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## IRON AGE SEALS FROM ST1 AND SALUT, CENTRAL OMAN

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### Abstract

During the IMTO excavations directed by the writer on the site of the Early Bronze Age (second half of the III millennium BC) tower ST1, near Salut, two cylinder seals were discovered in layers stratigraphically connected to the Iron Age re-occupation of the site (roughly 1300-300 BC).

While the study of the remaining material is ongoing and will require further, long work, it is worth to present these two seals that belong to a typology apparently not so common for Iron Age South East Arabia, although not as rare as usually thought. Besides, a more typical pyramidal stamp seal will be presented, discovered at the Iron Age site of Salut, indicating the coexistence of the two typologies.

These seals display motifs and carving techniques perfectly fitting the general repertoire known from the area and period, with no strong evidence in favour of a different date.

The publication of such items is deemed of importance in the light of the recent, renewed interest in the scarcely represented and studied glyptic of the area, and aims at presenting specialists in that field with new data to be included in more comprehensive studies. The discussion of the actual use of these seals, and the perception that locals had of these items, is left to a more extensive work in preparation.

### Introduction

In late 2010, the team of the Italian Mission To Oman (IMTO) started the investigation of an Early Bronze Age site located 300 m to the north-west of the preeminent Iron Age site of Salut, which has been the focus of the mission's work since 2004 (fig. 1)<sup>1</sup>.

The site was given the tag name ST1 (fig. 2a); here, substantial architecture was unearthed, which bore evidence for a multi-period occupation. After the first Early Bronze Age phase, when the site comprised a typical round stone "tower" surrounded by a huge ditch, the site was in fact re-occupied during the Early Iron Age (ca. 1300-650 a.C. – that is, contemporary to the first phase of Salut's existence) and much later saw the establishment of early and recent Islamic structures.

Remarkable ceramic assemblages, consistent with these different periods, were collected, and are currently under study.

Though in expectably much lower quantities, other items were found, which are in themselves of importance to the reconstruction of the site's chronology and evolution. Among these were two stone cylinder seals coming from Iron Age contexts. In the paucity of similar finds from South East Arabia, the provenance contexts appear the most reliable evidence to

<sup>1</sup> For a recent, preliminary outline of the excavation results, see AVANZINI, PHILLIPS 2010.

assess their actual dating. However, some aspects of iconography and manufacture will be discussed, which in the absence of a safe provenance would have suggested more caution.

Apart from the intrinsic significance of such finds, their relevance is further enhanced when one considers that no cylinder seal of Iron Age date was previously known from Omani sites<sup>2</sup>. Given their contemporaneity, these two seals can further be considered along the only actual seal discovered so far at Salut, belonging to the more commonly, though not widely attested typology of pyramidal stamp seals.

## The seals and their archaeological contexts

The two seals from ST1 were discovered roughly in the same area of the excavation (Fig. 2b), though they come from two contexts which have no appreciable relation one another. Their spatial proximity has consequently to be seen as a mere outcome of chance.

Both came from layers which surely post-dates the end of the Bronze Age occupation of the site.

Seal F35 comes from context SU 108 which, on the basis of the collected pottery, can be surely dated to the Iron Age re-occupation of the site. This re-occupation, though probably focusing on the well located in the centre of the tower<sup>3</sup>, interested other areas of the site.

Among these, Iron Age activities took place directly on the remains of a Bronze Age structure (Structure 2), located on the external edge of the large ditch surrounding the tower, which is a recurrent feature for such kind of monuments. Structure 2, with an oval plan, was erected directly on top of a thick substratum of caliche, which constitutes the site's virgin soil (fig. 3). It comprised a large boulders wall, laid down inside a *ca.* 30 cm deep foundation trench, and was apparently paved reusing some of the caliche removed during this trench's excavation, in order to level the internal surface. Several potsherds, among which are well known diagnostic Iron Age shapes and decorations (fig. 4), were collected from SU 108, sitting directly on top of Structure 2 floor.

Seal F35 is carved with the combined use of drill and graver, resulting in a rather schematic scene on the seals sides (fig. 5a). The stone, of a dark black colour, appears hard and compact, without visible grains. The scene represents a horned animal, possibly with a long tail, facing a kind of arrow sign pointing upward (stylised tree?). The animal apparently has a long muzzle, almost resembling a beak, and a straight sign linking one of the forepaws with one of the rear ones could suggest that it was intended to be tied with a rope. To complete the scene, three round symbols were carved one just behind the animal, and the other two above it. A fourth drilling was made to obtain a radiating sun in a low position, between the animal's forepaws and the arrow sign.

<sup>2</sup> See POTTS 2010. In 2013 a cylinder seal was discovered in Grave 1002 at Adam (GERNEZ, GIRAUD 2013, fig. 32.g). Pending the seal's study, it deserves to be mentioned that the material uncovered inside the tomb indicate different periods of robbing and reuse, and it is not unlikely that the seal could be of Iron Age date, as it was discovered amongst disturbed layers (J. Goy, pers. comm.).

<sup>3</sup> DEGLI ESPOSTI 2011, 195-196.

The second seal, F36, was found at the interface between context SU 98, of sure Iron Age date, and the underlying deposit SU 102 (fig. 6). The latter represents an occupational surface developed above a natural, presumably water borne thick sediment, deposited in the intervening period between the end of the Bronze Age phase of the site and its re-occupation in the Iron Age period, as indicated by the collected pottery which is all of a Bronze Age date with no mixing of later material. It would thus seem that F36 was lost during the initial moments of the Iron Age occupation of the site.

The stone used for F36 is slightly different from the one of F35 in that it is of a dark grey colour and shows a sandy micro-texture. The seal bears an incised scene representing a row of five individuals holding hands and moving leftward (fig. 5b). Among them stand a series of symbols which are not easily identifiable, apart from one which represents the radiating sun and a second, less clearly, the moon crescent. It can be of some significance the fact that five symbols are present, which could be paired each with one individual. An indication in this direction seems to be given by the presence of one of the symbols directly above the head of one of the men. The carving technique appears rather inaccurate, with shallow incised grooves overlapping each other quite roughly. Evidence for drill use is absent, despite the presence of round element which would have been suitable for it.

Besides, both seals show two roughly straight lines framing the scene above and below, and are pierced vertically to allow suspension.

The dimensions of the two seals are almost identical: both 2,3 cm high, F36 has a diameter of 1,3 cm, while that of F35 is 1,2 cm.

The pyramidal seal S305 found at Salut comes from context US373, a compact, tip deposit excavated in Area 4, close to the landing of the staircase which connects the upper and the lower part of the site, whose upper flight at least has been demonstrated to be the result of a late construction now attributed to the early Islamic re-occupation of the site. The context is not sealed, as it is the outcome of the secondary deposition of soils and cultural materials washed from the upper part of the site after abandon and collapse; it in fact gave back mixed Iron Age and Islamic period material. However, the peculiar typology of the seal assures its Iron Age date.

S305 is made of a dark grey stone, with a slightly sandy texture; the flat base bears an excised motif representing a radiating sun or star, with irregular triangular “rays” and a deeper drilling emphasizing its centre (fig. 5c).

The squared base measure 1.5 x 1.6 cm, the height is 1 cm and the drilling at the tip is 0.4 cm in diameter.

## **Parallels**

Cylinder seals like F35 and F36 from ST1 are definitely scarce in Oman and South East Arabia as a whole, even if one takes into account a larger time span, also including the Bronze Age.

The iconography of F35, however, and the technique by which it was engraved, fit rather well with what is known from other coeval seals of the region, though the best comparable specimen are to be found among the pyramidal stamp seals (Table 1).

Actually the known repertoire, very limited but internally quite varied, prevents any safe attribution merely based on the seals' representation. No image is in fact repeated in more

than one seal, with the exception of the geometric pattern found on two almost identical, round metal stamp seals from Jabal al-Buhais<sup>4</sup> and Qarnt Bint Sa'ud<sup>5</sup>.

Nevertheless, a common trait can be seen in the general schematism of the motifs<sup>6</sup>, obtained with the combined use of drilling and engraving, often rather inaccurate.

In some instances a more realistic representation is present, as is the case for the bull's head in one seal from Jabal al-Buhais, where it anyhow stands above a schematic representation of the body, summarized in some irregular traits (possibly representing the legs, pizzle and tail?)<sup>7</sup>, or for the man bearing an axe visible in a broken seal from Rumeilah<sup>8</sup>.

The only vague parallel for F35 is probably the pyramidal stamp seal with the representation of a quadruped (in that case possibly a camel) coming from Rumeilah and dated to the site's phase I<sup>9</sup>, which corresponds to Salut's Early Iron Age occupation<sup>10</sup>.

The style of F36 is also crude, though with a less schematic appearance that probably has to do with the idea of movement that the scene transmits.

The only correspondence that can be found with other Iron Age seals from the region is the presence of a solar symbol, of course comparable with F35 but also with one of the two cylinder seals known from Rumeilah, where it is associated with a lunar symbol<sup>11</sup>. Accepting the interpretation of one of the symbol on F36 as the moon crescent would enhance this correspondence.

The pyramidal stamp seal from Salut belongs to a typology for which many more specimens are known, some of which have already been mentioned, to the extent that small stamp seals in general have also been described as «quite common on Iron Age sites»<sup>12</sup>. Pyramidal stamp seals were in fact retrieved at Jabal al-Buhais, Qarnt Bint Sa'ud, Rumeilah, Tell Abraq, where the shape however is uncommon, being conical, and during a survey around Tiwi<sup>13</sup>. An origin in South East Arabia is also highly probable for a few specimens from the Al-Maqsha necropolis in Bahrain<sup>14</sup>.

No precise parallel can be found for the engraved motif; however, three seals from Rumeilah<sup>15</sup> bear a vague resemblance in that they show a centrally symmetric motif representing a star / sun, or recalling a flower.

<sup>4</sup> JASIM 2008, fig. 11a.

<sup>5</sup> STEVENS 1992, fig. 1.1.

<sup>6</sup> See also LOMBARD 1998, 155.

<sup>7</sup> JASIM 2008, fig. 6.

<sup>8</sup> LOMBARD 1998, fig. 1.6.

<sup>9</sup> LOMBARD 1998, fig. 1.4.

<sup>10</sup> PHILLIPS 2010.

<sup>11</sup> LOMBARD 1998, fig.1.11.

<sup>12</sup> Potts 1991, 135.

<sup>13</sup> JASIM 2008, figs. 6, 8; STEVENS 1992, fig. 1.2-4; LOMBARD 1998, fig. 2; Potts 1991, 95 and fig. 135; SCHREIBER, HÄSER 2004, fig. 6.

<sup>14</sup> LOMBARD 2000, fig. 183-187.

<sup>15</sup> LOMBARD 1998, fig.1.1-3.

Site	Cylinder	Pyramidal	Date suggested by excavators	Context Date	Material	Reference
Tell Abraq	1		Middle elamite, 14th-13th century BC	Early Iron Age	faience	POTTS 1990, 122-123 and figs. 150-151.
		1	Iron Age	Iron Age	soft-stone	POTTS 1991, 95 and fig. 135,
Jabal Buhais		2	Iron Age	Two Iron Age tombs	1 light green soft stone; 1 greenish-black soft stone	JASIM 2008, fig.13; JASIM 2012, figs. 110, 163.
Rafaq 2	2		Late Iron Age*	Late Iron Age*		POTTS 2010, fig. 23.92-93.
Qidfa	1		II millennium / Iron Age	Reused II millennium tomb	soft-stone	ZIOLKOWSKI 2007: fig. 67.
	2		"	"	1 faience; 1 possibly limestone (?)	unpublished, Fujairah museum
Kalba	2		Iron Age?*	Iron Age?*	1 in pale green crystalline stone; 1 in soft-stone;	POTTS 2010: fig. 23.95-96.
Rumeilah		5	Early Iron Age	Early Iron Age (Period I), one from surface	2 translucent dark yellow-green stone; 1 red jasper; 1 dark green serpentin (?); 1 grey-black steatite	LOMBARD 1998, fig.2.
	2		Late Iron Age	Late Iron Age (Period II)	grey-black steatite	
Qarn Bint Saud		3	Iron age	Surface	1 brownish-green glossy soft stone; 1 dark greyish-green glossy soft stone; 1 dark greyish-green soft stone	STEVENS 1992, fig. 1.
ST1	2		Iron Age	Iron Age	1 dark grey sandy texture stone; 1 black stone	
Salut		1	Iron Age	Washed tip deposit with mixed material	black stone	
Adam	1		Wadi Suq	Mixed. with later material	grey soft stone	GERNEZ, GIRAUD 2013, fig. 32.g,
Tiwi		1	Iron Age	reused Hafit tomb	greenish soft-stone	SCHREIBER, HÄSER 2004, 323, fig. 6.

\* C. Phillips., pers. comm.

Tab. 1 - Iron Age stamp and cylinder seals from Oman and the U.A.E.

## Chronology and discussion

While an Iron Age attribution for the pyramidal stamp seal S305 is undisputable despite the mixed material found in association with it, the date of F35 and F36 is conversely indicated by the retrieval contexts. Nevertheless, a few elements of comparison deserve discussion concerning these two cylinder seals from ST1, that in some instances can appear controversial in respect of the dating based on stratigraphy.

This is particularly true for F35. While it was shown that the combination of drillings and engravings is diffuse in local Iron Age seals, such a style could also be compared with the “drilled style” of Mesopotamian origin, witnessed on a recently found seal from Abu Dhabi that was dated to the end of the fourth millennium and ascribed to that same Mesopotamian manufacture<sup>16</sup>. An exhaustive discussion of this type of seals was published in the same work, and won't be replicated here.

Some additional indication suggesting caution could be found in the “arrow” symbol engraved in front of the quadruped.

A similar sign is in fact engraved on a cylinder seal found at Ra's al-Jinz RJ-1<sup>17</sup>, which was dated by the excavators between 2500 and 2250 BC<sup>18</sup>. Such a date would be in accordance with that deduced by the preliminary observation of the local and imported pottery collected at ST1, and with the only radiocarbon date currently available. Pottery of unmistakable Umm an-Nar tradition<sup>19</sup> in fact compares with shapes and decoration occurring in phase IIc2-IIf at Hili 8<sup>20</sup>, but also known from Bat 1145 for example<sup>21</sup>. Imports coherently comprise a majority of Indus-related pottery, among which the widely attested Black Slip Jars are the most represented type. These evidence indicates a date in the second half of the third millennium, probably in the last three centuries, and is supported by a radiocarbon date obtained from a dump area belonging to a late phase of the site's Bronze Age occupation, which gave back a calibrated (2σ) range between 2460 and 2145 BC<sup>22</sup>.

On the other hand, a similar “arrow” sign is also visible on one of the large boulders used at the site of another Bronze Age tower, standing some 550 m. northeast of ST1. There, it was engraved three times on one of the blocks used to build a rectangular feature standing immediately south of the main monument (fig. 7)<sup>23</sup>. It is anyhow clear that without excavation data these engravings can not be associated to a specific period, and could pertain to the initial Bronze Age occupation as well as to an Iron Age re-use. The latter is moreover very likely,

<sup>16</sup> PITTMAN, POTTS 2009

<sup>17</sup> CLEUZIQU, TOSI 2007, fig. 265.

<sup>18</sup> CLEUZIQU, TOSI 2000, 28; CLEUZIQU, TOSI 2007, 217).

<sup>19</sup> e.g. DEGLI ESPOSTI, PHILLIPS 2012, fig. 7. See also IMTO seasonal preliminary reports, available on-line from this page: <http://arabiantica.humnet.unipi.it/index.php?id=109>.

<sup>20</sup> CLEUZIQU 1989, plates 24-29.

<sup>21</sup> FRIFELT 1985, fig. 5.

<sup>22</sup> Lab. code 14Fi2250, 14Fi2255, 14Fi2258; DEGLI ESPOSTI N.D.

<sup>23</sup> The site, although unpublished, has been partially excavated and is listed as “Building 4” in the list of the Hajar Project (see ORCHARD, ORCHARD 2007, pl. 6d).



given the presence, on the small hill just few meters away from this tower, of an Iron age settlement<sup>24</sup>, and the abundant quantity of Iron Age pottery found at the site<sup>25</sup>.

Wanting to accept such a Bronze Age date for the cylinder seals, then the question would arise about their provenance. Actually, there are features of the seal which could speak of a local production. In particular, the use of the drill in combination with gravure appears rather unskilled, specifically when the animal body is examined: this would in fact be expected to be composed by adjacent drillings, as visible on the seal from Abu Dhabi<sup>26</sup>. On F35 instead, two drillings are connected by a long, thick and rough groove. Besides, the diameter-to-height ratio is neatly different from the 1:1 figure which is reported as the most common among seals of the Mesopotamian drill style type<sup>27</sup>.

The use of the drill is abundantly witnessed at ST1, namely in the numerous potsherds showing what are generally referred to as “potter’s marks” or “house marks”, frequently found on vessels rims. While many of these come in the form of variously incised lines, numerous are the cases in which drillings are made on the vessel’s internal rim, forming different combinations (fig. 8a). Although such marks have often been considered as indicating an Harappan provenance of the vessels bearing them<sup>28</sup>, the abundance witnessed at ST1 and the fact that they are found on vessels made in almost all the type of fabrics defined there, indicates a likely local production. Besides, the drillings themselves are only found on typical Umm an-Nar shapes and in one case at least they were used as a decorative element among painted black lines. The unique attestation of an Indus Black Slip Jar bearing two of such drillings is on the other hand not determinant, since these signs were obviously made after firing (fig. 8b).

A local production could also be indicated by the kind of stone, definitely different from the harder and smooth textured stones commonly used for Mesopotamian or Iranian seals, and by the unusual height/diameter ratio mentioned above.

However, these differences should be better seen as connected to a chronological distance from the Bronze Age tradition, rather than to the local production/import issue, and would thus confirm the Iron Age date for F35, strongly indicated by the materials retrieved with it.

For what concerns F36, the same comments can be made on the stone and on the dimensions, supporting an Iron Age date. In this case, moreover, there is no clear resemblance with known styles. Its uniqueness can thus be indicative of a local production, expressing local ideas and possibly social or religious values.

In the absence of decisive evidence against the Iron Age date for the two cylinder seals, their stratigraphic context is finally deemed more reliable.

<sup>24</sup> CONDOLUCI, DEGLI ESPOSTI, PHILLIPS 2014.

<sup>25</sup> A. Mortimer, pers. comm.

<sup>26</sup> PITTMANN, POTTS 2009.

<sup>27</sup> PITTMANN, POTTS 2009, 110.

<sup>28</sup> e.g. WEISGERBER 1984; POTTS 2000, 129.

At Salut then, including the site itself and the surrounding area that is now known to have hosted a network of Iron Age sites<sup>29</sup>, both pyramidal and cylinder seals were in use.

On the basis of the evidence from Rumeilah, Lombard<sup>30</sup> suggested that cylinder seals were a late innovation in South East Arabia Iron Age, being peculiarly introduced in a period where their overall presence in the Near East was decreasing.

Unfortunately, there is no stratigraphic ground to establish a relative chronology between the three seals discussed here, and this hypothesis can not be tested.

Another interesting consideration made by Lombard in the same paper<sup>31</sup>, is that the introduction of the cylinder seal could be linked to a “fashion” choice, rather than to an actual change in the sealing technique. The two specimens from Rumeilah, in fact, bear incised motifs which were reputed unsuitable to the repetition implied by a cylinder seal, while rather adapted to a single impression, thus indicating that the engraver did not understand the new technique.

Actually this is true for just one of the two seals, while the other<sup>32</sup> is perfectly repeatable and also presents stylised vegetal (?) motifs that find some parallel in a cylinder seal from Kalba K4<sup>33</sup>, together with the already discussed sun and moon symbols. Moreover, at ST1 the situation is totally different, and the engraved scenes are coherent with the use of the seals bearing them.

Anyhow, an overview of the published seals from the Oman Peninsula seems to indicate that external “fashion” influences actually played a major role in the area’s seals production and/or use, with the adoption of different shapes typical of neighbouring regions over time as, for example, Dilmun type seals and scarab seals. Indeed, the actual perception and use of seals in prehistoric South East Arabia deserves a more extensive discussion, concerning in particular the issue of a real administrative function versus a more decorative/apotropaic one, and will be approached in another paper<sup>34</sup>.

It is beyond the scope of this presentation of some new evidence from the area of Salut, to discuss the iconographical implications and possible meanings of the engravings borne by the three seals. The scene represented on F36 however raises one last question, to be left for the moment unanswered: could there be any specific relation between that feasting scene, which could also have some ritual implication given the presence of astral symbols, and the main site of Salut, for which a communal function can be supposed, and that was also suggested to be a cultic site?<sup>35</sup>

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<sup>29</sup> CONDOLUCI, DEGLI ESPOSTI, PHILLIPS 2014.

<sup>30</sup> 1998, 158.

<sup>31</sup> LOMBARD 1998, 158-159.

<sup>32</sup> LOMBARD 1998, fig. 1.11.

<sup>33</sup> POTTS 2010, fig. 13.95.

<sup>34</sup> PHILLIPS, DEGLI ESPOSTI in preparation.

<sup>35</sup> BENOIST 2010.

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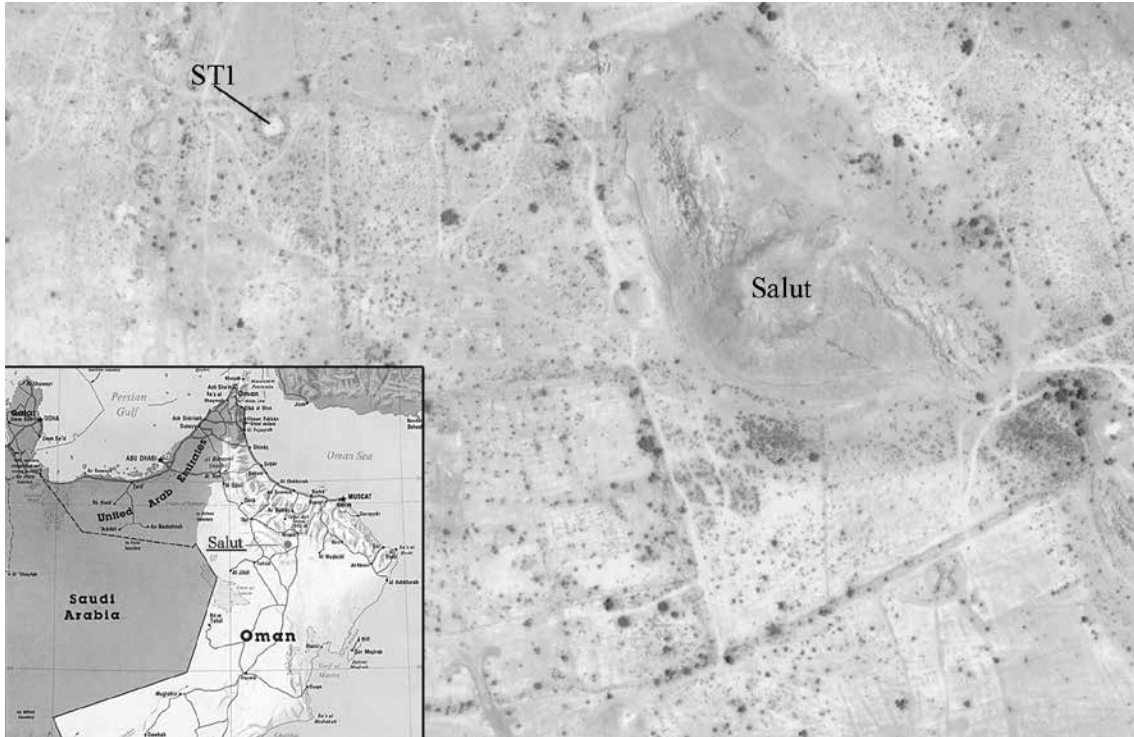
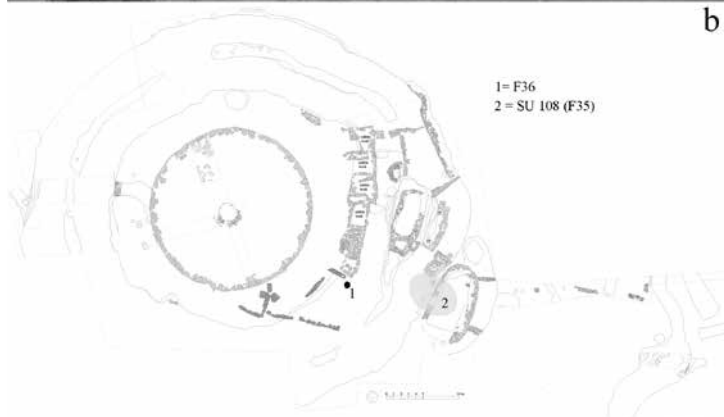


Fig. 1 - The location of Salut near Bisyah, in central Oman, and a satellite image showing the position of ST1 on the plain to the west of the Iron Age site of Salut.



a



b

Fig. 2 - a) General view of the excavations at ST1, from the east; b) General plan of the site showing F36's findspot and the location of SU108 (F35's context).



Fig. 3 - Two views of Structure 2: SU108 was resting directly on the preserved portion of its floor, thus indicating that the structure was reused during the Iron Age occupation of the site.

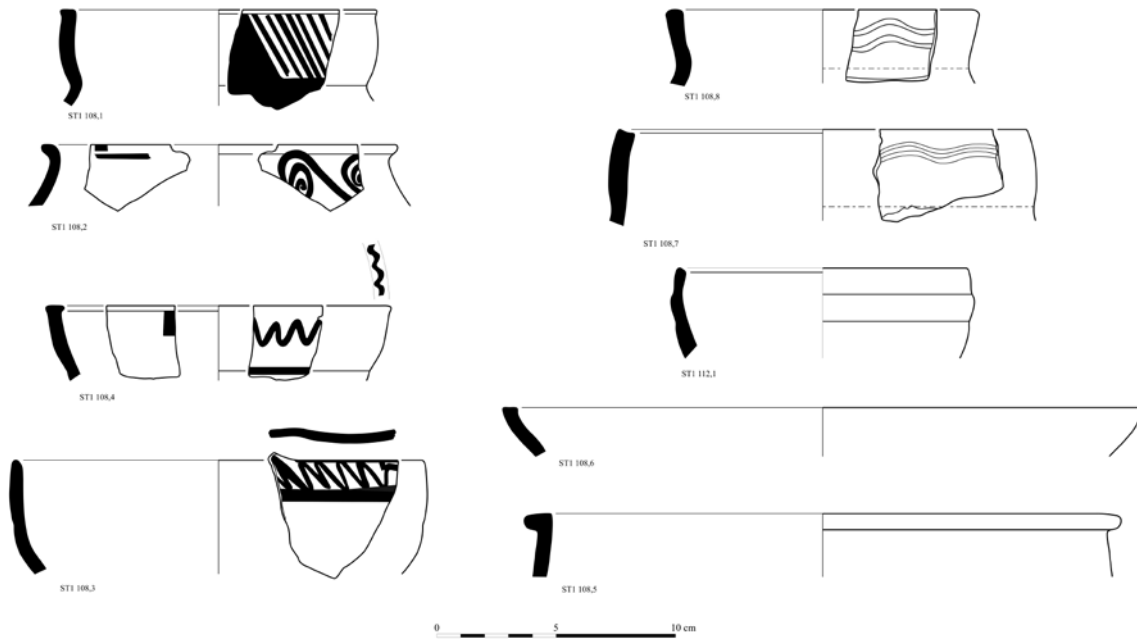


Fig. 4 - A representative sample of the pottery from SU108, clearly indicating its Iron Age date. Fine to medium fabrics, ranging in colour from pale red to red and brown-reddish, exceptionally yellow-greenish (n. 4); all with a red or brown slip. Almost all contain vegetable temper, all contain small black and/or white grits.

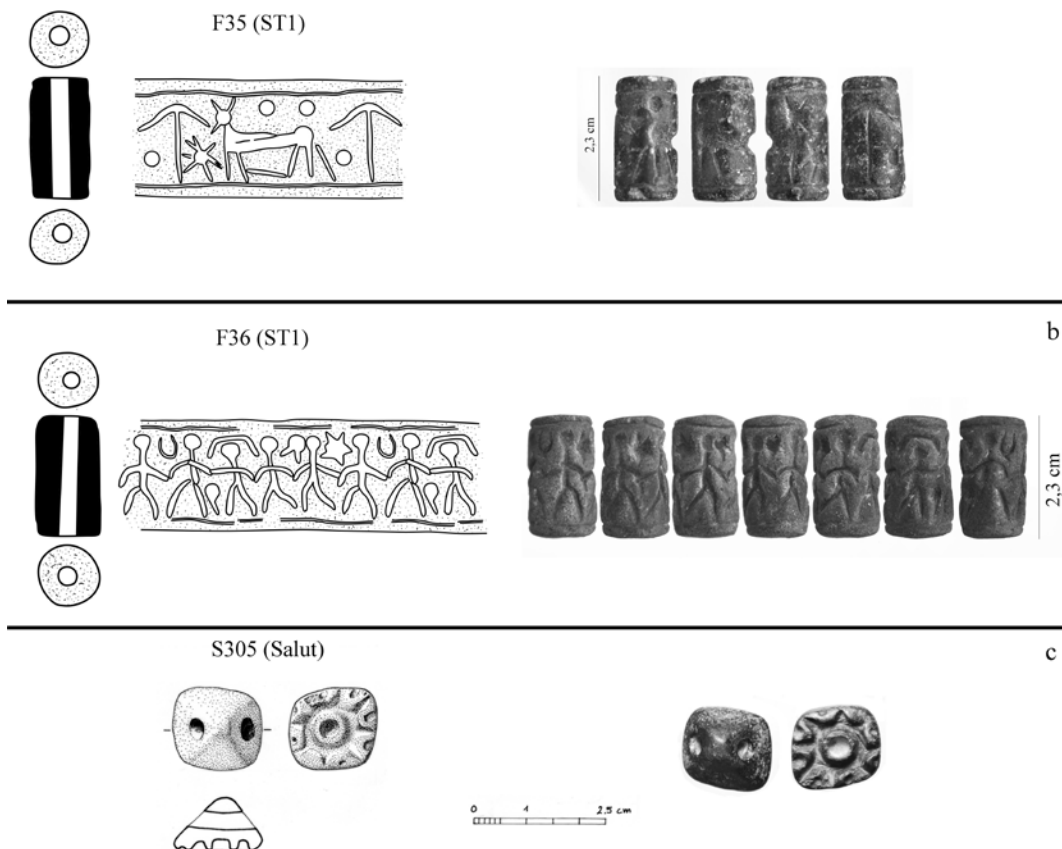


Fig. 5 - The Iron Age seals discovered at ST1 (a, b) and Salut (c). Drawing of (c) by S. Martelli.

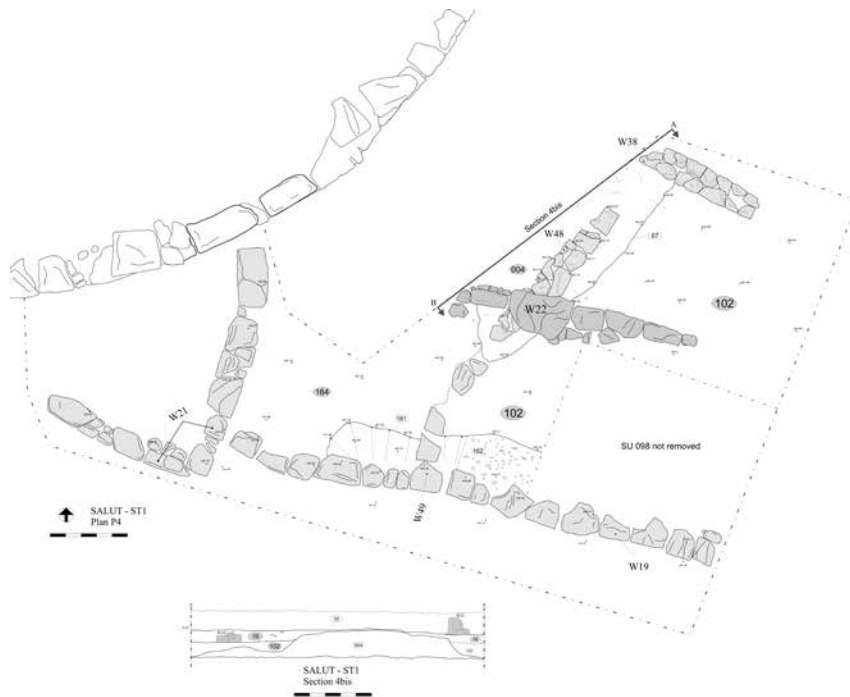


Fig. 6 - Plan of the area where F36 was found, occupied by Iron Age structures, with a section showing the relation between SU98 and SU 102. Darker wall W22 belongs to an Islamic re-occupation of the site – other late walls not shown.



Fig. 7 - Three incised (“pecked out”) arrow signs – here outlined – are visible on one of the large boulders used in the construction of an outer structure connected to another Bronze Age tower, some 500 meters to the northeast of ST1. The date of these incisions can not be ascertained due to the absence of stratigraphic relations with the surrounding deposits, but Iron Age occupation of the site is indicated by surface pottery.



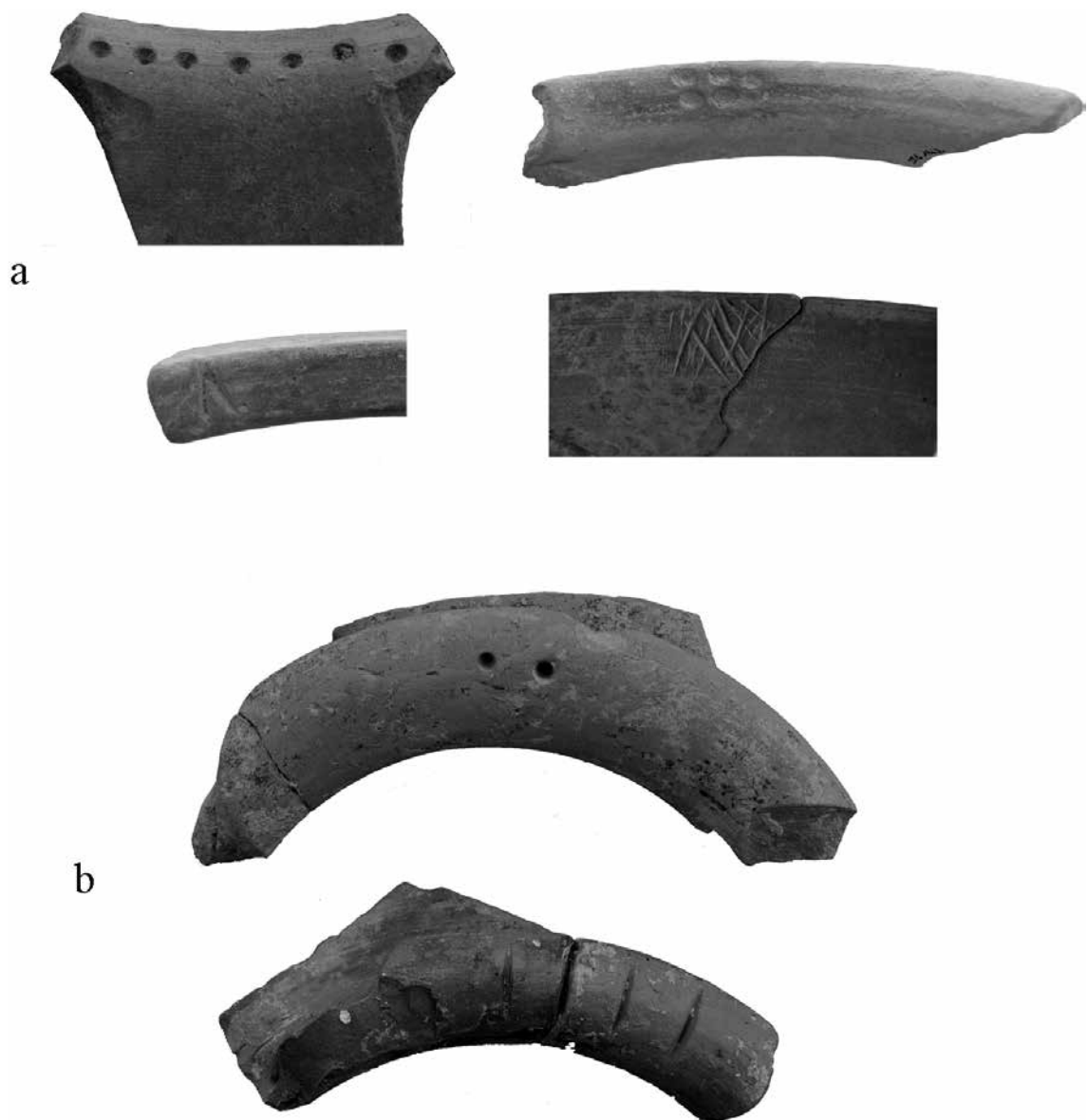


Fig. 8 - A sample of the different kinds of “house-marks” found on rim sherds belonging to local ware vessels (a) and Indus black slipped jars (b) from ST1. The use of the drill appears quite common.