

**Final Report  
For the Season 2014  
Excavations at Tell Timai  
University of Hawaii  
June 9 to July 12, 2014**



Unit N7-11, Ptolemaic Assemblage

Directors:

Professor Robert Littman, University of Hawaii, [littman@hawaii.edu](mailto:littman@hawaii.edu)  
Dr. Jay Silverstein, University of Hawaii, [jsilvers@hawaii.edu](mailto:jsilvers@hawaii.edu)

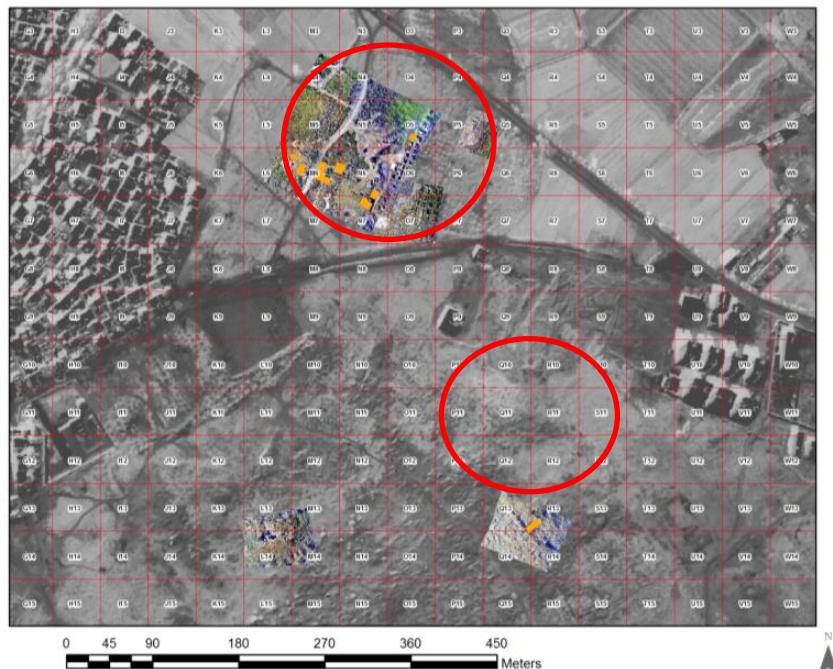
# **Excavations at Tell Timai 2014**

## **Introduction**

An archaeological team sponsored by the University of Hawaii led by Professor Robert Littman and Dr. Jay Silverstein conducted excavations from 9 June to 12 July 2014. The archaeological team consisted of 31 archaeologists and conservators from America, Egypt, Germany, Australia, England, South Africa, and Italy. The archaeological study focused on three areas of interest: 1) A Roman house in the central portion of the tell, 2) Ptolemaic buildings in the northern portion of the tell, and 3) the temple complex in the northern portion of the tell. The MSA contingent included Inspectors Mohamed Fawzy and Mohamed Ahmed abd el Azeem from El Ruba taftish and several trainee inspectors.

## **Investigations**

The 2014 season focused on three areas of archaeological investigation expanding on work from previous seasons (Figure 1). In addition, mudbrick conservation and repair of damage from vandals was conducted in two areas. Archaeobotanical analysis was conducted on carbonized remains for remains from this season and previous season's work. During the Tell Timai 2014 season a Sokkia Set 3110, a Trimble total station and Pentax autolevels were used to control unit elevations and conduct surface and unit feature mapping following the base datums established in previous seasons of work. Excavations were conducted by context—individual features were documented and sampled to establish form, function, history, and date. Conservators from the MSA assisted with the cleaning and conservation of artifacts.



**Figure 1. Map of the areas investigated.**

## **Excavations in the M6 Temple Foundation Area**

The research aim in the M6 area was to define the dimensions of a large mud brick structure in the northwest portion of the Tell that has a preliminary date of the Late Ptolemaic – Early Roman Period. Limestone temple foundations were reassessed to refine the date of construction and its sequential relationship to adjacent mud brick structures.

**Area Supervisor:** James Bennett, Durham University

**Archaeological Team:**

Kelsey Kahlbaum-Hoisington  
Benjamin Picciotto  
Casey Preston  
Viola Avalos  
Nurul Karim

**M6-1: The Limestone Temple Foundations (Figure 2)**

**Clearance and Damage: Brief Report**

Since July 2013 a large section on the southern face of the limestone temple foundations has been heavily destroyed. The south face of the south void partition has been taken apart and the stones pushed either side of the wall. Three courses of the stone were removed from their original position. This was achieved by the looters cutting a pit down on the southern face of the partition wall and pushing blocks into the open void. Furthermore, blocks were dragged out and dumped in a previous small 2010 excavation area. Some attempt was made to reconstruct the walls; however, the degradation of the blocks and the difficulty in placing them back in their original position although only a limited amount of damage was repaired. The temple was photographed in 2009 with the wall still intact and this would allow a digital reconstruction of the wall. The temple platform was fully buried to try and stop any further vandalism.



Fig. 1: Oblique 2D view of the Limestone Temple Foundations and the damage to the southern wall.

**Limestone Temple Surface Assessment and Condition Report**

In addition to the looting and vandalism damage, the surface of the limestone has been exposed to the elements and people walking on it and this has caused a number of the blocks to degrade heavily, while some of them have, due to water and fluctuations in temperature. A full photographic documentation of the temple was conducted including a photogrammetric capable survey of the surviving stone. The inner voids fill annually with the water and this has encouraged plant growth. Halfa grass and larger tree roots weaken the stone and a number of joins have cracked or widened because of plant roots.

### **M6-13: Continuation of 2013 Excavation**

Excavation at M6-13 continued the work started in 2013 by defining previously discovered features, the 8m long mud brick surface with two walls running to the south. The goals were to determine the phasing of the walls and to re assess the stratigraphy in the area. It was found that the small walls or parts of walls that were defined last season were actually mud brick collapse, which was confirmed by deposits and architectural plans in M6-16. A large photogrammetry project was conducted in this area (Fig.3)



Figure 3. Photogrammetric image of M6-13, M6-9 and M6-10

Three areas were defined for excavation in M6-13 the fill layer beneath the floor (M6-13-Foo7) and the fill between the eastern wall and the wall exposed in M6-9, and the fill on the western side of the western small wall running south into M6-16.

**Dates of Work:** 15<sup>th</sup> June 2014 – 29<sup>th</sup> June 2014

**Maximum Depth:** Starting Depth 0.65 m ASL: Closing Depth -0.47 m ASL (Overall Depth 1.12 m)

**Number of Features:** 3 (Foo9, Foo10, Foo11)

#### **Feature Narrative**

##### **Foo9:**

Foo9 consisted of a deep fill layer below M6-13 Foo7 (lime floor) (Fig.4). It had an overall depth of 1.12m. This feature formed the base of the mud bricks in M6-13-Foo8 where the bricks ceased and pottery was found under the bricks. However, at -0.47 m ASL the water table was encountered and excavation halted. The fill had few artifacts with only minimal pottery found and only small sherds. There was also a small amount of shell and two fragments of faience and two fragments of bronze.



**Fig.4: M6-13-Foo9**

**Fo10:**

This consisted of a deep fill layer that was the same as M6-13 Foo9 as it ran underneath the eastern north running wall (Fig.5). Like Foo9, Fo10 consisted of mud brick collapse and limited pottery. This unit was terminated at the same level as M6-13-Foo9 (-0.47 m). A faience Bes amulet was found (SCA Tell Timai artifact # 177).



**Fig. 5: M6-13-Fo10**

**Fo11:**

This was the same as M6-13-Foo9 and M6-13-Fo10. The fill was the same homogenous fill of mud brick collapse and only small amounts of pottery and other material (Fig. 6).

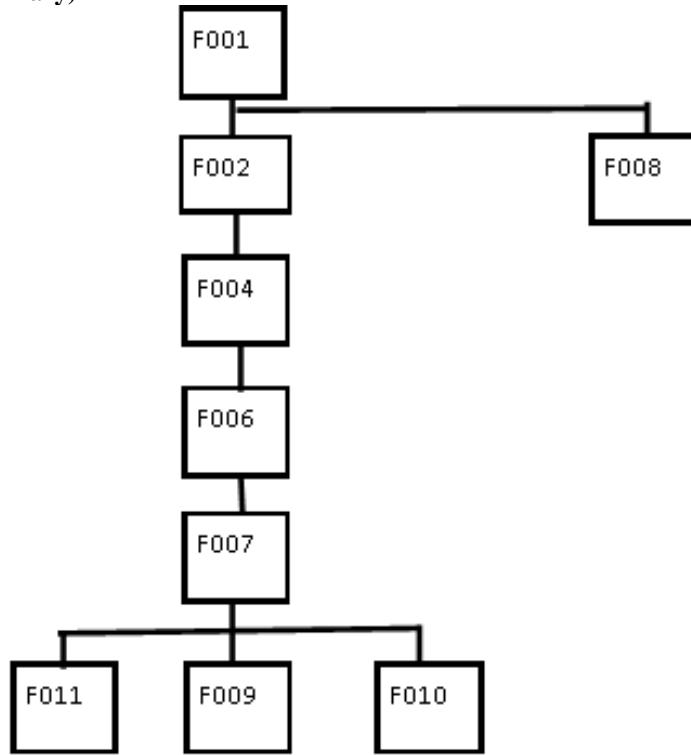


**Fig.6: M6-13-Fo11**

**Interpretive Summary**

The M6-13 Foo9, Fo10, and Fo11 may represent the foundation fill used to construct the large deep mud brick foundations (M6-13-Foo8). They are all very sterile, possibly indicating foundation fills for monumental structures.

#### Harris Matrix (Preliminary)



## M6-15

**Dimensions:** 7.7m x 8.8m

**Dates of Work:** 11th June 2014 – 8th August 2014

**Maximum Depth:** Starting Depth -0.02m ASL: Closing Depth -0.60 ASL (Overall Depth= 0.58cm)

**Number of Features:** 4 (F001 to F005)

#### Feature Narrative

##### F001:

F001 consisted of a very disturbed surface context including a mixture of modern and ancient materials within a matrix of degraded mud brick and Nile silt. Excavations started below the modern 0.0 elevation. The feature included the north eastern corner section of the limestone temple foundation (M6-1) and the unit was L-Shaped, using the edges of the limestone structure as its boundary. F001 was distributed uniformly across the unit to an average depth of approximately 0.20cm. There was an abundance of modern material, including linen, plastic, metal, modern building material and large amounts of grass root. A concentration of amphora sherds from the same vessel were found near the northern baulk and it appears to be a secondary deposit associated with sebakhin activity. There were some instances of heavily degraded and salt encrusted ceramics of ancient appearance. The feature terminated clearly based on compaction and texture; directly beneath the F001 was a large mud brick surface made out of dark and light mud bricks. The bottom of F001 corresponded with the depth where the temple foundation stones had ceased being removed. Feature 1 represented the degradation of the subsequent mud brick surface and was a consequence of intense sebakhin activity.

##### F002:

F002 was directly underneath F001 and consisted of a concentration of limestone chippings abutting the northern edge of the limestone temple foundation (M6-1). The deposit had a depth of 0.47cm, but the end of the feature was not reached due to the water table which was reached at -0.57 ASL. The

limestone chippings were retained for analysis by the petrology specialist. Ceramic sherds were also found in association with the deposit.

**Foo3:**

This was a hard-pack mud floor underneath the large mud brick surface Foo5. It was bounded by a 1.75 x 1m rectangular 'box' room that had been covered by Foo1. Foo3 was located at -0.39 ASL and was on average -0.02m thick. The Munsell colour was 8/10Y Light Greenish Grey and soil was hardened clay.

**Foo4:**

Foo4 was a deposit/fill of Nile silt directly underneath Foo3. It was not fully excavated because the water table was encountered at -0.60 m. The ceramics within it were all very small pieces; however, the sample included a number of small fine ware diagnostic rims. Some faience was also noted as well as a worked piece of stone.

**Foo5:**

Foo5 was a large mud brick surface made up of black and yellow mud bricks of an average size of 40 x 20 x 15cm (Fig. 7). This surface was cut by M6-1 (the limestone temple foundations). This has not been fully exposed.



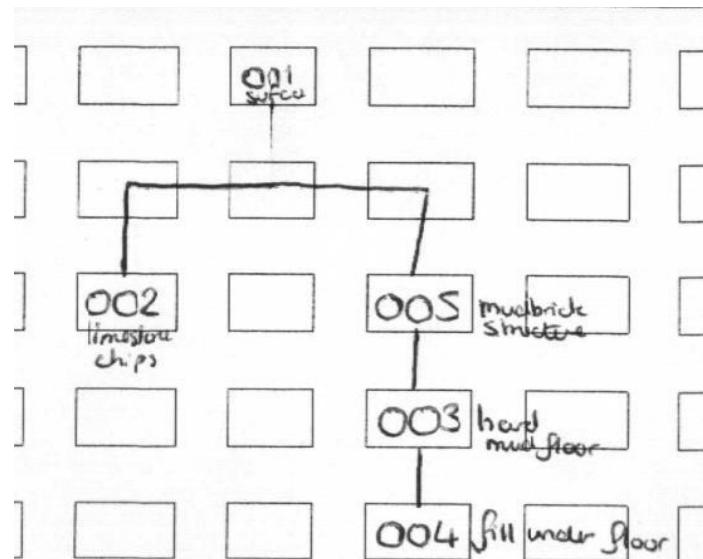
**Fig.7: Orthographic Image of M6-15-Foo5 and Corner of Limestone Temple Foundations**

**Interpretive Summary**

The first cultural phase identified appears to be the laying down of a large fill (Foo4) which was overlay with a 0.02cm thick hard packed mud floor (Foo3). This was then stabilized or fixed in place by the addition of the lower levels of mud brick that belonged to the large yellow and black mud brick structure (Foo5). This structure extends to the south (M6-2) and also to the East (N6-8), out of the

unit to the north. The structure was later cut into by the large limestone temple foundation (M6-1), indicated by many of the bricks being sliced in two by the foundation cut. The temple was built up and the earlier structures may have been developed or adapted into the new temple structure. The limestone deposit (Foo2) may represent part of the foundation cut for the temple foundations; however, the irregular and very small size does not support the idea of it being part of the temple foundation cut. Foo2 probably represents a later intrusion as the cut tapered to the base and appeared to be an attempt to access the lower levels of the limestone foundation. This will be further explored in following seasons. The final phase, Foo1, represents the looting of the stone and sebakhi.

### Harris Matrix



## M6-16

**Dimensions:** 10 x 5 m

**Dates of Work:** 10th June 2014 – 8th July 2014

**Maximum Depth:** Starting Depth: 1.43 m ASL: Closing Depth 0.81 m ASL (Overall Depth = 0.62m )

**Number of Features:** 13

### Feature Narrative

#### **Foo1:**

Foo1 consisted of a very disturbed surface context. The feature included a mixture of modern and ancient materials situated within the dusty soil matrix formed from degraded mud brick. The feature was distributed uniformly across the unit to an average depth of 25-30cm deep.

#### **Foo2:**

Foo2 was located directly beneath Foo1 and consisted of a compacted layer of degraded mud brick debris approximately 0.15 m thick. This layer also contained numerous examples of slag and modern metal fragments from electrical wire. This was a heavily contaminated feature most likely from sebakhin and modern disturbance.

#### **Foo3**

Foo3 was directly below Foo2 and consisted of a linear deposit of small and medium limestone chips. The limestone extended to the east into the baulk.

#### **Foo4**

Foo4 was located under Foo3 and consisted of another layer of degraded mud bricks approximately 0.09m thick. It was formed between the remaining areas of surviving mud brick walls in the area.

#### **Foo5:**

Foo5 was directly under Foo4 and consisted of collapsed mud brick within a room. It had a maximum depth of 0.45 m (fig.8).



**Fig.8. M6-16-Foo5**

**Foo6**

Foo6 consisted of a layer of grandiorite and silicified sand stone chippings directly beneath Foo5. The majority of the layer was grandirite chips, but in the east of the room sandstone became more frequent. The majority of the layer was made from a surface only one chip thick. The grandiorite chips are consistent with the material used construct the monolithic sarcophagus in the immediate vicinity.

**Foo7:**

Foo7 was directly under Foo4 and had approximately the same thickness as Foo4, 0.19-0.20m. It contained the same Nile silt deposit type as in Foo4 and may actually represent the same deposit/feature.

**Foo8:**

Foo8 was directly below Foo6 and consisted of a thin layer of sand approximately 0.07m thick that ran under a section of the grandoirite chippings in the room. Little pottery was found in the layer (fig.9).



**Fig.9: M6-16-F008**

**Foo9:**

Foo9 consisted of another grandiorite chipping layer directly beneath the sand layer (Foo8). The layer was only one chip deep (0.03-0.06 m deep). It was in a more concentrated area of the room compared to Foo6, and ran into the northern baulk where a large concentration of grandiorite chippings were found resting on a compacted lime floor in M6-13.

**Fo10: (Fig.10)**

Fo10 lay directly under Foo9 and consisted of fallen mud brick fill with very small pottery chips. The layer most likely represents the fill layer visible in the lower levels of M6-13 (M6-13-Foo9). The excavation in the area was not completed and further excavation will continue in 2015.



Fig. 10: M6-16-Fo10

**Fo11:**

A small area (pile) of grandiorite chippings directly underneath Foo7.

**Fo12:**

A small pile of broken ceramics against the side of a large thick wall running to the east.

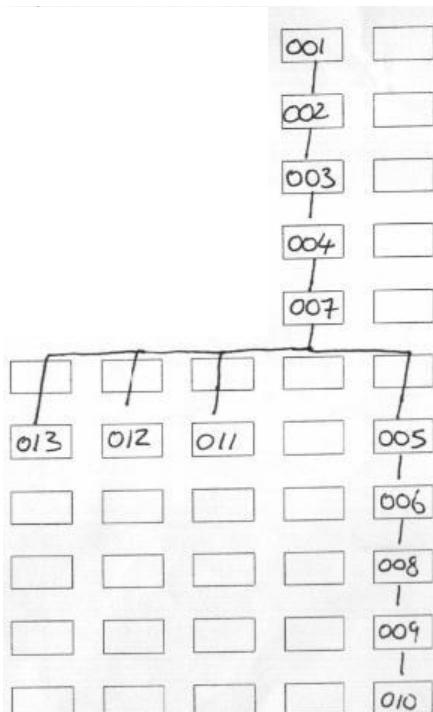
**Fo13:**

A large area of fallen mudbrick directly beneath Foo7 in the south of the unit to the south of the main east-west mud brick wall in the unit. No excavation due to time constraints.

**Interpretive Summary**

M6-16-Fo10 consisted of a fill layer,) probably the same as the lower fills laid down in M6-13 (Foo9, Fo10, Fo11). Grandiorite chippings overlay a surface, probably to form a subfloor surface for the small room. The upper layers are a consequence of significant disturbance caused by the sebak hin. Further excavation is required both horizontally and vertically to expand on the analysis of this area and it is currently planned for 2015. It does appear as though the disturbed walls in the unit form part of the same structure found in L6-1.

**Harris Matrix**



## M6-17

**Dimensions:** 18.5 x 6m

**Dates of Work:** 24<sup>th</sup> June 2014 – 8<sup>th</sup> July 2014

**Maximum Depth:** Starting Depth: 1.30m ASL: Closing Depth 0.15 ASL (Overall Depth 1.15m =)

**Number of Features:** 2 (Foo1, Foo2)

### Feature Narrative

#### **Foo1:**

Foo1 consisted of a very disturbed context alongside the modern dirt track that runs north-south through the north of the Tell. The feature included a mixture of modern and ancient materials within a dusty soil matrix formed from degraded mud brick. The feature was uniformly distributed to an average depth of 25-30cm deep. Considerable modern materials, including linen, plastic, metal, building material were present. The layer was further disturbed by thick roots of halfa grass. The feature terminated clearly based on compaction and texture. Directly beneath Foo1 was a large mud brick surface made out of dark and light mud bricks. There were a number of different brick sizes and orientation styles. There were also a number of small rectangular rooms. A number of coins were also found in Foo1 including a modern coin dated to 1992 indicating modern feature formation. There were also pieces of grandiorite that match the material used for the large sarcophagus on the opposite site of the road.

#### **Foo2:**

Foo2 consists of a large mud brick structure cut by the M6-1 temple foundations. Visible in Foo2 were multiple rooms, a variety of brick sizes, and perhaps multiple construction phases. Foo2 was not excavated, but was mapped and photographed (Fig. 10). Excavations will continue in this area in 2015.



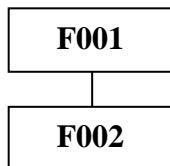
**Fig. 10: M6-17-Foo2**

### Interpretive Summary

A large mud brick structure with multiple small rooms of small size. The baulk shows that the rooms are filled with a limestone chipping fill, while under that fill is a mud fill. These fills have not been excavated yet due to time constraints. This structure like the mud brick structure in M6-15 has been cut through by the limestone temple foundations which in turn has destroyed large parts of the structure exposing the fill layer in the small rooms. This was later further destroyed by sebakhin digging and the construction of the road has caused extensive damage to the structure. This was later

covered over by modern rubbish. The structure based on proximity, ASL level, brick orientation, size and construction method appears to be continuous with the large expanse of mud brick in M6-10, M6-13, M6-9 and L6-2.

#### Harris Matrix



## L6-2

**Dimensions:** 2x10m

**Dates of Work:** 10<sup>th</sup> June 2014 – 8<sup>th</sup> July 2014

**Maximum Depth:** Starting Depth: 1.31m ASL: Closing Depth 0.99m ASL (Overall Depth = 0.32cm)

**Number of Features:** 2 (F001,F002)

#### Feature Narrative:

##### F001:

F001 consisted of a very disturbed surface context that included a mixture of modern and ancient materials within a dusty soil matrix formed from degraded mud brick. The feature was distributed uniformly across the unit to an average depth of approximately 25-32cm deep. The deposit was deeper in the western limits steady gradient rising to the west. Considerable modern materials, including linen, plastic, metal, building material were present. The layer was further disturbed by thick roots of halfa grass. Some heavily degraded salt encrusted ceramics of ancient appearance were found, but none of these were diagnostic. The feature terminated clearly based on compaction and texture because directly beneath the mud brick degradation layer was a large mud brick surface made out of dark and light mud bricks. Feature 1 represented the degradation of the subsequent mud brick surface and the effects of modern dumping in the area and the disturbance of modern halfa grass. The feature terminated clearly based on compaction and texture. Directly beneath F001 was a large mud brick surface made out of dark and light mud bricks.

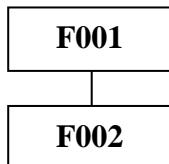
##### F002:

F002 consisted of a surface of light and dark mud bricks orientated in an east-west direction that ran across the entire unit. A brick size of 40x20 cm was consistent throughout the unit. The height of the bricks was not observed because the excavation did not continue beyond F002 (however based on other brick sizes in the immediate vicinity it is likely that the heights were about 15 cm). The bricks were mapped and photographed and the unit is [planned for further excavation in 2015].

#### Interpretive Summary

L6-2A 10 x 2 sqm surface of mud brick that relates to the same phase of mud brick surfaces in the upper levels of the north-west area.

#### Harris Matrix



## O5-13, The Far North

### **Introduction:**

Unit O5-13 was a 5x5 m trench located on the northern end of the SCA salvage area (Figure 11). The main aim for this trench upon examining the surrounding units was to pin down a possible stratigraphic context for this area as well as to learn more about the northern part of this industrial area.

**Area Supervisor:** Courtney Bobik, University College of London

### **Archaeological Team:**

Kelsey Baker

**Dimensions:** 5 x 5 m

**Dates of Work:** 24th June 2014 – 8th July 2014

**Maximum Depth:** Starting Elevation: -0.09m ASL. Closing Depth -1.07 ASL (Overall Depth 0.98 m)

**Number of Features:** 21

### **Feature Narrative:**

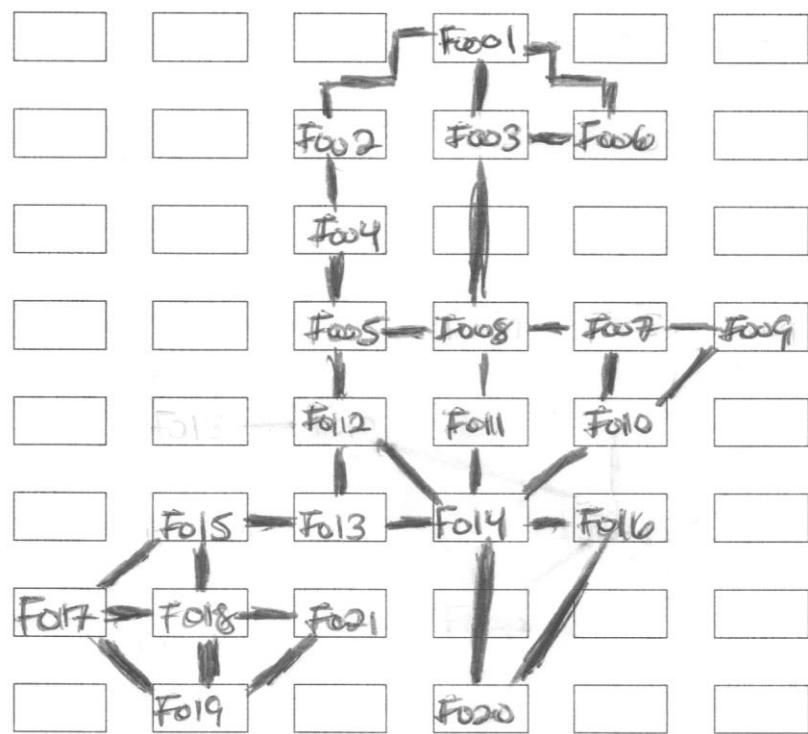
The trench contained 21 stratigraphic features, ranging from soil changes to architecture. For instance, the architectural features included Feature 013, which was a mudbrick wall and Feature 021, which was the remains of a plaster floor under Feature 013.

What appeared to be a ceramic oven with limestones stacked on top of it was found in the northern baulk of the unit. Also, a faience shabti (SCA 176) was found in the NE corner of the unit. A number of coins were found within the NE section of the unit, one of which could be conserved (SCA 171). There was a large charcoal and ash layer located in the NE corner of the unit. This layer extended to the wall, though there was no sign of burn residue or charcoal on the wall. Toward the bottom of the unit a bronze Osiris amulet (SCA 175) was recovered.



**Figure 11: Unit 05-13.**

**Harris Matrix:**

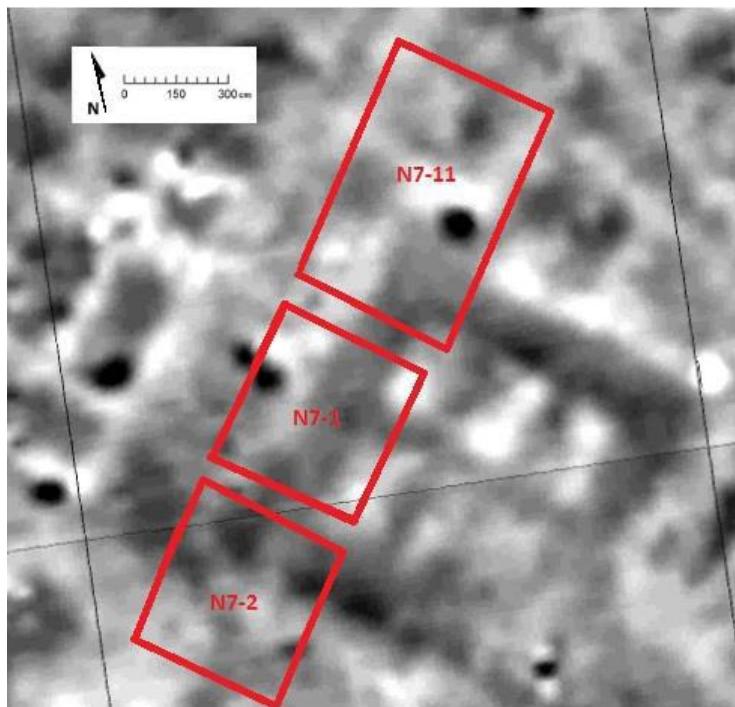


## N7-11 Area

### Introduction:

#### Introduction

Unit N7-11 was opened in the north of Tell Timai in order to further investigate a structure discovered during the 2010 excavation season. The structure was initially excavated based on the 2010 magnetometry survey of the area, which tentatively identified the foundations of a number of structures. Of these structures, one has been interpreted as a casemate, or a mudbrick foundation platform for a large building. Unit N7-11 was placed to the north of N7-1 and N7-2, excavated in 2010, in order to investigate the northwest corner of the casemate which appears in the magnetometry results, as well as an anomaly in the survey results assumed to be some kind of concentration of ceramics or fired bricks (Fig 12). The east of the structure has been excavated by the Supreme Council of Antiquities.



**Figure 12. Magnetometry survey results with excavation units indicated.**

**Area Supervisor:** Liesel Gentelli, University Western Australian

#### Archaeological Team:

Nora Shawki  
Chad Hui-Peterson  
Nurul Karim  
Emma Renly

**Dimensions:** 5 x 8 m

**Dates of Work:** 11th June 2014 – 6th July 2014

**Maximum Depth:** Starting Elevation: -0.09m ASL. Closing Depth -1.41 ASL (Overall Depth 0.98 m)

**Number of Features:** 33

#### Unit N7-11

Unit N7-11 was placed to the north of unit N7-1 in order to continue investigation of a structure excavated in that unit, with a one metre baulk between the two units. Excavation of N7-11 took three weeks and four days, with the unit opened on the 11th of June, and closed on the 6th of July, 2014. The unit was subsequently backfilled, with a layer of tarpaulin between exposed walls and the backfill to help facilitate future investigation. The maximum depth reached in the unit was 1.41m below sea level, a total excavated depth of 1.14m. At this point the water table forced excavation to cease. Unit N7-11 was excavated in 33 stratigraphic features, most of which have been tentatively dated to the

Ptolemaic period. However, without expert analysis of ceramics, none of the layers can be confidently dated at present, as no securely dateable artefacts were excavated. Analysis is anticipated to be completed next field season.

## Feature Narrative

### Feature 001:

Feature 001 consisted of surface cleaning material from highly disturbed context including a mix of modern and ancient materials, as well as 5-10cm of spoil from previous seasons' excavation, loosely situated within the silty soil matrix. As a result, no artefacts were retained. Feature 001 extended over the entire unit and was distributed uniformly across the unit to an average depth of 11.4cm. Feature 001 terminated at feature 002 based on the change of soil matrix. This feature represents highly disturbed modern fill.

### Feature 002:

Feature 002 consisted of highly disturbed ancient material with some modern inclusions loosely situated within the silty soil matrix. Feature 002 extended over the entire unit and was distributed uniformly across the unit to an average depth of 5.6cm. Feature 002 terminated based on the exposure of a wall (feature 020) and an installation (feature 003).

### Feature 003:

Feature 003 consisted of a cylindrical ceramic installation inside a cut and is most likely an oven. The oven was bound on three sides by walls (features 020, 023 and 024). It is made of a single, poorly fired, ceramic cylinder which was packed into a cut (feature 004) with ceramic sherds and layers of ash (feature 004 sub-feature 01), burnt clay (feature 004 sub-features 02 and 04) and charcoal (feature 004 sub-feature 03). Some very fragmentary baked bricks were discovered lining the west face of the oven. The interior fill of the oven is feature 003 sub-feature 01. A sample of the cylinder was kept, as well as all of the sherds. Soil samples from the outside and inside of the oven were also taken for archaeobotanical analysis. The oven was mapped using photogrammetry and 3D modelling in various stages of excavation.



**Figure 13. Feature 003, an oven, pre excavation and feature 004, the cut in which the oven is situated. To the right, the oven is indicated in red, with the sherds which are also part of the oven in blue. The green represents the fill of the oven, the yellow is the cut.**

### Feature 003 Sub-Feature 01:

Feature 003 sub-feature 01 was the interior fill of feature 003. This fill was made up of a uniform grey clay. There were no artefacts in this feature, but a sample of the clay was

taken for archaeobotanical analysis. The feature was 42cm in depth, terminating at the bottom of the oven (feature 003), with a small burnt patch at the bottom.

#### **Feature 004:**

Feature 004 is a cut which accommodates the oven (feature 003). There are four sub-features associated with the feature, representing the fill surrounding the oven. Feature 004 has dimensions of 74cm north-south × 57cm east-west × 49cm deep.

#### **Feature 004 Sub-Feature 01:**

Feature 004 sub-feature 01 consisted of a layer of ash fill between the oven (feature 003) and its associated cut (feature 004). This feature was thicker and more prominent to the east of the oven, and is probably the result of dumping ash from inside the oven. Feature 004 sub-feature 01 was an average of 5cm deep.

#### **Feature 004 Sub-Feature 02:**

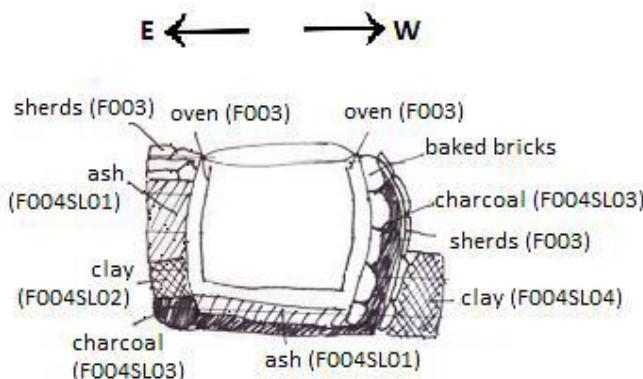
Feature 004 sub-feature 02 consisted of a layer of dark, burnt clay beneath the ash layer (feature 004 sub-feature 01) between the oven (feature 003) and its cut (feature 004). Feature 004 sub-feature 02 was an average of 9cm deep.

#### **Feature 004 Sub-Feature 03:**

Feature 004 sub-feature 03 consisted of a layer of fine, black charcoal underneath the layer of burnt clay (feature 004 sub-feature 02), between the oven (feature 003) and its cut (feature 004). This feature extended out and up to the top of the oven on the west side, making it 36cm deep, but not on the east, where it was 18cm deep.

#### **Feature 004 Sub-Feature 04:**

Feature 004 sub-feature 04 consisted of several small (roughly 1cm thick) layers of alternating ash and clay layers to the west of the oven. The feature is contained between the oven (feature 003) and its cut (feature 004), but only to the west of the oven, on the only side of the oven not bounded by walls.



**Figure 14. A sketch of the oven profile, bisected, facing south, all features labelled**

#### **Feature 005:**

Feature 005 was underneath feature 002 and extended over the whole unit except for the oven and its cut (features 003 and 004) and the highest of the walls (feature 020). It represents a similar fill to features 002 and 006; the only things distinguishing these things were the architectural contents. On either side of the wall, feature 020, feature 005 contained significant amounts of mudbrick collapse, presumably from feature 020. Feature 005 started at the top of a wall (feature

020) and stopped upon the discovery of the top of another wall (feature 021). The feature was uniformly distributed at an average depth of 11.8cm.

**Feature 006:**

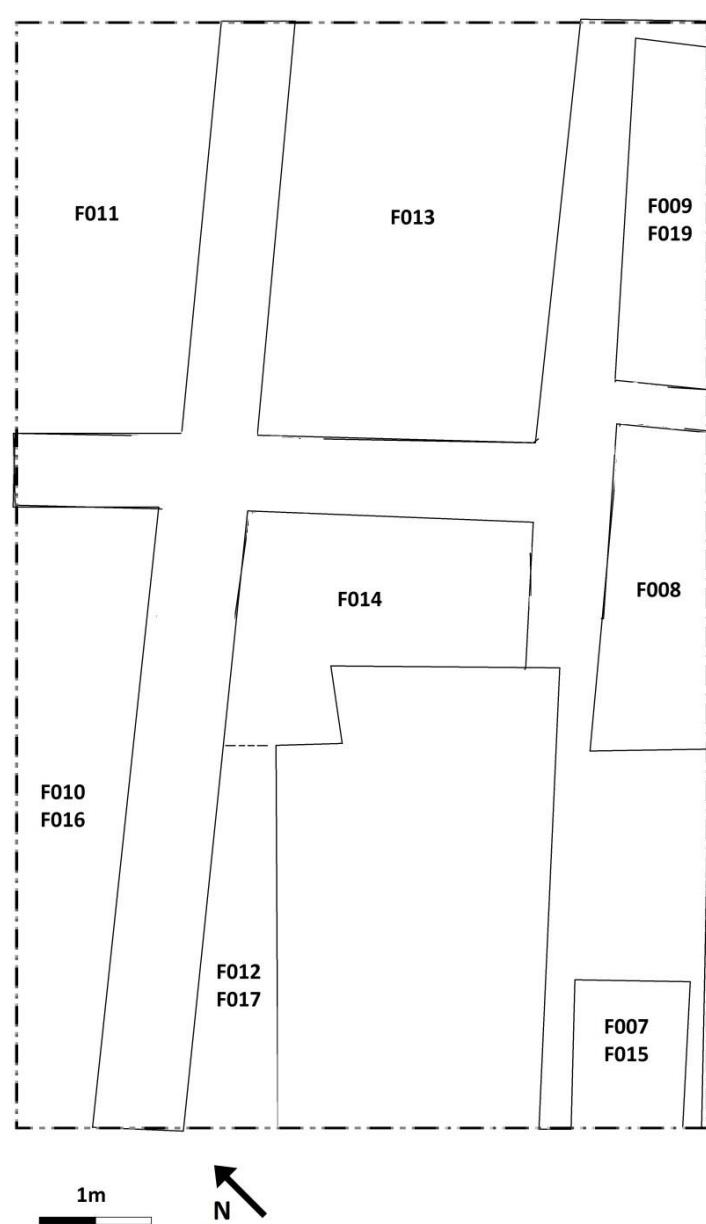
Feature 006 was underneath feature 005, extending to the edges of the unit to the north, northeast, west and southwest, and bounded to the southeast by the oven (features 003 and 004) and two walls (features 020 and 021). Three near whole vessels were found in feature 006, abutting the casemate wall (F020). Feature 006 represents a similar fill to features 002 and 005. Like feature 005, feature 006 started at the same level as the top of a wall (feature 021) and ended at the level of the top of several other walls (features 022 to 026 inclusive).



**Figure 15. Feature 006 near-whole vessels *in situ*.**

**Feature 007:**

Feature 007 consisted of the northernmost casemate chamber of the structure, in the southeast corner of the unit. It was bounded by three walls, features 020, 021 and 027, to the west, north and east of the feature respectively. The feature had very few ceramics and no artefacts apart from one animal bone. It would not be expected to find artefacts in a casemate chamber. The feature was 16cm deep.



**Figure 16.** All features in plan, excluding walls, installations and surface fill.

#### Feature 008:

Feature 008 consisted of a mostly clay fill with a heavy concentration of ceramic sherds. One figurine fragment was found, identified as a naked female torso. The feature was bound on three sides by walls, features 021, 023 and 025, to the south, west and north respectively, and the edge of the unit to the east. The feature was distributed uniformly at 78cm thick, terminating at the water table, with no further excavation possible.



**Figure 17. The figurine fragment found in feature 008, a naked female torso.**

**Feature 009:**

Feature 009 consisted of a mixed domestic fill bounded by three walls (features 023, 025 and 026 to the west, south and north of the feature respectively) and the edge of the unit to the east of the feature. There were abundant ceramic sherds in the feature, as well as shell, bone and stone. A whole vessel was discovered with a possible worked stone, and a smaller, whole ceramic drinking vessel inside it. The feature was ended at the level of the bottom of the whole vessel, at 44cm deep.



**Figure 8. Feature 009 whole vessel with drinking vessel in situ inside it.**

**Feature 010:**

Feature 010 consisted of a mixed domestic fill bounded by two walls (feature 024 to the north and feature 022 to the east) and the edges of the unit to the west and south. The feature contained many ceramic sherds, as well as bone, shell and some faience fragments. A near whole vessel was discovered in the north east of the unit, and was found to be extending into the wall (feature 022). It was decided to excavate the vessel out of the wall, to see if the space was in fact where a door had been. More mudbrick was found beneath where the vessel had been. The feature was terminated at the level of the bottom of the vessel, at 30cm deep.



**Figure 19.– Feature 010 whole vessel in situ. The vessel extended into a wall (feature 022).**

**Feature 011:**

Feature 011 consisted of domestic fill of mostly ceramic sherds and some fragmentary faience, bounded to the north and west by the edges of the unit, and to the east and south by walls (features 022 and 024 respectively). The feature contained four large worked stones, which were left in situ. Of these stones, one was identified as potentially being a small engaged column. Two coins were also found amongst the stones. Both were too heavily corroded to be positively identified, however they have both been identified as Ptolemaic. Excavation in this area of the unit ceased at the level of the bottom of the worked stones, at 25cm deep.



**Figure 20. Feature 011 worked stones in situ, facing south.**

**Feature 012** – Feature 012 was the narrow area between the casemate wall and another wall (features 020 and 022 respectively). It was bounded to the south by the edge of the unit and to the north arbitrarily. The feature consisted of largely domestic fill, ceramic sherds and some shell, bone and faience. The feature was 20cm thick.

**Feature 013** – Feature 013 consisted of domestic fill, ceramic sherds, shell, bone and faience. At what would appear to be a floor surface, a large assemblage of whole ceramic vessels and worked stones was discovered. At least 16 whole or near whole vessels were found. A 3D model of the vessels in situ was made, as well as a georeferenced photogrammetric map of the vessels. The vessels were excavated but the stones left in situ. It is of interest to note that the stones were exclusively at the same level, or beneath the vessels. The stones were tentatively identified as having numerous uses, including a pounder, a step and a small column. Beneath the stones a possible floor was identified, made up of very small, worn ceramic sherds. Excavation in this area ceased at this level, with the feature 32cm deep.



**Figure 21. Feature 013 stones in situ, facing south.**

#### **Feature 014:**

Feature 014 consisted of the fill surrounding the oven (feature 003) and its cut (feature 004). The feature was bounded arbitrarily to the south by feature 012, at the north corner of feature 020, the casemate wall. The only artefacts found in this feature were ceramic sherds. After 10cm, excavation in this area ended upon the discovery of an in situ vessel with a worked stone lid, feature 018. It was assumed that the level of the stone lid was likely a floor level.

#### **Feature 015:**

Feature 015 was beneath feature 007, representing casemate chamber fill. The feature consisted of clay fill, with some ceramics and faience inclusions. The feature was 66cm thick, at which point the water table made further excavation impossible. As with feature 007, it is expected to see few artefacts in the fill of a casemate chamber.

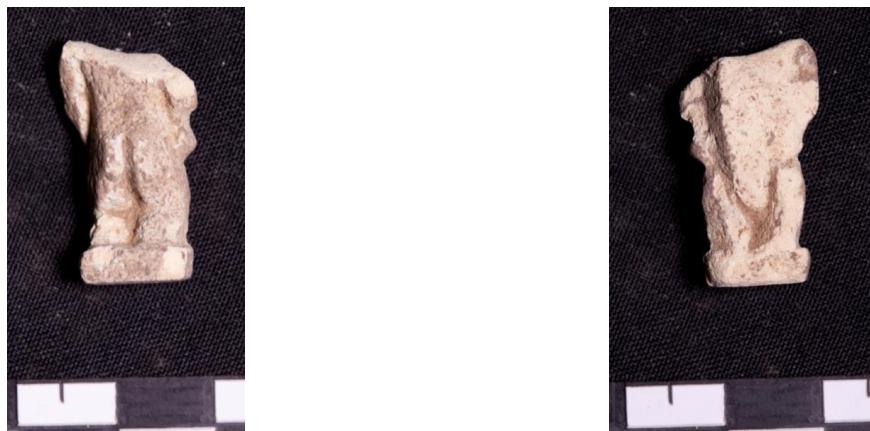
#### **Feature 016:**

Feature 016 was beneath feature 010, in the southwest part of the unit, bounded to the north and east by walls, features 024 and 022 respectively. The feature consisted of a mixed domestic

fill, ceramic sherds, pieces of faience and bone. The feature was 50cm thick, at which point the water table prevented further excavation in that area.

**Feature 017:**

Feature 017 was beneath feature 012, between the casemate (feature 020) and a smaller, earlier wall (feature 022). It would appear that this feature could be combined with feature 014, as the two features probably represent the fill of an area which was later cut by the construction of the casemate. Similarly to feature 014, feature 017 contained fill with ceramic sherd inclusions. Feature 017 also contained some faience, and a figurine fragment identified as the legs and torso of Bes.



**Figure 22. Bes figurine, back and front, from feature 017**

**Feature 018:**

Feature 018 represents a ceramic receptacle dug into the floor of the area which contained the oven (feature 003) and the fill features 012, 014 and 017. The receptacle was covered with a worked stone (fig. 23). Upon further investigation, the receptacle was found to be between 18 and 29cm wide, 23cm deep, with a volume of 18.75L. The whole receptacle was left in situ, samples were taken of the clay inside for further analysis. Excavation in this area ceased at the level of the top of the receptacle, as this level is believed to correspond with a floor level.



**Figure 13. Worked stone receptacle lid *in situ*.**

### **Feature 018 Sub-Feature 01:**

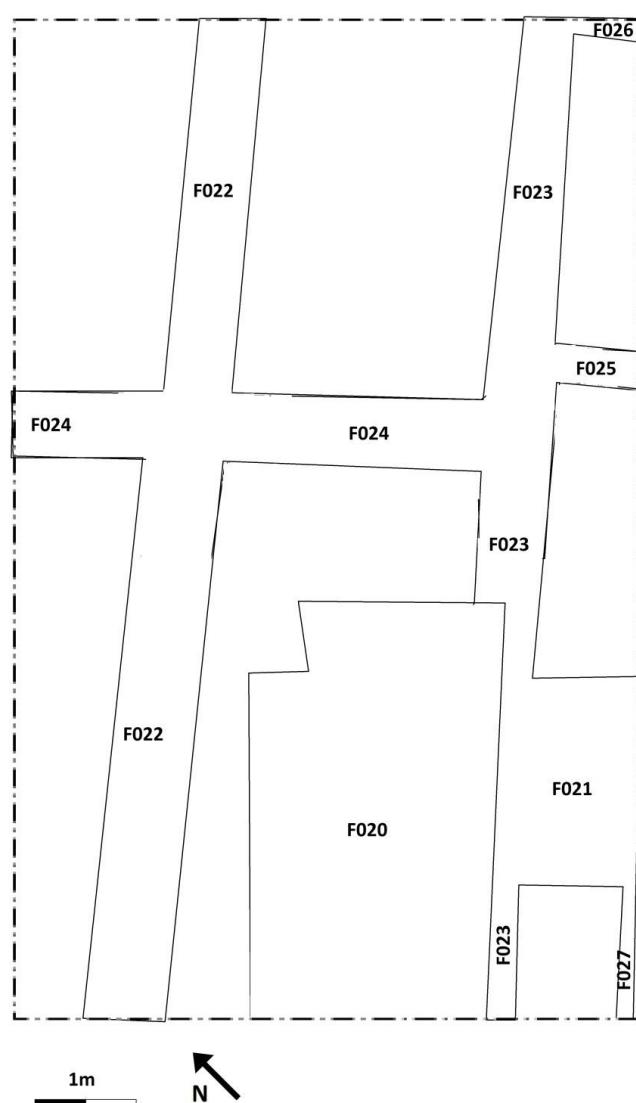
Feature 018 sub-feature 01 consisted of a clay fill inside feature 018, the water receptacle. All of feature 018 sub-feature 01 was retained for archaeobotanic analysis. There were no artefacts in this feature.

### **Feature 019:**

Feature 019 consisted of a mixed domestic fill. The feature was below feature 009, in the northeast of the unit. The top of feature 019 corresponds with the bottom of an in situ vessel in feature 009. The feature contained ceramic sherds, with fragmentary bone and faience. Feature 019 was 39cm deep and ended at the water table.

### **Wall Features:**

Eight mudbrick walls were identified in unit N7-11. These walls are thought to represent two different structures. The earlier structure is made up of six walls, features 022 to 027, while the later structure, a casemate foundation, is thought to be made up of features 020 and 021, which is on top of and cuts into the earlier structure.



**Figure 24. N7-11 walls labelled with feature numbers.**

**Feature 020:**

Feature 020 represents the westernmost external wall of the casemate foundation. It also appeared in unit N7-1 as feature 255, and in unit N7-2 as feature 270. The wall extends 3.22m from the southern edge of the unit, is 1.9m wide and between 33 and 41cm high. The bricks appear to be stacked and are all roughly 36×18×10cm in size. Beneath the casemate wall, a layer of sand was discovered in section (fig 25). This sand layer may have to do with the construction of the casemate. Feature 020 is bonded to the northernmost wall of the casemate structure, feature 021, and is on top of a wall of a previous structure, feature 023.



**Figure 25.** Sand layer (indicated in red), as seen in the baulk (blue) and beneath the casemate wall (yellow).

**Feature 021:**

Feature 021 represents the northernmost wall of the casemate foundation. The wall extends 1.05m from the eastern edge of the unit, is 1.6m wide and between 49 and 61cm high. The bricks appear to be stacked and are all roughly 35×18×7cm in size. Feature 021 is bonded to the westernmost wall of the casemate structure, feature 020, and cuts two walls from an earlier structure, features 023 and 027.

**Feature 022:**

Feature 022 is a wall running roughly northeast-southwest. The wall extends from the south to the north of the unit at 8m long. It is between 46 and 62cm wide and between 22 and 36cm high. The construction style of the wall is unclear, the bricks are relatively uniform at 33×17×9cm in size. Feature 022 is bonded with feature 024.

**Feature 023:**

Feature 023 runs parallel to feature 022, roughly northeast-southwest. The wall extends from the south to the north of the unit at 8m long. It is 38cm wide and between 36 and 40cm high. The bricks are laid header/stretcher and are all roughly 35×20×11cm in size. Feature 023 is bonded with features 026, 025 and 024. The feature is underneath the later casemate foundation, feature 020, and is cut by feature 021, also part of the casemate foundation.

**Feature 024:**

Feature 024 runs roughly northwest-southeast, extending 3.84m from the west side of the unit. The wall is 56cm wide and 42cm high. The bricks are stacked and are relatively uniform at 29×18×16cm in size. Feature 024 is bonded to feature 022 and 023.

**Feature 025:**

Feature 025 runs roughly northwest-southeast, extending 69cm into the unit from the east side. The wall is between 34 and 38cm wide and 33cm high. The bricks are laid header/stretcher and are relatively uniform at 20×15×9cm in size. Feature 025 is bonded to feature 023.

**Feature 026:**

Feature 026 runs roughly northwest-southeast, extending 48cm into the unit from the northeast corner of the unit. The wall is between 21 and 31cm wide and is 54cm high. It is difficult to assess the precise width of the wall as it extends out of the unit to the north. The construction of the wall is header/stretcher, with the bricks relatively uniform at 33×18×19cm in size. This wall is bonded to feature 023.

**Interpretive Summary**

Excavation of N7-11 revealed two distinct structures. Initially, a domestic structure stood on the area, as evidenced by the ceramic assemblage of feature 013, the oven and the water receptacle, followed by a larger, monumental structure built on the remains of the earlier structure, evidenced through the casemate foundation platform excavated.

**Earlier domestic structure**

The extent of this structure is not known, as it extends beyond the bounds of the unit. It has been identified as domestic in nature due to the artefacts found within it. The ceramic assemblage in feature 013 consisted of at least 16 different vessels, domestic in nature. Further functional analysis on the vessels is planned to be undertaken during the 2015 field season. The worked stones discovered in the same area may indicate that stone working happened in the vicinity, particularly as a number of the stones appeared to be unfinished.

The oven in unit N7-11 supports the interpretation of the earlier structure as domestic in nature. It would appear that the oven was in the corner of a room, used from the west side, with the east side, by the walls, being used for dumping excess ash from the cooking process. This is reflected in the vastly different configurations of the sub-features of feature 004 from the east side to the west side of the oven. The oven was constructed as a single, prefabricated vessel, which was dug into a cut and then packed in with ceramic sherds for insulation. The proximity of the walls to the east of the oven evidently made this ceramic sherd packing difficult, as the sherds discovered there were not as uniform or vertically placed as those to the west. This type of oven is consistent with domestic Egyptian bread ovens in the Graeco-Roman period, specifically a Type IIc oven, which consisted of a prefabricated cylinder built into a cut or mudbrick platform (Depraetere 2002). It is also very similar to an oven discovered in unit N7-9, in a structure which would have been next to the one in N7-11, this oven was of similar construction but built into a mudbrick massif (Gentelli 2013). Further functional analysis of the oven is to be performed during the 2015 field season, when archaeobotanical analysis will be

done on the samples retained from inside and outside the oven to give an indication of the foodstuffs which may have been prepared in it.

The abandonment of this structure may have been somewhat sudden, due to the presence of the in situ ceramic assemblage. Similarly, evidence for a sudden abandonment has been discovered elsewhere in the north of the Tell, particularly in the N6 and N7 areas.

#### **Later casemate structure:**

The later structure was a casemate foundation structure built in order to support a larger structure on top of it. It is evident that the structure is a casemate based on its construction. Casemates are generally constructed by initially digging a trench to build the casemate below ground level (Malecka-Drozd 2012, p.74). This is reflected in the cutting of the walls of the earlier structure beneath the casemate. Casemates have also been discovered which utilise walls from previous structures in their construction, at Tell el-Dab'a (Lehmann 2012) and Ashmunein (Spencer 1996, p.215). The casemate structure in unit N7-11 was found to cut through one of the previous structure's walls, but to lie atop of another.

The casemate foundation trench was then filled with sand (Malecka-Drozd 2012, p. 74), in order to support the weight of the structure without the sand shearing or compressing (Pisarczyk 2001, p.16), also assisting the structure's stability during earthquakes (Arnold 1991). Sand would also provide a mythic connection with the primeval mound (Ricke 1935). The casemate structure in N7-11 was found to have been built atop a layer of sand. Within the casemate structure, casemate chambers were often filled with sand, earth or rubble (Malecka-Drozd 2012, p. 70). In N7-11, the casemate chamber excavated proved to have very few artefacts, consistent with the chamber having been filled with earth.

This structure which the casemate supported would likely have had a similar layout to that of the casemate and casemate chambers, as has been found in structures built atop casemate foundations in the Nile Delta (Malecka-Drozd 2012, p.74). Further details on the structure the casemate may have supported are beyond the scope of this report, however by virtue of having been built on a casemate foundation, the structure would certainly have been large, if not monumental in size.

#### **Future Research**

It is recommended to continue excavation of the earlier domestic structure, to the north and west of N7-11. Due to the presence of the in situ ceramic assemblage in N7-11, it would appear that this structure has been abandoned relatively quickly, and so an opportunity to glean much information about daily life in Ptolemaic Thmuis has been presented. A similar situation occurred after the excavation of N6-5, and the complete excavation of that building lead to a much deeper understanding of the area. The building discovered in N7-11 would appear to present a similar opportunity to further understand the area.

#### **Harris Matrix**



## Unit N7-9

### INTRODUCTION:

Unit N7-9 was explored during the 2013 season, while the southeast corner of the building N6-N7 was being excavated. During this project we concentrated on the part outside the building, in the area between the wall of the big building in N-W (F015) and the S-E baulk. This area is interesting in terms of understanding the developments before the big building.

**Area Supervisor:** Giorgio Rea

**Dimensions:** 5 x 8 m

**Dates of Work:** 11 June 2014 – 8 July 2014

**Maximum Depth:** Starting Elevation: -0.63 m ASL. Closing Depth -1.22 ASL (Overall Depth 0.59 m)

**Number of Features:** 13 (Fo27-Fo39)



**Figure 26. N6-N7 Area.**

### N7-9

Unit N7-9 was a 5x8 meter unit but the real area excavated this year is only 6,20x2 meters (South-East part of Unit). The dig started on the 11<sup>th</sup> of June and finished on the 8<sup>th</sup> of July. The maximum depth recorded is - 1.22 (F039 bottom). The numbers featured begin with number 27 (the last number recorded during the 2013 season is F026) and go to F029. There are three phases associated with the unit.

#### Phase 1:

It consisted of a shelter, the principal layer of this phase is F037, which was below the foundation of the Shed. The important features of this phase are F037 S02 and F037 S04 (two hearths). We found whole vessels in a pit and a concentration of potteries (F037 S02 and F028). The vessels in the pit could be related to the preservation of foods. Feature 033 (collapsed wall) could be in the same phase, because this layer was about F039 and with a so deep bottom can be part of the elder wall in the unit.

#### Phase 2:

Consisted of a building, maybe a “shed”. Of this phase were the wall F020, F021 and F026. There's not a really floor, but a sort of rustic soil F029-F032. The absence of a floor suggested that the building is not a house but something like a shed or a working environment. The building is divided into 2 settings by wall F020 and the F028. This shed is probably extended in units N1-7 and N2-7. The walls were cut by the building of phase 1.

### Phase 3:

“The big Hellenistic House” in N6-N7, which was excavated in past seasons.

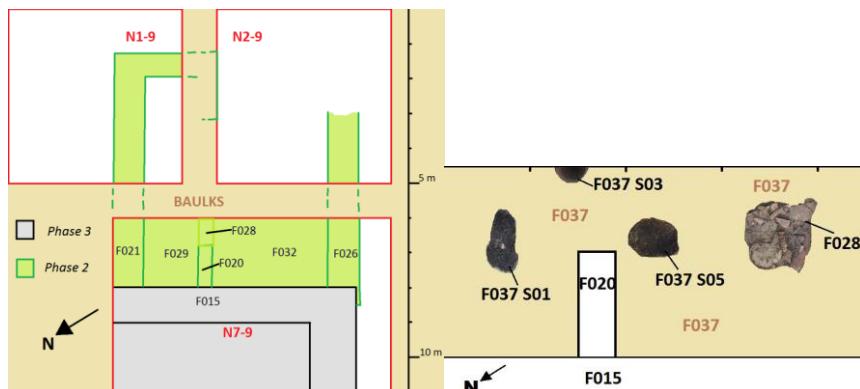


Figure 27. Simplified diagram: on the left Phases 2 and 3; on the right Phase 1.

### FEATURES:

#### F027:

It consisted of a reopened layer. The form is rectangular between the walls F021 and F026 (6.20x2 meter). With a medium depth of 0.04 m. Inside, we found ceramics, little stones and modern materials. The layer consisted in a silty-loam with a hard compaction (color: very dark grayish brown). Feature terminated at Features 028,030,031 and 033 based on the change of soil matrix.

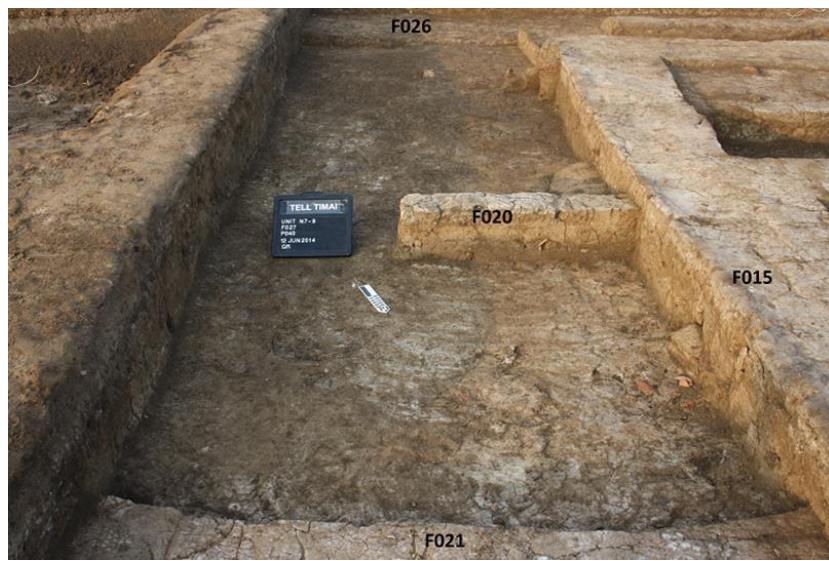


Figure 28. Pre-excavation Picture

#### F028:

It consisted of an unsealed fill below F027, formed by collapsed mud-bricks and a stone hinge-door. It's probably a door passage between the two rooms divided by wall F020 (Phase 2). Feature terminated at Features 029 and 032 based on the change of soil matrix.



Figure 29. Focus of F028

**F029- F032:** They consisted of unsealed fills below F027. At the beginning these layers, which were divided by the wall F020, seemed different, but in studying the baulk matrix I was able to understand which layers were the same. F029 is a little square closed inside the walls F015, F020 and F021. F032 is in the other side respect wall F020. F032 is cut by F030 S01 and F031 S01. The feature is 5.58 m long and 2 m in width. The layer is depth 0.13 m. Feature terminated at Feature 034 based on the change of soil matrix and artifact assemblage.

#### **F030:**

It consisted of a very dark rectangular soil (maybe a wooden decomposed board) which was 0.76 x 0.32 meters in size. It was depth 0.06 meter. It was parallel to wall F016.

#### **F030 S01:**

Cut of F030. The shape is rectangular (0.76 x 0.32 m), with a medium depth of 0.06 meter; the sides are vertical. It was oriented North/East- South/West.

#### **F031:**

It consisted of a fill of a pit (cut F031 S01); that is irregular (1.94x0.83 m), with a medium depth of 0.14 meters. It was possible to understand the limits of the pit because the fill had a great concentration of potteries mixed with a clay-like crushable soil (color: very dark grayish brown).

#### **F031 S01:**

It consisted of a Pit (Cut of F031). The shape is curvilinear (1.94x0.83 m), with a medium depth of 0.14 meters; the sides are rounded.



Figure 30. F031 before and after excavation.

**F033:**

It consisted of a layer (partially excavated) of collapsed mud-bricks, below F027. This Feature is posed on the wall F026 and is very particular because it's more than 0,54 m deep. If the layer is so deep, it could be more ancient (It was depth like F039).

**F034:**

It consisted of an unsealed fill below F029-032. It was a clayey and crushable soil colored dark brown (7.5YR 3/2). The feature is 5.50 m circa long and 2 m in width. We found a coin in the fill (to not possible to read). Feature terminated at Feature 035 based on the change of soil matrix and artifact assemblage.

**F035:**

It consisted in an unsealed fill below 34, about 36. It was a clayey and crushable soil colored very dark grey (7.5YR 3/1). The feature is 5.50 m circa long and 2 m in width. Feature terminated at Feature 035 based on the change of soil matrix and artifact assemblage. We found a piece of a figurine: a little sun disk with a little cobra (maybe a crown of goddess Sekhmet).

**F036:**

It consisted of an unsealed fill below F015 and F034, abut F035; It was possible to distinguish the F035 for its great concentration of ceramics. This layer is under the wall F015 so I thought that the builders of the wall (F035) had used ceramics (rubbish) to make a regular base where they built the wall.

**F037:**

It consisted of an unsealed fill under 35 and 36. The excavated area is rectangular between the walls F021 and F026 (5,50x2 meters), but this layer was more extended (it was below all walls F020, F021 and F015). The maximum depth reported is 0,27 meter. Inside this layer we found ashes, mud-bricks, ceramics and little stones. Feature terminated at Feature 039 based on the change of soil matrix and artifact assemblage. We found a piece of a figurine; this is the face of god Bes (we have the head without the neck).

**F037 S01:**

It consisted of a fill of a hearth (F037 S02). The shape is curvilinear (0,37 x 062m), with a medium depth of 0,06 meters; the sides are rounded.

**F037 S02:**

Hearth or pit filled with ashes (It was filled by F037 S01). The Feature cuts F037. The shape is curvilinear (0,37 x 062m), with a medium depth of 0,06 meters; the sides are rounded.

**F037 S03:**

It consisted of two vessels put in a pit. The upper one is a globular vessel, while the lower one is a whole cut amphora that was wedged with other ceramics.

**F037 S04:**

It was the pit where F037 S03 was put in. It had the same form of the vessels.

**F037 S05:**

It consisted of the fill of an hearth (F037 S06). This is very interesting because around the hearth there was some red soil; so maybe they used some ceramic materials around the hearth to protect the fire from wind.

**F037 S06:**

It consisted in a Hearth (It was filled by F037 S05). The Feature cuts F037. The shape is curvilinear (0.40 x 0.58m), with a medium depth of 0.05 meters; the sides are rounded.



Figure 31. Features of phase 1 (F037 S01, F037 S05, F037 S03).



Figure 32. F038, close-up.

#### F038:

It was a concentration of pottery around a vessel. Very interesting we found in the fill some pieces of amphora (3 different feet). This was a layer of dereliction. This feature was big 0.70x0.60 m and depth 0.15 m.

#### F039:

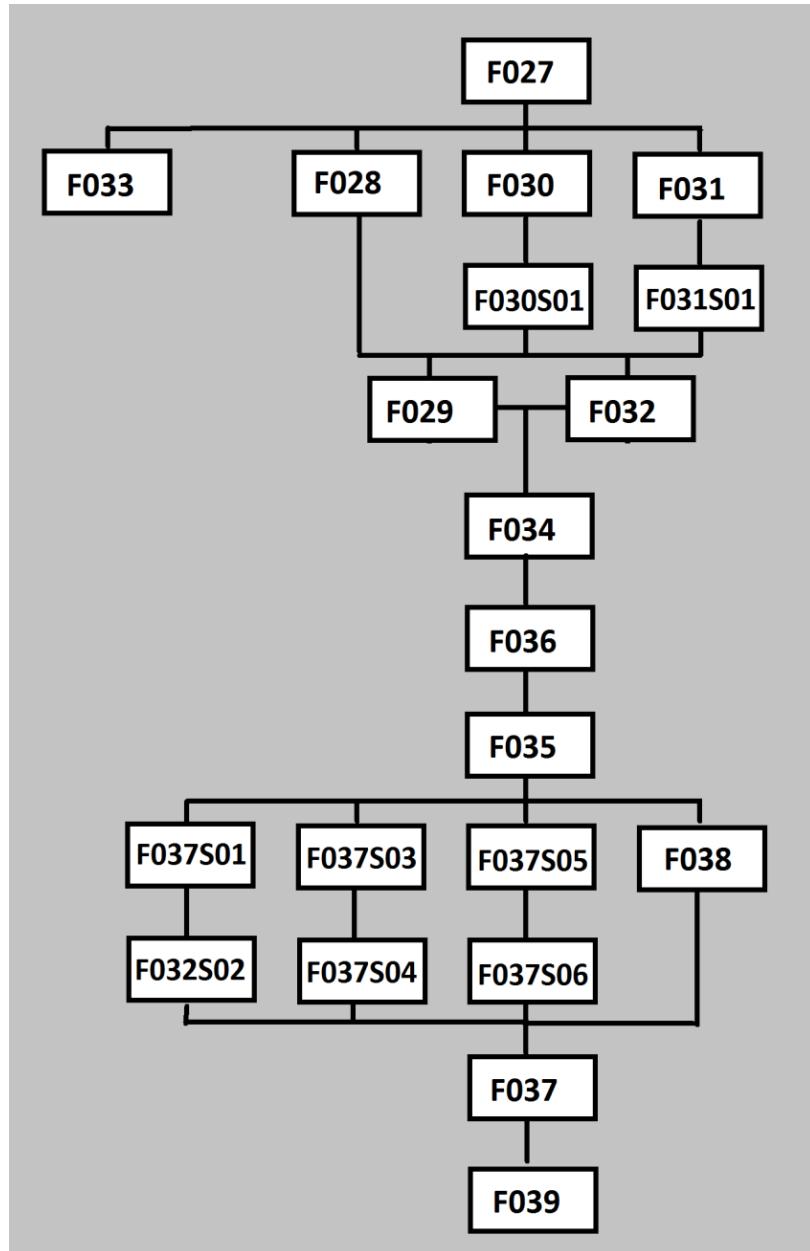
It consisted of an unsealed fill below F037. It was difficult to dig because it was muddy (We were under the water level). The excavated area is rectangular between the walls F021 and F026 (5.50x2 meters), but this layer (like F037) was more extended (it was below all walls F020, F021 and F015. The maximum depth reported is 0.10 meter. We found a piece of a figurine; this is ceramic head, the hair style is datable at the last part of IV century BC.

#### INTERPRETATIVE SUMMARY:

The excavation has proved two previous phases before the Hellenistic Building N6-N7 (Phase 3). The elder one (Phase 2) was characterized by a little building which developed until Units N7-1 and N7-2. Two walls (F021 and F026) are the limits N-E and S-W of the building; between them and parallel them there is a little not complete wall F020, which possibly divided in two rooms the structure. The walls of this building are perpendicular with the structure N6-N7 and they are cut by its wall (F015). Under the first layer (reopened soil F027), there were some particular features; in the southern part between F020 and F026, we found a rubbish hole (F031), a very dark rectangular soil (maybe a wooden decomposed board F030) and a big compact layer of collapsed mud-bricks (F033) abuts the wall F026. It is difficult to understand if the rubbish pit will do before or during the phase 3. In the same line with wall F020 we found a little layer with some partials mud-bricks and a stone hinge door (F028), probably a door passage between the two rooms divided by wall F020. The absence of floors in the deeper layers connotes that the structure is not an habitation, but something like a shed or a working environment. Under these, the matrix is regular under the layer F029-F032, we found the F034, F035, F037 and F039. The soil F037 is under the foundation of F020, F021 and F026, it advanced a phase (Phase 1) precedent the little

building showed 2 hearth (F037 SL01, F037 SL 05) and 2 vessels put in a hole (F037 SL 03). In the same phase we have a ceramics concentration around a vessel (F038); this feature had not a physical contact with the other features, but it was in the same level (it was posed on F037). All ceramics founded are dating at Ptolemaic period, and in particular for the ceramic in the deeper layer (F037,F039), we can date at IV century BC. The dates are not sure because I did yet a precise study about potteries (I hope in the next season). We can just define with Harris Diagram the succession of the features.

#### Harris Matrix:



## **Unit N7-2**

Unit N7-2 is a 5x5 meter unit which lies southwest of unit N7-11, a unit excavated during the 2014 season as well as unit N7-1, excavated in 2010 season. The units to the Northwest of N7-2 were previously excavated in 2013, and are confirmed to be domestic structures based on finds from the units and the magnetometry survey.

Two main objectives were focused on, (1) define the features and stratigraphy of the unit in order to improve on the 2010 documentation, (2) excavate to further understand the wall of the casemate structure in the unit by attempting to excavate past the previous water level mark in the 2010 season. Furthermore, the previous excavation season in 2010 was abruptly halted due to the high water level rising, the 2014 season was reopened based on the theory of a lower water table. The unit was officially opened on June 22, 2014 and closed on June 26, 2014, except for the temporary re-opening on July 5-7, 2014 in order to map the stratigraphy of the unit.

**Area Supervisor:** Nora Shawki, Durham University

**Dimensions:** 5 x 5 m

**Dates of Work:** 22 June 2014 – 7 July 2014

**Maximum Depth:** Starting Elevation: -0.10 m ASL. Closing Depth -1.33 ASL (Overall Depth 1.23 m)

**Number of Features:** 4

### **N7-2**

Unit N7-2 consisted of a 5x5 meter excavation situated directly southwest of units N7-1 and N7-11; also east of N7-9, a domestic structure excavated in 2013/14, based on finds and magnetometer's survey results. The dates of work began June 22, 2014 and the closing of the unit was on June 26, 2014. Temporary reopening of the unit was held from July 5 until 7 in order to map stratigraphy of the unit. The grid corners are, Easting 358281.97 and Northing 3424176.14, with elevation: -0.08. Maximum depth reached was -1.36 meters until water table was reached. In total, four features were distinguished.

### **Feature Narrative: (related images found below)**

#### **Feature 001:**

Consisted of surface cleaning material from highly disturbed context including a mix of modern and ancient materials loosely situated within thick, wet soil. Feature one was distributed uniformly across the unit to an average depth of 20 cm. Feature terminated at Feature 2 based on the wall structure found. This feature represented highly disturbed modern fill. The finds include a mixture of pottery, metal, faience, stone, bone, shell, and slag. The main finds were four figurines (images below), (1) Terracotta Figurine: Unnamed fertility goddess, female body starting from head to pubic region, hair/headdress apparent, with outlining to the body of pubic area; B006, (2) Terracotta Figurine: Partial fragment of arm, with hand pointing downwards, seems to be placed over a knee/leg; B003, (3) Terracotta Figurine: Torso of a figure, possible male due to muscular aspects, neck to thigh; B023, (4) Terracotta Figurine: Phallic figurine, man sitting while holding enlarged phallus between legs. Phallus is broken off; B011. The unnamed fertility goddess (B006) has been dated to Ptolemy 1<sup>st</sup> or 2<sup>nd</sup>, Early Ptolemaic or Late Period, 4<sup>th</sup> to 3<sup>rd</sup> century BC. This makes the finds from unit N7-2 the oldest on site at Tell Timai under Phase I.

#### **Feature 2:**

Consisted of a mud brick wall structure with dimensions of 2.59 x 1.25 meters. The mortar used was mud/clay, mainly Nile Silt with a binder of pottery sherds. The maximum depth of wall which could be excavated was 25 centimeters due to the water table rising, with one row of courses visible.

#### **Feature 3:**

Consisted of analytical material loosely situated within wet soil. Finds consisted of bone, pottery, faience, shell and pottery. Feature terminated at Feature 4 due to high water table rising with an average of 20 cm of water visible in unit.

#### **Feature 4:**

Consisted of analytical material loosely situated within extremely wet soil. Finds consisted of pottery, slag, shell, bone and faience. Feature 4 involved the excavation of half of the unit on the northeast side of the unit in order to avoid deep water level rising quicker on northwest side of unit. Main objective of Feature 4 is to excavate to end of Feature 2 (mudbrick wall structure), and to define all courses. Feature 4 was the final attempt in understanding the wall in unit as water table terminated the excavation in N7-2.

#### **Interpretive Summary:**

A charcoal layer was found in Northwest side of the unit, a large circular outline of charcoal, matching up with the layer found in 2010 season presumed to be from a previous oven excavation. Besides charcoal line, there was a large salt layer about one meter wide in the North corner of the unit, later to be discovered that it was lying directly on top of rising water level in that particular area. To the northeast of the wall, the water level was reached at 1.30 meters, halting feature three. The decision was made to separate the unit in two to avoid the high water table on the Northeast end of the unit. Feature four was then the final feature to be excavated on the Northeast/Southeast end of the unit surrounding the wall, until the water table was hit at 1.33 meters. The rising water level has compromised the unit's dating context, as the water table rises, the finds rise as well and dating is out of context. The baulk being exposed since 2010 has compromised the ability to view the stratigraphy of the unit, the unit had to be exposed for a week following the closing of the unit in order to fully view the individual mudbricks in order to re map the walls of the unit.

The baulk remapping showed the stratigraphy of the unit as well as the mudbrick walls in relation to surrounding units. The wall in N7-2 does *not* line up with the wall in N7-1, unit Northeast to it. The wall in N7-2 is a lower feature, possibly different structure. The wall found in the Northwest/Southwest baulk matched the wall in unit N7-9, also excavated in 2014. The South facing baulk of the unit was filled with mudbrick collapse and no defined features. The East section drawings and Northeast section drawings both include mudbrick walls and collapse not previously documented.

Few archaeological finds were apparent in N7-2, mainly due to the prolonged exposure of the unit since previous excavation in 2010. The rising water table has jeopardized the ability to assign context to many finds, such as figurines, which are an important form of dating the unit. The mixture of ancient and modern finds in Feature 1 are a prominent example of the problems in dating for features near the water table. The most notable finds were the figurines in Feature 1, although they come from mixed context. Preliminary analysis of the pottery of the top layer of the unit and the figurines date this feature to a time period between the Late Period and Ptolemaic, early 4th and 3rd centuries BC.



(1) F001, B006



(2) F001, B003



(3) F001, B023



(4) F001, B011

**Figure 33. Late Period/Early Ptolemaic Figurines.**



**Figure 34. Feature 3, Unit N7-2.**



**Figure 34. Feature 3, Unit N7-2.**

## Q13-1 Area

Dr. Jessica Nitschke

Unit Q13-1 was opened to coordinate excavation with the conservation efforts begun in 2013 for the standing architecture in Street #1 (Figure 10). Structure #1 was defined by four standing/visible walls, with a plan measuring approx. 6 m. x 13.5 m (Figure 11). The desired goals for the season were as follows: obtain the architectural layout of one of the structures on Street 1; confirm the preliminary hypothesis that the standing architecture in the area dates to the Late Roman period; identify and date various building phases; provide samples from various phases of walls for mud brick analysis (cf. conservation report); and identify the latest surviving street level. Due to limited time resources, excavation focused on the interior of the house, although a small part of Street 1 was excavated.

**Area Supervisor:** Dr. Jessica Nitschke

**Archaeologists:**

Isabell Heblisch

Lori Lawson

Sarah Hitchens

**Dimensions:** 5 x 5 m

**Dates of Work:** 22 June 2014 – 7 July 2014

**Maximum Depth:** Starting Elevation: 7.09 m ASL. Closing Depth 4.31 ASL (Overall Depth 2.78 m)

**Number of Features:** 4

Topsoil started at an elevation of +7.09m above sea level and the lowest point of excavation was +4.31 m in the west part of the house and +4.43 in the east part. Excavations revealed several building phases and several phases of rebuilding and modification of the structure.

The earliest revealed phase may date as early as Late Ptolemaic, but more likely early Roman (pending analysis of the ceramics). The plan of this earlier phase is especially clear in the west of the unit, where a room and a corridor are clearly identifiable. A coin found in wall F020 in the eastern part of the unit shows that the latest surviving walls in the unit (found in the eastern part of the unit) are no earlier than Hadrianic (SCA 173).

A post-occupational dump filled approx. 2 m. of the western room and 1.5 - 2.5 meters of the eastern half of the house. In this part of the unit, this post-occupational fill cut out a huge chunk of the architecture, erasing many relations - hence the stepped/sloping appearance of the architecture in that part of the unit. The extent of this post-occupation debris is evident in the southeast section. The artifacts from this dump/fill were mixed, including ceramics dating from the Hellenistic until the Late Roman and perhaps Islamic period. Various artifacts including SCA 174, 179, 180, and 182 came from this mixed fill.

Finally, we started excavating a 1.5m wide swathe of Street 1 outside the western face of the structure, going down about one meter. No street level was identified. The construction and alignment of the lower walls suggests that the older building plan may have extended beyond the limits of the four exterior walls identified in the visible standing architecture.



**Figure 10. Unit Q13-1 and the adjacent street prior to excavation.**



**Figure 11. The west (left) and east (right) rooms of Unit Q13-1.**

## Conservation

Marta Lorenzon, University Edinburgh

Objectives for conservation during the 2014 season at Tell Timai focused on recording and repairing the vandalism that occurred to previously conserved walls. Mudbrick restorations made during the 2013 season in Grids Q13 and L14 had been damaged and pulled down by vandals destroying part of previously reconstructed walls (Figures 12-14). According to the police the individuals responsible for the damage to the site had been arrested. Additional vandalism occurred at the north temple in Grid M6. An analysis of mudbrick clay/silt/sand ratios was also made to ensure accuracy of bricks made for conservation purposes.



**Figure 12. The destroyed 2013 restoration in Unit Q13-1.**



**Figure 13. Unit Q13-1 after repair and conservation of the damage.**



**Figure 14. Unit L14 after conservation.**

## Archaeobotanical Analysis

Dr. Claire Malleson

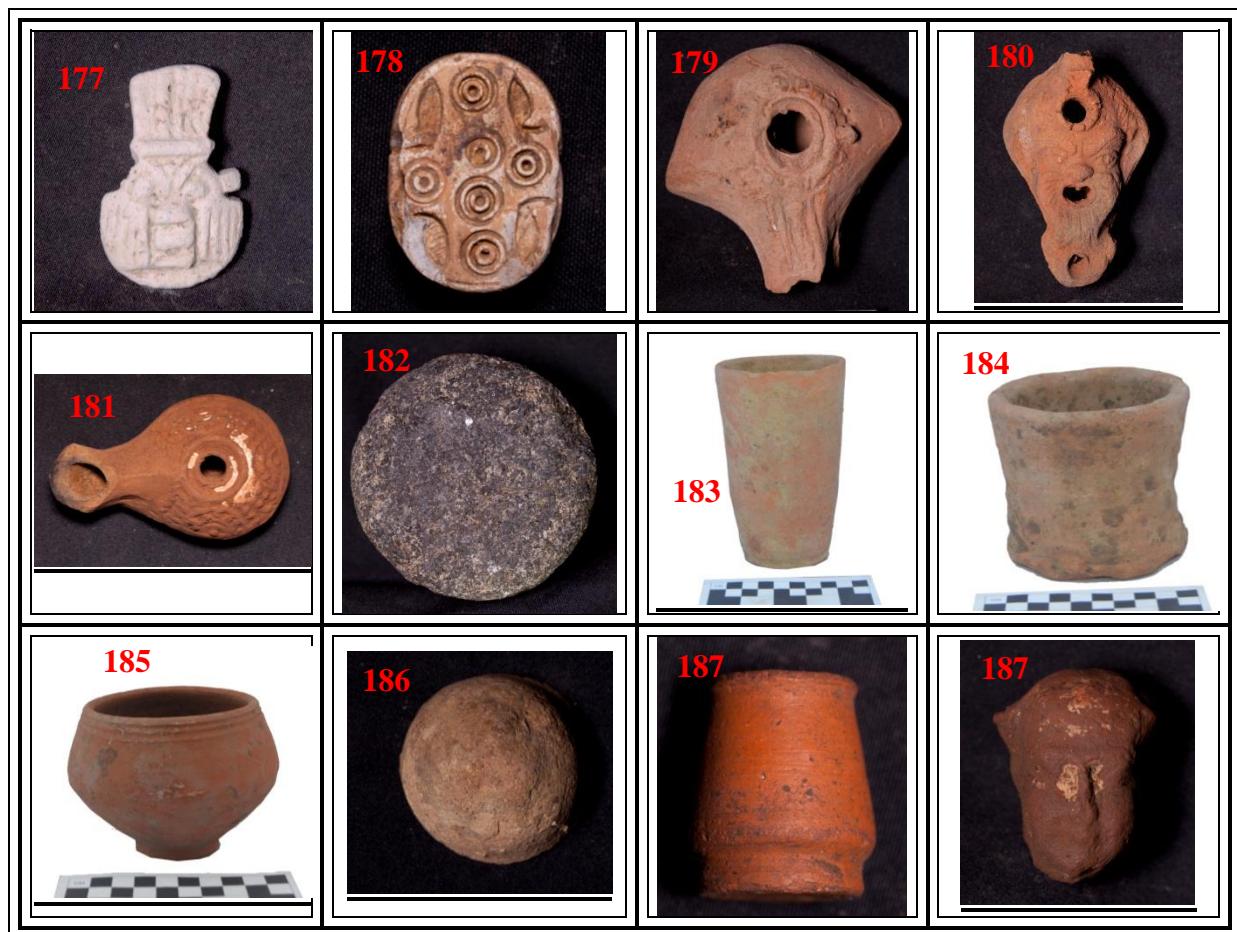
During the 2014 season at Tell Timai, archaeobotanical analyses were conducted on 105 samples taken during excavations in 2009, 2010, 2011, 2012, 2013 and 2014. All samples were processed via the bucket flotation method to recover charred plant remains. The most ubiquitous plant item in the assemblage was hard ‘spikelet’ fork of glume wheat chaff – most likely Emmer wheat (*Triticum dicoccum*). A few samples contained chaff of free threshing wheat (Bread wheat – *Triticum aestivum/durum*). A small number of samples contained cereal grains, the majority of which appear most like emmer wheat, with just a few example of bread wheat and a small number of barley (*Hordeum vulgare*) grains. The overwhelming majority of these grains were in very poor condition, very vesicular and distorted. Other plant types present in the samples include fruits (Common fig (*Ficus cf. carica*) and Grape (*Vitis cf. vinifera*)), pulses (possible Faba bean (*Vicia cf. faba*) and lentils (*Lens sp.*)), and probable cereal crop weeds (Rushes (*Eleocharis sp.*), Clover (Trifolieae tribe), Mallow family (Malvaceae) and Dock/sorrel (*Rumex sp.*)). All these plants were common in Egypt throughout antiquity.

**TELL TIMAI SUMMER 2014**  
**CATALOGUE OF FINDS FOR SCA**

<b>SCA#</b>	<b>Material</b>	<b>Provenience</b>	<b>Description</b>	<b>Dimensions</b>	<b>Period</b>	<b>Condition</b>
161	Coin	N6-10-F10-B53	Bronze, Svornos 442	16.9mm, 3.2g	Ptolemy II	Excellent
162	Coin	R17-1-F19-B353	Billon Tetradrachm,	25.0mm, 9.7g	Roman, Hadrian, 129 A.D.	Good
163	Coin	R17-1-F17-B319	Billon Tetradrachm,	23.9mm, 10.9g	Roman, Hadrian, 127 A.D.?	Good
164	Coin	R17-1-F12-B253	Bronze Diobol	18.0mm, 3.8g	Roman, Vespasian, c.72 A.D.	Good
165	Coin	R17-1-F19-B359	Bronze Hemiobol	18.9mm, 5.0g	Roman, Hadrian, 126/7 AD	Good
166	Coin	R17-1-F19-B366	Bronze, AE19 Obol, Modius	18.8mm, 4.0g	Roman, Hadrian	Good
167	Coin	R17-1-F19-B362	Bronze Drachm, Tyche in Temple	32.3mm, 20.3g	Roman, 2 <sup>nd</sup> Century AD	Good
168	Coin	R17-1-F21-B382	Bronze Drachm Nilus	34.0mm, 21.0g	Roman, Antoninus Pius, c.150 A.D.	Fair
169	Coin	R17-1-F19-B363	Bronze Drachm Egyptian Temple Pylons and gate	32.1mm, 21.1g	Roman, Antoninus Pius? Temple Pylons	Fair
170	Coin	R18-1-F19-SF12-B489	Bronze	17.6mm, 1.6g	Late Roman, 4 <sup>th</sup> C. A.D., Possibly Constantine I	Fair
171	Coin	O5-13-F14-B116	Bronze	38.8x9.9mm, 47.2g	Early Ptolemaic	Fair
172	Coin	Q13-1-F18-B129	AE 24 Diobol Hippopotamus	24.8x4.1mm, 10.0g	Roman, Claudius, c.42-43 A.D.	Very Good
173	Coin	Q13-1-F20-B300	AE Hemidrachm Euthenia, LΔwΔEK	29.6x8.0mm, 17.7g	Hadrian, c.127/8 A.D.?	Good
174	Coin	Q13-1-F6-B48	AE Drachm Euthenia	33.7x4.6mm, 16.4g	Roman, 2 <sup>nd</sup> c. A.D.	Very Good
175	Bronze	O5-13-F19-B139	Osiris Amulet	13.1g, 50.6mm	Ptolemaic/Late Period	Complete
176	Faience	O5-13-F5-B068	Shabti	68.4x20.5mm, 20.3g	Ptolemaic	Complete
177	Faience	M6-13-F10-B28	Bes Amulet	48.4mm, 14.8g	Ptolemaic	Complete
178	Faience	N7-6-F999 – B11	Scarab	26.5x19.1x11.8mm, 8.4g	2 <sup>nd</sup> Int/New Kingdom	Complete
179	Ceramic	Q13-1-F1-B7	Lamp	61.3x60.0mm, 45.2g	Roman	Near complete
180	Ceramic	Q13-1-F1-B19	Silenus Lamp	63.2x40.9x35.933.0g	Roman	Near Complete
181	Ceramic	Q13-1-F49-B400	Lamp	81.2x49.7x31.6mm, 52.9g	Roman	Complete
182	Stone	Q13-1-F6-B41	Polishing	53.3x35.2mm, 19.1g, 139.3g	Roman	Complete

183	Ceramic	N7-11-F9 – B42	Drinking cup	135x85mm, 277g	Ptolemaic	Complete
184	Ceramic	Q13-1-F31- B180a	cup	96x84mm, 490g	Roman	Complete
185	Ceramic	Q13-1-F31- B180b	Bowl	89x78mm, 223g	Roman	Complete
186	Ceramic	Q13-1-F6- B280	Gaming Piece	22.232.5mm, 19.2g	Roman?	Complete
187	Ceramic	N7-9-F37- B182	Kohl pot	22.8mm, 6.8g	Ptolemaic context	Complete
188	Terra Cotta	N7-9-F39- B192	Figurine, Head of Harpocrates	38x28 mm	Ptolemaic	Not complete





## References

- ARNOLD, D. 1991. *Building in Egypt. Pharaonic Stone Masonry*, Oxford, Oxford University Press.
- DEPRAETERE, D. D. E. 2002. A Comparative Study on the Construction and the Use of the Domestic Bread Oven in Egypt during the Graeco-Roman and Late Antique/Early Byzantine Period. *Mitteilungen des Deutschen Archäologischen Instituts Abteilung Kairo*, 58, 119-156.
- GENTELLI, L. 2013. Tell Timai 2013 Unit N7-9 Unit Report.
- LEHMANN, M. 2012. Towerhouses in Tell el-Dab'a. The Late and Ptolemaic Period. *Les maisons-tours en Égypte durant la Basse-époque, les périodes ptolémaïque et romaine*. Paris.
- MALECKA-DROZD, N. 2012. The Emergence and Development of Architecture on the Casemate Foundation Platforms in the Nile Delta. *Recherches Archéologiques*, Nouvelle Series 4, 69-96.
- PISARCZYK, S. 2001. *Gruntoznastwo Inżynierskie*, Warsaw, Wydawnictwo Naukowe.
- RICKE, H. 1935. Der Hohe Sand in Heliopolis. *Zeitschrift für Ägyptische Sprache und Altertumskunde*, 71, 107-111.
- SPENCER, A. J. 1996. Houses of the Third Intermediate Period at el-Ashmunein. In: BIETAK, M. (ed.) *Haus und Palast im Alten Agypten*. Vienna: Austrian Academy of Sciences.