# Bayt Sheikh Suhail bin Hamdan al-Sharqi, al-Fara', Fujairah, United Arab Emirates: An ethnoarchaeological study (1). 

Michele C. Ziolkowski \& Abdullah Suhail al-Sharqi<br>PO Box 432, Fujairah, United Arab Emirates.<br>Michele C. Ziolkowski,<br>PO Box 432, Fujairah, United Arab Emirates.<br>e-mail: mcz_ski@hotmail.com

## Introduction

Archaeologists visiting abandoned houses and settlements in western Asia, either consciously or unconsciously, often make comparisons with the type of architecture they encounter in excavation. Here we offer a study of one such compound which, with the aid of local informants, we are able to analyse and present with the sort of functional explanations which often remain only hypothetical for archaeologists. This article is based on an ethnoarchaeological study of a late Islamic period compound. Ethnographic information has long been used by researchers in order to have a better understanding of the various cultures or groups of people. For the archaeologist, ethnoarchaeology is the ethnographic study of living cultures from archaeological perspectives (2).

The recognition of a need for ethnographic material on which to base analogies gave rise to the sub-discipline, ethnoarchaeology (3). In other words, ethnoarchaeology developed in order to provide better ethnographic analogies to assist in the interpretation of archaeological data (4). 'Ethnoarchaeology is neither a theory nor a method, but a research strategy embodying a range of approaches
to understanding the relationships of material culture to culture as a whole, both in the living context as it enters the archaeological record, and to exploiting such understandings in order to inform archaeological concepts and to improve interpretation' (5). Importantly, the subject and source cultures should be similar in regard to variables likely to have affected or influenced the materials, behaviours, states, or processes being compared (6). Ethnographic field research relies on interviews, observation and interaction, and it also involves intimate and prolonged association with the people being studied (7).

The focus of this article is one of the former houses of Sheikh Suhail bin Hamdan al-Sharqi (Fig. 1). The study of this house is based on ethnographic and archaeological information. Ethnographic data was recorded during a series of interviews with former inhabitants of the house. These interviews were conducted between January 20th and May 5th 2003. The information gathered from these interviews consists of historical, descriptive and anecdotal details. The archaeological component of this study encompasses architectural design, construction details and material finds (including ceramics and

## M.C. ZIOLKOWSKI AND A.S. AL-SHARQI



Fig. 1.
Majlis 3 in the foreground with the main house in the background, facing northwest.
various objects). The associated settlement is not part of the main study at al-Fara'; however, it will be briefly reviewed in order to contextualise the main house.

## Location and environment

GPS (Datum WGS 84):
N $25^{\circ} 8^{\prime} 17.3^{\prime \prime}$
E $56^{\circ} 14^{\prime} 7.0^{\prime \prime}$
The site is located in the emirate of Fujairah, which is situated on the east coast of the United Arab Emirates (U.A.E.). The house is located in the southern mountains of Fujairah at al-Fara', near the entrance to the Wadi Furfar (Wād̄̄ al-Furfār) (Figs 2 and 3). The terrain consists of mountains, ridges, terraces and wadis. Zizyphus spina-christi (Ar. sidr), Acacia tortilis (Ar. samr) and Euphorbia larica (Ar. 'usbuq) constitute the majority of natural flora noted at the site (8). The present-day village of Gizemri is located on the eastern side of the wād $\overline{\text { }}$. The main/old house of Sheikh Suhail bin Hamdan is situated on a prominent rise overlooking the plain and the wād̄̀ bed (Fig. 4). Located on the plain below the main house to the northeast are a camel racetrack and terraced fields once used
for the cultivation of tobacco. Directly in front of the main house (east-southeast) are the remains of various rock-built enclosures related to the main house, and the more recent house of Sheikh Suhail built during the 1960s. East, south, southwest and west of the main house are the remains of the associated settlement. The date-palm gardens are situated southeast of the main house. Located at the southeastern end of the plain, is a dirt track over the mountains leading to Fujairah, also established by Sheikh Suhail.

## Construction materials and methods (archaeological and ethnographic information)

According to local sources, the main house was constructed around 1950. Bin Shimal, a local family living in Kalba and Fujairah, constructed houses in the area, including the house at al-Fara' (9). Prior to the construction of Sheikh Suhail's house at al-Fara' he resided in a couple of khaymah type houses located beside the fortified courtyard house of his brother, Sheikh Abdullah bin Hamdan al-Sharqi, in the Wadi al-Hayl (Wād̄̄ al-Hayl) (Fig. 5) (10). Interestingly, the fortified courtyard house at al-Hayl was also built by the Bin Shimal family (Fig. 6).


Fig. 2.
Map of the east coast.

The gabbro/dolerite rocks used in the construction of the main house at al-Fara' were all locally sourced. Sarūj noted on the buildings at the site was made locally in the following manner: soil with gravel inclusions was collected from the wād $\bar{d}$, sieved, mixed with water and formed into small mounds. These mounds were then sundried, baked, crushed, mixed with water again to form a paste, and applied to the buildings. A softer, less substantial type of șarūj was also used, which resembled mud plaster. The sun-dried mudbricks were made in Fujairah and brought up to al-Fara' for use. The gypsum was presumably imported from Iran. Mangrove (Avicennia marina) poles used in the construction were probably traded from East Africa (11) and, quite likely, locally sourced from the Khor Kalba area. Use of the date palm (Phoenix dactylifera) should not be understated, for much of the construction at al-Fara' consisted of this important material. Lastly, cement was also used in the construction of certain buildings at al-Fara'.

## The main courtyard wall

The main courtyard wall is roughly square in shape (Table 1) (Fig. 7). It was built with tightly packed mountain rocks, some of which were laid out in a herringbone pattern. The rocks were bound with a soft mud mortar and rubble mix. Various plaster fragments are visible on both the interior and exterior faces of the wall. These include sarū $\bar{j}$ (12), lime and sand and cement and sand. Eleven rooms/ features are contained within the courtyard and seven of these are attached to the wall. The four khaymah type houses were not attached to the courtyard wall, in order to allow for the overhang of the roofing materials. The original main entrance door for the courtyard is present at the site but is no longer in situ (Fig. 8). It once comprised a set of large double wooden doors. When these doors were in situ, the door on the right (upon entering) contained a smaller arch-shaped entrance within it. A complete measurement of this door is unobtainable because of its incomplete state. The height of the main door is around 2.33 m and the height of the smaller arched door within the main door is 1 m . According to local sources, the main entrance was large enough for a camel laden with goods to pass through into the courtyard.


Fig. 3.
Khaymah B in the foreground and Wadi Furfar in the background, facing west-northwest.


Fig. 4.
General view of the main house, facing east-northeast.

The main courtyard wall was originally level with the top of the first storey on the courtyard watchtower, which would have made the original wall
height about 2.65 m . During the summer months it was common for people to sleep out in the courtyard space. People would either have slept on the ground


Fig. 5.
Sheikh Suhail's khaymah type houses in the foreground at Wadi al-Hayl.
or on specially constructed sleeping platforms known as $\operatorname{sim}$ in Arabic. These sleeping platforms were constructed with wood, creating a frame with crossbeams. The top of the platform was then covered with bound date-palm branches. During the mornings, the women of al-Fara' would sit on the west-northwest face of the tower, in the shade, and in the afternoon they would gather in front of the main room. After al-'ashā' prayer in the evening, the people of al-Fara' would come to visit and congregate in the courtyard of the main house.

The khaymah type houses located within the compound: Khaymah A, the kitchen (Fig. 9)
The khaymah type houses located within the main courtyard are all semi-subterranean. These were constructed with mountain rocks bound with a soft mud mortar and rubble mix. They once contained pitched roofs built with wooden poles for support and bound date-palm branches (Fig. 10). The interior and exterior wall surfaces were once plastered. Traces of sarūj are still visible on the interior and exterior walls. Traces of a lime and sand plus cement-based plaster are also visible on the walls of the kitchen. Originally, both the interior and exterior walls of all the khaymah type houses
contained a layer of $s a r \bar{u} j /$ mud plaster. The interior walls were also covered with a second layer of fine gypsum plaster. The area between khaymah A (the kitchen) and the main courtyard wall had been built up with a mixture of dirt and rubble (Table 2). Coffee and tea were made just inside the entrance on the right-hand side of the kitchen. The cooking was done along the left wall of the room, upon entering into the space. Mountain rocks were set in groups of three with a fire in between and cooking pots placed on top. This type of set-up is known as tarāk $\bar{b} b$ in Arabic. Wood for the fire and dried 'usbuq (Fig. 11) used for starting the fire, were stored along the opposite wall. During the hot summer months much of the cooking took place just outside the kitchen under the shelter of a shade roof made from wooden poles and bound date-palm branches, known as sablah in Arabic. This provided the necessary shade and air flow.

## Khaymah B (Fig. 3)

Khaymah B contains three interior, recessed wall niches (Table 3). The niche along the rear wall has a rock lintel and measures $\mathrm{L} \times \mathrm{W} \times$ Depth $17 \times 13$ $\times 20 \mathrm{~cm}$. The two niches located along the side wall contain wooden lintels, and these measure $40 \times 20$


Fig. 6.
Bayt Sheikh Abdullah bin Hamdan al-Sharqi, Wadi al-Hayl.

Table 1. Main courtyard wall.

| Main compound wall | Dimensions in metres |
| :--- | :--- |
| Max height remaining | 1.9 |
| Original height | c. 2.65 |
| Wall width | $0.60-0.70-0.80$ |
| $\mathrm{~L} \times \mathrm{W}$ | $33.5 \times 31$ |
| Front entrance | 1 |
| Back entrance | 0.90 |

$\times ?$ and $40 \times 25 \times ? \mathrm{~cm}$ (13). The interior of khaymah $B$ contains remnants of roofing material, including a wooden beam and date-palm branches. Khaymah B also contains patches of $\operatorname{sar} \bar{u} j$ plaster adhering to the interior and exterior walls. Plaster fragments of lime
and sand have also been noted around the entrance and on one of the wall niches. This was the room in which Sheikh Suhail's daughters lived.

## Khaymah C and Khaymah D

Khaymah C was also a private family room (Table 4) (Fig. 12). Connected to the front of this room was an 'arissh type structure with side walls, a flat roof and a set of double wooden doors that opened up into the courtyard space. This 'arish was constructed with wooden poles and bound date-palm branches (Fig. 13). The date-palm branches were stripped of their leaves on the lower half of the wall construction, in a similar way to the example shown in Figure 13, from the 'Heritage Village' in Fujairah. Khaymah D was the room of Ali, one of the hired help (Table 5). A small fireplace was kept on the left-hand side as you enter the room. The sleeping area was located along the back wall.

## Cow and chicken pens

The cow pen is situated in the east-northeastern corner of the courtyard (Table 6) (Fig. 14). Enclosed by the main courtyard wall, the kitchen, and a slight curving interior wall, it is located beside the watchtower. The length of this wall measures roughly 4.6 m from the main courtyard wall. It is constructed with mountain rocks bound with a soft mud mortar and rubble mix. Patches of a sarūj-based plaster are still visible on the wall surfaces. The cow pen once housed around seven cows. It was originally covered with a sablah type roof made from wooden poles and bound datepalm branches. A large gate made with small tree branches and thatched date-palm branches once enclosed the opening at the front. The space between the watchtower and cow pen was used for storing firewood and 'usbuq (for kindling). The chicken pen, located on the opposite side of the watchtower, consists of a semicircular rock-built enclosure, which was attached to the main courtyard wall (Table 7) (Fig. 15). Dry-stone masonry was used in constructing the walls of the chicken pen. It was originally roofed with wooden branches and a locally grown shrub called 'usbuq (Ar.). These shrubs were placed on top of the wooden branches, forming a dome-shaped roof. The original wall height was around $60-70 \mathrm{~cm}$.


Fig. 7.
Ground plan of the main house.

## M.C. ZIOLKOWSKI AND A.S. AL-SHARQI



Fig. 8.
One half of the door to the main house in the foreground and the doors from Majlis 3 in the background.


Fig. 9.
Khaymah A, the kitchen, facing north-northeast.

The courtyard watchtower (Fig. 16)
This was originally a two-storey watchtower but only one level remains. This rectangular-shaped
tower was built abutting the main courtyard wall (Table 8). The walls were built with mountain rocks set in a soft mud mortar and rubble mix (Fig. 17). A


Fig. 10.
Khaymah, in the Wadi al-Hayl.

Table 2. Khaymah A.

| Khaymah A, the kitchen | Dimensions in metres |
| :--- | :--- |
| $\mathrm{L} \times \mathrm{W}$ | $6.4 \times 3.2$ |
| Entrance | 0.50 |
| Wall width | $0.60-0.70$ |
| Depth | 1 |

staircase is located in the west-northwestern end of the tower, leading to the second storey. The interior and exterior walls were both covered with a soft mud plaster, followed by a layer of cement and sand-based plaster. Hand impressions in the plaster and three wooden hanging pegs are also visible on the interior wall surfaces. The central portion of the ceiling has collapsed and the floor is covered with a thick layer of debris, which includes rocks, mud mortar, cement plaster, roofing material and wooden door fragments. The ceiling construction contains wooden poles, above which date-palm branches were bound together with rope, followed by a soft mud mortar and rubble mix, rubble, a layer of cement and sand, another layer of mud mortar and rubble and a final layer of cement with sand. The rope used to bind the wood and date branches was made from fibre collected from the date-palm
tree. The inspiration for this watchtower was taken from the example present at the fortified house of Sheikh Abdullah bin Hamdan at al-Hayl. Both the ground floor and the first floor of the watchtower at al-Fara' were used as family sitting rooms. Occasionally, the ground floor was used as a bedroom during the cooler winter months. Access to the roof was by a small corner ladder built with mangrove poles and set into the walls. The top of the tower was finished in the same manner as the example at al-Hayl (Fig. 6). From this vantage point (and the main house in general) one could see guests arriving from either the direction of Fujairah, or from Bithnah through the Wadi Ham (Wādī Hām), and also the Wadi Furfar.

## Main room

The main room consists of a long rectangularshaped space with an adjoining washroom (Fig. 18) (14). The walls were built with mountain rocks bound with a strong, s sarūj-based mortar (Table 9). The exterior walls were covered with two layers of a lime and sand-based plaster. Patches of cement and sand plaster are also visible below the top layer of lime plaster. The front of the room contains four

## M.C. ZIOLKOWSKI AND A.S. AL-SHARQI



Fig. 11.
'Usbuq.

Table 3. Khaymah B.

| Khaymah B | Dimensions in metres |
| :--- | :---: |
| $\mathrm{L} \times \mathrm{W}$ | $6.7 \times 4-4.2$ |
| Entrance | 0.90 |
| Wall width | 0.75 |
| Depth | 1.2 |

Table 4. Khaymah C.

| Khaymah C | Dimensions in metres |
| :--- | :--- |
| $\mathrm{L} \times \mathrm{W}$ | $6.6 \times 3.5-6$ |
| Entrance | 0.50 |
| Wall width | $0.70-0.80-0.90-1$ |
| Depth | 1.2 |

large rectangular-shaped windows placed in the lower half of the wall, plus three ventilation shafts near the roof. The front door (main entrance) contains a slab of wood at the base with two circular-shaped holes at either end for the doors to pivot on. On either side of the entrance are grooves or slots made in the plaster in order to fit the doors. The door to the main room from the courtyard was a double wooden door. There are two steps leading up to the entrance, each measuring 35 cm in height. The
entryway contains six lintels of mangrove wood, bound together with rope. Above the lintels are tightly packed mountain rocks bound with șar $\bar{u} j$ and cement. The windows comprise wooden lintels, iron grills and wooden shutters. Two large rectangularshaped windows are located on the side wall. Extra shelving space was built in above the two side windows. A total of sixty-three nails were dispersed around the walls for hanging various personal items. The interior walls were covered with a fine, smooth and chalky gypsum plaster (Fig. 19). Two layers of gypsum were used, firstly a thick coating of plaster and finally, a thin veneer. The fine gypsum plaster on the interior walls contains a zig-zag pattern placed around the room. The back wall contains three square-shaped and recessed niches. The roofing materials consist of mangrove poles, above which were placed a latticework of tied date-palm stems, and tightly woven palm-leaf matting (Fig. 20). The date-palm stems were bound in groups of three and placed in a criss-cross arrangement. Placed above the palm-leaf matting were alternating layers of small mountain rocks, lime and sand mortar, and finally a cover of cement and rubble. The roof was built on a downward angle,


Fig. 12.
Khaymah C, facing west-northwest.


Fig. 13.
'Arīsh type structure, 'Heritage Village' Fujairah.
sloping from the courtyard side to the back of the building, to allow water to drain from the roof and down the three water channels visible on the back wall (Fig. 4).

This long room was the main family space. Originally the floor was covered with matting made from woven palm leaves (khaṣaf (Fig. 21) and hasìir/ simah (Fig. 22)), and twigs ('asal) (Saccharum ravennae)

Table 5. Khaymah D

| Khaymah D | Dimensions in metres |
| :--- | :---: |
| $\mathrm{L} \times \mathrm{W}$ | $4.4 \times 2.4$ |
| Entrance | 0.70 |
| Wall width | 0.35 |
| Depth | 0.45 |

Table 6. Cow pen.

| Cow pen wall | Dimensions in metres |
| :--- | :---: |
| Maximum height | 1.3 |
| Wall width | $0.80-0.90$ |
| Length | 4.6 |

(Fig. 23). The niches located on the interior walls and above the windows were used for storing personal items (Fig. 24), which were also stored in chests and included clothing, perfume, saffron etc. The boxes were either made from metal with a decoration and a mirror inside the box under the lid (sahharah), or were wooden chests, which were made locally by a man named Ahmed al-Mtawar. These were similar in style to the mandūs type of wooden chest used in Oman (15). Ahmed al-Mtawar

Table 7. Chicken pen.

| Chicken pen | Dimensions in metres |
| :--- | :---: |
| Distance from the main wall | 1.4 |
| Maximum width across | 2.10 |
| Maximum height | $0.40-0.50$ |
| Wall width | $0.35-0.50$ |

also made the wooden doors used within the main house at al-Fara' (16).

## Washroom (Fig. 25)

There were two entrances into the washroom, one from the main room and the other from the courtyard (Table 10). The entrance from the main room consisted of a small step (height $=18 \mathrm{~cm}$ ) over the threshold, with mangrove poles used as lintels. The washroom was built abutting the main room, and on the exterior courtyard wall lime and sand plaster was smoothed over the join between the two rooms. This room and the adjoining toilet were both constructed with mudbricks, bound with a soft mud mortar and covered in a soft mud plaster (still visible in patches). The mudbricks contain vegetal temper and various mineral inclusions, consisting of


Fig. 14.
Cow pen, facing east-northeast.


Fig. 15.
Chicken pen, facing north-northeast.


Fig. 16.
Courtyard watchtower, facing north-northeast.
small fragments of gabbro/dolerite and quartz. The interior walls of the washroom also contain patches of a lime and sand-based plaster. The entrance to the
washroom from the courtyard was constructed with two bound mangrove poles as lintels, above which were two flat mountain rocks bound with mud

Table 8. Watchtower.

| Courtyard watchtower | Dimensions in metres |
| :--- | :---: |
| $\mathrm{L} \times \mathrm{W}$ | $6.2 \times 3.9$ |
| Max Height | 2.65 |
| Entrance | 0.70 |
| Wall width | 0.80 |



Fig. 17.
Courtyard watchtower, interior view showing the stairs, facing north-northwest.
mortar and covered with a lime and sand-based plaster. Wooden ceiling poles were used to enclose the washroom, above which were placed bundles of date-palm branches tied with rope and topped with a soft mud mortar and rubble mix (Fig. 26). The connecting door from the main room to the washroom was concealed with a curtain. Originally the washroom contained six, biconical-shaped ceramic
pots, known as khars, for water storage. These were placed on a raised platform used for washing, known as a dkka in Arabic (Fig. 27). This platform was located along the south-southwestern wall, with a drainage hole located between the platform and the back wall of the room. Unfortunately, this platform is no longer visible because of the debris that has accumulated from the wall and ceiling collapse.

## Toilet

The interior wall of the toilet adjoins the washroom wall (Table 11). The wall facing onto the courtyard reveals a base of mountain rocks below the mudbricks. The exterior walls of the washroom are those of the main courtyard wall (Fig. 4). The toilet pit was lined with mountain rocks and was once covered (except for a small semicircular opening) with wooden beams, mountain rocks and a mixture of rubble and cement. The door to the toilet from the main courtyard was a double wooden door. The toilet room was built without a roof, for ventilation purposes.

## Storeroom (Fig. 28)

The storeroom is a long rectangular-shaped structure, located in the south-southeastern corner of the courtyard (Table 12). It was built with tightly packed mountain rocks, bound with a soft mud mortar and rubble mix. A number of the rock courses were arranged in a herringbone type pattern, and patches of a sarū $\bar{j}$ type plaster are still visible on the interior and exterior wall surfaces. The exterior walls of the storeroom are those of the main courtyard wall. This room was used for storing food (e.g. rice and dates), cooking pots and utensils. Large ceramic storage vessels were originally placed in the room for the storage of dates. Originally, this room had a flat roof made from wooden poles, bound date-palm branches and mud mortar.

## The jammalah

The jammalah is located at the front of the main house (Table 13). It was the first room (attached to the exterior of the main house) that one would have noted upon arriving at the residence. The jammalah was built with mountain rocks bound with a soft mud mortar and rubble mix. Unfortunately this structure has collapsed considerably, and only the


Fig. 18.
Main room, facing northwest.

Table 9. Main room.

| Main room | Dimensions in metres |
| :--- | :--- |
| $\mathrm{L} \times \mathrm{W}$ | $10.6-9 \times 4.2$ |
| Max Height | 3.45 |
| Wall width | 0.70 |
| Front window 1 | $1.18 \times 0.80 \times 0.16($ Depth $)$ |
| Front window 2 | $1.17 \times 0.76 \times 0.13$ |
| Main door | $2 \times 1 \times 0.70$ |
| Front window 3 | $1.24 \times 0.82 \times 0.17$ |
| Front window 4 | $1.23 \times 0.82 \times 0.16$ |
| Front ventilation opening 1 | $0.26 \times 0.22$ |
| Front ventilation opening 2 | $0.23 \times 0.22$ |
| Front ventilation opening 3 | $0.24 \times 0.20$ |
| Side window 1 | $1.19 \times 0.84 \times 0.16$ |
| Side window 2 | $1.19 \times 0.81 \times 0.19$ |
| Niche 1 | $0.49 \times 0.52 \times 0.47$ |
| Niche 2 | $0.49 \times 0.51 \times 0.38$ |
| Niche 3 | $0.51 \times 0.54 \times 0.48$ |
| Internal door to washroom | $2.03 \times 0.67 \times 0.70$ |

room outline is clearly visible. The jammalah was used as the guesthouse for the camel herders transporting goods to the settlement. Originally the walls were higher ( $c .70 \mathrm{~cm}$ ) and it had a pitched, khaymah type roof made from wooden beams and bound date-palm branches.

## Majlis 1

Majlis 1 was built with mountain rocks bound with a soft mud mortar and rubble mix (Table 14). Unfortunately, this structure has collapsed considerably and only the room outline is clearly visible. This room was attached to the back of the jammalah and was used for greeting and entertaining guests. Guests would also stay in the majlis overnight. Coffee was made on the right-hand side upon entering the room, using a traditional coffee pot (dallah) placed over a small fire. The original wall height was around 1 m , and it once had a pitched, khaymah type roof made from wooden beams and bound date-palm branches. Majlis 1 and the following two rooms (majlis 2 and 3), were all built outside the main courtyard area, that is, separate from the private family space (17).

## Majlis 2 (Fig. 29)

Majlis 2 is located 1.5 m from the courtyard of majlis 3 (Table 15). This building is rectilinear in shape and semi-subterranean. It was constructed with mountain rocks bound with a soft mud-based mortar and rubble fill. There are two steps into the room, and upon entering the room there is a small feature on


Fig. 19.
Main room, interior, facing north-northeast.


Fig. 20.
Main room, ceiling detail (note the iron hook for hanging lanterns).
the right-hand side, consisting of a group of rocks arranged in a square shape (Fig. 30), which was the hearth for preparing coffee and tea (18). This type of
feature was usually located just inside the entrance to allow the smoke to clear the room. This was the second majlis built for the house. The main room had


Fig. 21.
Khasaf (F69).


Fig. 22.
Hașīr/Simah (F70).
a pitched roof with an attached courtyard. It once contained high courtyard walls in front of the room, with a flat roof constructed from wooden poles and bound date-palm branches. The original entrance was along the long wall on the east-southeast face and later, the entrance was shifted to one of the short
sides of the room, when it became the private residence of Ali Mohammed al-Kindi.

Majlis 3 (Fig. 1)
Majlis 3 is a rectangular-shaped freestanding building, located 16.5 m east-southeast from the main


Fig. 23.
'Asal (F71).
courtyard house (Table 16). The building is aligned west-southwest to east-northeast, from the entrance to the rear. The side walls slope inwards, and the four corners of the roof are slightly pointed. The roof was built on a slight downward angle at the rear to allow the water to flow from the roof into two large drainage channels, comparable to the main room in the courtyard. The walls were built with mountain rocks bound with cement and sand, and the exterior walls were also plastered with a mix of cement and sand. The two side walls contain large rectangular windows and ventilation openings, whilst the front of the building contains two large windows, the main entrance and three ventilation openings. All of the windows are set in the lower half of the building, and have wooden slabs as lintels. The entrance was built with four mangrove poles as lintels, and placed above these were rocks bound with cement. A portion of the wooden doorframe is in situ.

The interior walls were coated in a fine gypsum plaster (Fig. 31), and located on the lower half of the rear interior wall is a set of motifs etched into the plaster (Fig. 32). The space encompassed by the three motifs measures $34 \times 23 \mathrm{~cm}$. The meaning and relevance of these motifs is unclear. The interior walls also contain the remnant spaces for wooden pegs, but only one wooden wall peg remains in situ. The remains of the wooden doors are located on the


Fig. 24.
Main room, niche detail.


Fig. 25.
Washroom, facing west-northwest.

Table 10. Washroom.

| Washroom | Dimensions in metres |
| :--- | :--- |
| $\mathrm{L} \times \mathrm{W}$ | $5.6 \times 4.2$ |
| Interior entrance | 0.90 |
| Maximum height | ca 3.10 |
| Wall width | 0.70 |
| Mudbrick $\mathrm{L} \times \mathrm{W} \times$ Depth | $0.18 \times 0.09 \times 0.18$ |
| Main entrance | $1.08 \times 0.90$ |

floor in the interior (Fig. 8), each door measuring $183 \times 73 \mathrm{~cm}$. The ceiling contains mangrove poles, a latticework of bamboo, and woven palm-leaf matting (Fig. 31), above which were placed layers of rubble and cement. Attached to the front of the building is a courtyard wall built with mountain rocks bound with a soft mud mortar and rubble mix. Patches of a $s a r \bar{u} j$-based plaster are still visible on


Fig. 26.
Washroom, roofing detail, facing west-northwest.

## M.C. ZIOLKOWSKI AND A.S. AL-SHARQI



Fig. 27.
Dkka, Bayt Sheikh Abdullah bin Hamdan, courtyard watchtower, al-Hayl.

Table 11. Toilet.

| Toilet | Dimensions in metres |
| :--- | :--- |
| $\mathrm{L} \times \mathrm{W}$ | $5.8 \times 4.5$ |
| Entrance | 0.70 |
| Wall width | 0.70 |

both faces of the courtyard wall. The courtyard wall originally contained four tall windows, enclosed with fixed wooden sticks placed in a criss-cross pattern. The courtyard entrance did not contain a door and only a small step was present. This


Fig. 28.
Storeroom, facing west-northwest.

Table 12. Storeroom.

| Storeroom | Dimensions in metres |
| :--- | :---: |
| $\mathrm{L} \times \mathrm{W}$ | $10.6 \times 3.7$ |
| Entrance | 1 |
| Maximum height | 1.3 |
| Wall width | $0.65-0.70$ |

Table 13. Jammalah.

| Jammalah | Dimensions in metres |
| :--- | :---: |
| $\mathrm{L} \times \mathrm{W}$ | $8.2 \times 4.9$ |
| Entrance | 1.10 |
| Maximum height | 0.55 |
| Wall width | 0.75 |

Table 14. Majlis 1.

| Majlis 1 | Dimensions in metres |
| :--- | :--- |
| $\mathrm{L} \times \mathrm{W}$ | c. $10.6 \times 5.5$ |
| Entrance | 1.10 |
| Maximum height | $0.35-0.40$ |
| Wall width | 0.85 |

entrance was the same width as the doors located in the main room. The courtyard roof was flat and built with wooden poles and bound date-palm branches.

Table 15. Majlis 2.

| Majlis 2 | Dimensions in metres |
| :--- | :--- |
| $\mathrm{L} \times \mathrm{W}$ | $7.3 \times 4.3$ |
| Depth | 1.10 |
| Wall width | 1 |
| Entrance | 0.80 |
| Courtyard wall | $\mathrm{L}-3.7 ;$ width-0.85 |
| Courtyard wall | $\mathrm{L}-0.90 ;$ width-0.75 |

Majlis 3 was the third and final majlis built for the house (19).

## Associated settlement features (archaeological and ethnographic data)

There are a number of associated settlement features immediately surrounding the main house (Table 17) (Fig. 33). These include houses, various enclosures, cemeteries (24), gardens, irrigation channels, a garage (25), a camel racetrack (Fig. 34) (26) etc. These will be briefly reviewed in the following section, which is based on archaeological and ethnographic data. The associated settlement at al-Fara' consisted of a number of families from the Kunud tribe (sing. al-Kindi). The Kunud tribe was also present in the


Fig. 29.
Majlis 2, facing east-northeast.

## M.C. ZIOLKOWSKI AND A.S. AL-SHARQI



Fig. 30.
Hearth for coffee and tea (Majlis 2).

Table 16. Majlis 3.

| Majlis 3 | Dimensions in metres |
| :--- | :--- |
| $\mathrm{L} \times \mathrm{W}$ | $8 \times 3.40-53$ |
| Maximum height | 3.1 |
| Wall width | $0.45-0.50$ |
| Side window (mountain side) | $1.36 \times 0.80 \times 0.12$ |
| Ventilation opening | $0.22 \times 0.22$ |
| Side window (wadi side) | $1.32 \times 0.80 \times 0.12$ |
| Ventilation opening | $0.22 \times 0.22$ |
| Front window | $1.31 \times 0.80 \times 0.10$ |
| Ventilation opening | $0.23 \times 0.20$ |
| Main entrance | $2 \times 1.5 \times 0.50$ |
| Ventilation opening | $0.23 \times 0.23$ |
| Front window | $1.33 \times 0.79 \times 0.12$ |
| Ventilation opening | $0.21 \times 0.22$ |
| Courtyard $\mathrm{L} \times \mathrm{W}$ | $9 \times 5$ |
| Courtyard wall width | $0.65-0.70$ |
| Courtyard wall maximum height | 0.65 |

Wadi Furfar (27). The collective families at al-Fara' worked in the gardens owned by Sheikh Suhail and earned a percentage of the profits. The settlement associated with the main house was mainly located to the west, southwest, south and southeast, on the plain at the base of the mountains (28). The enclosures situated within this zone include adjoining
buildings, with or without courtyard walls (Fig. 35); small circular-shaped features; square-, circular-, rectangular- and rectilinear-shaped structures; semisubterranean and above-ground constructions; and cleared areas often outlined with rocks. The settlement associated with the main (old) house does not extend further than the date-palm garden. There was no substantial mosque built at the site, people would either pray in their own houses or congregate under an 'arish type structure; 'ìd prayers would be conducted in a cleared open space.
The home located directly behind the main compound was the house of Ali bin Saif al-Kindi (Fig. 36). It consisted of two khaymah type houses, two 'arish type features and a courtyard. Water jugs (yahlah) were often hung from the tree next to the house in order to cool the water inside the vessels. The small settlement area located behind the house of Ali bin Saif al-Kindi was known as the 'Baluchi settlement'. This area consists of various rock-built enclosures including one large rectangular-shaped, rock-built structure. The area located directly to the southwest of Sheikh Suhail's house and within close proximity, consists of a group of rock-built enclosures. The building closest to the main house was


Fig. 31.
Majlis 3, wall and ceiling detail.


Fig. 32.
Motifs on the wall in Majlis 3.
the home of Abdullah bin Saeed al-Kindi, whilst the remaining structures were used as animal pens for cows and goats (29).

Located below majlis 2 is a small rock-built enclosure (Fig. 37). This was originally used as a goat pen. The roof construction consisted of a central wooden pole around which large sticks were concentrically placed from the walls to the centre. The whole structure was roofed with a shrub that grows
locally ('usbuq), and would have formed a dome shape. In the southern mountains of Fujairah, these structures are referred to as khaymat 'usbuq. According to Dostal's study of the architecture of Ra's al-Khaimah North, these dwellings are known as 'khaimah māl 'usbōq' (30). A similar type of structure is shown here in Figure 38, from a mountain village at Dibba Fujairah called Wamm.

## Garden terraces

The majority of farming at the site was tobacco (Nicotiana tabacum) (31). Tobacco was picked at the beginning of summer and dried for one month in tobacco drying rooms. The tobacco from al-Fara' was primarily sold to two businessmen from Bahrain, Bin Hashem and Ahmed bin Yousef.

Dried fish storerooms (Ar. 'Imhabah) (Fig. 39)
These rooms were used for storing small dried fish, and there are seven rooms of this type present at the site (Table 18). They are all roughly oval in shape and semi-subterranean in construction. They have been built with mountain rocks, bound with a soft mud mortar and rubble fill. The interior pit was also lined with mountain rocks. The walls of these rooms

## M.C. ZIOLKOWSKI AND A.S. AL-SHARQI

Table 17. Features at al-Fara' that are either contemporary with or pre-/post-date the main house.

| Features (Fig. 33) | Relative chronology |
| :--- | :--- |
| Camel racetrack (Fig. 34). | Contemporary |
| Located on the plain, east-northeast of the main house. | Contemporary |
| Associated settlement. |  |
| This includes the various rock-built enclosures to the west, southwest, south and southeast |  |
| of the main house (Fig. 35). Including the enclosures built between the main (old) |  |
| house and the recent house. | Contemporary |
| 'Baluchi settlement.' |  |
| Located behind the main house, close to the wād̄ entrance. A large, rectangular-shaped, | Contemporary |
| rock-built enclosure. Plus various wall alignments. | Contemporary |
| House of Ali bin Saif al-Kindi (Fig. 36). | Contemporary |
| Located directly behind the main house. | Pre-dates |
| Islamic cemeteries. | Pre-dates |
| One is situated below the main house and the other is located close to the terraced gardens. |  |
| Dried fish storerooms A-G (Fig. 39); tobacco drying rooms A-D (Fig. 40); old and |  |
| new falaj systems (Figs 42 \& 43); the garage; garden terrace fields; the date-palm garden. |  |
| Two pre-Islamic graves and a lookout. |  |
| On the lowest mountain rise, east-northeast of the main house, on the Gizemri side of the wād $\bar{l}$, |  |
| are two pre-Islamic burial cairns and a lookout. | Pre-dates |

These two features are located beside the previous square-shaped enclosure.
Both features consist of low mounds built with mountain rocks. The larger example appears
to have a double ring wall and a central oval-shaped chamber. $\mathrm{L} \times \mathrm{W}-6 \times 5 \mathrm{~m}$ (20).
The smaller example is circular in shape and measures 2.8 m in diameter.
Both of these features may, in fact, have been larger burial mounds, similar to those noted
on the Gizemri side of the wād̄̄. It is possible that rocks were appropriated in order to build
the garden walls etc, associated with the main house and settlement.
A rock-built wall running from below majlis 2 and the goat pen, across the plain,
Pre-dates
towards the date-palm gardens.
A wide wall constructed with mountain rocks.
Various features located at the eastern end of the plain.
Pre-dates
Rock-built walls; enclosures (oval, circular, square, rectilinear);
cleared areas outlined with rocks; and eighteen small graves similar to examples recorded in the Wadi Saqamqam (pre-Islamic) (21).
Gizemri: There are sixteen pre-Islamic burial cairns located on the wād̄̄ edge, Pre-dates and one located by the road (22). The majority of these burials (Fig. 44) are large circular-shaped cairns, built with mountain rocks and containing central chambers. One example consists of three adjoining cairns, and a further example is of two conjoined cairns. There is also a smaller oval-shaped burial mound.
Petroglyph: A single petroglyph was located below the main house, in an easterly Pre-dates? direction (Fig. 45). It is situated close to the small Islamic cemetery. The petroglyph contains geometric motifs on four of its five faces/panels (23).
Recent house on the central plain (Fig. 46). This house was built by Sheikh Suhail during the mid-1960s. Post-dates
Associated with this new house are two khaymah type houses.
L-shaped enclosure and fragment of a rock-built wall. Located on the far side of the date-palm gardens. Post-dates
The L-shaped enclosure was used as a goat pen.
Wall-unclear.
Various enclosures built with cement, located within the associated settlement to the west and southwest. Post-dates

Al-Fara': Site sketch plan


Fig. 33.
Al Fara': Site sketch plan.


Fig. 34.
Camel racetrack, facing east.

## M.C. ZIOLKOWSKI AND A.S. AL-SHARQI



Fig. 35.
Associated settlement, facing east.


Fig. 36.
Bayt Ali bin Saif al-Kindi, facing west-northwest.
slope inwards and are slightly corbelled towards the roof. The roofs are flat and constructed with tree branches, mud mortar and rubble. Fish drying
rooms A-F are located on the plain beside the garden terraces, whilst room $G$ is situated close by the date-palm garden and tobacco drying room D .


Fig. 37.
Goat pen below Majlis 2, facing northeast.


Fig. 38.
Khaymat 'usbuq, Wamm, Dibba Fujairah.

The dried fish used at al-Fara' were of two main types, known in Arabic as qāshi' (anchovy) and ' $\bar{u} m a h$ (sardine) (32). These fish are caught by seine
netting on the beaches (33). They were and still are dried in the sun on the flat coastal areas along the east coast of the U.A.E. (34). These dried fish were

## M.C. ZIOLKOWSKI AND A.S. AL-SHARQI



Fig. 39.
Dried fish storeroom C, facing south-southwest.

Table 18. Dried fish rooms.

| Dried fish rooms | $\mathrm{L} \times \mathrm{W}$ : All dimensions in metres | Wall Height | Depth | Entrance WxH | Entrance-facing |
| :--- | :--- | :--- | :--- | :--- | :--- |
| A | $2.3 \times 1.8$ | 0.85 | 0.9 | $0.60 \times 0.50$ | East |
| B | $3 \times 2.9$ | 1.1 | 1.25 | $0.60 \times 0.50$ | East |
| C | $3 \times 2.4$ | 1.1 | 0.8 | $0.50 \times 0.57$ | North-northeast |
| D | $3.2 \times 2.7$ | 1.2 | 1.2 | $0.60 \times 0.43$ | North-northeast |
| E | $2.5 \times 2.6$ | 1 | 1.15 | $0.60 \times 0.45$ | North-northeast |
| F | $4 \times 3.6$ | 1.1 | 0.9 | Width- 0.50 | North-northeast |
| G | $4 \times 3.9$ | 1.25 | N/A | Width- 0.50 | Northeast |



Fig. 40.
Tobacco drying room C , facing west-northwest.

Table 19. Tobacco drying rooms.

| Tobacco | Wall Length: All <br> dimensions in metres | Wall Width | Interior Space | Max. Height: | Oriented |
| :--- | :--- | :--- | :--- | :--- | :--- |
| drying rooms | 15 | 1 | 6.5 | 1.8 | E-W |
| B | 14 | Top-0.65, mid-0.9, base-1.35 | 6.2 | 2.05 | WNW-ESE |
| C | 23 | $0.8-0.9$ | 6 | 1.8 | WNW-ESE |
| D | 17.7 | $0.95-1$ | 7.6 | 1.5 | NW-SE |



Fig. 41.
'Asal growing in the wād $\bar{d}$.
brought to al-Fara' from the coast in Fujairah, and were used as fertiliser for tobacco plants (35). A small amount of dried fish was buried next to each tobacco plant.

Comparable fish storerooms have been recorded at coastal sites in the Sultanate of Oman by Paolo Costa (36). At the old fishing station of Fins, Costa noted 'several small buildings partly sunken in the ground along the border of the exposed shore-shelf' (37). These were constructed with local tabular stone and wād $\bar{\imath}$ pebbles. According to Costa, most of these stores consisted of circular walls, founded 80100 cm below ground. The dry stone walls were corbelled inwards in order to reduce the span and allow the chamber to be covered by large stone slabs (38). They were used mainly for the storage of cured
fish (39). According to Costa, the storage of cured fish and the use of these storerooms is common all along the coasts of Oman, wherever there were rich fishing grounds and no direct access to a market. The fish would be stored and protected until the time of the date harvest when it would be transported by caravans on a long journey to the large oases of the interior, and bartered mainly with dates (40).

Tobacco drying rooms (Ar. Mu'arush) (Fig. 40)
A total of four tobacco drying rooms are present at the site (Table 19). Tobacco drying room A is located on the plain beside the garden terraces, between fish drying rooms A and B. Tobacco room B is located beside the garden terraces (northwestern area of the gardens) and C is on the edge of the garden close to


Fig. 42.
Detail of the new falaj.
the track. Tobacco room D is near the date-palm garden and fish drying room G. The tobacco drying rooms were built with large mountain rocks set in a mud mortar and rubble mix. Originally large wooden poles were placed across the width of the walls and wooden poles or the trunks from date palms were used as supports below the beams. The roof was covered with bound date-palm branches, and the back was also closed off with date-palm branches. The front contained a large gate made from wood and thatched date palm. Within these rooms, single tobacco plants were hung upside down and dried. They were tied by using the stems of a small shrub which grew locally in the wād $\bar{d}$, known in Arabic as 'asal (Saccharum ravennae) (Fig. 41), which was the same shrub used to make the floor matting shown in Figure 23.

Date-palm garden and 'aflāj (41)
A well and falaj system were used within the datepalm garden, and a large, cleared, flat area towards the rear of the date-palm garden was used to dry the collected dates. Grown within the date-palm garden were various herbs; sorghum (Sorghum vulgare or bicolor); and fruit plants including mango (Mangifera indica), watermelon (Citrullus lanatus), papaya (Carica papaya), pomegranate (Punica granatum) and figs (Ficus) (42). Bamboo (Bambusa) was also grown


Fig. 43.
The old falaj system still visible above the new one, facing south-southwest.

Table 20. Ceramic wares.

| Ware | Description |
| :---: | :---: |
| Cream Coarse <br> Ware I <br> (Figs 47 \& 48) | A cream-coloured coarse ware fabric, with large mineral inclusions. The fabric is rough in texture. The inclusions are predominantly angular and irregular in shape, whilst others are elongated and plate-like. The mineral inclusions are dark brown and white, measuring up to 5 mm . The voids are irregular and elongated, and measure up to 4 mm in length (43). |
| Fine Ware I | A fine ware fabric with a soft chalky texture. Buff in colour. A well levigated fabric. Mineral inclusions: flecks of mica and a dark-coloured mineral, measuring less than 0.5 mm . The voids are rounded and measure less than 0.5 mm (44). FP 132 contains elongated voids measuring 1-3 mm.Vessel types: Indeterminate. |
| Fine Ware II | A cream-coloured fine fabric. The texture is semi-coarse and slightly sandy. Mineral inclusions: grey, brown and black flecks, measuring less than 0.5 mm ; flecks of mica, less than 0.5 mm ; white, rounded inclusions, less than 0.5 mm ; white, irregular inclusions, 1 mm . The voids are rounded and less than 1 mm or are elongated and measure up to 3 mm (45). |
| Fine Ware III <br> (Figs 49 \& 50) | A pale orange and orange to red, fine ware fabric. Semi-coarse in texture and occasionally friable. The mineral inclusions are white and red-brown in colour, rounded and irregular in shape, and measure 1-2.5 mm. There are also flecks of mica and a grey-coloured mineral, measuring less than 0.5 mm . The voids are rounded, irregular and elongated, and measure up to 4 mm (46). Note regarding the 'Fine Wares': The interior surfaces are either uneven and in some cases cracked, or they have been smoothed with a small tool/device, possibly a seashell or smooth pebble. They are usually smoothed on the interiors near the rim and neck, whilst the lower interior surfaces of the body sherds are uneven and rough. |
| Glazed Ware III | A fine ware fabric with very few visible inclusions. Buff in colour, well levigated and light weight fabric. Flecks of mica measuring less than 0.5 mm are visible. The remaining mineral inclusions are round and grey, measuring less than 0.5 mm ; white, rounded and irregular, less than 1 mm ; grey, irregular and up to 2 mm (47). |
| Red Coarse Ware I (Figs 51 \& 52) | A red-coloured coarse fabric with a variety of mineral inclusions. The colour of the fabric varies from red to orange and grey, depending on the firing. The texture is coarse and occasionally brittle and friable. The majority of inclusions are plate-like in shape, and are red or red-brown in colour. These plate-like inclusions measure up to 4 mm . The remaining inclusions are white, red, red-brown, grey and black. They are rounded and irregular. The irregular shapes measure up to 5 mm , and the rounded inclusions are less than 1 mm in length. Small flecks of mica measuring less than 0.5 mm are also present. The voids are irregular, elongated and rounded, and they vary in size from less than 0.5 mm to 5 mm (48). |

Table 21. Ceramic wares and vessel types.

| Ceramic Type | Vessel Type |
| :---: | :---: |
| Cream Coarse Ware I. | Open bowls with flat bases and outward tapering walls. Sizes-large and extra-large. These were used for serving food (large size) and feeding animals (extra large size) (Fig. 53). |
|  | Storage vessels (khars). Rounded vessel bodies with flat bases, with or without handles (Fig. 54). |
| Fine Ware II. | Possibly used for Hab type pots (Fig. 55). These were pots placed in the courtyard and filled with water. They were used for drinking from throughout the day. A drinking cup was usually left close by. They had flat bases, with slightly outward tapering walls, which were rounded just below the rim. The opening was fairly wide. Wooden lids were placed on top of the pots. |
| Fine Ware III. | Khars and yahlah. Both types of vessels were used for holding water. The khars type were used for storing water, for example in small depressions built into the raised platforms in the washroom. They consist of a thick fabric and a rounded base with a biconical-shaped body (Fig. 56). They were smaller in size than the yahlah. The yahlah were used for collecting water from the wād $\bar{d}$. Women would carry one on their head and the other in their arm (Fig. 57). These vessels would have been hung from trees or hooks in order to cool the liquid inside. Yahlah have a thin fabric with a rounded base and body, and were larger in size than the khars. |
| Glazed Ware III. Red Coarse Ware I. | Jugs for storing honey. |
|  | Storage vessels (khars) (Fig. 54). Flat bases with rounded vessel bodies. With or without handles. |
|  | Incense burners (madkhan) (Fig. 58). |
|  | Cooking pots (burmah) (Fig. 59). These were used in the associated settlement houses. The main house had similar shaped cooking pots made of copper/brass, which were imported from India. |


| FP | Date | Loc | Frag. <br> Type | Vessel Shape | Diam | Thickness: A dimensions in mm . | $\mathrm{L} \times \mathrm{W}$ | Fabric Type | Decoration |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 23-3-03 | Main House, exterior, perimeter wall. | Rim. | Open bowl with outward tapering walls and a rounded rim. | 240 | 3-5 | $55 \times 52$ | Porcelain. White fabric. | Exterior-white glaze. <br> Interior-white glaze with a band ( 8.5 mm ) of navy blue running below the rim. |
| 2 | 23-3-03 | Main House, exterior, perimeter wall. | Rim. | Open bowl with outward tapering walls and a rounded rim. | 240 | 3-4 | $26 \times 17$ | Porcelain. White fabric. | Exterior-white glaze. <br> Interior-white glaze. A band of navy blue running below the rim (width- 8.5 mm ). |
| 3 | 23-3-03 | Main House, exterior, perimeter wall. | Body. | Bowl. | - | 3-4 | $60 \times 37$ | Porcelain. White Fabric. | Interior-white glaze. <br> Exterior-pale pink glaze and fluting. |
| 4 | 23-3-03 | Main House, exterior, perimeter wall. | Rim. | Open bowl with outward flaring walls and a rounded rim. | 240 | 4.5-5.5 | $64 \times 45$ | Porcelain. Cream fabric. | Exterior-white glaze. Interior-a pink line running below the rim. Green leaves, a pink flower and a blue motif (two concentric circles with radiating lines). |
| 5 | 23-3-03 | Main House, exterior, perimeter wall. | Rim. | Open. | - | 4.5-5 | $34 \times 33$ | Porcelain. Cream fabric. | Exterior-white glaze-crazing. Interior-brown and beige coloured geometric design. Meander pattern; a line; a row of square shaped motifs; hearts in a line. Crazing. |
| 6 | 23-3-03 | Main House, exterior, perimeter wall. | Body. | Open? <br> Wheelmade? | - | 11-13.5 | $75 \times 66$ | CCWI | Interior-cream slip. <br> Exterior-brown slip and combed parallel, incised lines. |
| 7 | 23-3-03 | Main House, exterior, perimeter wall. | Body. | Open? <br> Wheelmade? | - | 13.5-14 | $73 \times 36$ | CCWI | Interior-cream slip. <br> Exterior-brown slip and combed parallel, incised lines. |
| 8 | 23-3-03 | Main House, exterior, perimeter wall. | Body. | Open? <br> Wheelmade? | - | 11-14.5 | $64 \times 39$ | CCWI | Interior-cream slip. <br> Exterior-brown slip and combed parallel, incised lines. |
| 9 | 23-3-03 | Main House, exterior, perimeter wall. | Body. | Open? <br> Wheelmade? | - | 13.5-14.5 | $74 \times 45$ | CCWI | Interior-cream slip. <br> Exterior-brown slip and combed parallel, incised lines. |
| 10 | 23-3-03 | Main House, exterior, perimeter wall. | Body. | Open? <br> Wheelmade? | - | 10-12.5 | $85 \times 80$ | CCWI | Interior-cream and brown slip. Exterior-brown slip. |
| 11 | 23-3-03 | Main House, exterior, perimeter wall. | Body. | ? <br> Uneven interior surface. Storage vessel, khars? | - | 8-10 | $95 \times 70$ | RCWI | Exterior-orange/red slip. |

19

20

14 23-3-03 Main House, exterior, Body. ? perimeter wall.

15 23-3-03 Main House, exterior, Body. ? perimeter wall.

16 23-3-03 Main House, exterior, Body. ? perimeter wall.

17 23-3-03 Main House, exterior, Body. ? perimeter wall.
18 23-3-03 Main House, exterior, Body. ? perimeter wall.
23-3-03 Main House, exteri perimeter wall.

23-3-03 Main House, exterior, Rim perimeter wall.
23-3-03 Main House, exterior, Body. ? perimeter wall.

23-3-03 Main House, exterior, Body. ? perimeter wall.
perimeter wall.

23-3-03 | Main House, exterior, Body. ? |
| :--- |
| perimeter wall. | perimeter wall.

$-\quad 3-3.5$
$24 \times 21$
$\times 18.5$
$-\quad 4$

- $3.5-4$
$26 \times 22$
$18 \times 16$
RCWI
- $\quad 4$
$-\quad 5-5.5$
- 6.5

90
11-12 outward curving neck and rim. External overhang. Rim-rounded. Cooking pot, burmah. Incense burner fragment? 30 ? 4-5
$23 \times 13$ RCWI

Exterior-faded plum red painted decorationintersecting lines. Possibly a cream slip below the decoration. Exterior-faded plum red coloured painted decoration-parallel lines. Possibly a cream slip below the decoration. Exterior-cream slip. Plum red painted decorationparallel lines.
Exterior-pale orange slip. Plum red painted decoration-parallel and intersecting lines.
Exterior-cream slip. Plum red painted decoration-parallel and intersecting lines. Exterior-dark slip?

Exterior-dark slip?
Exterior-cream slip?
A band of plum red paint below the rim. Running off the band are vertical lines of plum red paint. Rim-top-plum red paint. Exterior-incised decoration. Horizontal line below the rim. A band of zig-zag pattern. On either side of the zig-zag pattern are triangular shapes consisting of small punctates. Two paralle horizontal lines.

| FP | Date | Loc | Frag. <br> Type | Vessel Shape | Diam | Thickness: All dimensions in mm. | $\mathrm{L} \times \mathrm{W}$ | Fabric <br> Type | Decoration |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 21 | 23-3-03 | Main House, exterior, perimeter wall. | Rim. | Incense burner. Outward flaring walls, and a pointed rim with a slightly concave external face. | 100 | 4.5-5 | $48 \times 46$ | RCWI | Rim-flat exterior face-plum red paint and an incised zig-zag pattern. <br> Exterior-a pale orange slip. A horizontal band of plum red paint with horizontal, incised parallel lines. A line of oval shape holes. A horizontal band of plum red paint, incised parallel lines and a zig-zag pattern. A band of incised, parallel, horizontal lines. |
| 22 | 23-3-03 | Main House, exterior, perimeter wall. | Rim. | Incense burner. Outward flaring walls, and a pointed rim with a slightly concave external face. | 80 | 4 | $64 \times 20$ | RCWI | Exterior-rim face-plum red paint and an incised zig-zag pattern, plus two parallel lines running through it. Exterior wall-pale orange slip. A band of incised decoration below the rim consisting of short vertical zig-zag motifs. A band of plum red paint with horizontal, incised parallel lines. |
| 23 | 23-3-03 | Main House, exterior, perimeter wall. | Rim. | Incense burner. Outward flaring walls, and a pointed rim with a slightly concave external face. | 100 | 4.5 | $90 \times 35$ | RCWI | Rim-exterior flat face-orange slip and a band of plum red paint with an incised zig-zag pattern. Exterior wall-a horizontal band of plum red paint with incised horizontal parallel lines. A line of oval shaped holes. |
| 24 | 23-3-03 | Main House, exterior, perimeter wall. | Body. | Water vessel, khars. A biconical body shape with a rounded base. Interior surface is uneven and cracked. | - | 5 | $100 \times 54$ | FWIII | Exterior-incised decoration. Parallel, horizontal sets of wavy lines consisting of dashes. Horizontal parallel lines, set within the wavy lines. |
| 25 | 23-3-03 | Main House, exterior, perimeter wall. | Body. | Water vessel, khars. A biconical body shape. Interior surface is uneven and cracked. | - | 7-8 | $84 \times 33$ | FWIII | Exterior-incised decoration. <br> Parallel, horizontal wavy lines consisting of dashes. <br> Vertically set groups of dashes. Parallel, horizontal lines. |


| 23-3-03 | Main House, exterior, perimeter wall. | Body. | Water vessel, khars. <br> A biconical body shape. <br> Interior surface is uneven and cracked. | - | 6 | $40 \times 30$ | FWIII | Exterior-incised decoration. Parallel, horizontal set of wavy lines, consisting of dashes. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 23-3-03 | Main House, exterior, perimeter wall. | Body. | Water vessel, khars. <br> A biconical body shape. Interior surface is uneven and cracked. | - | 4-6.5 | $52 \times 40$ | FWIII | Exterior-incised decoration. Parallel, horizontal wavy lines, consisting of dashes. Vertically set groups of dashes. |
| 23-3-03 | Main House, exterior, perimeter wall. | Rim. | Water vessel. Khars? <br> Straight neck walls, with a rounded rim. A deep groove runs below the rim exterior. Interior surface is smoothed. | 100 | 6 | $85 \times 40$ | FWIII | Exterior-incised decoration. A wavy, horizontal line. Fragment of a second line below. |
| 23-3-03 | Main House, exterior, perimeter wall. | Rim. | Water vessel. Yahlah? <br> Straight neck walls, with a slightly inward curving, rounded rim. Interior surface is smoothed. | 100 | 2 | $46 \times 29$ | FWIII | Exterior-incised decoration. Sets of lines (fragment). |
| 23-3-03 | Main House, exterior, perimeter wall. | Rim. | Water vessel. Yahlah? Straight neck walls, with a slightly inward curving, rounded rim. A deep groove runs below the rim exterior. Interior surface is smoothed. | 90 | 3-5 | $50 \times 42$ | FWIII | Exterior-incised decoration. Sets of parallel and intersecting lines forming a teardrop shape. |
| 23-3-03 | Main House, exterior, perimeter wall. | Rim. | Water vessel. Yahlah? Straight neck walls, with a slightly inward curving, rounded rim. A deep groove runs below the rim exterior. Interior surface is smoothed. | 90 | 2-5 | $31 \times 28$ | FWIII | Exterior-incised decoration. Two sets of parallel lines, intersecting. |
| 23-3-03 | Main House, exterior, perimeter wall. | Rim. | Water vessel. Yahlah? Straight neck walls, with a slightly inward curving, rounded rim. A deep groove runs below the rim exterior. Interior surface is | $90 ?$ | 2 | $29 \times 20$ | FWIII | NA |

Interior surface is
uneven and cracked.

A biconical
body shape. Interior
is uneven and cracked.
Water vessel. Khars?
ight neck walls, with a rounded rim. A deep rim exterior. Interior surface is smoothed.

Straight neck walls, with a slightly inward curving, rounded rim
Interior surface is

Water vessel. Yahlah?
Straight neck walls, with a slightly inward curving, rounded rim. A deep rim exterior. Interior surface is smoothed.

Straight neck walls, with a slightly inward curving, w th rim exterior. Interior urface is smoothed
er vessel. Yahlah with a slightly inward curving, rounded rim below the rim exterior.
Interior surface is
smoothed.


| 23-3-03 | Main House, exterior, perimeter wall. | Body. | Water vessel. Rounded body. | - | 4.5 | $33 \times 28$ | FWIII | Exterior-incised decoration. One horizontal line. A fragment of cross-hatching. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 23-3-03 | Main House, exterior, perimeter wall. | Body. | Water vessel. Rounded body. Interior surfaceuneven. | - | 5.5-6 | $48 \times 27$ | FWIII | Exterior-incised decoration. One horizontal line. Crosshatching. One horizontal line. |
| 23-3-03 | Main House, exterior, perimeter wall. | Body. | Water vessel. Rounded body. | - | 6-9 | $45 \times 40$ | FWIII | Exterior-Four parallel, incised lines. |
| 23-3-03 | Main House, exterior, perimeter wall. | Body. | Water vessel. Khars? Interior surfaceuneven. | - | 6.5-8.5 | $53 \times 35$ | FWIII | Exterior-incised decoration. A band of closely set dashes, forming wavy lines. Two horizontal, parallel lines. A band of vertically aligned dashes. |
| 23-3-03 | Main House, exterior, perimeter wall. | Body. | Water vessel. Khars? Interior surfaceuneven. | - | 7-8 | $58 \times 37$ | FWIII | Exterior-incised decoration. Parallel, horizontal, wavy lines, consisting of dashes. Two parallel horizontal lines. Parallel, horizontal, wavy lines, consisting of dashes, with three faint parallel lines in between. Three parallel horizontal lines. |
| 23-3-03 | Main House, exterior, perimeter wall. | Body. | Water vessel. Khars? | - | 5.5-6.5 | $37 \times 30$ | FWIII | Exterior-incised decoration. <br> Three parallel, horizontal lines with a set of wavy horizontal lines (dashes) in between. Three parallel, horizontal lines. |
| 23-3-03 | Main House, exterior, perimeter wall. | Body. | Water vessel. Khars? <br> Interior surface-uneven. | - | 5-6 | $48 \times 35$ | FWIII | Exterior-incised decoration. One horizontal line. Three parallel, horizontal lines with dashes. A band of horizontal, wavy lines consisting of dashes. A horizontal line. A wavy line (horizontal). |
| 23-3-03 | Main House, exterior, perimeter wall. | Body. | Water vessel. Rounded body. | - | 5 | $50 \times 40$ | FWIII | Exterior-incised decoration. A patch of vertical sets of dashes. A wavy horizontal line. Two parallel, horizontal lines. One small intersecting line. |

\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|}
\hline FP \& Date \& Loc \& Frag. Type \& Vessel Shape \& Diam \& Thickness: All dimensions in mm . \& \(\mathrm{L} \times \mathrm{W}\) \& \begin{tabular}{l}
Fabric \\
Type
\end{tabular} \& Decoration \\
\hline 47 \& 23-3-03 \& Main House, exterior, perimeter wall. \& Body. \& Water vessel. Khars? \& - \& 5-7 \& \(44 \times 36\) \& FWIII \& Exterior-incised decoration. Dashed, horizontal lines, slightly irregular. In between, are two sets of three parallel, horizontal lines. \\
\hline 48 \& 23-3-03 \& Main House, exterior, perimeter wall. \& Body. \& Water vessel. Khars? Interior-uneven surface. \& - \& 6-6.5 \& \(51 \times 35\) \& FWIII \& \begin{tabular}{l}
Exterior-incised decoration. \\
Dashed, horizontal lines, slightly irregular. \\
In between, are two sets of three parallel, horizontal lines. Plus a wavy line, set horizontally.
\end{tabular} \\
\hline 49 \& 23-3-03 \& Main House, exterior, perimeter wall. \& Body. \& Water vessel. Khars? \& - \& 5 \& \(33 \times 26\) \& FWIII \& Exterior-incised decoration. Sets of dashes, arranged vertically around the vessel. \\
\hline 50 \& 23-3-03 \& Main House, exterior, perimeter wall. \& Body. \& Water vessel. Rounded body. \& - \& 5 \& \(34 \times 22\) \& FWIII \& \begin{tabular}{l}
Exterior-incised decoration. \\
Three parallel, horizontal lines. Wavy, parallel, horizontal lines, consisting of dashes.
\end{tabular} \\
\hline 51 \& 23-3-03 \& Main House, exterior, perimeter wall. \& Body. \& Water vessel. Khars? \& - \& 6-6.5 \& \(33 \times 22\) \& FWIII \& Exterior-incised decoration. Sets of dashes arranged vertically and placed around the vessel body. Two parallel, horizontal lines in between. \\
\hline 52 \& 23-3-03 \& Main House, exterior, perimeter wall. \& Body. \& \begin{tabular}{l}
Water vessel. \\
Yahlah? \\
Rounded body.
\end{tabular} \& - \& 3.5-4.5 \& \(46 \times 35\)

$41 \times 37$ \& FWIII

FWII \& | Exterior-incised decoration. |
| :--- |
| Fine, parallel, horizontal, combed lines. Sets of wavy, combed dashes, set on an angle, and arranged around the vessel. Fine, parallel, horizontal, combed lines. | <br>

\hline 53 \& 23-3-03 \& Main House, exterior, perimeter wall. \& Body. \& Closed vessel shape. \& - \& 5-7 \& $41 \times 37$ \& FWIII \& Exterior-incised decoration. Parallel, horizontal lines with a few intersecting lines. A zig-zag pattern consisting of two parallel lines. <br>

\hline 54 \& 23-3-03 \& Main House, exterior, perimeter wall. \& Body. \& | Water vessel? |
| :--- |
| Rounded body? | \& - \& 5 \& $43 \times 32$ \& FWIII \& Exterior-burnishing? <br>


\hline 55 \& 23-3-03 \& Main House, exterior, perimeter wall. \& Body. \& | Water vessel? |
| :--- |
| Yahlah? |
| Rounded body? | \& - \& 4-5 \& $47 \times 45$ \& FWIII \& Exterior-burnishing? <br>

\hline
\end{tabular}

## Interior surface-uneven.

23-3-03 Main House, exterior, Neck. perimeter wall.

23-3-03 Cow Pen.
Base.
Water vessel?
Straight neck wall.
Wheelmade?
59

60

Body. Open?
Body. Open
Rim. Incense burner
Straight neck walls.
A slightly outward
faring rim with a flat top.

Rim. Incense burner?
Outward flaring walls
and rim. A flat edge to the exterior face of the rim.

| $38 \times 29$ | FWIII | NA |
| :---: | :---: | :---: |
| $78 \times 63$ | FWIII | Exterior-burnishing? <br> Incised lines-irregular and a circular shape. |
| $36 \times 25$ | FWIII | NA |
| $40 \times 31$ | Porcelain. <br> White fabric. | Interior-a gold coloured band. Floral and vegetal decorationbrown and green. |
| $26 \times 20$ | Porcelain. White fabric. | Background-white. <br> Interior-floral and vegetal decoration-brown and green. |
| $26 \times 14$ | Porcelain. White fabric. | Interior-a band of navy blue running below the rim (width 8 mm ). Background-white. |
| $85 \times 53$ | CCWI | Exterior-a raised ridge with a central groove, running below the rim (width 18 mm ). Patches of a brown slip. |
| $48 \times 47$ | CCWI | Interior-cream slip. <br> Exterior-brown slip. |
| $57 \times 26$ | CCWI | Interior-cream slip. <br> Exterior-brown slip. |
| $50 \times 36$ | RCWI | Interior-light brown slip? <br> Rim-top, interior-plum red paint. <br> Exterior-Three parallel, horizontal, incised lines, running below the rim. A band of incised crosshatching. Five incised, parallel, horizontal lines. Fragments of openings. |
| $15 \times 14$ | RCWI | Interior-orange slip? <br> Rim-top, interior, exterior-plum red paint. <br> Exterior-below the rim-Three incised, parallel, horizontal lines. A dimpled effect. Fragment of a triangular incised motif. |


| 75 | 23-3-03 | Cow Pen. | Body. | ? | - | 6.5 | $30 \times 20$ | FWIII | NA |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 76 | 23-3-03 | Cow Pen. | Body. | ? | - | 4-4.5 | $28 \times 17$ | FWIII | NA |
| 77 | 23-3-03 | Cow Pen. | Body. | ? | - | 4 | $29 \times 20$ | FWIII | NA |
| 78 | 23-3-03 | Cow Pen. | Body. | Rounded? Yahlah? | - | 2.5-3.5 | $53 \times 24$ | FWIII | Exterior-burnishing? |
| 79 | 23-3-03 | Cow Pen. | Body. | ? | - | 6 | $42 \times 21$ | FWIII | NA |
| 80 | 23-3-03 | Cow Pen. | Neck. | Water vessel? | 100? | 5-6 | $26 \times 22$ | FWIII | Exterior-parallel, horizontal grooves. |
| 81 | 23-3-03 | Cow Pen. | Body. | Rounded. Yahlah? | - | 4-6 | $46 \times 38$ | FWIII | NA |
| 82 | 23-3-03 | Cow Pen. | Body. | Water vessel. <br> Yahlah? <br> Rounded body. | - | 4-7 | $52 \times 47$ | FWIII | Exterior-incised decoration. <br> Parallel, horizontal lines. Sets of combed wavy lines. A leaf shaped motif made from parallel combed lines. Parallel horizontal lines. |
| 83 | 23-3-03 | Cow Pen. | Body. | Water vessel-rounded. Yahlah? Fragment of an attached handle. | - | 4.5-6 | $58 \times 50$ | FWIII | Exterior-incised decoration. <br> A group of parallel, horizontal lines <br> (combed). Sets of combed wavy lines. <br> Fragments of two leaf shaped motifs made from parallel combed lines. |
| 84 | 23-3-03 | Cow Pen. | Neck- <br> body. | Water vessel. Khars? Interior surfaceuneven. | Ind? | Neck-11 <br> Body-8 | $58 \times 55$ | FWIII | Exterior-incised decoration. Fragment of a wavy line. Horizontal, parallel lines interspersed with vertical lines consisting of dashes, and a set of horizontal lines made of larger dashes. |
| 85 | 23-3-03 | Cow Pen. | Neck- <br> body. | Water vessel. Khars? | Ind? | Neck-13 <br> Body-7 | $60 \times 58$ | FWIII | Exterior-incised decoration. Parallel, horizontal lines, interspersed with horizontal lines consisting of dashes. |
| 86 | 23-3-03 | Cow Pen. | Body. | ? | - | 5-6.5 | $23 \times 20$ | FWII | Exterior-incised decoration. Cross-hatching. One line. |
| 87 | 23-3-03 | Cow Pen. | Rim. | Water vessel. <br> Straight neck walls. A well rounded and slightly inward curving rim. | 100 | 7.5 | $46 \times 29$ | FWII | NA |

Table 22. Continued

| FP | Date | Loc | Frag. <br> Type | Vessel Shape | Diam | Thickness: All dimensions in mm . | $\mathrm{L} \times \mathrm{W}$ | Fabric <br> Type | Decoration |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 88 | 23-3-03 | Cow Pen. | Body. | ? | - | 8 | $41 \times 25$ | FWII | NA |
| 89 | 23-3-03 | Cow Pen. | Body. | ? | - | 4-4.5 | $26 \times 9$ | FWII | NA |
| 90 | 23-3-03 | Cow Pen. | Body. | ? | - | 5 | $25 \times 20$ | FWII | Exterior-two, parallel incised lines. |
| 91 | 23-3-03 | Cow Pen. | Body. | Interior surface-uneven. | - | 5-11 | $44 \times 33$ | FWII | Exterior-incised decoration. One single and two parallel lines. |
| 92 | 23-3-03 | Cow Pen. | Body. | ? | - | 6 | $48 \times 26$ | FWII | Exterior-incised decoration. Cross-hatching. |
| 93 | 23-3-03 | Cow Pen. | Body. | ? | - | 6-7 | $40 \times 25$ | FWII | Exterior-incised decoration. Three parallel lines. Fragment of two wavy lines. |
| 94 | 23-3-03 | Cow Pen. | Body. | ? | - | 5 | $23 \times 17$ | FWII | Exterior-incised decoration. Two parallel lines with a wavy line in-between. |
| 95 | 23-3-03 | Cow Pen. | Body. | ? | - | 8-10 | $32 \times 23$ | FWII | Exterior-incised decoration. Parallel lines and parallel wavy lines. |
| 96 | 23-3-03 | Cow Pen. | Body. | ? | - | 6 | $21 \times 20$ | FWII | Exterior-incised decoration. <br> Parallel lines; an $X$; intersecting lines consisting of dashes. |
| 97 | 23-3-03 | Cow Pen. | Body. | ? | - | 5.5-6 | $20 \times 17$ | FWII | Exterior-incised decoration. One line. |
| 98 | 23-3-03 | Main Courtyard. | Rim. | Open vessel. Outward tapering vessel walls and a rounded rim. | 380? | 4-6 | $33 \times 30$ | Porcelain. Fabric-off-white | Interior and exterior-white-crazing. |
| 99 | 23-3-03 | Main Courtyard. | Rim. | Small bowl with straight walls. The lower half of the vessel is slightly rounded. A rounded rim. | $60 ?$ | 3 | $21 \times 21$ | Porcelain. Fabric-off-white. | Interior-white background with a single yellow coloured, horizontal line below the rim. Exterior-white background with two parallel, horizontal lines below the rim (yellow and green). |
| 100 | 23-3-03 | Main Courtyard. | Rim. | Open bowl with outward tapering walls and a well-rounded rim. | 260 | 4-5 | $55 \times 32$ | Porcelain. Fabric-off-white. | Interior and exterior-crazing. Exterior-white. <br> Interior-white background with a single pink, horizontal line below the rim. Interior and exterior-crazing. |


| 101 | 23-3-03 | Main Courtyard. | Body. | ? | - | 3.5 | $35 \times 28$ | Porcelain. Fabricwhite. | Interior-white. <br> Exterior-white background with two shapes, one pale pink and the other in pale green. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 102 | 23-3-03 | Main Courtyard. | Body. | ? | - | 3.5-4 | $25 \times 24$ | Porcelain. Fabricwhite. | Interior-white. <br> Exterior-white background with two shapes, one pale pink and the other in pale green. |
| 103 | 23-3-03 | Main Courtyard. | Body. | Open? | - | 3.5 | $28 \times 24$ | Porcelain. Fabric-off-white. | Exterior-white glaze-crazing. Interior-white glaze with fragments of blue and green coloured motifs. Crazing. |
| 104 | 23-3-03 | Main Courtyard. | Body. | Open bowl. Rounded. | - | 3-4 | $45 \times 23$ | Porcelain. Fabricwhite. | Interior-white glaze. <br> Exterior-pink coloured background with a floral motif, containing light green, green, purple, and pale brown colours. Fluting plus a fragment of a raised circular motif. |
| 105 | 23-3-03 | Main Courtyard. | Body. | ? | - | 10-10.5 | $39 \times 34$ | CCWI | Interior-cream slip. <br> Exterior-brown slip and parallel incised lines. |
| 106 | 23-3-03 | Main Courtyard. | Body. | ? <br> Open serving bowl. | - | 12 | $83 \times 75$ | CCWI | Interior-brown slip. <br> Exterior-brown slip. |
| 107 | 23-3-03 | Main Courtyard. | Rim. | Incense burner. <br> Straight neck walls, slightly outward flaring towards the rim. The rim is flat on top with rounded corners. | 70 | 4 | $32 \times 30$ | RCWI | Interior-a pale brown slip? Rim-top, interior and exteriorplum red paint. <br> Exterior-incised decoration-3 parallel, horizontal lines below the rim. A zig-zag band. Three parallel, horizontal lines. Fragments of cut out shapes. |
| 108 | 23-3-03 | Main Courtyard. | Body. | Incense burner. | - | 4.5-5 | $20 \times 16$ | RCWI | Exterior-Fragments of cut out shapes. A patch of plum red paint. Three parallel incised lines. |
| 109 | 23-3-03 | Main Courtyard. | Body. | Incense burner. | - | 4 | $20 \times 19$ | RCWI | Exterior-incised decoration. Two parallel, horizontal lines. A row of dots. A zig-zag band. |
| 110 | 23-3-03 | Main Courtyard. | Rim. | Incense burner. <br> Rim-outward flaring with external overhang. Rim-damaged. | $80 ?$ | 9 | $28 \times 15$ | RCWI | Rim-exterior face-plum red paint. Exterior-incised zig-zag motif in a band. |


| Table 22. Continued |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |


| 128 | 3-3-03 | Main Courtyard. | Body. |  |  |  | $35 \times 33$ |  | Badly worn. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 129 | 23-3-03 | Main Courtyard. | Rim. | Water vessel. <br> A slightly rounded rim with an inward curve. Interior surface-smooth. | 120? | 5 | $34 \times 18$ | FWII <br> Note: <br> Large voids, irregular, $4-8 \mathrm{~mm}$. One large brown mineral inclusion, irregular, 3 mm . | NA |
| 130 | 23-3-03 | Main Courtyard. | Neck. | Water vessel. <br> Straight neck walls. Worn sherd. | - | 7 | $30 \times 21$ | FWII | NA |
| 131 | 23-3-03 | Main Courtyard. | Neck. | Water Vessel. <br> Straight neck walls. Interior surface-smooth. | 110? | 7-7.5 | $37 \times 27$ | FWII | Exterior-one groove. |
| 132 | 23-3-03 | Main Courtyard. | Body. | , | - | 7 | $48 \times 17$ | FWI | NA |
| 133 | 23-3-03 | Majlis 2-exterior. | Neckbody. | Water Vessel. Khars. Straight neck walls. Interior surface-smooth. | 120? | Neck-6.5 <br> Body-6 | $85 \times 80$ | FWIII | Exterior-incised decoration. <br> Sets of parallel, horizontal lines, interspersed between diagonally set groups of dashes. Plus parallel, horizontal rows of wavy lines, consisting of dashes. |
| 134 | 23-3-03 | Majlis 2-exterior. | Body. | Water vessel? Khars. | - | 7-8.5 | $35 \times 30$ | FWIII | Exterior-incised decoration. Parallel, horizontal lines. |
| 135 | 23-3-03 | Majlis 2-exterior. | Body. | Water vessel. <br> Well rounded body. Interior surface-uneven. Cement mending. | - | 5-6 | $68 \times 63$ | FWIII | Exterior-incised decoration. Curved lines. Parallel, horizontal lines interspersed with vertically set groups of dashes. Parallel, horizontal, wavy lines, consisting of dashes. |
| 136 | 23-3-03 | Majlis 2-exterior. | Body. | Water vessel. Yahlah. Well rounded body. Interior surface-uneven. | - | 5.5-6.5 | $85 \times 75$ | FWIII | NA |
| 137 | 23-3-03 | Jammalah-interior. | Body. | ? | - | 3.5 | $38 \times 29$ | Porcelain <br> Fabricwhite. | Interior and exterior-white glaze Exterior-Alternating bands of colour-pale pink and green. |

Table 22. Continued

| FP | Date | Loc | Frag. <br> Type | Vessel Shape | Diam | Thickness: All dimensions in mm . | $\mathrm{L} \times \mathrm{W}$ | Fabric Type | Decoration |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 138 | 23-3-03 | Jammalah-interior. | Rim. | Large open bowl. <br> Rim-a flat top with internal overhang. Interior surface-smooth. Serving bowl. | 520? | 12 | $73 \times 38$ | CCWI | Interior and exterior-brown slip. Exterior-a raised ridge running below the rim. |
| 139 | 23-3-03 | Jammalah-interior. | Body. | Water vessel, khars. <br> A biconical body shape. Interior surface is uneven and cracked. | - | 7 | $68 \times 45$ | FWIII | Exterior-incised decoration. Parallel, horizontal lines, consisting of dashes. Parallel, horizontal lines. Parallel, horizontal lines, consisting of dashes. Parallel, horizontal lines. |
| 140 | 23-3-03 | Jammalah-interior. | Body. | Water vessel, khars. A biconical body shape. Interior surface is uneven and cracked. | - | 5-6.5 | $55 \times 48$ | FWIII | Exterior-incised decoration. Parallel, horizontal lines, consisting of dashes. |
| 141 | 23-3-03 | Jammalah-interior. | Body. | Water vessel, khars. A biconical body shape. Interior surface is uneven and cracked. | - | 5.5 | $70 \times 48$ | FWIII | Exterior-incised decoration. Horizontal, parallel lines, consisting of dashes. Horizontal, parallel lines. Horizontal, parallel lines, consisting of dashes. |
| 142 | 23-3-03 | Jammalah-interior. | Body. | ? | - | 5.5 | $34 \times 23$ | FWIII | Exterior-incised decoration. Parallel lines. |
| 143 | 23-3-03 | Jammalah-interior. | Neck. | Water vessel. <br> Straight neck walls. <br> Interior surface-smooth. | Ind? | 5 | $23 \times 23$ | FWIII | NA |
| 144 | 23-3-03 | Jammalah-interior. | Rim. | Incense burner. <br> Outward flaring walls. <br> Rim-rounded with external overhang. Interior surface-smooth. | Ind? | 4.5 | $23 \times 21$ | RCWI | Rim-top, interior and exteriorplum red paint. <br> Exterior-below the rim-incised, parallel, horizontal lines. Cut out oval-shaped holes. Three parallel, horizontal, incised lines with plum red paint across. Fragments of cut out oval-shaped holes. |
| 145 | 23-3-03 | Jammalah-interior. | Body. | ? | - | 10 | $33 \times 21$ | FWI | NA |


| 146 | 23-3-03 | Main House, exterior, perimeter wall. | Body. | Water vessel, khars. A biconical body shape. Interior surface is uneven and cracked. | - | 5-6 | $85 \times 43$ | FWIII | Exterior-incised decoration. Parallel, horizontal, wavy lines, consisting of dashes. These are interspersed with horizontal, parallel lines. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 147 | 23-3-03 | Main House, exterior, perimeter wall. | Body. | Water vessel, khars. A biconical body shape. Interior surface is uneven and cracked. | - | 4-5 | $130 \times 53$ | FWIII | Exterior-incised decoration. Vertical sets of dashes located around the vessel just above the base. The dashes decrease in size from bottom to top. Parallel, horizontal lines, with a wavy line on top consisting of dashes. |
| 148 | 23-3-03 | Main House, exterior, perimeter wall. | Body. | Water vessel, khars. A biconical body shape. Interior surface is uneven and cracked. | - | 6-6.5 | $61 \times 58$ | FWIII | Exterior-incised decoration. A set of parallel, horizontal lines. A set of combed, parallel, wavy lines. A set of parallel, horizontal wavy lines, consisting of dashes. |
| 149 | 23-3-03 | Kitchen-interior. | Rim. | Open bowl with a deep centre, and outward flaring walls. A rounded, wavy rim. | $280 ?$ | 5 | $85 \times 51$ | Porcelain. <br> Fabricwhite. | Interior and exterior-white glaze-crazing. <br> Interior-raised decoration running below the rimraised dots and two indented, wavy, parallel lines. |
| 150 | 23-3-03 | Kitchen-interior. | Body. | ? <br> One clear perforation and fragments of two more, diam. 3.5 mm . | - | 3.5 | $28 \times 20$ | Porcelain. <br> Fabricwhite. | Interior and exterior-white glaze. |
| 151 | 23-3-03 | Kitchen-interior. | Rim. | Incense burner. <br> Outward flaring walls. <br> A rounded rim with external overhang. | - | 3.5 | $26 \times 12$ | RCWI | Interior-orange slip? <br> Exterior-orange slip and a patch of plum red paint. |
| 152 | 23-3-03 | Kitchen-interior. | Body. | ? | - | 9 | $55 \times 40$ | CCWI | Exterior-patches of a brown slip. |
| 153 | 23-3-03 | Kitchen-interior. | Body. | Water vessel? Yahlah? Rounded body. Interior surface-uneven. | - | 4.5-6.5 | $63 \times 42$ | FWIII | Exterior-incised decoration. Fine, parallel, horizontal combed lines. Parallel combed lines, forming a leaf shape. Located on either side-vertically aligned, parallel, wavy combed lines. |

\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|}
\hline FP \& Date \& Loc \& \begin{tabular}{l}
Frag. \\
Type
\end{tabular} \& Vessel Shape \& Diam \& Thickness: All dimensions in mm . \& \(\mathrm{L} \times \mathrm{W}\) \& Fabric Type \& Decoration \\
\hline 154 \& 27-1-03 \& Main Courtyard. \& Rim. \& Incense burner. Straight neck walls. A rounded and outward curving rim. \& 60 ? \& Neck \& \(24 \times 21\)

$68 \times 60$ \& RCWI \& Rim-interior, top and exterior-plum red paint. Exterior-below the rimtwo parallel, horizontal incised lines. A band of incised diamond shapes. A patch of plum red paint. <br>

\hline 155 \& 23-3-03 \& Storeroom-interior. \& Neck. \& Water vessel. Yahlah? Straight neck walls. A well rounded body. A handle fragment still visible. Interior surface-smooth. \& 111? \& | Neck-4 |
| :--- |
| Body-6 | \& $68 \times 60$ \& FWIII \& | Exterior-incised decoration. |
| :--- |
| Parallel, horizontal, fine lines. | <br>

\hline 156 \& 23-3-03 \& Majlis 1-interior. \& Base. \& A flat base with a rounded corner. Outward flaring vessel walls. \& 111? \& Wall-7 \& $58 \times 25$ \& FWI \& NA <br>

\hline 157 \& 23-3-03 \& Majlis 1-interior. \& Rim. \& Water vessel. Yahlah? Straight neck walls. A rounded rim with internal and external overhang. A groove runs below the rim on the exterior. Interior surface-smooth. Wheelmade? \& 100 \& 3 \& $38 \times 37$ \& FWIII \& | Rim-remnants of plum red paint. |
| :--- |
| Exterior-incised decoration. Intersecting lines. | <br>

\hline 158 \& 23-3-03 \& Majlis 1-interior. \& Body. \& Water vessel. Rounded. Interior surface-uneven. \& - \& 6.5 \& $57 \times 43$ \& FWIII \& Exterior-incised decoration. Horizontal, parallel, wavy lines consisting of connected dashes. A single, horizontal, wavy line. Two parallel, horizontal straight lines. A band of cross-hatching. <br>

\hline 159 \& 30-1-03 \& NNE face-exterior perimeter wall. \& Rim. \& Open bowl. \& Ind? \& 5 \& $28 \times 27$ \& | Porcelain. |
| :--- |
| Fabricwhite. | \& | Interior and exterior-glaze-crazing. |
| :--- |
| Interior-raised decoration consisting of circles and a wavy line running below the rim. | <br>

\hline
\end{tabular}

| 160 | 30-1-03 | NNE face-exterior perimeter wall. | Rim. | A well rounded body and an outward curving rim, with external overhang. Rim-flat top. Interioruneven surface. Cooking pot-burmah. | 160? | 5-8 | $100 \times 70$ | RCWI | Exterior-signs of burningcooking pot. <br> Rim-over the top, interior and exterior are patches of a plum red paint. Exterior-below the rim-plum red paint-diagonal lines. These lines run into a horizontal band of plum red paint. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 161 | 30-1-03 | Settlement south of Majalis $2 \& 3$. | Lid handle. | A circular shaped handle from a vessel lid. Biconical in section, with a central depression in the top centre. | Diam- $41-42$ | Height-15 | - | RCWI | A pale orange slip? |
| 162 | 1-5-03 | Main House, exterior, perimeter wall. | Base. | Irregular shaped base. Slightly concave on the underside. Storage vesselkhars? | 150 | 10-12 | $95 \times 80$ | CCWI | N/A |
| 163 | 1-5-03 | Main House, exterior, perimeter wall. | Base. | Slightly irregular/flat base with <br> a rounded corner and outward tapering walls. | $260 ?$ | Base-12 <br> Wall-12 | $125 \times 90$ | CCWI | Interior and exterior-fragments of a brown coloured slip. |
| 164 | 1-5-03 | Main House, exterior, perimeter wall. | Base. | Flat base with a rounded corner and outward tapering walls. Storage vessel-khars. | $160 ?$ | Base-12 <br> Wall-15 | $160 \times 115$ | CCWI <br> Note: The fabric core is com parable to CCWI however, the fabric peripheries are pale or ange in colour. | Exterior-a red/brown slip. |
| 165 | 1-5-03 | Main House, exterior, perimeter wall. | Rim. | Open bowl with slightly rounded vessel walls and a flat topped rim. Serving bowl. | 320 | 10 | $125 \times 110$ | CCWI | Interior, exterior and rim-brown coloured slip. Exterior-a raised, horizontal band running below the rim. |


| FP | Date | Loc | Frag. <br> Type | Vessel Shape | Diam | Thickness: All dimensions in mm . | $\mathrm{L} \times \mathrm{W}$ | Fabric <br> Type | Decoration |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 166 | 1-5-03 | Main House, exterior, perimeter wall. | Rim. | An open bowl with slightly rounded vessel walls. A slightly rounded rim. Serving bowl. | 240 | 10-12 | $135 \times 125$ | CCWI | Interior and exterior-Fragments of a brown coloured slip. Exterior- a raised, horizontal band running below the rim. |
| 167 | 1-5-03 | Main House, exterior, perimeter wall. | Rim. | An open bowl with slightly rounded vessel walls. A slightly rounded rim. Serving bowl. | 240? | 10-14 | $125 \times 120$ | CCWI | Interior and exterior-Fragments of a brown coloured slip. Exteriora raised, horizontal band running below the rim. |
| 168 | 1-5-03 | Main House, exterior, perimeter wall. | Body. | Water vessel, khars. A biconical body shape. Interior surface is uneven and cracked. | 280? | 5-6 | $125 \times 90$ | FWIII | Exterior-incised decoration. Consisting of dashes, interspersed with parallel, horizontal lines. Plus a fragment of three vertical lines. |
| 169 | 1-5-03 | Main House, exterior, perimeter wall. | Body \& neck. | Water vessel. Straight neck walls. Khars. | Neck-90-100? | Neck-6.5 <br> Body-8.5 | $100 \times 70$ | FWIII | Exterior-incised decoration. Parallel, wavy lines consisting of dashes. Fragments of intersecting lines. |
| 170 | 1-5-03 | Main House, exterior, perimeter wall. | Body. | Water vessel. Khars. | - | 8.5 | $130 \times 75$ | FWIII | Exterior-incised decoration. <br> Horizontal, parallel lines; horizontal, parallel lines consisting of short dashes; a wavy line; horizontal, parallel lines; fragment of four vertically aligned lines. |
| 171 | 1-5-03 | Main House, exterior, perimeter wall. | Rim. | A wide, rounded rim with a well rounded body. Water vessel? Hab? | 280? | 9 | $110 \times 60$ | FWII | Exterior-incised decoration. Four, parallel, horizontal lines, below the rim. |

Table 23. Object registration.

| Reg. <br> No. | Date | Location | Object | Material | Dimensions: $(\mathrm{mm})$ | Description |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| F1 | 26-1-03 | Interior, Main Courtyard. | Bangle fragment. | Glass. | $\begin{gathered} \text { L-20; Th-3; } \\ \text { Diam-60. } \end{gathered}$ | A dark blue, curved glass bangle fragment. Smooth in texture. Circular in section. |
| F2 | 27-1-03 | Majlis 3, exterior. | Bangle fragment. | Glass. | $\begin{gathered} \text { L-11; Th-4; } \\ \text { Diam-60. } \end{gathered}$ | A red, curved glass bangle fragment. Smooth in texture. Circular in section. There is a cream coloured central core, diam. 1.5. |
| F3 | 27-1-03 | Interior, Main Courtyard. | Bangle fragment. | Glass. | $\begin{gathered} \text { L-19; Th-3.5; } \\ \text { Diam-50. } \end{gathered}$ | A dark blue, curved glass bangle fragment. Smooth in texture. Circular in section. |
| F4 | 27-1-03 | Interior, Main Courtyard. | Bangle fragment. | Glass. | $\begin{gathered} \text { L-15; Th-3.5; } \\ \text { Diam-60? } \end{gathered}$ | A yellow, curved glass bangle fragment. Smooth in texture. Circular in section. There is a cream coloured central core, diam. 1.5. |
| F5 | 27-1-03 | Interior, Main Courtyard. | Nail. | Iron. | L-34; Shaft Th-5; Top diam-19-20. | An iron nail with a circular and slightly convex shaped top (51). The shaft is square in section and pointed at one end. |
| F6 | 23-3-03 | Khaymah B. | Nail. | Iron. | L-70; Shaft Th-4-5; Top diam-15. | An iron nail with a circular and slightly convex shaped top. The shaft is square in section but broken at the end. |
| F7 | 27-1-03 | Interior, Main Courtyard. | Sphere? | Faience? | Diam-8-10. | A sphere of slightly irregular shape. Mottled turquoise and brown in appearance. |
| F8 | 2-2-03 | Interior, Main Courtyard. | Bangle fragment. | Glass. | $\begin{gathered} \text { L-20; Th-3.5; } \\ \text { Diam-60. } \end{gathered}$ | A light blue, curved glass bangle fragment. Smooth in texture. Circular in section. |
| F9 | 26-2-03 | Majlis 3, exterior. | Bangle fragment. | Glass. | $\begin{aligned} & \text { L-22; Th-3.5; } \\ & \text { Diam-60. } \end{aligned}$ | A yellow, curved glass bangle fragment. Smooth in texture. Circular in section. There is a cream coloured central core, diam. 1.5. |
| F10 | 26-2-03 | Interior, Main Courtyard. | Bangle fragment. | Glass. | $\begin{gathered} \text { L-11; Th-3.5; } \\ \text { Diam-50? } \end{gathered}$ | A dark green, curved glass bangle fragment. Smooth in texture. Circular in section. There is a pale green coloured central core, diam. 1.5. |
| F11 | 13-3-03 | Interior, Main Courtyard. | Bangle fragment. | Glass. | $\begin{gathered} \text { L-17; Th-3.5; } \\ \text { Diam-60? } \end{gathered}$ | A twisted red and white bangle fragment. Curved in shape and circular in section. |
| F12 | 23-3-03 | Interior, Main Courtyard. | Bead. | Glass. | Diam-9; <br> Perforation diam. 1.5. | A pale yellow, frosted glass, spherical bead. With a central perforation, circular in section. |
| F13 | 23-3-03 | Interior, Main Courtyard. | Bangle fragment. | Glass. | L-8; Th-4; <br> Diam-ind? | A dark blue, curved glass bangle fragment. Smooth in texture. Circular in section. There is a pale blue coloured central core, diam. 1.5. |
| F14 | 23-3-03 | Interior, Main Courtyard. | Bead. | Glass. | Diam-12; <br> Perforation diam. 2. | A yellow, spherical shaped bead. With a central perforation, circular in section. |
| F15 | 23-3-03 | Interior, Main Courtyard. | Bangle fragment. | Glass. | $\begin{gathered} \text { L-17; Th-3; } \\ \text { Diam-50. } \end{gathered}$ | A dark blue, curved glass bangle fragment. Smooth in texture. Circular in section. |
| F16 | 23-3-03 | Interior, Main Courtyard. | Bangle fragment. | Glass. | $\begin{gathered} \text { L-13; Th-3.5; } \\ \text { Diam-60? } \end{gathered}$ | A red and white, twisted, glass bangle fragment. Curved in shape. Circular in section. |
| F17 | 23-3-03 | Interior, Main Courtyard. | Bangle fragment. | Glass. | L-11; Th-3.5; Diam-ind? | A yellow, curved glass bangle fragment. Smooth in texture. Circular in section. There is a cream coloured central core, diam. 1.5. |
| F18 | 23-3-03 | Cow Pen. | Bangle fragment. | Glass. | $\begin{gathered} \text { L-13; Th-3.5; } \\ \text { Diam-60? } \end{gathered}$ | A dark blue, curved glass bangle fragment. Smooth in texture. Circular in section. There is a pale blue coloured central core, diam. 1.5. |
| F19 | 23-3-03 | Cow Pen. | Bangle fragment. | Glass. | $\begin{gathered} \text { L-15; Th-3; } \\ \text { Diam-70? } \end{gathered}$ | A red, curved glass bangle fragment. Smooth in texture. Circular in section. There is a cream coloured central core, diam. 1.5. |
| F20 | 23-3-03 | Main House, exterior, Perimeter Wall | Bangle fragment. | Glass. | $\begin{gathered} \text { L-25; Th-3; } \\ \text { Diam-60. } \end{gathered}$ | A red, curved glass bangle fragment. Smooth in texture. Circular in section. There is a cream coloured central core, diam. 1.5. |

M.C. ZIOLKOWSKI AND A.S. AL-SHARQI

Table 23. Continued

| Reg. <br> No. | Date | Location | Object | Material | Dimensions: $(\mathrm{mm})$ | Description |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| F21 | 23-3-03 | Main House, exterior, Perimeter Wall. | Bangle fragment. | Glass. | L-24; Th-3; Diam-60. | A red, curved glass bangle fragment. Smooth in texture. Circular in section. There is a pale red coloured central core, diam. 1.5. |
| F22 | 23-3-03 | Main House, exterior, Perimeter Wall. | Bangle fragment. | Glass. | $\begin{gathered} \text { L-20; Th-3; } \\ \text { Diam-40. } \end{gathered}$ | A red, curved glass bangle fragment. Smooth in texture. Circular in section. There is a cream coloured central core, diam. 1.25. |
| F23 | 23-3-03 | Main House, exterior, Perimeter Wall. | Bangle fragment. | Glass. | L-41; <br> Th-3.5-4; <br> Diam-55? | A dark blue and white twisted glass bangle fragment. Smooth in texture. Curved fragment. Circular in section. |
| F24 | 23-3-03 | Main House, exterior, Perimeter Wall. | Bangle fragment. | Glass. | L-36; <br> Th-3.5; <br> Diam-55? | A twisted dark blue and white glass bangle fragment. Smooth in texture. Curved fragment. Circular in section. |
| F25 | 23-3-03 | Main House, exterior, Perimeter Wall. | Bangle fragment. | Glass. | $\begin{gathered} \text { L-31; Th-3; } \\ \text { Diam-60. } \end{gathered}$ | A dark green, curved glass bangle fragment. Smooth in texture. Circular in section. There is a pale green coloured central core, diam. 1.25. |
| F26 | 23-3-03 | Main House, exterior, Perimeter Wall. | Bangle fragment. | Glass. | L-9; <br> Th-3-3.5; <br> Diam-ind? | A light green, curved glass bangle fragment. Smooth in texture. Circular in section. Consisting of a hollow central core, diam. 1.5. |
| F27 | 23-3-03 | Main House, exterior, Perimeter Wall. | Bangle fragment. | Glass. | $\begin{gathered} \text { L-20; Th-3; } \\ \text { Diam-60. } \end{gathered}$ | A dark blue, curved glass bangle fragment. Smooth in texture. Circular in section. There is a pale blue coloured central core, diam. 1. |
| F28 | 23-3-03 | Main House, exterior, Perimeter Wall. | Bangle fragment. | Glass. | $\begin{gathered} \text { L-24; Th-3.5; } \\ \text { Diam-60. } \end{gathered}$ | A twisted red and white coloured glass bangle fragment. Circular in section. Curved fragment. |
| F29 | 23-3-03 | Main Room. | Window pane fragment. | Glass. | $\begin{aligned} & \mathrm{L} \times \mathrm{W}-95 \times 45 \text {; } \\ & \text { Th-2-3. } \end{aligned}$ | A glass window pane fragment. It contains a raised floral and vegetal pattern on one face. |
| F30 | 23-3-03 | Main Room. | Window pane fragment. | Glass. | $\begin{aligned} & \mathrm{L} \times \mathrm{W}-57 \times 36 \text {; } \\ & \text { Th- } 2-3 \text {. } \end{aligned}$ | A glass window pane fragment. It contains a raised floral and vegetal pattern on one face. |
| F31 | 23-3-03 | Main House, exterior, Perimeter Wall. | Pigment shell. | Shell. (Fi <br> See Seas registra table for details. | $\times W-57 \times 49 .$ | A seashell with patches of a turquoise-green coloured pigment inside. In the lower, central portion of the shell interior the contents are black in colour. |
| F32 | 23-3-03 | Main House, exterior, Perimeter Wall. | Small jar. | Glass. | $\begin{aligned} & \text { Height-60; L } \times \\ & \text { W-body- } 18 \times 18 \text {. } \end{aligned}$ | A small clear glass jar. Either for medicine or perfume. |
| F33 | 23-3-03 | Main House, exterior, Perimeter Wall. | Dish fragment. | Glass. | $\mathrm{L} \times \mathrm{W}-46 \times 37$; Th-4-5; Base diam. 80? | The base fragment of an open glass dish. Interior surface is smooth. Exterior surface contains raised geometric designs. A footed base. |
| F34 | 23-3-03 | Main House, exterior, Perimeter Wall. | Dish <br> Fragment. | Glass. | $\mathrm{L} \times$ W-46 $\times 23$; Th-3.5-5; Rim diam. 220? | A rim fragment of an open glass dish. Interior surface is smooth. Exterior surface contains raised geometric designs. The rim consists of a series of raised curves. |
| F35 | 23-3-03 | Main House, exterior, Perimeter Wall. | Dish <br> Fragment. | Glass. | $\mathrm{L} \times \mathrm{W}-34 \times 27$; Th-5; Rim diam. 220? | A rim fragment of an open glass dish. Interior surface is smooth. Exterior surface contains raised geometric designs. The rim consists of a series of raised curves. |
| F36 | 23-3-03 | Main Room. | Small jar. | Glass. | Height-41; <br> Vessel and base diam. 30 . | A small, clear glass, cylindrical shaped vessel. For medicine or perfume. |

Table 23. Continued

| Reg. <br> No. | Date | Location | Object | Material | Dimensions: (mm) | Description |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| F37 | 23-3-03 | Main Room. | Small jar. | Glass. | Height-49; <br> Base diam. 38; Vessel diam. 68. | A squat and rounded, clear glass jar. Exterior-fluted design. |
| F38 | 23-3-03 | Main Room. | Door lock. | Iron. | $\begin{aligned} & \text { L-165; Shaft L } \times \\ & \text { W-2-6 } \times 10 \end{aligned}$ | Part of a door locking system. An elongated u-shape. The locking device recovered from the main room is known as Halq in Arabic. This was the lock used at the top of the door. |
| F39 | 23-3-03 | Interior, Main Courtyard. | Metal Object? <br> Possibly a bangle fragment. | Copper/ bronze? | $\begin{aligned} & \mathrm{L} \times \mathrm{W}-30 \times 21 \text {; } \\ & \text { Th-0.5. } \end{aligned}$ | A small metal fragment. Exterior-two parallel lines of small raised circles on either side. Centre-a single line of slightly larger raised circles. |
| F40 | 23-3-03 | Main House, exter ior, <br> Perimeter Wall. | -Metal <br> Fragment? <br> Bangle fragment. | Tin-silver? | $\mathrm{L} \times \mathrm{W}-45 \times 15.5 ;$ <br> Th-1 mm. | A metal fragment with decoration on one side. One end is curved. The decoration consists of a geometric cross hatch pattern; raised, pointed circles; small raised circles; and two parallel lines with a rope pattern on either side. |
| F41 | 23-3-03 | Cow Pen. | Metal <br> Fragment? <br> Small <br> bangle fragmentchild. | Tin-silver? | $\begin{aligned} & \mathrm{L} \times \mathrm{W}-31.5 \times 5 ; \\ & \text { Th-2l. } \end{aligned}$ | A thin metal strip with decoration on one side. Slightly bent. Decoration: a raised floral and vegetal pattern. |
| F42 | 23-3-03 | Interior, Main Courtyard. | Key. | Iron. | $\begin{aligned} & \mathrm{L} \times \mathrm{W} \times \mathrm{W}- \\ & 43.5 \times 19 \times 8 \text {; } \\ & \mathrm{Th}-2 . \end{aligned}$ | An iron key. |
| F43 | 23-3-03 | Jammalah, interior. | Bullet shell. | Brass. | $\begin{aligned} & \text { L-56; } \\ & \text { Diam-13-11-8. } \end{aligned}$ | Cylindrical-shaped bullet shell. Inscription on the top: 1943 D1 2 |
| F44 | 23-3-03 | Main Room. | Bullet shell. | Brass. | $\begin{aligned} & \text { L-56; } \\ & \text { Diam-13-11-8. } \end{aligned}$ | Cylindrical-shaped bullet shell. Inscription on the top: NORMA 03 BRITISH |
| F45 | 23-3-03 | Cow Pen. | Bullet shell. | Brass. | L-57; <br> Diam-11.5-12-8. | Cylindrical-shaped bullet shell. Inscription on the top: F N 757 Js ? |
| F46 | 23-3-03 | Cow Pen. | Bullet shell and attachment. | Brass and Iron. | L-86; <br> Diam-13-11; <br> Att. L-63; Diam-12.5. | Cylindrical-shaped bullet shell with an iron cylinder attached. Top inscription is indeterminate. |
| F47 | 23-3-03 | Interior, Main Courtyard. | Bullet shell. | Brass. | $\begin{aligned} & \text { L-58; } \\ & \text { Diam-11.5-11-8. } \end{aligned}$ | Cylindrical-shaped bullet shell. Inscription on the top: F N $7 \times 57$ |
| F48 | 23-3-03 | Interior, Main Courtyard. | Bullet shell. | Brass. | $\begin{aligned} & \text { L-56; } \\ & \text { Diam-13-11-8. } \end{aligned}$ | Cylindrical-shaped bullet shell. Inscription on the top: 752 ? |
| F49 | 23-3-03 | Interior, Main Courtyard. | Bullet shell. | Brass. | L-57; <br> Diam-11-11-8.5. | Cylindrical-shaped bullet shell. Inscription on the top: F N 49 |
| F50 | 23-3-03 | Interior, Main Courtyard. | Bullet shell. | Brass. | $\begin{aligned} & \text { L-57; } \\ & \text { Diam-11-11-8.5. } \end{aligned}$ | Cylindrical-shaped bullet shell. Inscription on the top: 4 S67 16 x |
| F51 | 23-3-03 | Interior, Main Courtyard. | Bullet shell. | Brass. | $\begin{aligned} & \text { L-56; } \\ & \text { Diam-11-11-8.5. } \end{aligned}$ | Cylindrical-shaped bullet shell. Inscription on the top: Indeterminate. |
| F52 | 23-3-03 | Interior, Main Courtyard. | Bullet shell. | Brass. | $\begin{aligned} & \text { L-50; } \\ & \text { Diam-11.5-11. } \end{aligned}$ | Cylindrical-shaped bullet shell. Inscription on the top: Ws $6.5 \times 57$ |
| F53 | 23-3-03 | Majlis 2, exterior. | Bullet shell. | Brass. | $\begin{aligned} & \text { L-56; } \\ & \text { Diam-13-11-8. } \end{aligned}$ | Cylindrical-shaped bullet shell. Inscription on the top: $\mathrm{R} \uparrow / 567$ |
| F54 | 23-3-03 | Majlis 2, exterior. | Bullet shell. | Brass. | L-55; Diam-13-11-7 (damaged). | Cylindrical-shaped bullet shell. Inscription on the top: NORMA 503 BRITISH |

M.C. ZIOLKOWSKI AND A.S. AL-SHARQI

Table 23. Continued

| Reg. <br> No. | Date | Location Object | Material | Dimensions: (mm) | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| F55 | 23-3-03 | Majlis 2, exterior. $\quad$ Bullet shell. | Brass. | $\begin{aligned} & \text { L-51.5; } \\ & \text { Diam-11.5-11.5-8 } \end{aligned}$ | Cylindrical-shaped bullet shell. Inscription on the top: SAKO 243 |
| F56 | 23-3-03 | Majlis 2, exterior. $\quad$ Bullet shell. | Brass. | $\begin{aligned} & \text { L-55; } \\ & \text { Diam-13-11-? } \end{aligned}$ | Cylindrical-shaped bullet shell. Inscription on the top: 1943 ? |
| F57 | 23-3-03 | Main House, exter-Bullet shell. ior, Perimeter Wall. | Brass. | $\begin{aligned} & \text { L-56; } \\ & \text { Diam-13-11-8. } \end{aligned}$ | Cylindrical-shaped bullet shell. Inscription on the top is indeterminate. |
| F58 | 23-3-03 | Main House, exter-Bullet shell. ior, Perimeter Wall. | Copper? | $\begin{aligned} & \text { L-54; } \\ & \text { Diam-18-16-12.5. } \end{aligned}$ | Cylindrical-shaped bullet shell. No visible inscription. |
| F59 | 23-3-03 | Main House, exter-Bullet shell. ior, Perimeter Wall. | Brass. | L-39; Diam-13-11damaged. | Cylindrical-shaped bullet shell. |
| F60 | 23-3-03 | Interior, Main Bullet shell. Courtyard. | Brass. | L-15; <br> Diam-6.5-5. | Small cylindrical-shaped bullet case. No visible inscriptions. |
| F61 | 23-3-03 | Main House, exter-Nail. ior, Perimeter Wall. | Iron. | $\begin{aligned} & \text { L-80; Shaft L } \times \\ & \text { W- } 5 \times 5-3 \times 4 \text {; } \\ & \text { Top-L } \times \\ & \text { W- } 7 \times 15 \text {. } \end{aligned}$ | An iron nail with a square shaped shaft and pointed end. The top is slightly convex in shape. |
| F62 | 23-3-03 | Khaymah B, Nail. interior. | Iron. | L-145?; <br> Shaft-6-4; <br> Top diam-22. | An iron nail with a square shaped shaft and pointed end. The nail is bent. The top is circular and slightly convex in shape. |
| F63 | 23-3-03 | Khaymah B, Nail. interior. | Iron. | L-135?; <br> Shaft-5-4; <br> Top diam-23. | An iron nail with a square shaped shaft and pointed end. The nail is bent. The top is circular and slightly convex in shape. |
| F64 | 23-3-03 | Khaymah B, Nail. interior. | Iron. | L-115?; <br> Shaft-5-3; <br> Top diam-21. | An iron nail with a square shaped shaft and pointed end. The nail is bent. The top is circular and slightly convex in shape. |
| F65 | 23-3-03 | Khaymah B, Nail. interior. | Iron. | L-160?; <br> Shaft-5-3; <br> Top diam-20. | An iron nail with a square shaped shaft and pointed end. The nail is bent. The top is circular and slightly convex in shape. Top-slightly irregular. |
| F66 | 23-3-03 | Khaymah B, Nail. interior. | Iron. | L-110?; <br> Shaft-5-3; <br> Top diam-21. | An iron nail with a square shaped shaft and pointed end. The nail is bent. The top is circular and slightly convex in shape. |
| F67 | 23-3-03 | Khaymah B, Nail. interior. | Iron. | L-75?; <br> Shaft-5-3; <br> Top diam-16. | An iron nail with a square shaped shaft and pointed end. The nail is bent. The top is circular and flat in shape. Top-slightly irregular. |
| F68 | 23-3-03 | Khaymah B, Nail. interior. | Iron. | L-80?; <br> Shaft-5-3; <br> Top diam-17. | An iron nail with a square shaped shaft and pointed end. The nail is bent. The top is circular and slightly convex in shape. |
| F69 | 1-5-03 | Main House, exter-Matting. ior, Perimeter Wall. | Palm leaf. | Width of leaves-6-7. | Fragment of a woven palm leaf mat (khasaf). |
| F70 | 1-5-03 | Main House, exter-Matting. ior, Perimeter Wall. | Palm leaf. | Width of leaves-4-6. | Fragment of a woven date-palm leaf mat (hașīr/simah). Tightly woven. |
| F71 | 1-5-03 | Main House, exter-Matting. ior, Perimeter Wall. | Twigs? | Diam. of twigs-1-2. | Fine twigs, woven over a fibrous rope to form a mat ('asal). |

Table 24. Seashells.

| Reg. No. | Date | Location | Description (53) |
| :---: | :---: | :---: | :---: |
| S1 | 1-5-03 | Main courtyard. | 'Cowry shell.' <br> Class-Gastropoda. <br> Subclass-Prosobranchia. <br> Superfamily-Cypraeoidea. <br> Family-Cypraeidae. |
| S2 | 23-3-03 | Kitcheninterior. | 'Cowry shell.' <br> Class-Gastropoda. <br> Subclass-Prosobranchia. <br> Superfamily-Cypraeoidea. <br> Family-Cypraeidae. |
| S3 | 23-3-03 | Main houseexterior, perimeter wall. | Class-Gastropoda. <br> Subclass-Prosobranchia. <br> Superfamily-Muricoidea. <br> Family-Olividae. |
| S4 | 23-3-03 | Main courtyard. | Class-Gastropoda. <br> Subclass-Prosobranchia. <br> Superfamily-Muricoidea. <br> Family-Olividae. |
| S5 | 23-3-03 | Main courtyard. | Class-Gastropoda. <br> Subclass-Prosobranchia. <br> Superfamily-Conoidea. <br> Family-Conidae. |
| S6 | 23-3-03 | Main courtyard. | Class-Gastropoda. <br> Subclass-Prosobranchia. <br> Superfamily-Conoidea. <br> Family-Conidae. |
| S7 | 23-3-03 | Main courtyard. | Class-Gastropoda. <br> Subclass-Prosobranchia. <br> Superfamily-Conoidea. <br> Family-Conidae. |
| S8 | 23-3-03 | Main courtyard. | Class-Gastropoda. <br> Subclass-Prosobranchia. <br> Superfamily-Conoidea. <br> Family-Conidae. |
| S9 | 23-3-03 | Main courtyard. | Class-Gastropoda. <br> Subclass-Prosobranchia. <br> Superfamily-Neritoidea. <br> Family-Neritidae. |
| S10 | 23-3-03 | Main courtyard. | Class-Bivalvia. <br> Subclass-Protobranchia. |
| S11 | 23-3-03 | Cow pen. | Class-Bivalvia. <br> Subclass-Protobranchia. |
| S12 | 23-3-03 | Cow pen. | Class-Gastropoda. <br> Subclass-Prosobranchia. <br> Superfamily-Muricoidea. <br> Family-Nassariidae. <br> Subfamily-Dorsaniinae. |
| S13 | 23-3-03 | Main houseexterior, perimeter wall. | Class-Bivalvia. <br> Subclass-Pteriomorpha. <br> Superfamily-Limopsoidea. |
| S14/F31 <br> (Fig. 63) | 23-3-03 | Main houseexterior, perimeter wall. | Class-Bivalvia. <br> Subclass-Pteriomorpha. <br> Superfamily-Arcoidea. <br> Family-Arcidae. <br> Subfamily-Anadarinae. |

within the date-palm garden at al-Fara', and used in the ceiling construction of majlis 3 . Both the old and new falaj systems continued into the Wadi Furfar. The new falaj runs into the Wadi Furfar for about half a kilometre from the edge of the terraced garden fields. The older falaj channel is visible from the garden terraces at the northwestern region of the site, to the entrance of Wadi Furfar. This old irrigation channel was built with tightly packed mountain rocks; however, it is incomplete and badly damaged. The new falaj system was constructed with a mortar made from lime and sea sand (seashells visible), and at a later stage it was replastered with cement (Fig. 42). This new water channel was built below the old falaj and the two channels are visible in Figure 43.

## Ceramics and objects: based on archaeological and ethnographic information (pers. comm. M. al-Kindi 2003)

Pottery was traded from the Sultanate of Oman and Ra's al-Khaimah Emirate (U.A.E.), with the people of Fujairah (Tables 20, 21 and 22). A large portion of the ceramics at al-Fara' were made by the Shihūh in Khasab and Limah (Musandam Peninsula, Sultanate of Oman) (49), and in Rams (Ra's al-Khaimah, U.A.E.). The Shihūh would travel from the mountains to the coast during the summer months to sell goats, ceramics and other items such as grinding stones (50). One of the more common types of ceramic recovered from the site were fragments of the large fine ware ceramic water vessels, known as yahlah. The women of al-Fara would carry two large water pots (yahlah), one on their head, using a doughnut-shaped device made from fabric called 'Ikamālah, and the other on their arm. These pots were made of a pale-coloured, 'fine ware' type fabric and had rounded bases (Table 21) (Fig. 57). The women would leave the main house from the back entrance and collect water from the wād $\bar{\imath}$ or the falaj in the gardens below.

Glass bangles were amongst the most common type of jewellery worn by the women at al-Fara' (Figs 60 and 61) (Table 23). These glass bangles were usually imported from India and Iran. Two fragments of tin-silver bangles were also recovered from the main house at al-Fara' (F40 and F41), and one bronze bangle fragment (F39) (Fig. 62). Glass

## M.C. ZIOLKOWSKI AND A.S. AL-SHARQI

Table 25. Comparative compounds on the east coast of the U.A.E.

| House | Location | Date |
| :---: | :---: | :---: |
| Bayt Sheikh Abdullah bin Hamdan al-Sharqi (Fig. 6). Fortified courtyard house, watchtower, mosque, majlis, and associated settlement (houses, storerooms, animal enclosures, tobacco drying rooms and gardens). | Wadi al-Hayl, southern mountains of Fujairah. GPS: <br> N $25^{\circ} 5^{\prime} 5.6^{\prime \prime}$ <br> E $56^{\circ} 13^{\prime} 36.6^{\prime \prime}$ | c. 1932-38 |
| Bayt Sheikh Mohammed bin Hamad al-Sharqi <br> (Fig. 64, background), former ruler of Fujairah. <br> This house was established by Sheikh <br> Mohammed's father, Sheikh Abdullah bin Hamdan (62). <br> Fortified courtyard house, Fujairah fort, and associated settlement. | Below Fujairah fort (61). <br> GPS: <br> N $25^{\circ} 8^{\prime} 13.8^{\prime \prime}$ <br> E $56^{\circ} 20^{\prime} 17.0^{\prime \prime}$ | c. late 19th/early 20th century. |
| Bayt Sheikh Abdullah bin Hamdan al-Sharqi (63). Fortified courtyard house (Fig. 65). This house was established by Sheikh Abdullah's father, Sheikh Hamdan bin Suroor (64). | Below Fujairah fort. GPS: as above. | c. late 19th/early 20th century. |
| Fortified courtyard compound (Fig. 66). Note: this building was used by Sheikh Mohammed bin Hamad, the former ruler of Fujairah, during his travels outside Fujairah. The building was also used as a prison (65). | Masafi, Fujairah. <br> GPS: <br> N $25^{\circ} 18^{\prime} 15.0^{\prime \prime}$ <br> E $56^{\circ} 9^{\prime} 43.7^{\prime \prime}$ | c. first half of the 20th century. |
| Bayt Sheikh Salim al Anzar (Fig. 67), the former Wali of Madha. <br> Fortified courtyard house, associated settlement, watchtower, falaj system, terraced garden fields, Islamic cemetery, and rock built walls. | Madha, Sultanate of Oman. <br> GPS: <br> N $25^{\circ} 16^{\prime} 44.5^{\prime \prime}$ <br> E $56^{\circ} 19^{\prime} 35.3^{\prime \prime}$ | Mid-twentieth-century date (66). |
| Local Sheikh's residence, Qurayyah, Fujairah (Fig. 68). <br> Site 64, Coastal Survey (67). <br> This site contains a circular shaped tower built with mountain rocks and șarū $j$, located within a corner of the courtyard; main courtyard wall; a mudbrick house; a large platform; structural foundations for khaymah type houses; walls; and a well (68). | Qurayyah, Fujairah. <br> GPS: <br> N $25^{\circ} 14^{\prime} 25.3^{\prime \prime}$ <br> E $56^{\circ} 21^{\prime} 17.3^{\prime \prime}$ | Late Islamic period. <br> The ceramic recovered from the surface of Site 64 has been dated from the 17th to 20th centuries (69). |
| Non-fortified courtyard type houses located in Fujairah: Bayt Sheikha Amna bint Hamdan al-Sharqi. Large courtyard house (Fig. 64. foreground). This house was established by her husband Sheikh Saif bin Hamad (70). | Below Fujairah fort. <br> GPS: <br> N $25^{\circ} 8^{\prime} 13.8^{\prime \prime}$ E $56^{\circ} 20^{\prime} 17.0^{\prime \prime}$ | Early 20th century. |
| Ziqt Village (Settlement): <br> Site 32: Coastal Survey (71). <br> The site consists of various structures including housing compounds with perimeter walls and various internal rooms. However, none of these courtyard/compound houses were fortified. | Ziqt Village, Fujairah. <br> GPS: <br> N $25^{\circ} 30^{\prime} 39.9^{\prime \prime}$ <br> E $56^{\circ} 18^{\prime} 58.1^{\prime \prime}$ <br> The village is located on the coastal plain, close to the edge of the mountains, behind the present-day settlement. | According to local sources, this was the old village of Ziqt, or the pre-modern village. |
| Al Aqqah (House compound): <br> Site 35: Coastal Survey (72). <br> A walled compound containing a rectilinear, semi-subterranean house with a pitched roof and associated features. <br> This compound was not fortified. | Al Aqqah, Fujairah. GPS: <br> N $25^{\circ} 29^{\prime} 30.1^{\prime \prime}$ E $56^{\circ} 21^{\prime} 28.9^{\prime \prime}$ Located on the coastal plain. | Presumably associated with the pre-modern settlement of Al Aqqah. |

Table 25. Comparative compounds on the East Coast of the U.A.E.

| House | Lo |
| :--- | :--- |
| Bidyah Coast (Settlement): | Bi |
| Site 44: Coastal Survey (73). | G |
| The site consists of various houses, compounds, a mosque and | N |
| wall alignments. The structures were built with wood, | E |
| date-palm trunks, bound date-palm branches, mountain rocks, | Th |
| coral, farush, bound with a mud-based mortar, covered with a | lo |
| mud plaster, and in most cases replastered with cement. | ed |
| Eight compound/courtyard type houses were recorded at the | ga |
| site, however, none of these were fortified. |  |

Bidyah, Al-Worayyah (Settlement):
Site 51, Coastal Survey (75).
Five rock built compounds. None of these were fortified.

Qurayyah (Settlement):
Site 63, Coastal Survey (76).
One courtyard/compound type house with
internal rooms built amongst nine singular houses.

Saqamqam (Fortified settlement):
Site 67, Coastal Survey (77).
This site consists of a settlement built around an isolated watchtower atop a low lying jabal. There are 68 structures present at the site (including a mosque), fourteen of which are compound/courtyard type houses. None of the courtyard houses were fortified.

## Location

Bidyah, Fujairah. GPS:
N $25^{\circ} 26^{\prime} 36.7^{\prime \prime}$
E $56^{\circ} 21^{\prime} 30.4^{\prime \prime}$
This settlement is located along the edge of the date-palm gardens on the beach.
containers such as F37, a rounded, squat, clear glass jar with an exterior fluted design, originally held medicine (possibly Chinese). The women at al-Fara' would use these and other containers to hold special homemade perfumed mixtures of musk (misk), saffron threads (zi'farān) and 'uttrr (a thick mixture
of perfumed oils including dihn al-'̄̄̄d (aloewood oil)). Musk was purchased as a block and crumbled into the mixture. They would combine these ingredients in clean containers with lids made from glass, metal or ceramic, and bury them for forty days. This mixture, once infused with all the scents, would be

## M.C. ZIOLKOWSKI AND A.S. AL-SHARQI



Fig. 44.
Examples of prehistoric burial cairns near Gizemri, facing northeast.


Fig. 45.
Petroglyph, facing south-southeast.
used on their hair during special occasions such as weddings. This particular perfumed mixture is known as mkhammariyya (52).

Kohl (kuhl) at al-Fara' was stored in seashells such as F31/S14, half a bivalve shell (Table 24) (Fig. 63). The women of al-Fara' made kohl in the following


Fig. 46.
Old photograph of the house built by Sheikh Suhail during the mid-1960s.


Fig. 47.
Cream Coarse Ware I, FP 62 and 138.
manner: small glass containers which were used as oil lamps, containing a wick made from dried and wound leaves ('asal/Saccharum ravennae) and covered
with pressed dates, were placed inside niches present in the rooms. After about five days, a layer of soot would have built up on the inside of the


Fig. 48.
Cream Coarse Ware I, FP 10, 6 and 9.


Fig. 49.
Fine Ware III, FP 168 (khars).
niche holding the oil lamp. This soot was then scraped and mixed with unsalted butter, stored in a seashell and used as kohl. Murwad or kohl applicators were also common items for the women at al-Fara', and were made of twigs from the henna (Ar. hinna) (Lawsonia inermis) or Zizyphus spinachristi tree (Ar. sidr). Kohl applicators were also made at Dibba from soft stone (54), and these too were used by the women at al-Fara'. The soft-stone kohl applicators were smooth and contained two or three shimmering colours present within the stone. Unfortunately, no kohl applicators were recovered from the site.
Shells containing pigment ('pigment shells') are known from prehistoric contexts in the U.A.E. Half a bivalve shell (Marcia hiantina) was recovered from an early Iron Age context at Tell Abraq (Iron I, c. $1300-1000 \mathrm{BC}$ ) (TA 637, found 18.01.1992 in locus $130,75.20 \mathrm{E} / 105.10 \mathrm{~N}$, elev. 5.92 m ). Adhering to the interior of the shell was a roughly oval concentration of green matter measuring $c .19 \times 12 \mathrm{~mm}$, and 1 mm in thickness. The substance was analysed by x-ray powder diffraction and was determined to be atacamite $\left(\mathrm{Cu}_{2} \mathrm{Cl}(\mathrm{OH})_{3}\right)$, a secondary copper mineral (55). Thomas and Potts have compared the pigment shell from Tell Abraq to similar examples from sites in Mesopotamia


Fig. 50.
Fine Ware III, FP 83, 72, 82, 71 (below) (yahlah).


Fig. 51.
Red Coarse Ware I, FP 65, 68, 69, 66, 67 (top); 107, 110, 108, 109, 144 (middle); 111 (bottom), incense burner fragments and one vessel sherd.
(modern-day Iraq), for example Kish (Early Dynastic period c.2900-2350 BC), Khafajah (Early Dynastic), Ur and Uruk. According to Thomas and Potts,
'The custom of employing bivalve shells as holders for pigment in Mesopotamia is clearly the same as that observed at Tell Abraq, even if the precise

## M.C. ZIOLKOWSKI AND A.S. AL-SHARQI



Fig. 52.
Red Coarse Ware I, FP 160 (burmah).


Fig. 53.
Cream Coarse Ware I, open bowl type.
species of shell varied, and there seems no reason to doubt that TA 637 is a cosmetic container with some of its original, green pigment still intact' (56). Similar finds were recovered from the tomb at Sharm, Fujairah Emirate. The tomb construction has been dated to the second millennium BC (57). These finds included eleven bivalve shell halves and two fragmentary halves (58). The majority of shells from Sharm contain a green pigment; however, two examples varied, S-356 contained a dark grey/green pigment and S-167 was black in colour (59).

Three types of woven matting were recorded in the main room of the house and in majlis 3 (60). The


Fig. 54.
Storage vessel, khars.
first type is known as haṣir or simah in Arabic and was made by the women of the house, from tightly woven date-palm leaves (Fig. 22). The second type of matting present is khasaf, which was made from woven palm leaves (not date palm) (Fig. 21), and imported from the Sultanate of Oman and Iran. A


Fig. 55.
Hab type water vessel.
third type made from woven twigs known as 'asal, was also recovered (Fig. 23). The majority of 'asal matting was imported from the Sultanate of Oman. These twigs are the same as those used to string up the tobacco plants for drying, and as wicks in the oil lamps.

## Comparative architecture

Architecturally, the house at al-Fara' is linked to a tradition of fortified courtyard style houses found throughout the Arabian Peninsula and the Gulf (Table 25) (79). Kennet describes this type of compound as the 'house-tower', and he refers the compound at Falaya in Ra's al-Khaimah as one


Fig. 56.
Khars type water vessel.
example of this type (80). Kennet describes the 'house-tower' type as consisting of a rectangularshaped tower, a courtyard wall, a number of smaller domestic buildings and possibly a well. He noted that they were distributed over the whole of the northern half of Ra's al-Khaimah, with only a few examples in the south. He also noted that they were probably owned by a local sheikh or large landowners (81). Velde's study of the fortified compound at Falaya has placed the first phase of construction to the eighteenth century (82). According to Velde, the complex may also have been used as a place of retreat for the population of the Falaya area, who could gather inside the courtyard with their livestock (83). Kennet has also compared the


Fig. 57.
Woman carrying water vessels, yahlah.


Fig. 58.
Incense burners, madkhan.


Fig. 59.
Cooking pot, burmah.


Fig. 60.
Glass bangle fragments: column 1, top to bottom: F1, 3, 13, 15, 18, 27; column 2: F20, 2, 19, 21, 22, 25; column 3: F9, 4, 17, 26, 8, 10.


Fig. 61.
Twisted glass bangle fragments: column 1: F24, 23; column 2: F28, 11, 16.


Fig. 62.
F40, 41 and 39, bangle fragments.
'house-tower' type to the notion of a private $s \bar{u} r$ (84). These $s \bar{u} r$ are well known on the coastal plain of Oman, and around 100 examples have been
recorded in detail by Paolo Costa. According to Costa, the $s \bar{u} r$ are fortified enclosures which were used as a temporary shelter by a number of people and including their goods and livestock (85). These $s \bar{u} r$, or 'aswār in plural, were not owned by an individual but were built and maintained by a group of families or a tribe for communal use in case of threat (86). Costa has dated the $s \bar{u} r$ of the Batinah to a post mid-sixteenth century date, possibly the late eighteenth to nineteenth centuries (87). According to local sources, the main house at al-Fara' was used as a place of refuge by the local community. At its peak, al-Fara' probably had a population of around 100 people. According to M. al-Kindi, in case of a natural disaster such as flooding, the people would gather for safety at the main house, thus enforcing the notion of a private $s \bar{u} r(88)$.

Courtyard type houses were also built to house a family and serve their domestic and social needs. According to Costa these house types were 'generally formed by several single-room units, located within a walled compound in such a way that open spaces remain available for the out-of-door life' (89). This distinction within the architecture of al-Fara' is clearly expressed by the separation of


Fig. 63.
F31/S14, pigment shell.

## M.C. ZIOLKOWSKI AND A.S. AL-SHARQI



Fig. 64.
Foreground: Bayt Sheikha Amna bint Hamdan al-Sharqi. Background: Bayt Sheikh Mohammed bin Hamad al-Sharqi (former ruler of Fujairah), Fujairah fort and settlement.


Fig. 65.
Bayt Sheikh Abdullah bin Hamdan al-Sharqi, Fujairah fort and settlement.


Fig. 66.
Compound at Masafi, Fujairah.


Fig. 67.
Bayt Sheikh Salim al-Anzar, Madha, Sultanate of Oman.


Fig. 68.
Qurayyah, facing west.


Fig. 69.
Sheikh Suhail bin Hamdan al-Sharqi.


Fig. 70.
Poetry lines about al-Fara'.
public and private space. Each successive majlis at al-Fara' was built outside the main courtyard area, including the jammalah, thus ensuring that guests arriving at the main house need not disrupt the privacy of the family unit. Another architectural feature of the courtyard type house is its ability to retain the cool evening air for much of the following day (90).

## Conclusion

The main house of Sheikh Suhail at al-Fara' is reflective of a long tradition of fortified courtyard type houses situated throughout Arabia and the Gulf. Ethnographic information has been used to interpret a wide range of data at the site. Many of the
ceramics and objects also reveal a continuation of practices, with particular types dating back to the prehistoric period. The combined archaeological and ethnographic study (ethnoarchaeological) has enabled these traditions to be elucidated. This ethnographic information enabled us to gain a clearer insight into the settlement and in addition, it demonstrated the longevity of various forms of material culture. Sites of this period are often overlooked because they represent the recent past. However, we hope to have proved that these sites provide not only relevant studies in their own right, but are important for forming links with sites from the various historical and prehistoric periods.

The house at al-Fara' was abandoned around 1966, and Sheikh Suhail (Fig. 69) built a new house on the plain below the old one (91) (Fig. 45). We would like to conclude this paper on a personal note. The settlement at al-Fara' is mentioned in a number of local poems (Fig. 70), and a couple of lines from one of these translates as follows:

> Fara', the shelter for the castaway and fugitive, A protecting shield for you on the days of fear.

Lastly, one of the people interviewed for this study commented on life at al-Fara' in its heyday. They noted, 'it was always full of people, with many things happening, and it was wonderful' (92)!

## References

1. We would like to express our gratitude to HH Sheikh Hamad bin Mohammed al-Sharqi (Ruler of Fujairah, Member of the Supreme Council) for his support and encouragement of our work. The family of Sheikh Suhail must also be thanked for allowing the study to take place. We would also like to thank M. al-Kindi for providing the majority of ethnographic information contained within this article. M. al-Kindi patiently answered so many questions on numerous occasions, including visits to the site. F. al-Sharqi must also be thanked for offering additional information. Our thanks also to Professor Dan Potts for reading an early draft of this paper and offering helpful suggestions, and to Mr Naser Ali Tajali for translating the poem on al-Fara'. All Arabic transliterations were done by Dr Hassan Naboodah from the Zayed Centre for Heritage and History, Al Ain, U.A.E. We appreciate Dr Naboodah's help with the transliterations. Common spelling of people and place names has also been used in this paper. Figures 1-45, 47-54, 57-68 by M.C. Ziolkowski; Figures 55-56 by A.S. Al-Sharqi; Figure 46 photographer unknown (kindly provided by Mr Hassan Suleiman); and Figure 69 photographer unknown. The site sketch plan of al-Fara' (Figure 33) is based on a map kindly provided by Fujairah Municipality. Whilst the geographical
features are in scale, the archaeological features have only been sketched in. An earlier, shorter version of this paper was delivered at a conference in Al Ain, U.A.E., in 2003 and is to be published in Hellyer P \& Ziolkowski MC eds. Emirates Archaeology, Volume I: Proceedings of the 1st Annual Symposium on Recent Palaeontological and Archaeological Discoveries in the Emirates. Forthcoming. We would like to thank Dr Mark Beech for guiding us in the right direction with regard to articles of a 'fishy' nature. Our thanks to Mr Peter Hellyer for his support throughout this study. Christina Ziolkowski was also most helpful in finding references in Fisher Library, University of Sydney, Australia, and sending them to Fujairah. We know that she was greatly stressed by her library sessions and we appreciate her help.
2. David N \& Kramer C. Ethnoarchaeology in Action. Cambridge: Cambridge University Press, 2001: 2.
3. David \& Kramer, Ethnoarchaeology in Action: 2.
4. David \& Kramer, Ethnoarchaeology in Action: 43.
5. David \& Kramer, Ethnoarchaeology in Action: 2. The following descriptions from various authors provide further insight into the concept of ethnoarchaeology: 'a major purpose of ethnoarchaeology is to provide links between present and past...' (David \&

Kramer, Ethnoarchaeology in Action: 33); 'ethnographic research for an archaeological purpose, linking material remains to the human behaviour from which they resulted' (Gould RA. Explorations in ethnoarchaeology. Albuquerque: University of New Mexico Press, 1978: vii); 'the study by archaeologists of variability in material culture and its relation to human behaviour and organisation among extant societies, for use in archaeological interpretation' (Longacre WA. Ceramic ethnoarchaeology: an introduction. In: Longacre WA, ed. Ceramic Ethnoarchaeology. Tuscon: University of Arizona Press, 1991: 1).
6. David \& Kramer, Ethnoarchaeology in Action: 47.
7. Murphy RF. Cultural and Social Anthropology: An overture. New Jersey: Prentice-Hall, Inc., 1986: 225.
8. All plant identifications were made with the aid of the following reference source: Jongbloed MVD. The Comprehensive Guide to the Wild Flowers of the United Arab Emirates. Abu Dhabi: ERWDA, 2003.
9. The main house was built on a relatively flat, low lying hill. Prior to the construction of the house it was only necessary for a few small rocks to be cleared from the site. Relative construction chronology for the main house: 1) main wall; 2) main room, washroom and toilet; 3) storeroom;
4) courtyard tower; 5) the remaining rooms and enclosures. al-Kindi M. Pers. comm. Note: all personal communications and ethnographic data from M. al-Kindi, unless otherwise stated.
10. Before residing at al-Hayl, Sheikh Suhail bin Hamdan lived in the large fortified house located below Fujairah fort, known as Bayt Sheikh Abdullah bin Hamdan al-Sharqi, which was established by his father Sheikh Hamdan bin Suroor al-Sharqi. Abdullah A \& al-Mismari OS. Pers. comm.
11. Unwin S. The origins and categories of 'Arab' chests, with particular reference to Oman. PSAS 18: 1988: 155.
12. According to M. al-Kindi, the $s$ ar $\bar{u} j$ used on the exterior walls of the khaymah type rooms, storeroom and the courtyard wall was not as substantial, strong or durable as the type used on the main room at al-Fara' or at other sites in Fujairah, for example at Wadi al-Hayl or Fujairah fort. This softer, less substantial type of șarūj, bore a closer resemblance to mud plaster.
13. These measurements are incomplete due to collapse within the niches.
14. Rooms of this type, i.e. with flat roofs (regardless of their size), are known as makhzan in Arabic. Abdullah A. Pers. comm.
15. For further information concerning these wooden chests see Unwin, The origins and categories of 'Arab' chests: 155-61.
16. Ahmed al-Mtawar was a citizen of Fujairah and lived in the village associated with Fujairah fort. Pers. comm.
17. The study of nineteenth-century courtyard houses at Suhar (Sultanate of Oman) by Kervran et al., commented on the placement of the majlis at the entrance to the house, 'so that the arrival of strangers might not disrupt the domestic life of the household.' Kervran M, Le Cour-Grandmaison C, Soubeyran M \& de Pémille A. Suḥāri Houses. JOS 6/2: 1980: 307 \& 311.
18. Dostal has also noted these features in his study of the architecture in Ra's al-Khaimah North. Dostal W. The Traditional architecture of Rās al-Khaimah (North). Göttingen: Hubert \& Co, 1983: Fig. 1:12.
19. Majlis 3 was once visited by Sheikh Saqr bin Mohammed al-Qasimi, the former ruler of Sharjah. He was a guest at the house.
20. The larger of the two was surveyed by a Swiss archaeological team (Site 65). Corboud P, Castella A-C, Hapka R \& Im-Obersteg P. Archaeological Survey of Fujairah, (1987-1990) (United Arab Emirates): Inventory of the sites. Geneva: Swiss-Liechtenstein Foundation for Archaeological Research Abroad, 1991: 20.
21. The Wadi Saqamqam graves were surveyed and three examples excavated. Ziolkowski MC. Wadi Saqamqam, Fujairah, U.A.E.: Preliminary survey and excavation. Tribulus 13/1: 2003: 316.
22. These graves were also surveyed by a Swiss archaeological team. Forty burial mounds were recorded at this site, many of which have since been destroyed. The site was misleadingly named 'Kidnah' in the Swiss survey reports. Corboud et al., Archaeological Survey of Fujairah, (1987-1990): Site 66: 20. Carl Phillips has excavated a number of comparable burials in the Kalba area (Sharjah Emirate). Phillips CS. Late pre-Islamic finds from Kalba. In press. After examining a number of photographs of the burial cairns from al-Fara' (the two deflated burials located below the main house; and those on the Gizemri side of the wadi including the examples on the hill), C.S. Phillips has suggested that the construction of these tombs is similar to that of the tombs in Kalba, and may also date to a post-Iron Age/Late preIslamic period. Phillips CS. Personal communication: 2004. Comparable burial cairns are located to the west of Qurayyah village on Fujairah's coast.
23. For a full discussion regarding rock art terminology see Ziolkowski MC. A study of the petroglyphs from Wadi alHayl, Fujairah, United Arab Emirates. $A A E$ 9: 1998: 13-89.
24. One cemetery is situated below the main house and the other is located close to the terraced gardens. The cemetery closer to the terraced gardens is the older of the two.
25 . The garage is situated on the plain below the main house and close to the camel racetrack. It is rectangular in
shape and was built with mountain rocks bound with a soft-based mud mortar and rubble mix. The entire building was plastered with cement. The building measured $(\mathrm{L} \times \mathrm{W})$ $9 \times 4.2 \mathrm{~m}$, with a maximum wall height of 3.2 m and a maximum wall width of 0.6 m .
26. This area was cleared for camel racing soon after the house was established. Camel races were not scheduled on a regular basis but would be conducted according to the needs of the people at al-Fara'.
27. The rival Jaliylah tribe was situated within Wadi Saham and Wadi Miduk. Conflicts often arose between the Ku nud and Jaliylah tribes.
28. House repairs were usually carried out by small groups (c. five people) on a daily basis. Repairs of a more substantial manner, for example the falaj, would be carried out by a larger group.
29. Animals kept: chickens, goats, camels, cows and donkeys. Animals hunted: gazelle, pigeon and wild rabbit.
30. Dostal, The Traditional architecture: 2324: Plate 10.
31. As noted by Potts, 'Tobacco is obviously a New World cultivar. In spite of the apparent interest in the cultivation of tobacco along the Batinah coast in the late 19th century, tobacco had probably not been cultivated there for very long. Some scholars believe that tobacco reached India and China c. 1560-1565. Certainly it was being exported to Muscat by English traders such as Capt. John White in 1635, and it was one of the foreign goods purchased at Muscat by caravans coming from the interior of Oman in 1775'. Potts DT. Contributions to the agrarian history of Eastern Arabia II. The cultivars. AAE 5/4: 1994: 258-9.
32. The identification of the fish types anchovy and sardine with their Arabic equivalents were taken from Iddison $P$. A fish suq in the UAE desert. http:// enhg.4t.com/iddison/oxysymp97.htm: 1998. Gashr $=1$. De vis' anchovy (Encrasicholina devisi), 2. Bucaneer anchovy (E.punctifer); 'Oитa $=1$. Indian oil sardinella (Sardinella longiceps), 2. White sardinella (Sardinella albella), 3 . Spotted sardinella (S.gibbosa), 4. Sind sardinella (S.sindensis), 5 . Goldstripe sardinella (Amblygaster sinn).

## AN ETHNOARCHAEOLOGICAL STUDY

33. Iddison, http://enhg.4t.com/iddison/ oxysymp97.htm.
34. According to S.B. Miles writing in Oman during the late nineteenth century, 'Fish fry, called Kasha, is also largely caught, especially near Cape Mussendom, where they are desiccated in the sun without further attention and are then packed in mat bags, about eight feet long, being then known as Metoot'. Miles SB Col. The Countries and Tribes of the Persian Gulf: Volumes 1 and 2. Reading: Garnet Publishing, 1994: 404.
35. Miles also noted that sardines caught along the coast of Oman were used for bait, manure and the extraction of oil. Miles, The Countries and Tribes of the Persian Gulf: 404. There is in fact a long documented tradition in the Arabian Gulf of fishing for anchovies and sardines. Historical accounts such as the fourth-century BC voyage of Nearchus along the Arabian Gulf and Makrān coasts, recounted in Arrain's Indica Book VIII of his Anabasis Alexandri, described the catching of anchovies and sardines by castnet on the Makrān coast, and a 'flour' or 'meal' made from grinding dried fish. Donaldson WJ. Erythraean Icthyophagi: Arabian fisheaters observed. New Arabian Studies 5: 2000: 10. Arrian Translation: Brunt PA. Indica (Book VIII of Anabasis Alexandri: II, 306-446). London: Loeb Classical Library, 1983: 385-401. Also recorded in Arrian is the fact that domestic livestock along the Makrān coast were fed on fish. Donaldson, Erythraean Icthyophagi: Arabian fish-eaters observed: 10; Brunt, Indica: 393. According to Ibn al-Mujāwir's text, Ta'rīkh alMustabsir, from the early thirteenth century, regarding the people of alMansūrah (in the present-day province of Dhofar, Sultanate of Oman; the coastal settlement of al-Mansūrah is located between Raysūt and Mirbāt, roughly where the present-day Salālah, the modern day capital of Dhofar stands): 'The fodder of their animals is dried fish which is [called] 'ayd, and they fertilise their land with nothing but fish'. Donaldson, Erythraean Icthyophagi: Arabian fish-eaters observed: 12-14. 'Ayd is still the name used for sardines in the Yemen and Dhofar. Donaldson, Erythraean

Icthyophagi: Arabian fish-eaters observed: 14-15.
36. Costa PM. Fishing stations of the coast of Oman: A theme of ethno-archaeological research. PSAS 18: 1988: Plate 5: 11.
37. Costa, Fishing stations of the coast of Oman: 4.
38. Costa, Fishing stations of the coast of Oman: 4-5.
39. Costa, Fishing stations of the coast of Oman: 4 and 6.
40. Costa, Fishing stations of the coast of Oman: 6.
41. There was no madbasa at al-Fara'. Dibs (date syrup) was brought to al-Fara' from various settlements in the area including Wadi Furfar, Wadi Saham, Wadi Miduk, Wadi-al-Hayl and Bithnah.
42. For further detailed information regarding the cultivars see Potts, The cultivars: 247-60.
43. Ziolkowski MC. The Historical Archaeology of the Coast of Fujairah, United Arab Emirates: from the Eve of Islam to the Early Twentieth Century, Volumes I \& II. Unpublished Ph.D. Thesis submitted to the Near Eastern Archaeology Department, University of Sydney, Australia, 2002: II: 134. A vessel type comparable to the Cream Coarse Ware from alFara' is illustrated in Richardson N \& Dorr M. The Craft Heritage of Oman, Volume Two. Dubai: Motivate Publishing, 2003: Fig 391: 495. This example is from the Western Musandam and has been dated to the middle of the twentieth century. Richardson \& Dorr, The Craft Heritage of Oman: 495. The example from the Musandam is also comparable to the Cream Coarse Ware vessel shapes recovered from al-Fara' that is, the open bowls with outward tapering walls and flat bases (Fig. 52).
44. Ziolkowski, The Historical Archaeology of the Coast of Fujairah, II: 135.
45. Ziolkowski, The Historical Archaeology of the Coast of Fujairah, II: 136.
46. Ziolkowski, The Historical Archaeology of the Coast of Fujairah, II: 137. A number of pottery production sites from Northern Oman made pottery comparable to the examples recovered from al-Fara'. These pottery production sites include Musilmat on the coast and Bahla in the interior; Nizwa and Manah in the interior, Saham on
the Batinah Coast, Mahyrah located on the coastal side of the Eastern Hajar range and Mutrah in the capital area. Comparable examples of Fine Ware, yahlah type water vessels are illustrated from Bahla and Musilmat. Richardson \& Dorr, The Craft Heritage of Oman: 498-99, Figs 411 and 412. A khars type water vessel of comparable fabric, shape and decoration to the examples from al-Fara', is illustrated in Richardson \& Dorr. This example is from Saham on the Northern Omani coast. Richardson \& Dorr, The Craft Heritage of Oman: Fig 416: 500.
47. Ziolkowski, The Historical Archaeology of the Coast of Fujairah, II: 156. Glazed pots for holding honey and labn were produced at Nizwa and Bahla. Richardson \& Dorr, The Craft Heritage of Oman: 503.
48. Ziolkowski, The Historical Archaeology of the Coast of Fujairah, II: 140. Comparable Red Coarse Ware fabric vessels are illustrated in Richardson \& Dorr, The Craft Heritage of Oman: 494-97. These include incense burners from Lima (Musandam), burmah cooking pots from Al Alama (Musandam) and khars type storage jars from the Western Musandam. Richardson \& Dorr, The Craft Heritage of Oman: Figs: 385, 397 and 401.
49. According to Costa, 'Pots were, and to a much lesser degree, still are made at al-Alama and Limah'. Both places utilised local clay sources, the source at Limah is called Qabal. Costa PM. Musandam, Architecture and Material Culture of a little known region of Oman. London: Immel Publishing, 1991: 151. For illustrations of cooking pots and incense burners made in the Musandam see Costa, Musandam: 183 and 185; Richardson \& Dorr, The Craft Heritage of Oman: 494-97. Al Alama is located 8 km inland from Limah. Richardson \& Dorr, The Craft Heritage of Oman: 494. For an ethnographic study of the potters at Limah, see King G. The pottery of Lima, Musandam, Sultanate of Oman. Tribulus 13/1: 2003: 17-19.
50. As noted by Costa: 'Traditionally the Shihuh are semi-nomadic, farming their small terraces in the winter and living by the sea in the summer so that they can fish and harvest the dates'.

Costa, Musandam: 147. Artefacts made by the Shih $\bar{u} h$ are often sold in markets in the U.A.E. Costa, Musandam: 149.
51. Throughout history much of the iron used in the Arabian Gulf was imported. An account of commerce in the Gulf written in 1790 lists iron as one of the imports at Muscat from the Indian subcontinent. Around 1835/6 iron reached the lower Gulf (Ra's al-Khaimah, Umm al-Qawain, Dubai and Abu Dhabi) from Bombay and the Makran coast, and by the early twentieth century iron ore and tools were being imported in sizeable amounts by the Gulf countries from various European producers. Potts DT. Arabian Gulf in Antiquity, Volume II. Oxford: Oxford University Press, 1990: 272. There is also evidence of iron working at the East African sites of Kilwa, Manda and Shanga. The East African coast was a major source of iron for India and the Gulf region from the eleventh century. Pouwels RL. Horn and Crescent: Cultural change and traditional Islam on the East African Coast, 800-1900. Cambridge: Cambridge University Press, 1987: 16.
52. For further information concerning perfumed oils including this particular mixture, see Kanafani AS. Aesthetics and Ritual in the United Arab Emirates: The anthropology of food and personal adornment among Arabian women. Beirut: American University of Beirut, 1983: 42-44.
53. Identification of shells was based upon Bosch DT, Dance SP, Moolenbeek RG \& Oliver PG. Seashells of Eastern Arabia. Dubai: Motivate Publishing, 1995: S1: 28 \& 72; S2: 28 \& 72; S3: 28 \& 144; S4: 28 \& 144; S5: 28 \& 157; S6: 28 \& 157; S7: 28 \& 157; S8: 28 \& 157; S9: 28 \& 43; S10: 202; S11: 202; S12: 28, 131 \& 134; S13: 202, 204 \& 213; S14/F31: 202, 204, 205, 210-11. According to M. al-Kindi, bivalve shell halves were also used for drinking Arabic coffee by the locals at al-Fara'.
54. 'The Semail ophiolite forms a huge thrust sheet or nappe, the Semail Nappe, which is over 600 km long, up to 150 km wide and between 5 and 10 km thick. It crops out over an area of about $20,000 \mathrm{sq} \mathrm{km}$ along the length of the Oman mountains from near Dibba in the north to near Sur in the
southeast. It is within this ophiolitic sequence that the material generally termed soft stone is to be found' Lippard SJ, Shelton AW \& Gass IG. The Ophiolite of Northern Oman. London: Blackwell Scientific Publications, 1986: 39; Ziolkowski MC. The Soft Stone Vessels from Sharm, Fujairah, United Arab Emirates. AAE 12/1: 2001: 28. The manufacture of soft-stone kohl applicators represents a long, continued tradition in the working and manufacture of soft-stone objects. 'Pigment shells' have been recovered from the Iron II period site of Muweilah, Sharjah Emirate. Magee P. Personal communication: 2004. Iron $\mathrm{II}=1000-600 \mathrm{BC}$. Magee P. The impact of southeast Arabian intra-regional trade on settlement location and organisation during the Iron Age II period. $A A E$ 15: 2004: 32. Ethnographic details concerning the pigment shell and the use of soft-stone kohl applicators at al-Fara' were discussed with P. Magee. The authors were then informed of a number of soft-stone 'rods' in fragmented form, which were recovered from the excavations at Muweilah. Magee P. Personal communication: 2004. These Iron II period soft-stone rods may have served a similar purpose, as those referred to in the ethnographic accounts of al-Fara'.
55. Thomas R \& Potts DT. Atacamite pigment at Tell Abraq in the early Iron Age. AAE 7: 1996: 13-14.
56. Thomas \& Potts, Atacamite pigment at Tell Abraq: 14-15.
57. Riley M \& Petrie CA. An analysis of the architecture of the tomb at Sharm, Fujairah, U.A.E. $A A E$ 10: 1999: 188. The tomb at Sharm was reused during the Iron Age and the Late pre-Islamic period. See Barker D. Stone, paste, shell and metal beads from Sharm. AAE 12: 2001: 202-22; Petrie CA. Late pre-Islamic ceramics from the tomb at Sharm, Fujairah, U.A.E. AAE 11: 2000: 80-6. Weeks LR. Metal artefacts from the Sharm tomb. AAE 11: 2000: 180-98. Ziolkowski, The Soft Stone Vessels: 10-86.
58. Masia K. Pigment shells from Sharm. AAE 11: 2000: 22.
59. Masia, Pigment shells from Sharm: 2223. Examples of pigment shells recovered from the site of Jebel Buhais,

Sharjah Emirate, are on display in Sharjah Archaeological Museum. These examples (Case 15, Object number 4) have been dated to $c .2000 \mathrm{BC}$.
60. Palm-leaf matting is present in numerous buildings throughout the Arabian Gulf and Peninsula. Kennet has recovered palm-leaf matting at Kush, dated to the twelfth and thirteenth centuries. Kennet D. Kush: A Sasanian and Islamic period archaeological tell in Ra's al-Khaimah (U.A.E). AAE 8: 1997: 285.
61. See also Ziolkowski, The Historical Archaeology of the Coast of Fujairah: 18998. In 2004, both authors conducted an ethnoarchaeological study of the fort and associated settlement. Ziolkowski MC \& al-Sharqi AS. Fujairah Fort and Associated Settlement: A study based on historical, archaeological and ethnographic information. Emirates $A r$ chaeology, Volume II: Proceedings of the 2nd Annual Symposium on Recent Palaeontological and Archaeological Discoveries in the Emirates. Forthcoming. Ethnographic information concerning the large fortified houses below Fujairah fort was kindly supplied by Abdullah A \& al-Mismari OS. Pers. comm.
62. Abdullah A. Pers. comm.
63. The original compound walls, watchtower and associated rooms of the fortified house below Fujairah fort were established by Sheikh Abdullah's father, Sheikh Hamdan bin Suroor alSharqi, possibly in the late nineteenth or early twentieth century. The firststorey room and verandas were added to the building in the western half of the courtyard by Sheikh Abdullah bin Hamdan at a later date. Abdullah A \& al-Mismari OS. Pers. comm.
64. Abdullah A \& al-Mismari OS. Pers. comm.
65. Local Sources. Pers. comm.
66. Riley M. Bayt Sheikh Abdullah bin Hamdan al-Sharqi: A study of the Sheikh's Palace and its Associated Buildings, Wadi al-Hayl, Fujairah. Unpublished Honours thesis submitted to the School of Archaeology (Near Eastern), University of Sydney, Australia, 1998: 40.
67. This site was first noted by B. de Cardi (Site 27). de Cardi B \& Doe DB. Archaeological Survey in the Northern Trucial States. EW 21/3-4: 1971: 256. It is included within the Swiss

## AN ETHNOARCHAEOLOGICAL STUDY

archaeological survey (Site 15).
Corboud et al., Archaeological Survey of Fujairah, (1987-1990): 9. See also survey in Ziolkowski, The Historical Archaeology of the Coast of Fujairah, I: 159-61.
68. Ziolkowski, The Historical Archaeology of the Coast of Fujairah, I: 160 and II: 667.
69. Ziolkowski, The Historical Archaeology of the Coast of Fujairah, I: 24051.
70. Abdullah A. Pers. comm.
71. Ziolkowski, The Historical Archaeology of the Coast of Fujairah, I: 141.
72. Ziolkowski, The Historical Archaeology of the Coast of Fujairah, I: 143.
73. Ziolkowski, The Historical Archaeology of the Coast of Fujairah, I: 148-50.
74. Floor W. First contacts between the Netherlands and Masqat or A report on the discovery of the coast of Oman in 1666: Translation and Introduction. Zeitschrift der Deutschen Morgenländischen Gesellschaft 132: 1982: 303.
75. Ziolkowski, The Historical Archaeology of the Coast of Fujairah, I: 152.
76. Ziolkowski, The Historical Archaeology of the Coast of Fujairah, I: 158 and II: 66.
77. This site was first surveyed by B. de Cardi. de Cardi \& Doe, Archaeological Survey in the Northern Trucial States: 256. See also the Swiss archaeological mission (Site 27). Corboud et al., Archaeological Survey of Fujairah, (19871990): 11; and Ziolkowski, The Historical Archaeology of the Coast of Fujairah, I: 161-2 and II: 68.
78. Tomkinson M. The United Arab Emirates. London: Michael Tomkinson Publishing, 1975: 184.
79. For further detailed comparisons with fortified compounds throughout the Arabian Peninsula and Gulf, see Riley, Bayt Sheikh Abdullah bin Hamdan alSharqi: 35-47. Riley has compared the fortified courtyard house of Sheikh Abdullah bin Hamdan al-Sharqi, Wadi al-Hayl, Fujairah, with numerous examples from Bahrain, Kuwait, U.A.E. (Dubai, Ra's al-Khaimah and Fujairah), Sultanate of Oman (including the enclave of Madha) and Saudi Arabia. See also examples of the 'tower houses' of Najran, in southwestern Saudi Arabia: King G. The Traditional Architecture of Saudi Arabia. London: I.B. Tauris \& Co Ltd, 1998: 121-6 and 210.
80. Kennet D, Connolly D \& Baker F. Ra's al-Khaimah Tower Survey 1991-2. PSAS 23: 1993: 28-29. Further examples of 'House-tower' types were recorded by Kennet at the following sites in Ra's al-Khaimah: al-Shimal (Fig 6, 30: 1993) (76: 1995); Wadi al-Qawr (Fig 7, 31: 1993) (150: 1995); al-Hayl (Fig 8, 32: 1993) (96: 1995); al-Jazīrat alHamrā (Fig 9, 33: 1993) (130: 1995); alHudayba (Fig 15, 39: 1993) (124: 1995); Wadi al-Muni'i (Fig 24, 46: 1993); al-'Uraybi (54: 1995) al-Ghubb (58: 1995); and Diqdaqqa (140: 1995). Kennet, Connolly \& Baker, Ra's al-Khaimah Tower Survey 1991-2. Kennet D. The Towers of Ra's al-Khaimah. Oxford: Tempus Reparatum (BAR International Series 601), 1995.
81. According to Kennet: 'The small number of house towers in comparison to the contemporary mud-brick houses on the plain suggests that only the village headman or larger landowners built on such a scale. What is clear is that the "house towers" had a dual domestic and defensive function, both of which affect their design and construction. The towers' relationship to agricultural land and domestic complexes might suggest that they belonged to local landowners who felt the need to build some defensive capability into their residences. The "house-towers" lack cannon ports and were designed only for matchlock defence, probably against the sporadic raiding of the hill tribes or bedouin. As well as the domestic and defensive functions already mentioned there is quite likely to have been an element of prestige in building a "house-tower" which would have been an extremely potent symbol of a family's wealth and power. The date of the earliest towers of this type is not known. That they existed at the beginning of the 19th century is attested by a mention of several towers amongst the date palm groves behind Ra's al-Khaimah.' Kennet, Connolly \& Baker, Ra's al-Khaimah Tower Survey 1991-2: 14-15. Cook AS. Survey of the Shores and Islands of the Persian Gulf 1820-1829. London: Archive Editions, 1990: 134.
82. Velde C. The residence of Falayah. In: Hellyer P \& Ziolkowski MC, eds. Emirates Archaeology, Volume I: Pro-
ceedings of the 1st Annual Symposium on Recent Palaeontological and Archaeological Discoveries in the Emirates. Forthcoming.
83. Velde C. Falayah: The summer residence of the Qawasim in Ra's alKhaimah, U.A.E. Tribulus 11/1: 2001: 9.
84. Kennet, The Towers of Ra's al-Khaimah: 13.
85. Costa PM. The sur of the Batinah. JOS 8/2: 1985: 121. According to Costa: 'In the past people were clearly concerned that their flimsy palm-frond huts were not suitable for defence, and in fact in order to have a safe place to retreat to they built the numerous fortified compounds ( $s \bar{u} r$ ) which dot the coastal plain'. Costa PM. The palm-frond house of the Batinah. JOS 8/2: 1985: 119. 'The sur is to be found near almost every minor settlement in most parts of Oman, wherever an unwalled group of dwellings needed a defended compound for the inhabitants to retreat to in the course of attack by a foreign army or during inter-tribal strife'. Costa, The sur of the Batinah: 121.
86. Costa, The sur of the Batinah: 121.
87. Costa, The sur of the Batinah: 188.
88. According to Costa, in the mountain region the sur takes advantage of the topography for the best defence with minimal construction. The flat top of a steep hill is generally a favourite location. Costa, The sur of the Batinah: 121-24. The house at al-Fara is situated on a slight eminence with a relatively level ground surface.
89. Costa, The palm-frond house of the Batinah: 118.
90. The courtyard space facilitates the exchange of air, thus cooling the area not only within the courtyard (through heat irradiation), but in the rooms that surround it. At night time, cool air descends into the courtyard and fills the rooms. During the day, the air within the rooms gradually becomes warmer, but the effects of this process are not felt until very late in the day. Riley, Bayt Sheikh Abdullah bin Hamdan al-Sharqi: 33; Talib K. Shelter in Saudi Arabia. London: Academy Editions, 1984: 52.
91. al-Sharqi F. Pers. comm. The author Abdullah Suhail al-Sharqi was born at this house c.1968/69.
92. Pers. comm.

