The Sealings from Marsa Gawasis* (s3w): Preliminary Considerations on the Administration of the Port

Andrea Manzo** Rosanna Pirelli

Introduction

The authors of this paper consider it a great privilege to participate in this publication in honor of Professor Abdel Moneim Sayed. Not only do we share in the esteem for the great scholar, but we feel a filial affection for the *Maestro* and Egyptologist who wrote an important new page in the history of Ancient Egypt with the discovery, some thirty years ago, of the Middle Kingdom Port of *Saw*.

As members of the Italo-American Archaeological Expedition to Marsa Gawasis,³ we present here the initial information and some preliminary interpretation of the administrative activities carried out in *Saw*, in the hope that they may be appreciated by Professor Sayed and may constitute a small contribution to knowledge of this important site.

The first item of an administrative marker (a cretula without any seal impression) was found at Marsa Gawasis during 2004/2005 field season.⁴ It was however an isolated item; a larger collection of clay sealings was discovered instead in 2005/2006.⁵

Although their study is still in a preliminary phase, it is already evident that these materials may greatly contribute to our understanding of the chronology and function of the sectors of the site and of the practical and administrative organization of the expeditions sailing from Mersa Gawasis to Punt. Actually, the number of sealings found so far at Marsa Gawasis is still too restricted either to trace a general outline of the administrative organization of the Port, or to identify a sufficient number of persons and/or

specific functions linked to it. Nonetheless a first series of observations can be sketched by comparing our material with that of other coeval sites, both in Egypt (Elephantine and Abydos) and Nubia (Uronarti, Mirgissa, Askut),⁶ where the remarkable amount of sealings found in the new excavations in the last years has considerably enlarged our knowledge on the life and functioning of the different sectors of the Egyptian administration, above all during the Middle Kingdom.

The cretulae of Marsa Gawasis, both with seal impressions and without, come from a well-defined area of the site, the area on the two sides of the entrance to Cave 2 (WG 24), which is subdivided into two trenches: WG 16 to the North, and WG 32 to the South. Only one fragment of depurated clay was discovered at WG 31, North–West of WG 16.

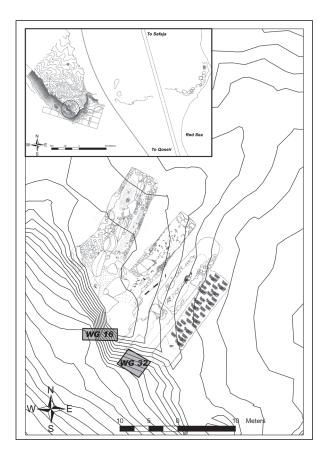
After a short description of the two areas, we are going to present a complete catalogue of the cretulae found so far, followed by a short discussion on the two types (with and without seal impressions) and by a preliminary attempt at interpreting the data.⁷

The archaeological context

The clay sealings were collected in three excavation units, WG 16, WG 24, and WG 32 (Fig. 1).

WG 16/24

The two excavation units WG 16 and WG 24 are contiguous and are located on the western slope of the coral terrace close to the entrances of a large



man-made complex of caves, where some carved niches with stelae were uncovered.8

Six, possibly seven, phases of occupation were recorded in the stratigraphic test pit WG 16. Five phases are clearly associated with living floors, characterized by concentrations of archaeological material and hearths.

The strata dug in this excavation unit were not lying horizontally, but were sloping from east to west, or from west to east. As the Valley of the Wadi is west of the excavation unit, downslope of the unit, a slope of the strata from east to west could be expected. The deepest strata seem to follow such a natural pattern, while on the contrary the upper ones slope to the east, follow a completely different pattern. Excavation showed that this might be explained by the presence of a huge stratum consisting of small- and medium-size rocks, which is thicker in its western part than

in the eastern, and is absent near to the wall of the terrace. This stratum possibly resulted from cutting or enlarging the caves. Also, the composition of the strata changed after the formation of this rock stratum, as the earlier strata consisted mainly of sand mixed with gravel, while the later strata consisted mainly of sand, ashes, and organic materials, sometimes with salt encrustations. The gravel mainly originated from decaying of conglomerate stone from collapsed rock after the conglomerate stratum was exposed on the edge of the terrace. The abundance of gravel in the earlier strata demonstrates that this natural process was going on. The absence of gravel from the upper strata might be explained by decreasing rock decay, which might be related to the excavation of the caves and the possible construction of the entrances as well as of some shims sustaining the edge of the terrace. From this phase onward, traces of anthropic activity and occupation dramatically increase, as suggested by the concentrations of hearths and by thick layers of organic materials (wood, branches, ropes, bones) and other archaeological materials, such as potsherds and clay sealings, which constitute dumps. These layers are interpreted as traces of intense activities taking place just outside of the cave, which might have involved food preparation and consumption, and even administrative activities.

A later occupation phase is associated with a stratum mainly formed by eolian sand. The thickness of the sand deposits with the materials on top of the stratigraphic sequence suggests less intensive occupation of the area at the end of its use.

The sealings were discovered in the strata ascribed to two different phases, both dated to the Middle Kingdom on the basis of the associated ceramics. The earlier one immediately follows the deposition of the stratum of coral chunks marking the excavation, or at least the enlargement of Caves 2 and 3. The later concentration was discovered on a living floor related

to one of the last phases of use of the entrance to Cave 2, when the access to Cave 3 was already covered by sand. The two phases are separated by several strata in which no sealings were found (Fig. 2).

WG 32

WG 32 lies just south–east of the entrance to Cave 2 and in front of two other caves (5 and 6).

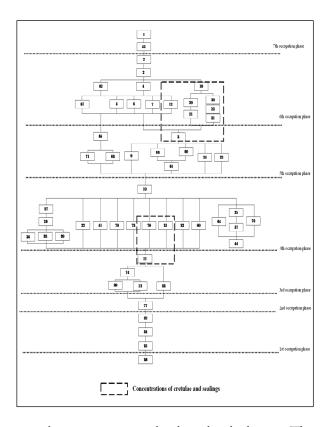
The whole trench was covered by a large amount of sand which concealed not only the entrances to the caves, but also the niches cut in the rock terrace, where in the seasons 2004/2005 and 2005/2006, eight stelae were found.⁹

The trench can be divided into two sub-sectors, west and east, the former being about 1/3 of the latter.

The excavation of the western sub-sector, lying immediately south of the entrance to Cave 2, started only one week before the end of 2005/2006 field season, so that only a surface of 2 x 2 meters was dug, to a depth of one meter.

The whole area is covered by several layers of Posidonia (*Posidonia oceanica*) alternating with layers of sand, both mixed with artefacts.

Below a first very disturbed layer of dirty sand, a compact layer of salt and a thick stratum of Posidonia (with very few artefacts) cover a layer of sand which is on the contrary rich in artefacts. Two hearths were found: the former lies one meter from the rock wall; the latter 90 cm from the former. Each was associated with a mat, some potsherds, some cretulae and various pieces of wood. The area all around was rich in ropes of different thickness and typology; 10 several cores of *Terra sigillata* were also found. A remarkable amount of artefacts was found propped against the rock wall, south of Cave 2: cretulae with sealing impressions, some pieces of cloth, one of which seems to be partially painted black, a large, moderately preserved, mat, many pieces of natural wood and small fragments of planks,



some bones, various potsherds and a thick rope. This occupation layer with hearths is probably related to the latest phase of use of the area and may be related to the latest concentration of sealings in WG 16/24.

In the eastern sub-sector, the windblown sand covered more than 21 piled wooden boxes, one bearing a painted inscription and a large ship timber. This plank was apparently related to a living floor which was exposed in the latest phase of use of the area before abandonment. Even if it is not yet proven, it is likely that the mound of wooden boxes was lying on the same surface floor. The upper sand stratum, as well as the strata containing the wooden boxes sealed other entrances to Caves 5 and 6 which were already covered by sand when the large ship timber and the wooden boxes were abandoned there and the area was used for the last time. On the contrary, the entrance to Cave 2, immediately north of the fireplaces and of the concentration of sealings, seems to have been used also in later phases.

Cretulae with seal impressions¹¹

Number (Id.)	1/39
Trench	WG 32
SU	10
Object	Cretula with seal impression on three sides
Material	Fine, dark gray clay
Size	L: 3,15; W: 2,65; Th: 1,2
Images	

Pattern and/or reconstruction		
General		The cretula is polyhedric, with three seal impressions.
descripti	on	
Recto	Seal impr.	Two contiguous sides are impressed with the same institutional shield-shaped seal (stamp seal): probably square or with a rounded short side. The inscription is enclosed by a continuous, not symmetrical, spiral scroll border.
		A third side shows a deep oval depression, which is partly superimposed on the two other impressions. It is certainly a countersealing. Unfortunately the seal impression is no longer recognizable. (Type A)
	Inscr.	"\(\hbar{h}\)3swt (?) pr \(\hat{h}\)\(\delta\)" The inscription is incomplete: on the upper part, one can see the determinative of the foreign country, followed by the expression "pr \(\hat{h}\)\(\delta\)"
	Trans.	of the foreign land and (?) the treasury"
Verso		Textile, wood grain and rope impression. (Type 4)
Associate material		Box and planks
Remarks		Notwithstanding the difference in the material and in the style of the scrolls, a cretula of the same type is to be seen in N° 7/64
Compar	isons	
Chronol	ogy	Middle Kingdom

Num. Ic	1	2/38
Trench		WG 32
SU		10
Object		Cretula with seal impression
Materia	1	Fine dark gray clay
Size		L: 2,4; W: 2; Th: 1/H. 1,7
Images		
Pattern and/or reconstruction		No accurate reconstruction to be proposed
General		The cretula has a very irregular shape. The recto is slightly convex; the verso is the
descript	ion	clear result of an application on a circular object.
Recto	Seal	Not very clear. Probably to be identified with a decoration described as "rosette, oval
	impr.	and round" by Reisner (see below) (Type D)
	Inscr.	
	Trans.	
Verso		The verso clearly shows the shape of a wooden peg and ropes (Type 3)
Associated		Boxes and planks
materials		
Remarks		
Compai	risons	Reisner, Uronarti XIII d., p. 61, Fig. 202 –210
Chronology		Middle Kingdom

Num. Id.	3/40
Trench	WG 32
SU	10
Object	Cretula with seal impression
Material	Sandy clay
Size	L: 1,75; W: 1,2; Th: 0,65

Images		
Pattern and/or reconstruction		
General description		The cretula has an irregular polyhedric shape: the recto is almost flat, while the verso clearly follows the silhouette of a container (vessel or sack)
Recto	Seal impr.	The seal impression is very fine, but only partially preserved. An oval shape occupies the center of the field. In the lower right angle a sign <i>anx</i> is clearly visible. (Type C)
	Inscr.	
	Trans.	
Verso		The curved surfaces of the verso show on one side the impression of a textile; on the other side the impression of a rope. Very probably it sealed a vase. (Type 1)
Associated materials		Boxes and planks
Remarks		
Comparisons		
Chronology		Middle Kingdom

Num. Id.	4/59
Trench	WG 32
SU	10
Object	Cretula with two seal impressions
Material	Fine dark gray clay
Size	L: 2,3; W: 1,5; Th: 2
Images	

Pattern and reconstruction		
General		The cretula is polyhedric, with two decorated and one smoothed surface. The verso is
descript	ion	irregularly shaped.
Recto	Seal impr.	Two different oval seal impressions are preserved; one is occupied by a spiral scroll decoration; the latter shows a partially preserved inscription. (Type B)
	Inscr.	[] <i>W3dt</i> [(?)] <i>Mry</i> ". The inscription is incomplete. Beside the name of the Cobra <i>nome</i> , one more sign is partially visible. It is not possible however to identify it with certainty. Under the standard, the hoe <i>mr</i> is visible.
	Trans.	[Overseer(?)] of the Cobra-nome ¹² Mery
Verso		One side shows the impression of a cloth; its upper part is occupied by the double deep impression of a rope. (Type 1)
Associated materials		Boxes and planks
Remarks		
Comparisons		
Chronology		Middle Kingdom

Num. Id.	5/41
Trench	WG 32
SU	10
Object	Cretula with seal impression
Material	Pure, dark gray clay
Size	L: 1,6; W: 1; Th: 0,7
Images	

Reading and reconstruction		
General		Polyhedric cretula with two seal impressions
descripti	on	
Recto	Seal impr.	The seal impression is oval in shape. The vertical field, containing the title and the name of the official, is enclosed within a scroll frame. The scroll style is almost rough, with an elongated form. It appears to be derived from the combination of two different "rope-extremities". The complete frame was probably formed of three vertical scrolls on each long side, and one horizontal scroll on each short side. It is to be noted that the presence of the scroll at the base is not very frequent and limited in time. (Type B)
	Inscr.	" $r \underline{dd}[i]$ whm "nh" The inscription is incomplete. If the uppermost preserved sign is part of a title, one can suggest that the name of the official was $\underline{Djed}(i)$, followed by the Late Middle Kingdom epithet
	Trans.	Djedi repeating life
Verso		Almost flat, on cloth (Type 1)
Associated materials		Boxes and planks
Remarks		Parallels with Martin types are dated among the Late Middle Kingdom (but mostly Thirteenth Dynasty) and the Second Intermediate Period ¹³ . The same is true for the items characterized by the presence of the epithet 'repeating life'. ¹⁴
Compari	isons	Same owner as cretula n° 10/63
Chronol	ogy	Late Twelfth–Thirteenth Dynasties

Num. Id.	6/60
Trench	WG 32
SU	10
Object	Cretula with seal impression
Material	Sandy clay

Size		L: 2,45; W: 1,9; Th: 1
Images		
Reading	and	No accurate reconstruction to be proposed
reconstr	uction	
General		Only a small portion of the cretula is preserved. It is polyhedric, with very light traces
descript	ion	of a spiral scroll seal on one side.
Recto	Seal impr.	(Type ?)
	Inscr.	
	Trans.	
Verso		Rope-bag or basket (Type 5)
Associated materials		Boxes and planks
Remarks		For the rope-basket, see on-line report 2004/2005
Comparisons		
Chronology		Middle Kingdom

Num. Id.	7/64
Trench	WG 32
SU	16
Object	Cretula with seal impression
Material	Sandy clay
Size	L: 3, W: 2, Th: 1
Images	

Pattern and/or reconstruction		
General		The cretula has an almost lenticular shape, with one convex (recto) and one rounded
description		side. Its body is crossed by a very thin rope. Traces of fingerprints are present in various parts of the cretula.
Recto	Seal	The seal impression is of the institutional type, with a vaguely ovoid shape. The
	impr.	inscription is enclosed by a continuous, asymmetrical, spiral scroll border, less regular than that of cretula 1. (Type A)
	Inscr.	"h3swt (?) pr hd". The incomplete inscription seems to be the same as that of cretula n° 1/39: on the upper part, one can see the determinative of the foreign country, followed by the expression "pr hd"
	Trans.	of the foreign lands and (?) of the treasury
Verso		Small ropes. (Type 6)
Associated materials		Under the <i>Posidonia</i>
Remarks		
Comparisons		Notwithstanding the difference in the material and in the style of the scrolls, a cretula of the same type is to be seen in n° 1/39
Chronology		Middle Kingdom

Num. Id.	8/61
Trench	WG 32
SU	16
Object	Cretula with seal impression
Material	Clay
Size	L: 2,25; W: 1,8; Th: 1

Images		
Pattern and/or reconstruction		No accurate reconstruction to be proposed
General description		The fragmentary cretula is very irregular in shape, appearing to be molded around a knot of ropes.
Recto	Seal impr.	Very poorly preserved, of the spiral scroll type (Type D?)
	Inscr.	
	Trans.	
Verso		The side opposite the seal impression is convex with fingerprints (Type 6)
Associated		Under the <i>Posidonia</i>
materials		
Remarks		
Comparisons		
Chronology		Middle Kingdom

Num. Id.	9/62
Trench	WG 32
SU	16
Object	Cretula with seal impression
Material	Clay
Size	L: 3,6; W: 2; Th: 1,1
Images	
Pattern and/or	No accurate reconstruction to be proposed
reconstruction	

General description		The cretula is very poorly preserved. The recto is crossed by different imprints: one curved rope and the surface of a papyrus (?)
Recto	Seal impr.	Only a small part of the scroll border is preserved. (Type ?)
	Inscr.	
	Trans.	
Verso		Traces of ropes around a hexagonal peg (?) (Type 3)
Associated materials		Under the <i>Posidonia</i>
Remarks		
Comparisons		
Chronology		Middle Kingdom

Num. Id.	10/63
Trench	WG 32
SU	SU 14
Object	Cretula with seal impression
Material	Pure, dark gray clay
Size	L: 1,9; W: 0,9; Th: 1,1
Images	
Pattern and/or reconstruction	Same as 5.41
General description	Irregularly shaped cretula with one seal impression.

Recto	Seal impr.	The seal impression is oval in shape. The vertical field, containing the title and the name of the official, is enclosed within a scroll frame. The scroll style is almost rough with an elongated form. It appears to derive from the combination of two different "rope-extremities". The complete frame was probably formed of three vertical scrolls on each long side, and one horizontal scroll on each short side. It is to be noted that the presence of the scroll at the base is not very frequent and is limited in time. (Type B) "…r dd[i] whm 'nh'. The inscription is incomplete. If the uppermost preserved sign is part of a title, one can suggest that the name of the official was $Djed(i)$, followed by the Late Middle Kingdom epithet.
**	Trans.	Djed(i) repeating life
Verso		Circular impression of peg and rope (?) (Type 3)
Associat material		It was found inside wooden box 13
Remarks	s	Same as 5/41
Comparisons		Parallels with Martin types are dated between the Late Middle Kingdom (mostly Thirteenth Dynasty) and the Second Intermediate Period. The same is true for the items characterized by the presence of the epithet "repeating life". The same is true for the items characterized by the presence of the epithet "repeating life".
Chronology		Late Twelfth–Thirteenth Dynasties.

Num. Id.	11/42
Trench	WG 16
SU	73
Object	Cretula with seal impression.
Material	Sandy clay.
Size	L: 2,6; W: 2,2; Th: 1
Images	
Pattern and/or	No accurate reconstruction to be proposed
reconstruction	

General		The cretula is almost flat with two quadrangular (?) seal impressions on the recto
description		
Recto	Seal	Poorly preserved, only a scroll border is still visible. Probably a shield-shaped
	impr.	institutional seal. (Type A ?)
	Inscr.	
	Trans.	
Verso		The irregular surface seems to have been superimposed on a mat container or basket
		(Type 5)
Associated		
materials		
Remarks		This cretula is probably to be joined with fragment n° 12/96
Comparisons		
Chronology		Middle Kingdom

Num. Id	•	12/96
Trench		WG 16
SU		73
Object		Cretula with seal impression
Material		Sandy clay
Size		L: 2; W: 1,5; Th: 0,8
Images		
Pattern and/or reconstruction		No accurate reconstruction to be proposed
General description		The cretula is almost flat with two quadrangular (?) seal impressions on the recto
Recto	Seal	Poorly preserved, only a scroll border is still visible. Probably a shield-shaped
	impress.	institutional seal (Type A?)
	Inscr.	
	Trans.	

Verso	The irregular surface seems to have been superimposed on a mat container or
	basket (Type 5)
Associated	
materials	
Remarks	This cretula is probably to be joined with fragment n° 11/42
Comparisons	
Chronology	Middle Kingdom

Num. Id.		13/44
Trench		WG 32
SU		73
Object		Cretula with seal impression
Material		Sandy clay
Size		L 1,8; W: 1,1; Th: 1,1
Images		
Pattern or reconstruction		
General description		The cretula is almost flat. The recto is smooth and shows one seal impression. (Type D)
Recto	Seal impr.	The light seal impression is oval with a decoration of spiral scrolls all over the field.
	Inscr.	
	Trans.	
Verso		The verso shows the impression of a large rope and/or basket. (Type 5)
Associated materials		

Remarks	
Comparisons	Reisner, p. 57, 227
Chronology	Middle Kingdom

Num. Id.		14/43
Trench		WG 16
SU		SU 73
Object		Cretula with seal impression
Materia	1	Sandy clay
Size		L: 1,65; W: 1,2; Th: 0,5
Images		
Pattern or reconstruction		No accurate reconstruction to be proposed
General		The cretula is almost lenticular, with a convex recto impressed by a seal.
description		
Recto	Seal	The seal impression is only partially preserved. The proper field of the seal is limited
	impr.	by a scroll border. It is most probably a "Sceau ornemental". ¹⁷
	Inscr.	
	Trans.	
Verso		The verso seems to have been superimposed on a mat or basket.
		(Type 5)
Associated		
materials		
Remarks		
Comparisons		Mirgissa ¹⁸
Chrono	logy	Middle Kingdom

Discussion

Although the number of clay sealings found so far at Marsa Gawasis is very limited, four types of Middle Kingdom seal impressions are present:

- A. Shield-shaped institutional stamp seals;
- B. Oval-shaped private-name seals;
- C. Oval-shaped seals with glyph;
- D. Oval-shaped seals with design.¹⁹

Unfortunately the state of preservation and the restricted number of items does not permit a full appraisal of the administrative organization of the Port, but some preliminary considerations can be made.

The text of the two shield-shaped sealings (Nos. 39 and 64) refer to a "pr hd"; the expression is preceded by the ideogram of the "foreign land", which is in turn followed by one more dubious sign (probably a "t"). Although the inscriptions are incomplete, the remaining signs demonstrate that the text was the same. It is difficult, however, to fill the lacuna: the position of the term "treasury" is in some way unusual as it usually precedes the name of the institution to which it is attached in a direct genitive.²⁰ In some cases, however, the stamp seal can also bear the name and the title of high status officials.21 In this case, we could hypothesize an expression such as "Imy-r h3swt22 [...?] pr-hd", "Overseer of the foreign lands and [director (?)] of the treasury", but this would leave no room for the name of the official. This solution is not impossible if we think of a temporary epithet, assigned to the official responsible for the site during a specific expedition,²³ rather than the regular title of a single official. A further hypothesis may be that the inscription contained reference to the storeroom where the commodities for the expeditions, or more probably the products imported from the foreign lands (Punt) were kept. In this case we might reconstruct the inscription of the seal as follows: "[htm inw] n h3swt pr hd", i.e. "storeroom of the goods of the foreign lands (and) treasury". 24 These hypotheses are however sheer speculation: only new data from further investigations will enable us to provide a more reliable explanation.

It is interesting, however, that the two cretulae are from different areas: n° 39 was probably attached to a wooden container (probably one of the cargo boxes)²⁵, while n° 64 was a nodule cretula which sealed thin ropes and is from the area of the hearths.

The second interesting group of cretulae is constituted by two oval-shaped sealings (n° 41 and n° 63) belonging to the same official. His name, probably *Djed(i)*, is the same found on the wooden box n° 2,²⁶ but the state of preservation of the seal does not enable us to read the title which precedes it. The inscription of the two sealings ends with the Late Middle Kingdom epithet *whm* 'nh. Both the cretulae were found in the eastern sub-sector of WG 32, former (n° 41), whose verso is probably impressed with a wooden peg, was found inside a box (n° 13; SU 14); the latter was found in the same area (SU 10), but outside the boxes. Its verso is impressed with a tissue texture.

Cretula n° 59 is an interesting but single item, bearing the name of the X *nome* of Upper Egypt, *W3dt*, probably followed by the name of the official, *Mry*; his title is unfortunately no longer legible. We could hypothesize a title composed with *h3ty-*, although among the known "Governors of the X *Nome* of Upper Egypt", no official named *Mry* is recorded. In this case also we are in need of further evidence to clarify the content of the inscription. One of the contiguous surfaces is impressed with a scroll decoration, while a third one is smoothed. The verso shows two different surfaces: the former, almost flat, is impressed with the texture of a tissue crossed by a thin rope, the latter is deeply impressed with a thicker rope.

Of the remaining cretulae, three (Nos. 60, 61, and 62) are poorly preserved to allow the complete identification of their seal impressions; two (42 and 96) could be (but very doubtfully) interpreted as institutional stamp seals, both because of their shape and because of the decorative pattern of the scroll border; while 43–44 show only decorative patterns,

the former without hieroglyphic signs, the latter probably with some.²⁹ All of them anyway perfectly fit all the Middle Kingdom typologies already known from other sites, both in Egypt and abroad, and bear witness to an articulate administrative organization, which also employed the well-known practices of multiple sealings and counter-sealing.

Cretulae without seal impression

Num. Id	l .	4
Trench		WG 24 near NW entrance to Cave 2
SU		49
Object		Fragmentary curved clay sealing
Material		Gray depurated sandy clay
Size		2.1 x 2.2 x 0.4 cm
Images		DSCN153-155
General		Smoothed recto surface
description		
Recto	Seal	
	impr.	
	Inscr.	
	Trans.	
Verso		Textile and two parallel rope impressions
Associat	ed	
materials		
Remarks		
Comparisons		Similar sealings were recorded on vessels used for potting provisions such as salt or salted meat/fish. ³⁰
Chrono	logy	

Id.		5
Excavation Unit		WG 16 tr. 2 sq. 3
SU		48
Find		Fragmentary curved clay sealing
Material		Gray depurated clay
Dimensions		2.35 x 1.7 x 1.1 cm
Images		DSCN151-152
Recto	Scene	Smoothed surface
	Inscr.	
Verso		Possible impression of a rope, remains of textile
Related finds		
Comparisons		Similar sealings were recorded on vessels used for potting provisions such as salt or
		salted meat/fish. ³¹
Dating		

Id.		7
Excavation Unit		WG 16 tr. 2 sq. 3
SU		19
Find		Fragmentary curved clay sealing
Material		Gray depurated clay
Dimensi	ons	1.2 x 1.1 x 0.7 cm
Images		DSCN156-158
Recto	Scene	Textile impression
	Inscr.	
Verso		Impressions of two almost parallel ropes
Related finds		
Comparisons		
Dating		

Id.		11
Excavation Unit		WG 31
SU		2
Find		Gray clay fragment
Material		Gray clay
Dimensions		3.7 x 2.9 x 1.2 cm
Images		P1000693, SF11, 11.3-11.6
Recto	Scene	Rough surface
	Inscr.	
Verso		Rough surface
Related finds		
Comparisons		It maybe a fragment of raw clay to be used for sealing.
Dating		

Id.		78
Excavation Unit		WG 16 tr. 2 sq. 2-3
SU		73
Find		Fragmentary clay rounded sealing
Materia	1	Gray sandy clay
Dimens	ions	9 x 2.8 x 2.5 cm
Images		DSCN0116-117
Recto	Scene	Smoothed surface, round face (diameter 9 cm) on an unbroken side, flat surface on another unbroken side
	Inscr.	
Verso		Impressions of fibers
Related finds		
Comparisons		It is similar to sealings intended for medium–large size vessels. The presence of fibrous impressions is usually related to the conservation of cheese or other dairy products. ³²
Dating		

Id.		79
Excavation Unit		WG 16 tr. 2 sq. 2-3
SU		73
Find		Fragmentary clay sealing
Material		Gray sandy clay
Dimensi	ons	4 x 3.8 x 1.4 cm
Images		DSCN0118-20
Recto	Scene	Smoothed surface
	Inscr.	
Verso		Impression of two parallel ropes and some fibers, impression of a smoothed trimmed rounded surface
Related	finds	
Comparisons		It is similar to sealings intended for medium–large size vessels. The presence of fibrous impressions is usually related to the conservation of cheese or other dairy products. The impression of profilated surface may be related to the neck of a ceramic bottle (?). ³³
Dating		

Id.		80
Excavation Unit		WG 16 tr. 2 sq. 2-3
SU		73
Find		Fragmentary clay sealing
Materia	I	Grey clay
Dimens	ions	4 x 4.2 x 1.8 cm
Images		DSCN0121-124
Recto	Scene	Smoothed surface
	Inscr.	
Verso		Impression of two parallel ropes and some fibers, impression of a smoothed profilated surface
Related finds		
Comparisons		It is similar to sealings intended for medium–large size vessels. The presence of fibrous impressions is usually related to the conservation of cheese or other dairy products. The impression of profilated surface may be related to the neck of a ceramic bottle (?). ³⁴
Dating		

Id.		81
Excavation Unit		WG 16 tr. 2 sq. 2-3
SU		73
Find		Fragmentary clay sealing
Material		Gray clay
Dimensi	ions	4.5 x 3.8 x 1.4 cm
Images		DSCN125-126
Recto	Scene	Surface with some impressions of fiber
	Inscr.	
Verso		Impression of two parallel ropes and some fibers. Impression of a smoothed profilated surface
Related finds		
Comparisons		Probably part of a stopper for medium–large size vessels. ³⁵
Dating		

Id.		82
Excavation Unit		WG 16 tr. 2 sq. 2-3
SU		73
Find		Fragmentary clay sealing
Material		Gray clay
Dimensions		
Images		DSCN0127-128
Recto	Scene	Smoothed surface, rounded face (unidentifiable diameter) on an unbroken side, flat surface on another unbroken side.
	Inscr.	
Verso		Impressions of fibers.
Related finds		
Comparisons		Probably intended for medium–large size vessels. The fibrous impressions on the inner surface are usually related to the conservation of cheese or other dairy products. ³⁶
Dating		

Id.		83
Excavation Unit		WG 16 tr. 2 sq. 2-3
SU		73
Find		Fragmentary clay sealing
Material		Gray clay
Dimensions		4 x 3.7 x 1.2 cm
Images		DSCN0129-130
Recto	Scene	Smoothed surface
	Inscr.	
Verso		Impressions of fibers
Related finds		
Comparisons		As in the previous case, this sealing may have been intended for medium–large size vessels (?). The fibrous impressions on the inner surface are usually related to the conservation of cheese or other dairy products. ³⁷
Dating		

Id.		84
Excavation Unit		WG 16 tr. 2 sq. 2-3
SU		73
Find		Fragmentary clay sealing
Materia	1	Gray clay
Dimensions		3.7 x 3.6 x 1.3 cm
Images		DSCN0131-133
Recto	Scene	Rough surface with fibrous impressions (eroded ?)
	Inscr.	
Verso		Impression of two parallel ropes and some fibers, impression of a smoothed profilated surface
Related finds		
Comparisons		Probably can be ascribed to a sealing for closing medium–large size vessels. ³⁶
Dating		

Id.		85
Excavation Unit		WG 16 tr. 2 sq. 2-3
SU		73
Find		Fragmentary clay rounded sealing
Material		Gray clay
Dimensi	ons	3.7 x 1.8 x 1.6 cm
Images		DSCN0134-136
Recto	Scene	Smoothed irregular surface with traces of impression for application, some rope
		impressions
	Inscr.	
Verso		Impressions of ropes on the lower part, rounded surface.
Related finds		
Comparisons		To be ascribed to well-known types of bag sealings. ³⁹
Dating		

Id.		86
Excavation Unit		WG 16 tr. 2 sq. 2-3
SU		73
Find		Fragmentary clay sealing.
Material		Gray clay
Dimensi	ons	2.7 x 3.1 x 1 cm
Images		DSCN0137-138
Recto	Scene	Smoothed surface with small fibrous impressions.
	Inscr.	
Verso		Impression of two parallel ropes and some fibers; impression of a smoothed profilated
		surface.
Related finds		
Comparisons		Probably intended to seal medium–large size vessels. ⁴⁰
Dating		

Id.		87
Excavation Unit		WG 16 tr. 2 sq. 2-3
SU		73
Find		Fragmentary clay sealing
Material		Gray clay
Dimensions		2 x 1.7 x 1.1 cm
Images		DSCN0139-140
Recto	Scene	Smoothed surface with small fibrous impressions
	Inscr.	
Verso		Impression of two parallel ropes and some fibers; impression of a smoothed profilated surface
Related finds		
Comparisons		Probably intended for medium–large size vessels. ⁴¹
Dating		

Id.		88
Excavation Unit		WG 32 under the niches
SU		16
Find		Clay sealing (?)
Material		Light gray clay
Dimensions		5 x 2.7 x 2.2 cm
Images		DSCN0141-142, WG 32 Su 16 cretule con sigillo 2, Varia 2006, 21, 23
Recto	Scene	Smoothed surface with small textile fibers embedded in the clay
	Inscr.	
Verso		Smoothed surface with small textile fibers embedded in the clay
Related finds		
Comparisons		It can be identified with a nodulus. ⁴²
Dating		

Id.		89
Excavation Unit		WG 16 tr. 2 sq. 2-3
SU		73
Find		Elongated clay sealing
Material		Gray clay
Dimensions		2.7 x 3.1 x 1 cm
Images		DSCN0143-144
Recto	Scene	Smoothed surface
	Inscr.	
Verso		
Related finds		
Comparisons		It maybe a fragment of clay prepared for sealing but never used. ⁴³
Dating		

Id.		90
Excavation Unit		WG 16 tr. 2 sq. 2-3
SU		73
Find		Fragmentary clay sealing
Material		Gray clay
Dimensi	ons	5 x 2.8 x 1.5 cm
Images		DSCN0145-147
Recto	Scene	Smoothed surface with small fibrous impressions
	Inscr.	
Verso		Impression of two parallel ropes and some fibers, impression of a smoothed profilated rounded (?) surface
Related	finds	
Comparisons		Probably a fragment of a stopper for medium–large size vessels. The fibrous impressions are related to the conservation of cheese or other dairy products. The impression of profilated surface may be related to the neck of a ceramic bottle (?). ⁴⁴
Dating		

Id.		91
Excavation Unit		WG 16 tr. 2 sq. 2-3
SU		73
Find		Fragmentary clay sealing
Material		Gray clay
Dimensi	ons	3.1 x 3.2 x 1.3 cm
Images		DSCN0148-150
Recto	Scene	Smoothed surface with small fibrous impressions
	Inscr.	
Verso		Impression of three ropes and some fibers, impression of a smoothed profilated rounded (?) surface
Related	finds	
Comparisons		Stopper, for medium–large size vessels. The fibrous impressions is related to the conservation of cheese or other dairy products. The impression of profilated surface may be related to the neck of a ceramic bottle (?). ⁴⁵
Dating		

Id.		92
Excavation Unit		WG 32 near the second fireplace
SU		16
Find		Gray clay fragment
Material		Gray clay
Dimensions		10 x 6.7 x 4 cm
Images		Varia 2006 16-17
Recto	Scene	Rough
	Inscr.	
Verso		Rough
Related finds		
Comparisons		
Dating		

Id.		93
Excavati	on Unit	WG 16 tr. 2
SU		81
Find		Two fragmentary clay sealings
Material		Gray clay
Dimensions		6 x 4.2 x 1.3 cm and 6.1 x 5.3 x 1.4 cm
Images		Varia 2006 19-20
Recto		Smoothed surfaces with small fibrous impressions
Verso		Impression of some fibers, impression of a smoothed profilated rounded (?) surface
Related	finds	
Comparisons		Intended for medium–large size vessels. The fibrous impressions is related to the conservation of cheese or other dairy products. The impression of profilated surface may be related to the neck of a ceramic bottle (?). ⁴⁶
Dating		

Id.	94
Excavation Unit	WG 32
SU	16
Find	Fragmentary clay sealing
Material	Gray clay
Dimensions	1.9 x 1.2 x 1 cm
Images	Varia 2006 28-29, WG 32 SU 16 cretulae with seal impression, WG 32 SU 16
	cretulae with seal impression (14–16)
Recto	Smoothed surfaces finger impressions.
Verso	Smoothed surfaces finger impressions.
Related finds	
Comparisons	
Dating	

Id.	95
Excavation U	mit WG 32 Box 13
SU	14
Find	Fragmentary clay sealing
Material	Gray clay
Dimensions	1.9 x 2.6 x 2 cm
Images	Cretulae with seal impression 2006 (109–111)
Recto	Smoothed surfaces finger impressions
Verso	Smoothed surfaces finger impressions
Related finds	
Comparisons	
Dating	

Id.	05/01		
Excavation Unit	WG 24		
SU	26		
Find	Fragmentary clay sealing		
Material	Gray clay		
Dimensions	1.9 x 1 x 0.8 cm		
Images	WG 2004/2005 (148–151)		
Recto	Smoothed surfaces		
Verso	Impressions of ropes on the lower part, round face (diameter ca. 6 cm), possible		
	impression of a peg on the other internal side		
Related finds			
Comparisons	To be ascribed to well-known types of peg sealings. ⁴⁷		
Dating			

Discussion

The impressions on the verso of the sealings can be ascribed to the following classes: 48

- Vessel sealings. Impression of textile and of ropes on the verso, smoothed recto. These fragments should probably be ascribed to sealings of small vessels used to pot dry foodstuffs, such as salt or salted meat/fish.⁴⁹
- Jar/Vessel sealings. Impressions of fibers 2. on the verso, smoothed recto; sometimes on the verso traces of horizontal grooves were remarked as well and the shape of the sealing could be reconstructed as troncoconico (truncated cone) with a flat top. Sealings bearing traces of fiber impressions on the verso, a smoothed recto, and a troncoconico shape are usually ascribed to medium-large size vessels; the fibrous impression is related to the conservation of cheese or other dairy products.⁵⁰ The shape of the impression may be related to the neck of a ceramic bottle/ jar. Interestingly very close comparisons for the general shape of the sealings and for the presence of fiber impressions on the verso can be found in the sealings closing the New Kingdom jars discovered at Malkata, dating to the reign of Amenhotep III, and mainly used for wine and/or pressed meat.⁵¹
- 3. Peg sealing. Impression of a cylindrical element and of ropes on the verso, smoothed recto. The impressions on the verso may have been originated by a peg and the rope used to close a wooden (?) box.⁵²
- 4. Box sealing. Impression of a flat surface with wood grain and ropes on the verso, possibly originated by sealing of a box.⁵³
- Bag sealing. Impression of a folded rope bag or basket. Sealings on folded leather bags

- are well known.⁵⁴ The fibrous but regular impressions on the internal part of these sealings may have originated from rope bags and baskets.
- 6. Nodulus. Some of the fragments of Terra sigillata bearing the impression of a seal previously described, are characterized by the absence of the impression of a sealed object. These items can be ascribed to the class usually named noduli, most likely intended to sample the sealing, and/or to represent accomplished commitments, and/or to state the authenticity of a verbal message by the bearer. 55

Moreover, cores of depurated clay and an elongated object with roughly circular cross section were also discovered in WG 32 SUs 10, and 16 and in WG 16 SU 73, as well as in WG 31 SU 2. This object can be interpreted as clay prepared for sealing, but not used. ⁵⁶ The fact that containers were not only opened but also sealed at Marsa Gawasis is confirmed by the association at WG 32 of the cores of depurated clay with ropes, mats and textiles, which may have been used to close the containers.

Finally, it should be remarked that the impressions on the verso of sealings not only suggest the kind of containers which were sealed, but also give a first insight into the administered goods. It is likely that rope bags, baskets and boxes, as well as vessels closed by means of textiles, contained dry matter. On the contrary, wet contents can be suggested for the vessels sealed by means of a straw stratum and a clay stopper. Significantly, some of the types of sealings discovered at Marsa Gawasis, such as the jar sealings, can be confidently related to containers for food carried as supplies on the expeditions to Marsa Gawasis from the Nile Valley.⁵⁷ Moreover, other administrative activities may have been performed at Marsa Gawasis, such as the ones represented by the noduli.

Preliminary classification

The following table shows the distribution of the different kinds of sealings⁵⁸ in the stratigraphic units, on the base of which we can probably identify also two clearly cut phases of administrative activity.⁵⁹

Id ⁶⁰	Excavation Unit	SU	Type: recto	Type: verso	Phase
78	WG 16	73		2	1
79	WG 16	73		2	1
80	WG 16	73		2	1
81	WG 16	73		2	1
82	WG 16	73		2	1
83	WG 16	73		2	1
84	WG 16	73		2	1
86	WG 16	73		2	1
87	WG 16	73		2	1
90	WG 16	73		2	1
91	WG 16	73		2	1
93	WG 16	81		2	1
89	WG 16	73		4	1
42	WG 16	73	?	5	1
43	WG 16	73	С	5	1
44	WG 16	73	D	5	1
85	WG 16	73		5	1
96	WG 16	73	;	5	1
92	WG 32	16		?	2
94	WG 32	16		?	2
95	WG 32	14		?	2
4	WG 24	49		1	2
5	WG 16	48		1	2
7	WG 16	19		1	2
40	WG 32	10	С	1	2
41	WG 32	10	В	1?	2

59	WG 32	10	В	1	2
38	WG 32	10	D	3	2
62	WG 32	16	unidentified	3	2
63	WG 32	14	В	3	2
39	WG 32	10	A	4	2
60	WG 32	10	unidentified	5	2
61	WG 32	16	unidentified	6	2
64	WG 32	16	A	6	2
88	WG 32	16		6	2

Final considerations

So far, 37 excavation units have been investigated at Marsa Gawasis, and sealings were recovered in just three trenches, all located on the western edge of the coral terrace, close to the rock wall itself and to the entrance to Cave 2 (Fig. 1). This fact strongly suggests that administrative activities were performed in that area. The location close to an entrance of a structure is not uncommon for sealings, and it can be suggested that the controlled goods were stored inside the cave and were checked when they were taken in or out of it. Significantly, similar concentrations of sealings were not noticed close to the other entrances to the rock cut-caves (Cave 1, Cave 3) so far investigated at Marsa Gawasis, and this may be related to a different use of the caves, which will be confirmed by further investigations inside and outside the caves themselves.61

As shown in the Table, the distribution of the classes of sealings in the two different phases is very different.

Apparently, Phase 1 is characterized by a remarkable homogeneity:

 Twelve sealings out of 18 were used to close the same kind of container, i.e. medium– large size vessels sealed with troncoconico clay stoppers whose bottom was lined with a stratum of fibers.

- 2. Verso—Type 2 is the commonest, with just one occurrence of Types 3 and 4;
- 3. Five more sealings were closing baskets or rope bags. Significantly, unlike the previous group, four bear seal impressions. Only one sealing of Phase 1, without seal impression, bears traces of wood and ropes.

Phase 2, on the contrary characterized by a great variety of impressions, either on the recto or on the verso. All the types of Middle Kingdom seals occur on 10 out of 17 sealings of this Phase. Moreover, all the types of verso impressions, except Type 2, are represented. This may suggest that the variety of sealed containers considerably increased from Phase 1 to Phase 2. In particular, sealings with impressions of textile and ropes, peg and ropes, and noduli occur for the first time at Marsa Gawasis. The same is true for oval-shaped private-name seals, which as far as the archaeological evidence has shown to date, are not found in Phase 1.62

The classes of sealings seem to suggest that the function of the area changed from Phase 1 to Phase 2. The sealings of verso-Type 2 discovered in the strata of the earlier Phase bear witness mostly to storage

and management of supplies for the crew of the expeditions, as a wood jar stopper in WG 16 may confirm. On the contrary, the types of sealings from the later phase, linked to a more conspicuous occurrence of cretulae with seal impressions, may suggest a proper administrative control of the imported goods. This is confirmed by the great amount of wooden boxes in WG 32, and by the inscription on one of them (No. 2) mentioning goods imported from Punt during an expedition in Year 8 of a king, whose name is unfortunately not preserved.

The variety of administrative activities, involving not only the opening but also closing of containers in this area, is suggested by the presence in WG 32⁶³ of some nuclei of pure clay (Terra sigillata), and of ropes of different dimensions and tissues. The administrative use of the area is also confirmed by the discovery of some ostraca in the same assemblage of the sealings of Phase 2,⁶⁴ whose study is in progress.

The suggested interpretation of the archaeological and epigraphical data, collected so far, points to a quite complex administrative organization with some changes in the course of time. Verification of our hypotheses, as well as a more detailed reconstruction of its structure, will be among the goals of the future archaeological investigation at Marsa Gawasis.

Notes

- The site was previously referred to as Wadi Gawasis, but Marsa Gawasis is now preferred because of its coastal location, even if it extends seven-hundred meters inland into the Wadi. In particular, as will be seen from the maps, the recent epigraphical finds all come from the inland sector.
- ** Assistant Professor of Nubian Archaeology; Department of Asia, Africa, and the Mediterranean; University of Naples "L'Orientale".
- The project is being conducted by the Università degli Studi di Napoli "L'Orientale" and the Istituto Italiano per l'Africa e l'Oriente (IsIAO), Roma, in collaboration with Boston University (USA).

- 2 K. Bard et al., Recent Excavations at the Pharaonic Port of Mersa Gawasis on the Red Sea, 2004-2005 Field Season, 1-8, http://www.archaeogate.org.
- 3 K. Bard et al., Joint Archaeological Expedition at Mersal Wadi Gawasis (Red Sea, Egypt) of the University of Naples "L'Orientale" (Naples, Italy) Istituto Italiano per l'Africa e l'Oriente (Rome, Italy), and Boston University (Boston, USA), 2005-2006 Field Season, 1-20, http://www.archaeogate.org.
- 4 A collection of papers of this subject was published in *Le sceau et l'administration dans la vallée du Nil*, Villeneuve-d'Ascq 7-8 juillet 2000, *CRIPEL* 22 (2001).
- The study is between Andrea Manzo and Rosanna Pirelli as follows: A. Manzo deals with trench WG 16/24 and the cretulae with no seal impressions; R. Pirelli concentrates on trench WG 32 and the cretulae with seal impressions; the introductory and final notes have been written jointly.
- 6 K. Bard et al., Recent Excavations at the Pharaonic Port of Mersa Gawasis on the Red Sea, 2004-2005 Field Season, 1-8, http://www.archaeogate.org.
- K. Bard et al., Joint Archaeological Expedition at Mersal Wadi Gawasis (Red Sea, Egypt) of the University of Naples "L'Orientale" (Naples, Italy) Istituto Italiano per l'Africa e l'Oriente (Rome, Italy), and Boston University (Boston, USA), 2005-2006 Field Season, 1-20, http://www.archaeogate.org.
- 8 See the on-line report 2005-2006.
- 9 The Identification (Id.) number refers to the list of the small finds in the SCA inventory and is here preceded by another figure, giving the order in which the writer received and studied the cretulae.
- 10 See par. "Discussion".
- 11 J.T. Martin, Egyptian Administrative and Private-Name Seals. Principally of the Middle Kingdom and Second Intermediate Period (Oxford, 1971), pl. 2: n° 1 (13th D.), n° 3 (13th D.), n° 5 (13th D.); n° 8 (13th D.) n° 9 (13th D.); n° 10 (Late 12th 18th D.); n° 11 (Late 12th 18th D.); n° 13 (13th D.); n° 15 (13th D.).
- 12 Martin, *Egyptian Administrative and Private-Name Seals*, pl. 10: n° 7 (13th D.), 14 (2nd Int. Period), 30 (13th D.); pl. 11: n° 23 and 25 (both 13th D.).
- 13 Martin, Egyptian Administrative and Private-Name Seals, pl. 2: n° 1 (13th D.), n° 3 (13th D.), n° 5 (13th D.); n° 8 (13th D.) n° 9 (13th D.); n° 10 (Late 12th 18th D.); n° 11 (Late 12th 18th D.); n° 13 (13th D.); n° 15 (13th D.).
- 14 Martin, *Egyptian Administrative and Private-Name Seals*, pl.10: n° 7 (13th D.), 14 (2nd Int. Period), 30 (13th D.); pl. 11: n° 23 and 25 (both 13th D.).

- 15 B. Gratien, 'Scellements et contrescellements au Moyen Empire en Nubie. L'apport de Mirgissa', *CRIPEL* 22 (2001), 47-69.
- 16 Gratien, CRIPEL 22, Fig. 3 (Dunham, SCFII, 32-1-72).
- 17 See for instance, S.T. Smith, 'Sealing Practice, Literacy and Administration in the Middle Kingdom', *CRIPEL* 22 (2001), 189.
- The same is true for the 'granary of' or 'the administrative gatehouse of..', cfr. several examples in *CRIPEL* 22 (2001) and G.A. Reisner (late), 'Clay sealing of Dynasty XIII from Uronarti Fort', *KUSH* 3 (1955), 26-69.
- J. Wegner, 'Institutions and Officials at South Abydos: An Overview of the Sigillographic Evidence', CRIPEL 22 (2001), 88.
- 20 W.A. Ward, *Index of the Egyptian Administrative and Religious Titles of the Middle Kingdom* (Beirut, American University of Beirut, 1982), n° 290a.
- 21 Something comparable with the epithet *ltmw ntr* usually applied to the officials who led the expeditions. Although it is premature to try to establish if these two functions were fulfilled by the same person, I think it more likely that the head of the sailing expedition was different from the official who was in charge of the administration of the local *temporary treasury* on the site.
- 22 Cfr. Wegner, CRIPEL 22, Fig. 3, p. 83.
- 23 However, on a side of the rear impressions of textile are also present, which is difficult to explain. Nevertheless, the verso of the sealing is almost flat, and this supports the hypothesis that it was used to seal a box.
- 24 The title on the wooden box is *hrp nfrw sš nswt*.
- 25 Martin, Egyptian Administrative and Private-Name Seals, Nos. 394, 589, 1163; Ward, Index of the Egyptian Administrative and Religious Titles of the Middle Kingdom, No. 869.
- 26 LÄ II, 414. An alternative reading of the title as imy-r tmw, is highly improbable because of the disposition of the signs. This title moreover is an Old Kingdom military title, not known from Middle Kingdom sources. (Cf. B. Grdseloff, 'Notes sur deux monuments inédits de l'Ancien Empire', ASAE 42 (1943), 108-109; Wb V 372-373, 8; P.-M. Chevereau, 'Contribution à la prosopographie des cadres militaires de l'Ancien Empire et de la Première Période Intermédiaire', RdE 38 (1987), 13-48.
- 27 Cfr. Gratien, *CRIPEL* 22, Fig. 3 (Dunham, SCF II, 32-1-72).
- J.P. Pätznick, 'La ville d'Eléphantine et son matériel sigillaire : enquête sur un artefact archéologique', CRIPEL 22 (2001), 140, pl. 15 E.

- 29 Pätznick, CRIPEL 22, 140, pl. 15 E.
- 30 Pätznick, CRIPEL 22, 140, pl. 15 C.
- 31 Pätznick, CRIPEL 22, 140, pl. 15 C.
- 32 Pätznick, CRIPEL 22, 140, pl. 15 C.
- 33 Pätznick, CRIPEL 22, 140, pl. 15 C.
- 34 Pätznick, CRIPEL 22, 140, pl. 15 C.
- 35 Pätznick, CRIPEL 22, 140, pl. 15 C.
- 36 Pätznick, CRIPEL 22, 140, pl. 15 C.
- A.L. Foster, 'Some Middle Kingdom Sealing Types from the Harvard-Boston Expedition to Mirgissa, 1931-1932', *CRIPEL* 22 (2001), 130-131, pl. 8.
- 38 Pätznick, CRIPEL 22, 140, pl. 15 C.
- 39 Pätznick, CRIPEL 22, 140, pl. 15 C.
- 40 Foster, CRIPEL 22, 134-135, pl. 13.
- 41 Foster, CRIPEL 22, MFA 32-1-38, p. 135, pl. 14.
- 42 Pätznick, CRIPEL 22, 140, pl. 15 C.
- 43 Pätznick, CRIPEL 22, 140, pl. 15 C.
- 44 Pätznick, CRIPEL 22, 140, pl. 15 C.
- 45 Foster, CRIPEL 22, 132-133, pl. 11.
- To facilitate comparisons with collections from other sites, the classes were distinguished and named according to the system adopted by P. Ferioli and E. Fiandra, 'Clay Sealings from Arslantepe VI, A: Administration and Bureaucracy', *Origini* 12 (1983), 455-509 and by Foster, *CRIPEL* 22, 130-136.
- 47 Pätznick, CRIPEL 22, 140, pl. 15 E; C. von Pilgrim, 'The Practice of Sealing in the Administration of the First Intermediate Period and the Middle Kingdom', CRIPEL 22 (2001), pl. 18 D.
- 48 Pätznick, CRIPEL 22, 140, pl. 15 C.
- 49 C. Hope, Excavations at Malkata and the Birket Habu: Jar Sealings and Amphorae (Warminster, 1978), 14-15, 24-25, Fig. 8, b, pl. IV, c.
- Foster, CRIPEL 22, 132-133, pl. 11; see also Ferioli and Fiandra, Origini 12, 490-496; Wegner, CRIPEL 22, Fig. 17; Wegner, CRIPEL 22, 81-84, Fig. 2.
- 51 L. Pantalacci, 'L'administration royale et l'administration locale au gouvernorat de Balat', *CRIPEL* 22 (2001), pl. 17, B-C.
- 52 Foster, CRIPEL 22, 130, pl. 8.
- 53 Foster, CRIPEL 22, 134, pl. 13.
- 54 Foster, *CRIPEL* 22, MFA 32-1-38, p. 135, pl. 14; Ferioli and Fiandra, *Origini* 12, 472-473, Fig. 2.

- As referred also in some ostraca preliminary studied by Posener mentioning dried fish sent to the Port from the Nile Valley, see A.M. Sayed, 'News on the Recently Discovered Port on the Red Sea Shore', *CdE* 58 (1983), 26.
- The single sealing from WG 24 SU 26 was not listed in the table as it was probably intrusive in the assemblage where it was discovered.
- 57 The two phases were made evident in stratigraphic pit WG 16/24 which was excavated. Phase 1 may be dated immediately after the excavation/enlargement of the cave(s), during the Middle Kingdom. Phase 2 is also related to the finds from WG 24 and from WG 32 and can be ascribed to the last Middle Kingdom phases of use of the area. The occurrence of the same pattern in WG 32 will be verified next season. This datum is confirmed also by the chronology of the pottery: ceramic ware found in the strata of Phase 1 is datable to Early Middle Kingdom; while pottery ware from strata of Phase 2 belongs to Late Middle Kingdom (we are grateful to Cinzia Perlingieri for communicating these data on pottery).
- The identification numbers refer to the list of the small finds in the SCA inventory.
- It is sometimes also suggested that concentration of sealings may be related to the use of keeping the sealings as an administrative record of the checked goods for some time. Actually, after an administrative cycle, the records were discarded and the number of checked goods registered in textual documents (see P. Ferioli and E. Fiandra, 'La gestione dei magazzini nei sistemi centralizzati', Origini 14 (1988-89), 561-581; L. Pantalacci, 'Fonctionnaires et analphabètes : sur quelques pratiques administratives observées à Balat', BIFAO 96 (1996), 361-362), but this practice is far from being clearly defined in Egypt. On this subject see also von Pilgrim 2001, who suggested that "... it is much more likely, that sealings were not collected separately to control the number of opening but rather to control the identity of those who had access to a sealed room or container".
- As to Type A (shield-shaped institutional stamp seals), we cannot be sure that our Items 42 and 96 can be ascribed to this class.
- 61 A further example of unshaped *Terra sigillata* was found in WG 30.
- 62 The study of the ostraca is being conducted by El-Sayed Mahfouz, University of Assiut.