig. 42);
  - d. Vessel lids used to cover bottles and vessels: these vary in shape and size. Three of them preserve the remains of round handles and have rim diameters of 4cm with a height of 3cm (Fig. 43), while the others have no handles and are of a smaller diameter, implying that they were used as stoppers (Fig. 44);
3. Two stoppers that were probably used to plug the spouts of containers for olive oil or wine vessels for best fermentation (Fig. 45);
  4. A number of Late Roman Amphorae of various shapes and sizes made from Nile alluvial clay, perhaps from the region of Oxyrhynchus, represent the stage of the late fifth and the sixth centuries AD. They were directed towards the intra-regional market for consumption. A single complete example, of LRA 7 has a dull brown color, elongated ribbed body, pointed base and cylindrical shape with two crude handles attached to the lower neck.<sup>57</sup> The most identifiable features from the other preserved necks are a small mouth with a high neck, large bulging mouth with short neck in a cup-shaped mouth, symmetrical handles and spouts with clarifiers below the rim (Fig. 46). R.S. Bagnall has suggested that some high-quality wine from the Latin-speaking Western Mediterranean, probably Italy, was making its way to the ancient capital town of Al-Qasr. Type G is an import from the West; it does not provide evidence that the Oasis was producing wine. As with other imported amphorae found at Ismant and Mut al-Kharab, it indicates that the community was importing wine in these amphorae from elsewhere. It is understandable that a major center in Bahariya also imported fine wine.

57 WODZIŃSKA 2016, p. 189; HILL 2016, p. 14.

## CONCLUSION

The excavation results have indicated extensive activity during the late Roman and Byzantine periods within a mud-brick structure with an adjoining complex of rooms located in the south-east corner of the temple. Some confirmation that it dates to this time comes from textual sources in the form of three Greek and three Coptic ostraka. Ceramics and small finds, which were regularly encountered across the upper layer, indicate that the site was occupied continuously into the mid-seventh century AD. This date is indicated by a bronze scale pan and Arabic writing found on some ceramic sherds together with a stamp with the name Muhammad on a globular water vessel (Fig. 47). This mudbrick structure was mainly used for producing olive oil.

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Photo by Alaa Eldin Amaar, 2015

FIG. 4. Texts on the limestone roofing slabs of the Apries chapel.



Photo by Alaa Eldin Amaar, 2015

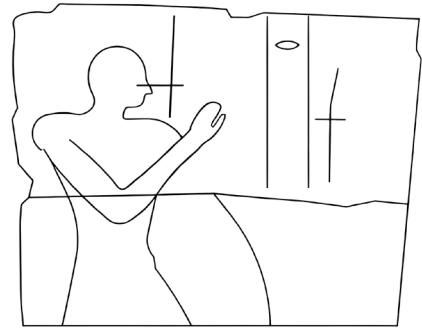


FIG. 5. Relief of a priest on the eastern wall of the chapel (drawing by Samir Gaber).



Photo by Alaa Eldin Amaar, 2015

FIG. 6. The secondary doorway in the eastern wall leading to the outside neighboring rooms.

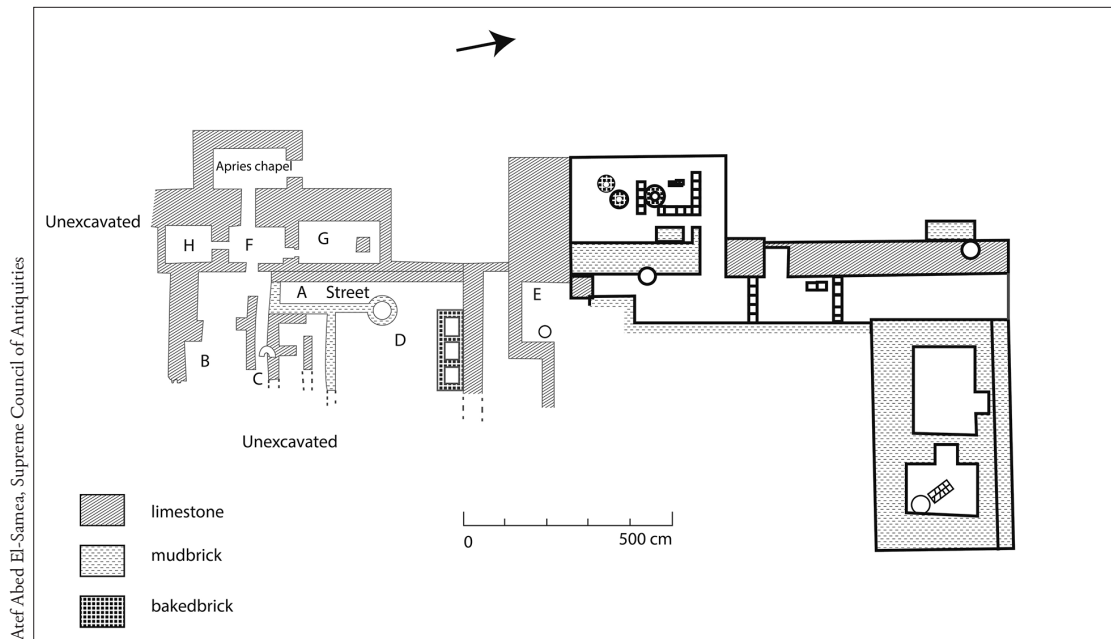


FIG. 7. Plan showing results of recent excavations, 2015 to 2020, in the Apries Temple at Al-Qasr.



Photo by Alaa Eldin Amaar, 2015

FIG. 8. The mud brick building.



Photo by Alaa Eldin Amaar, 2015

FIG. 9. Limestone mill mortar.



Photo by Alaa Eldin Amaar, 2015

FIG. 10. Groundwater well.



Photo by Alaa Eldin Amaar, 2015

FIG. 11. Three plaster-lined sedimentation troughs.



Photo by Alaa Eldin Amaar, 2015

FIG. 12. Two limestone crushing basins.



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FIG. 13. Graffiti on five blocks on the sandstone wall adjoining the plaster-lined troughs.

Photo by Alaa Eldin Amaar, 2015

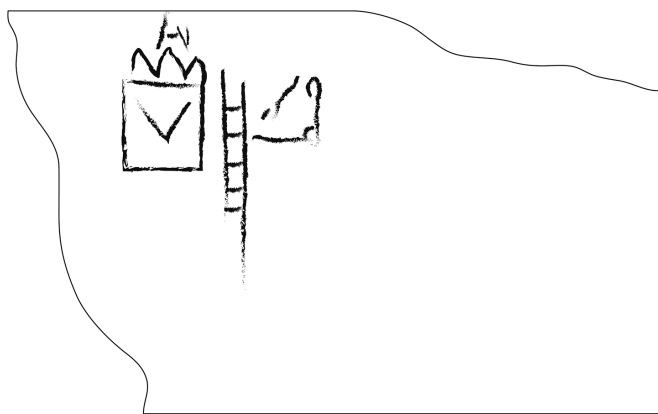
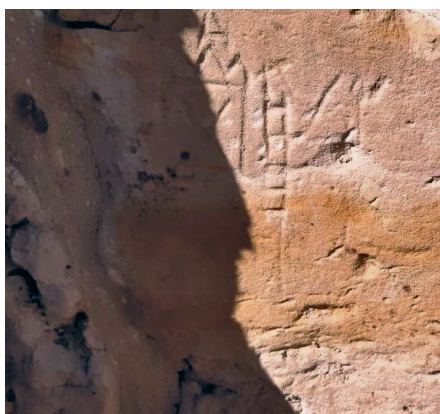


FIG. 13a. Details of the Graffiti on block 1 (drawing by Samir Gaber).

Photo by Alaa Eldin Amaar, 2015

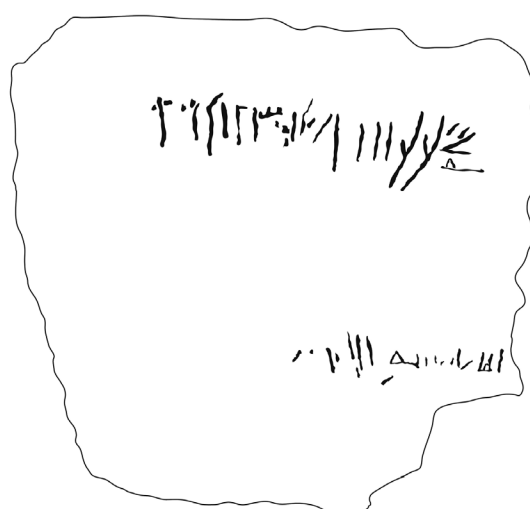
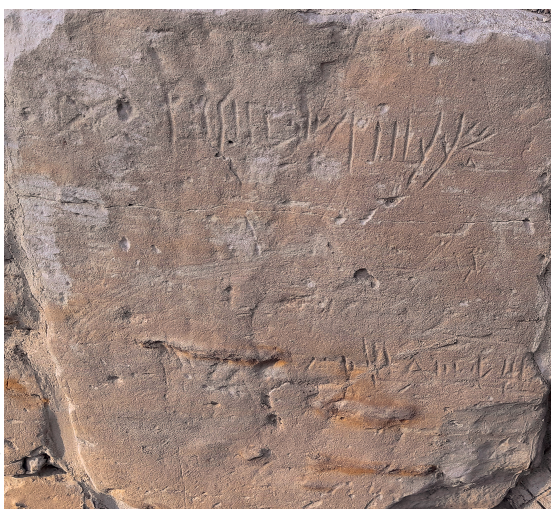


FIG. 13b. Details of the Graffiti on block 2 (drawing by Samir Gaber).



Photo by Alaa Eldin Amaar, 2015

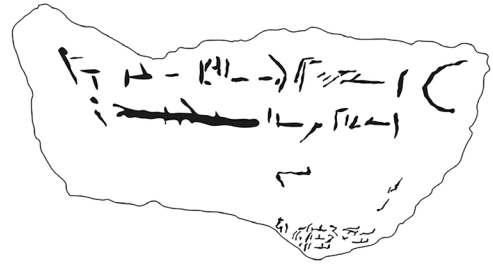


FIG. 13c. Details of the Graffiti on block 3 (drawing by Samir Gaber).



Photo by Alaa Eldin Amaar, 2015

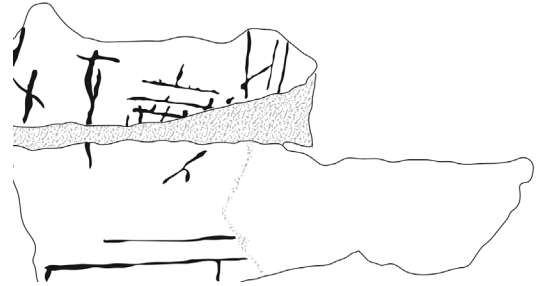


FIG. 13d. Details of the Graffiti on block 4 (drawing by Samir Gaber).

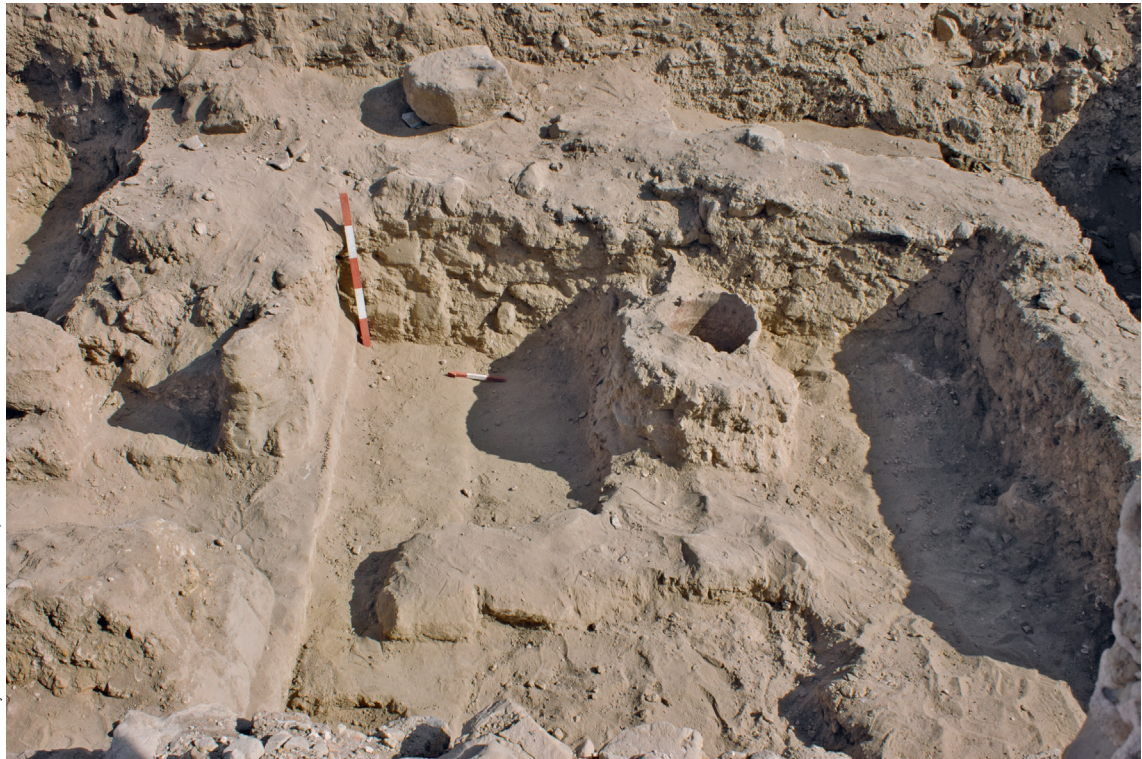


Photo by Alaa Eldin Amaar, 2015

FIG. 14. Room (E), the sunken pottery vessel embedded in the ground for oil or wine.



Photo by Alaa Eldin Amaar, 2015

15.

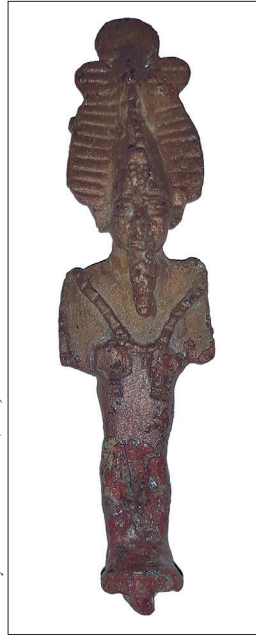


Photo by Alaa Eldin Amaar, 2015

16.



Photo by Alaa Eldin Amaar, 2015

17.



Photo by Alaa Eldin Amaar, 2015

18.



Photo by Alaa Eldin Amaar, 2015

19.

FIG. 15. A broken head of a ram, possibly representing Amun-Re.

FIG. 16. Bronze statuette of Osiris.

FIG. 17. A bronze *Atef* crown.

FIG. 18. Two uraei with sun discs on their heads.

FIG. 19. A part of a bronze *Atef* crown with faience paste inlay.



FIG. 20. Pottery vessel decorated with a name (photo by Alaa Eldin Amaar, 2015; drawing by Samir Gaber).

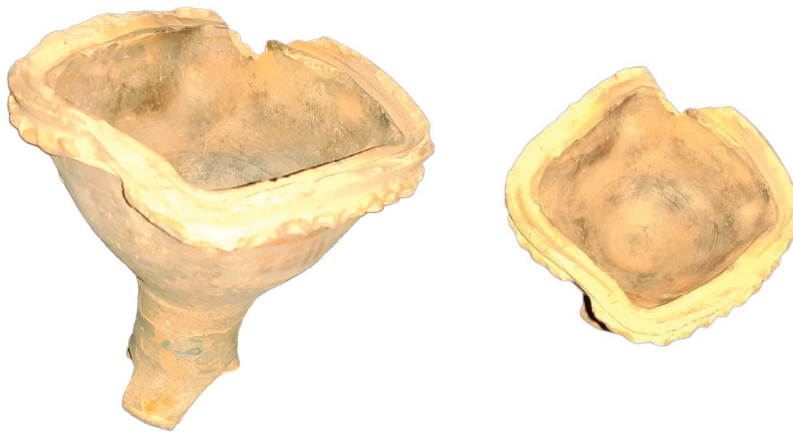


FIG. 21. Pottery censer (photo by Alaa Eldin Amaar).



a.



b.



c.



d.

FIG. 22. Oblong grinding slabs and dimpled crushing hand stones (photo by Alaa Eldin Amaar, 2015).



FIG. 23. A Latin amphora handle stamp (photo by Alaa Eldin Amaar, 2015; drawing by Samir Gaber).

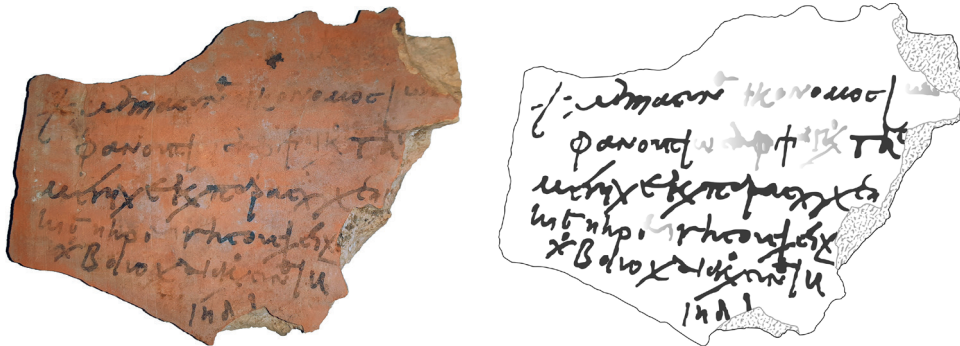


FIG. 24. Greek ostrakon (photo by Alaa Eldin Amaar, 2015; drawing by Samir Gaber).

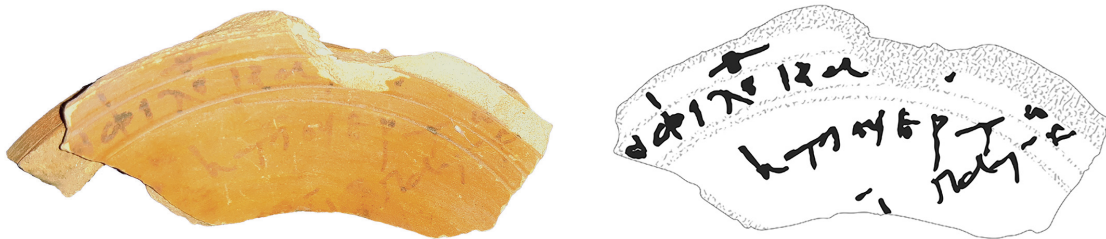


FIG. 25. Greek sherd (photo by Alaa Eldin Amaar, 2015; drawing by Samir Gaber).



FIG. 26. Greek sherd (photo by Alaa Eldin Amaar, 2015).

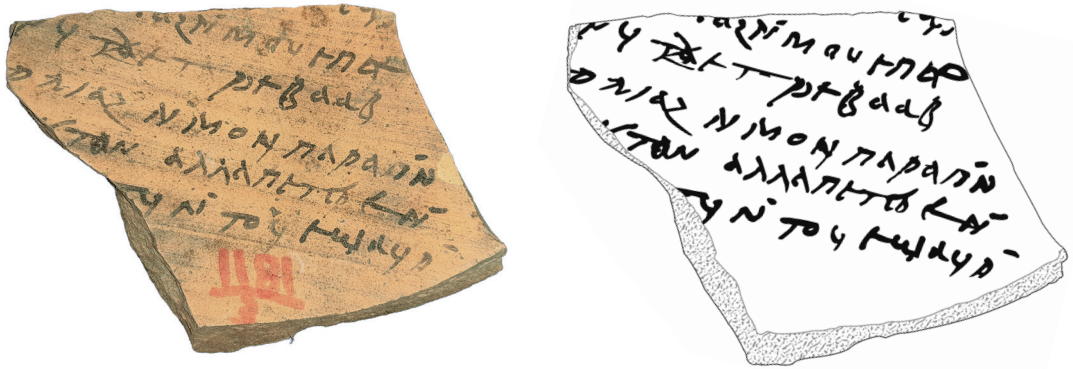


FIG. 27. Coptic ostrakon (photo by Alaa Eldin Amaar, 2015; drawing by Samir Gaber).

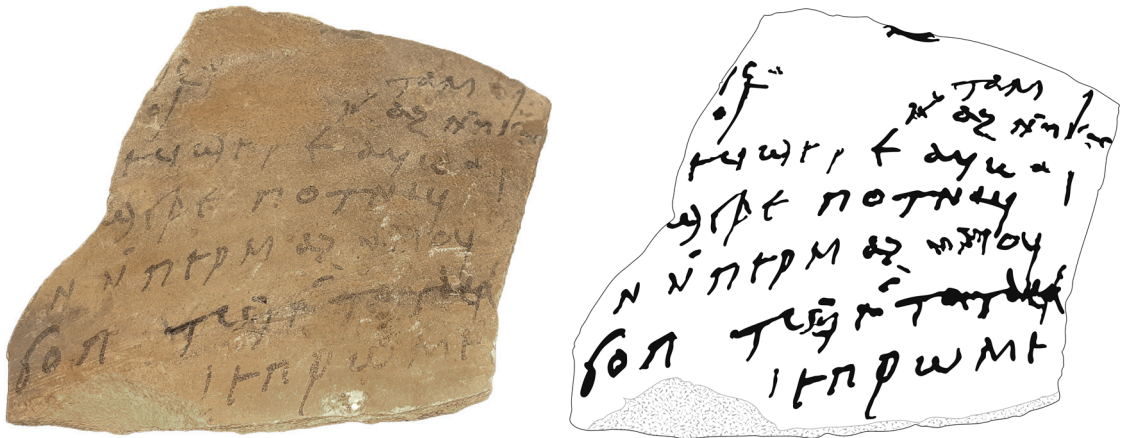


FIG. 28. Coptic ostrakon (photo by Alaa Eldin Amaar, 2015; drawing by Samir Gaber).

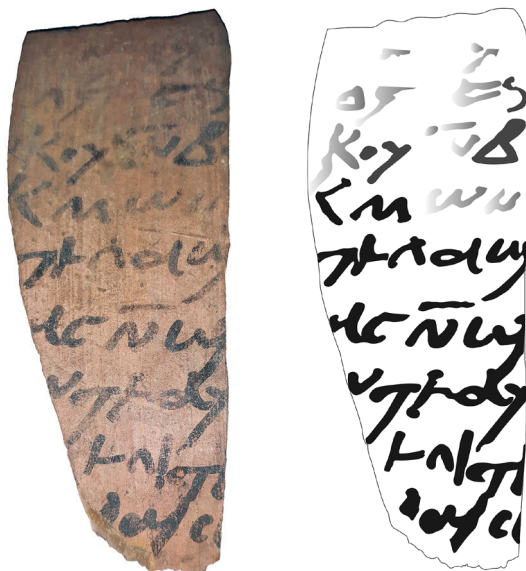


FIG. 29. Coptic ostrakon (photo by Alaa Eldin Amaar, 2015; drawing by Samir Gaber).

Photo by Alaa Eldin Amaal, 2015



FIG. 30. Three sandstone sanctuaries adjoining the chapel of Apries.

Photo by Alaa Eldin Amaal, 2015



FIG. 31. A lunette stela of Amenhotep II (drawing by Marwa Gamal).

Photo by Alaa Eldin Amaal, 2015

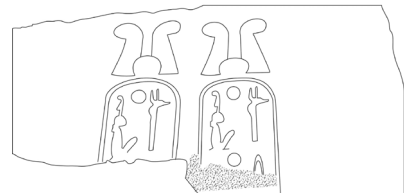


FIG. 32. A royal limestone statue base with two cartouches (drawing by Samir Gaber).

Photo by Alaa Eldin Amaar, 2015

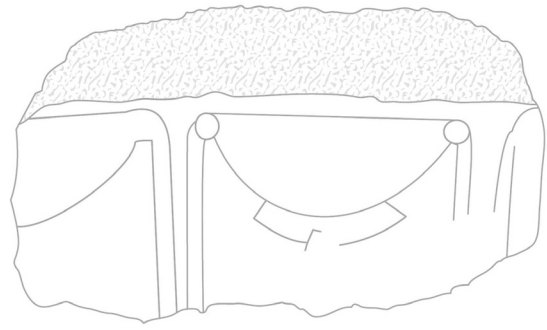


FIG. 33. Fragment decorated with *nbw*-signs (drawing by Samir Gaber).

Photo by Alaa Eldin Amaar, 2015

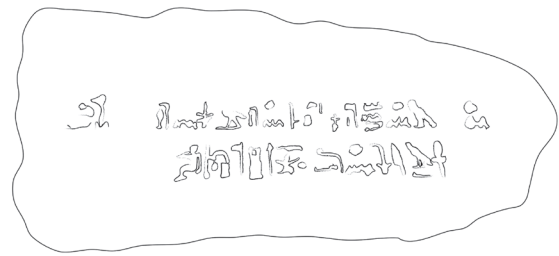


FIG. 34. Block bearing the name and titles of Djed-Khonsu-iu-ef-ankh (drawing by Samir Gaber).

Photo by Alaa Eldin Amaar, 2015



FIG. 35. A sandstone block with a royal relief (drawing by Samir Gaber).

Photo by Alaa Eldin Amaar, 2015

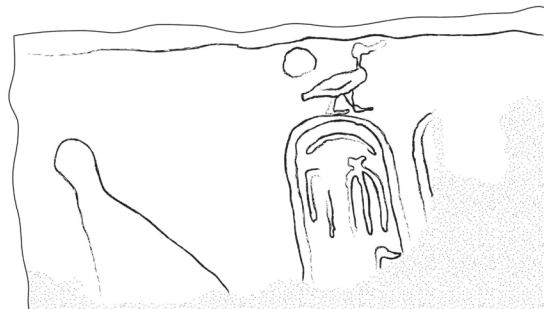


FIG. 36. A sandstone block with remains of the cartouches of Amasis (drawing by Samir Gaber).



Photo by Alaa Eldin Amaar, 2015

FIG. 37. Roman ceramics remain in copious quantities on the site.



Photo by Alaa Eldin Amaar, 2015

FIG. 38. An Oasis-ware red slip ware lamp.



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FIG. 39. Two oil lamps with a bottle-shaped body.

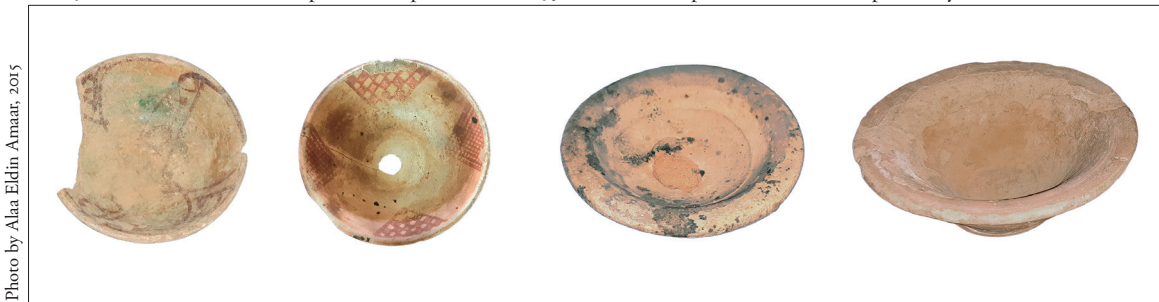


Photo by Alaa Eldin Amaar, 2015

FIG. 40. Dishes.



Photo by Alaa Eldin Amaar, 2015

FIG. 41. Shallow bowls.

Photo by Alaa Eldin Amaar, 2015



FIG. 42. Cooking pots.

Photo by Alaa Eldin Amaar, 2015



FIG. 43. Vessel lids.

Photo by Alaa Eldin Amaar, 2015

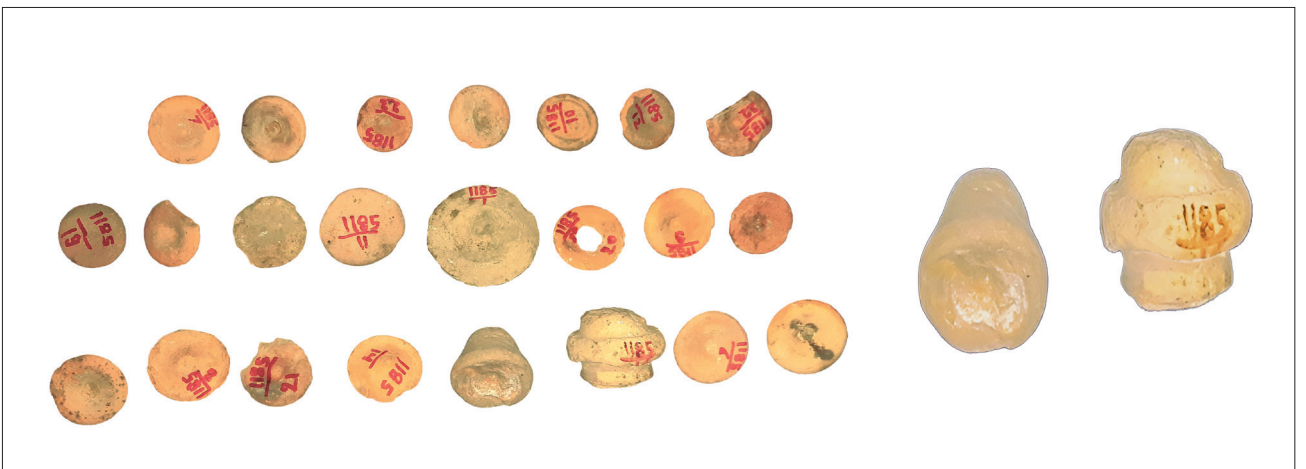


FIG. 44. Vessel stoppers (Type E) .

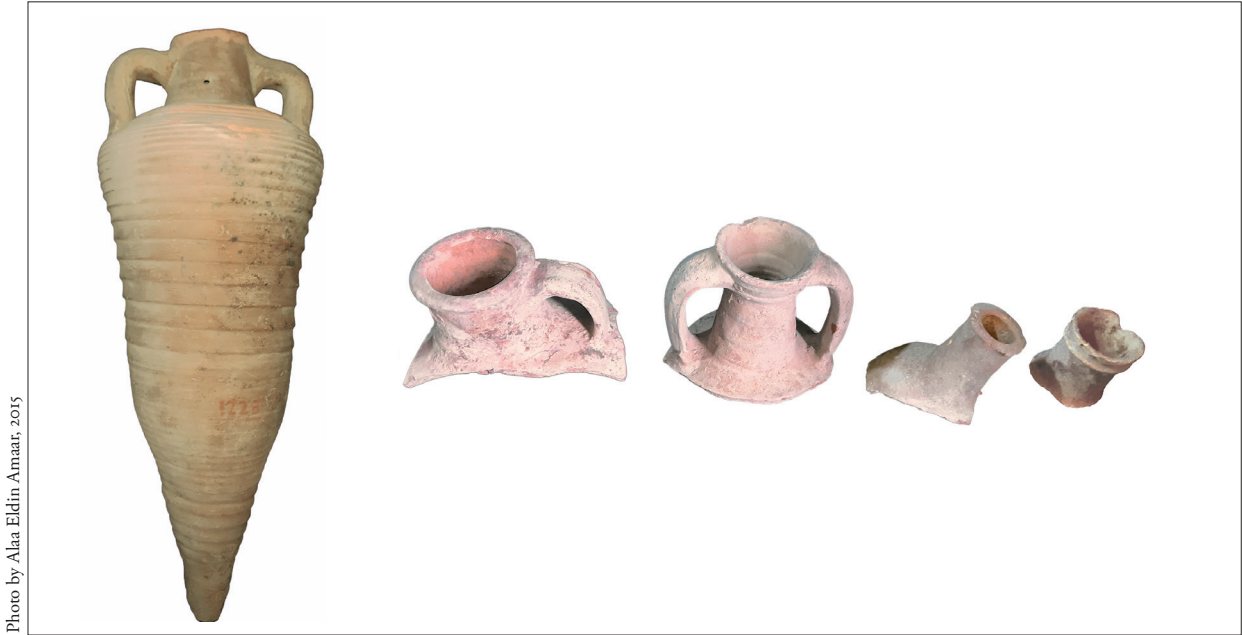


FIG. 45. Two vessel stoppers.



FIG. 46. A selection of the amphorae.

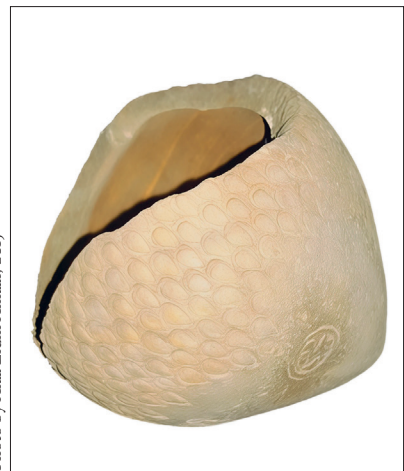


FIG. 47. A globular water vessel.

