

### **Preliminary observations on the pottery from Amheida following the 2001 season**

#### **Methods of recording and future work**

The January 2001 season allowed a general introduction to the nature and date range of ceramic material at Amheida it did not, however, allow a detailed study of fabrics, and this important work will be started next year. The work on Dakhleh pottery by Colin Hope has identified the main fabric types for the Ptolemaic, Roman and Byzantine periods and are summarised from his 1999 publication below. Of the published types, quantities of numbers 4 to 13 were noted at Amheida. Work will commence in 2002 on the type and fabric series for site, which can then be cross-referenced to those at Ismant el-Kharab where pottery fabrics and types continue to be recorded. The fabrics recorded and published to date by Hope (1987 b and 1999) are as follows:

#### Ptolemaic and Roman Periods

1. Dense bodied, ferruginous fabric tempered with quartz; hard fired grey or black and carelessly finished. Lentoid flasks, water kegs. Ptolemaic (Hope 1999, 230).
2. Light weight, porous marl. Small and medium sized bowls; neck-less jars, water kegs and deep-sided bowl with ring bases. Ptolemaic (Hope 1999, 230).
3. Open texture green-fired marl clay. Jars, kegs, pigeon pots.
4. Shale tempered fabric; pinkish-grey colour in the section with a greyish brown surface. (Hope 1999, 232). Large shale inclusions, often with fragments of limestone and the appearance of a marl clay fabric. Mainly used for water kegs.
5. Quartz tempered fabric as with 4 with small-medium pieces of shale; low fired typically with a brown colour but red surfaces and coatings are common (Hope 1999, 232); used for cooking pots.

Christian Period described in Hope 1987b, 31-32 are as follows:

6. Medium-dense body with shale, fired either a) orange throughout or b) with a grey core and orange surface
7. Medium-dense body with inclusions of quartz, fired orange or brown.
8. A finer version of 6, fired orange.
9. A very fine, dense body with small quartz inclusions and some oxidised carbonates evenly fired orange.
10. The preliminary ware corpus (Hope 1987b, 31-32) is as follows:
  - B5a clay 1a with a streaky burnish
  - B5b clay 1b with a streaky burnish
  - B6 clay 3a with an even burnish
  - SR B 5b clay 1b with a red slip and streaky burnish
  - SR B 6a clay 2a with a red slip and even burnish
  - SR B 6b clay 2b with a red slip and even burnish
  - SR B 8 clay 3a with a red slip and even burnish
  - SR B 9 clay 4 with a red slip and even burnish
  - DR 6 clay 2, fired muted brown, decorated with black lines over an even burnish and a red slip.
11. Roman shale wares do not continue in the Byzantine period (Hope 1999, 235). Water kegs are replaced with a common quartz-tempered fabric and cooking pots are made from a fine brittle fabric, fired wither grey or pinkish grey, with a quartz and shale fabric; often given a red surface coating which turned dark grey during firing and used for tin-walled cooking pots (pl. 14.30).
12. A shale and quartz-tempered fabric with medium texture and less compact than 6. Fired pale orange to pink and usually cream coated with decoration; mainly bowls.
13. Imitations of African Red Slip wares; red-fired shale fabric with a densely covered red slip, roughly burnished, predominantly bowls (Hope 1999, 234-36, pl.14.35).
14. Egyptian fine wares: Aswan, Egyptian red slip B and K ware.

Although small numbers of Old Kingdom, Second Intermediate Period and Late Period sherds were noted, the pottery predominantly dates from the late first century BC to the fourth century AD; dates which accord with the observations by Hope (1987 and 1999). There is evidence at the site for industrial activity: kilns and pottery manufacture, plaster manufacture, faience manufacture (exclusively in the first century AD) and there are several areas of kiln dump. Industrial material will be marked, and recorded separately so that from the start of the first excavation season it will be possible to gain an idea of the quantity, which will in turn offer important clues as to the nature of the site and the periods of industry. The site, therefore, offers an important opportunity for the study of manufacturing and perhaps ultimately trading in locally made products and will be an important part of the work on finds. In terms of recording finds, it has been decided that faience, glass and ceramic vessels will all be placed on a single vessel register, recording the forms, fabrics and quantity from each context. Non-diagnostic finds-traditionally small finds- will be placed on a separate register. This particular category will offer important evidence for the material culture of the site and its inhabitants, and the extent to which the Egyptian, Greek, Roman and Coptic elements of the local culture interacted.

The definition of terms such as Roman, Christian, Coptic, Byzantine and Late Antique will all need to be carefully reviewed, particularly with regard to date versus material culture. Methods of recording will specify the chronological date or period in addition to the material culture, and this will form an important part of the overall study of the finds. Initially, periods will be divided as follows:

Chosen Term	Period	Cultures	Divisions
Ptolemaic	332-30 BC	Greek or Egyptian	Macedonian (323-305 BC) Early Ptolemaic (332-204 BC) Mid-Ptolemaic (204-80

			BC Late Ptolemaic (80-30 BC)
Roman	30 BC-395 AD	Egyptian, Egyptianising, Greek, Roman, Christian	Ptolemaic/Roman (post 30 BC- end of the first century BC). Early Roman (first-second centuries AD)  Late Roman (third to fourth centuries AD)
Late Antique	Fourth to eighth centuries AD	Roman, Coptic, Byzantine (for imported material specifically associated with the Byzantine Empire, Islamic	Material will be divided chronologically where possible and also in terms of material culture.
Islamic			
Medieval			
Modern			

It has been decided in term of finds' descriptions to use the term Coptic rather than Christian or Byzantine because of the nature of the site. It is hoped, given the promising stratigraphy found in the 2001 test pits that it may eventually be possible to allocate absolute date frames for locally manufactured types of pottery, and where possible more specific periods will be allocated. The system listed in the table above will allow broad categories to be allocated, so that material can be grouped if not dated from the start.

### **2001 Pottery recording**

The following report includes profiles, photographs and description of diagnostic forms, which were collected during the 2001 season. The location of any objects that were taken from the site was marked, the material was then registered, recorded and bagged and will form part of the type series for the next season.

### **Open vessels**

PS 40

Painted bowl. Finely tempered clay

Pattern 1999 85 fig.19 (early Roman) and compare P.M. McKendrick Sidi Khrebish -Volume III: Part 1: The Fine Pottery no. 226 (early first century AD).

PS 1

Wheelmade bowl, coarsely tempered with painted decoration on the lip.

Exterior 5 YR 6/4; interior 5 YR 6/4; core 5 TY 5/6 and slip 2.5 YR 4/2

Rim diameter 14 cm 40 % preserved

Compare Hope 1980 in Edwards et al. 1987 47, plate XXV.e (Christian Period)

PS 7

Wheelmade bowl, finely tempered; imitation of African Red Slip clay and originally glazed.

Exterior 2.5 YR 5/6; interior 10 R 5/6 and core 2.5 YR 5/6

Rim diameter 20 cm 32 % preserved

Compare Hope 1980 in Edwards 1987 46, pl. X8XIV.k.

PS 10

Wheelmade bowl, coarsely tempered.

Exterior 7.5 YR 6/4, interior 5 YR 5/4, core 5 YR 5/3 and slip Gley 17/104.

Rim diameter 18 cm 18 % preserved

PS 11

Wheelmade bowl.

Exterior 2.5 YR 5/6, interior 5 YR 5/4 core 5YR 5/4

Rim diameter 21 cm 12 % preserved

Compare Pattern 1999, figure 2. 16, early Roman

PS 15

Wheelmade bowl, medium-coarsely tempered.

Exterior 5YR 6/4; interior 5 YR 6/4; core 2.5 YR 4/1

PS 17

Wheelmade, finely tempered closed vessel with a burnished slip (10 R 6/6). There are large limestone inclusions in the clay matrix.

Rim diameter 17 cm 10 % preserved.

Old Kingdom?

For the globular additions compare G. Soukiassian et al. Les Ateliers de Potiers D'Ayn-Asil (1990) pl. 16.7.

## PS 26

Wheelmade small bowl or lid. Coarsely tempered clay with an uneven foot.  
Exterior 5 YR 4/1 to 10 YR 4/1 (unevenly fired).  
Rim diameter 11 cm 18% preserved, plus base.  
Compare Pattern 1999 85, fig. 2.12 (Early Roman)

## PS 27

Flat bowl or plate with a foot.  
Coarsely tempered with 2.5 YR 6/6 clay on the surface and 2.5 YR at the core. There are traces of a slip on the interior 2.5 YR 5/4.  
Rim diameter 16 cm 31% preserved.  
Hope 1983 in Edwards et al 1987 87, fig. 4.m 17/7, Late Ptolemaic or Roman (?) by comparison with the pottery in tomb 14 which is dated by the wooden coffins (5<sup>th</sup> to 4<sup>th</sup> centuries BC); Hope suggests that the smaller bowls may have functioned as a lamps (78).

## PS 29

Bowl or cup  
Exterior 10 YR 5/2, Interior 10 YR 5/1, core 10 YR 4/1, medium-coarsely tempered clay  
Rim diameter 18 cm 15 % preserved.  
Compare Pattern figure 2.15, early Roman.

## PS 31

Wheelmade cup, the clay is similar in appearance to ARS and probably a local imitation: exterior slip 2.5 YR 5/4 with clay 2.5 YR 6/6 to 5 YR 6/6.  
Rim diameter 12 cm 17% preserved.  
Compare Pattern 1999, 2. 15 and 16, early Roman.

## PS 36

Base fragment of a wheelmade closed vessel, jar (?); buff marl clay 5 YR 6/4 core with the exterior 2.5 YR 8/2.  
Base diameter 3.5 cm, 100% preserved  
Compare Hope 1981 in Edwards et al 1987 63, pl. XXIII.U 2/2 (Roman).

## PS 38

Faience bowl  
Rim diameter 18 cm 25 % preserved  
First century AD  
See W.M.F. Petrie 1909. Memphis I, and 1911 in E.B. Knobel, W.W. Midgley, J.G. Milne, M.A. Murray and W.M.F. Petrie Historical Studies: 34-37; C. Taggart Journal of Libyan Studies 14 (1983) 152, no.7 (first century AD).

**Larger Open vessels**

## PS 5

Wheelmade krater medium-coarsely tempered clay. Exterior 10 YR 5/2, interior 2.5 Y 5/1 and core 7.5 YR 4/1. Grey-fired fabric.  
Rim diameter 28 cm 16 % preserved.  
Mentioned in Hope 1999: 235, Byzantine period. Compare J. Dore and N. Keay Excavations at Sabratha 1948-1951 volume 2, The finds part 2 (1989) 135, no. 86 (second half of the second century AD).

## PS 6

Wheelmade krater medium-coarsely tempered clay. Exterior 10 YR 6/2, interior 7.5 Y 5/3 and core 10 YR 4/1. Grey-fired fabric. Compare PS 5  
Rim diameter 52 cm  
Mentioned in Hope 1999: 235 (Byzantine period).

## PS 28

Wheelmade Krater with a spout. Coarsely tempered clay: exterior is 7.5 YR, the interior 10 YR 5/2 and the core is 7.5 YR 5/2. Red-fired surface with uneven firing on the rim.  
Diameter 29 cm 17 % preserved  
Variation of Hope 1981 in Edwards et al (1987) 65, plate XXV.II and 1980 in Edwards et al (1987) 45, pl. XXIII.f6 (Roman).  
See note by Hope (1999) 235 on the disappearance of this type in the "Byzantine" period.

**Closed Vessels**

## PS 39

Wheelmade jar. Coarsely tempered pink clay with a grey core and red paint applied to the surface.  
Rim diameter 12 cm 15% preserved.  
Compare Hope 1979 in Edwards et al (1987) 21, pl. XIX.390-H6-2/VII/1, 45, pl. xxiii. 5: Roman.

## PS 3

Wheelmade closed vessel, probably a storage jar coarsely tempered clay with uneven firing; the inner lip is abraded and the fabric is coarsely tempered. Exterior 7.5 YR 5/3, interior 10 YR 6/3 and core 10 YR 4/2  
Rim diameter 11 cm 15 % preserved.

## PS 8

Cooking pot exterior 2.5 YR 5/6, interior 2.5 YR 5/6, core 2.5 YR 5/8. Medium-finely tempered clay.  
Diameter 11 cm

## PS 13

Wheelmade cooking pot, exterior 10 YR 5/2; interior 10 YR 5/3 and core 10 YR 4/1.  
Medium-coarsely tempered.  
Rim diameter 10 cm 25 % preserved

## PS 16

Wheelmade cooking pot, coarsely tempered exterior 5 YR 4/2, interior 5 YR 4/1 and core 5 YR 4/4.  
Rim diameter 16 cm 24 % preserved.  
No parallels- the fabric is the same as those vessels dated to the 'Christian' period, see above.

## PS 18

Wheelmade cooking pot coarsely tempered clay 10 YR 4/1 and core 2.5 Y 4/1; Grey-fired ware.  
Diameter 6 cm 16 % preserved.

## PS 19

Cooking pot, surface 10 R 5/6 and core 2.5 YR 4/1 coarse  
Diameter 53 cm, 10 preserved  
Compare Hope 1979 23, plate XXI.7 for slipped version (?)

## PS 20

Wheelmade jar, possibly used as a strainer since there is a row of horizontal holes across the shoulder. Exterior 10 R 6/6 with a core of 2.5 YR 5/6  
Rim diameter 14 cm 21 % preserved

## PS 21

Wheelmade closed vessel. Coarsely tempered clay exterior 5 YR 6/4 with a slip 2.5 YR 4/1, the interior clay is 5 YR 5/4 and the core 2.5 YR 5/6. A schematic floral pattern decorates the shoulder of the vessel and there are clusters of vertical lines on the rim.  
4<sup>th</sup> century AD (?)  
Diameter 16 cm 8% preserved

## PS 30

Wheelmade flagon with an abraded surface, made from medium tempered clay. The exterior slip is Gley 1 8/5GY, the exterior clay is 2.5 YR 4/8.  
Rim diameter 4 cm 100% preserved

## PS 37

Mouldmade oil lamp. Clay 2.5 Y 5/4 interior to 5 YR 6/4 exterior; the core is gley 1 5/10 Y.  
Short nozzle with volutes terminating at the shoulders. The discus is sunken and plain, but surrounded by a relief loop design (now worn).  
Compare D.M. Bailey [A catalogue of lamps in the British Museum](#) volume 3: Roman provincial lamps (1988) 254, pl. 54 fig. 155. Q2090: Probably 2<sup>nd</sup> to 3<sup>rd</sup> century AD; J.W. Hayes [Ancient Lamps in the Royal Ontario Museum. A catalogue. 1. Greek and Roman clay lamps](#) 206, pl. 48.413: 1<sup>st</sup> to 2<sup>nd</sup> century AD.

### **Area 1- the kilns**

#### Introduction

The Amheida kilns were discussed by Hope in 1980 (Edwards et al 1987: 34-36 and 1999: 230), where the structures were drawn and recorded and a brief summary of the surface finds, including quantities of un-fired clay and clinker was made. Unfortunately, although there is still evidence for ceramic wasters and kiln debris at the site, no examples of the un-fired clay vessels survive on the surface, and the kiln structures have little or no material remaining with the exception of the walls, some of which remain in situ. The summary below represents preliminary observations on the individual rooms of the kiln area and the series of rooms to the east of the main complex. It should, however, be noted that it is not certain to what extent the site was disturbed during the initial cleaning and recording, or from the subsequent exposure of the area. Although in January 2001 there was no time for a systematic survey or detailed recording of the contents of each room, notes were made on the surface finds within the boundaries of the walls; profiles of any new forms were drawn and recorded, and then replaced. The next season should commence with a more detailed analysis of the surface pottery, which will be collected and recorded for comparison with the stratified lower levels once excavation is undertaken.

Many of the vessel dates are dependent upon the parallel work at and publications from Ismant el-Kharab, and the various reports are cited here as references. Other pottery forms compare well with pottery from the Nile Valley. The following is intended as an introduction to the material in this area and a more detailed summary along with profiles of the types of vessels from the area will follow. For a discussion on the various clay types see Hope (1987b: 25 ff. and 1999: 230-31). Many of the early observations (Hope 1987a) were confirmed by an initial survey of the site, most especially the lack of buff-coloured marl clays (Hope 1987a: 12). Hope, in his initial observations (1987a: 14 and 1999: 232), described the red-fired and grey-fired fabric that predominates below.

#### Kiln area 1 (east of the main kilns)

##### Room A

- Mostly medium-sized sherds.
- A large number of krater rims PS 5 and PS 28. Hope (1987b: 45, pl. 23 4.E and Pattern 1999: 85, no. 25).
- Submarine-shaped water carrying vessels (Hope 1987c: 72, pl. XXXII.a).
- Storage jars (same form as N3.6 and N3.9) **Image**.

- Bowls, first century AD: form K.1, K.5 and Pattern 1999: 85, no. 14 and no. 15.

#### Room B

- Several well-preserved bowl fragments: Forms K.2, K.3 and K.4

#### Room C

- A large percentage of vitrified wasters and kiln debris.
- Mostly grey-fired pottery, including a pot stand and submarine-shaped water vessels.
- Buff-coloured marl clay imported Roman amphora handle.

#### Room D

- A high percentage of kiln debris and small quantities of limestone.
- Equal number of first century AD and fourth century AD diagnostic sherds, including a first century AD faience bowl (form PS 38).
- Cooking pots (form PS 16 and K.7).
- Medium-sized sherds (8x12 cm) of storage jars (form N3.6).

#### Room F

- Large amounts of kiln debris with storage jar rims, (form N3.6, **IMAGE**).
- medium-sized sherds (average 7x4 cm) with some sherds as small as 2.5x3.5 cm.
- Grey-fired, local fabric and a local imitation of African Red Slip, as noted previously by Hope (1999: 235-36).

#### Room G

- Small, medium and large sherds (16x8 cm, 6x7 cm and 1.5-2 cm range).
- Mostly grey-fired pottery.
- Wasters of storage jars (N3.6) and flagons (PS 30, **IMAGE**).
- Kiln debris and fired mud bricks
- First century AD ribbed cooking pots (Pattern 1999: 85, no. 22, 'early Roman').
- Storage jar (form PS 18).

#### Room H

- Mainly grey-fired sherds, medium to small in size.
- Submarine-shaped water vessels, but including some rim fragments.
- First century AD bowl.
- This room also included limestone fragments and kiln debris.

#### Room I

- An equal percentage of red and grey-fired vessel fragments of medium-sized sherds (15x18 cm), and some kiln debris.
- Storage jars (form N3.6)
- Trefoil mouthed flagons
- Copy of an African Red Slip bowl;
- 'Early Roman' cooking pot (Pattern 1999: 85, no. 22).
- Spouted kraters (form PS 28).

#### Room J

- Imported amphora handle manufactured in orange marl clay with a white slip on the surface.
- A fourth century AD glass cup rim.
- Storage jars (form N3.6 and N3.9).
- Spouted kraters (form PS 28, as illustrated in Hope 1987b: 45, pl. XXIII, 4.E and Pattern 1999: 85, no. 25), dated to the early Roman levels at Ismant el-Kharab.

#### Room K

- Large pieces of kiln debris with some pieces of roughly cut basalt and sandstone.
- Medium to small sherds (6x7 cm to 2x3 cm), an equal number of red and grey-fired ceramics,
- Red-fired storage vessel (form N3.6) typically grey-fired.

#### Room L

- Predominantly grey-fired vessels preserved in medium-sized sherds.
- Storage jars (form N3.6) and water jars dating to the fourth century AD.
- First century AD bowl fragment and several rim fragments of kraters, possibly originally with spouts.
- Form K.10 and K11.
- Body fragments of red-slipped open vessels and a storage jar with a ribbed body (same form as Pattern 1999: 84, no. 8, fourth (?) century AD).

#### Room M

- Predominantly smaller sherds of closed vessels, with a similar range of grey-fired and red-fired local clay. Some larger pieces (16x17 cm).
- Small pieces of kiln debris.
- Pottery predominantly fourth century AD and included storage jars (N.3.6), flagon rims (PS 30).
- First century BC-AD bowl (form PS 26).
- Krater rims, possibly of an early date: PS 5 and PS 6, as detailed above in Pattern 1999.

#### Room N

- Medium sized sherds (5x8.5 cm).

- Large amounts of kiln debris and vitrified wasters, concentrated patches of quartz fragments, which occur naturally but are not usually found in such high density in a single occupation area, and fragments of white plastered pieces from the kilns.
- Large numbers wasters of Roman submarine-shaped water carriers within this room. There was a noticeable concentration of large pieces in the eastern sector of this long room, manufactured from the local grey-fired clay and measuring 13x22 cm on average.
- Red-fired clay.
- Several rim fragments of first century AD bowls manufactured in the red-fired clay.
- Fragments of fourth century AD storage jars (form N3.6).

#### Room O

- Small to medium sized sherds (8x9 cm), in both red and grey-fired fabrics.
- Faience, green-blue vitrified waster.
- A small fragment of Cu Alloy was also found possibly the remains of a coin.
- Form K.6 storage jar.

#### Room P

- A large number of the submarine-shaped water vessels and storage jars (N3.6), preserved in medium-sized fragments (5x9 cm).
- Mostly grey-fired clay predominates.
- Kiln debris.
- A body fragment of white, translucent glass.

#### The Kilns, area 1

##### Room

This room was clean apart from collapsed sides of the walls, presumably after the original clearing (Hope 1987b).

##### Room

- Large quantities of vitrified kiln debris from ceramic wasters and charcoal.
- Early, first century AD bowls (form PS 40), but otherwise, like room , this area was clean.

##### Room

- Kiln debris on the surface of this room.
- A large red-fired clay vessel with ochre pigment on the inside.
- Fourth century AD storage jars (N3.6).
- Fragments of bowls dated at Ismant e- Kharab to the first century AD (Pattern 1999: 85, no. 18).
- Parts of the kiln wall of room have fallen into .

##### Room

- Coarse, over-fired sherds from closed vessels were preserved along with large slipped storage jars.
- A krater with a nozzle: form PS 28 (compare Hope 1987b: 45, pl. 23 4.E and Pattern 1999: 85, no. 25).
- First century AD ribbed cooking pots (Pattern 1999: 85, no. 22, 'early Roman').

##### Room

- Fourth century AD storage jars.
- Body sherds from slipped, ribbed amphorae.
- Fragments of a bulbous cooking jar (Hope 1999: 233, no. 30), which is dated to the 'Byzantine period'.
- The majority of the vessels were closed and manufactured in the red and grey-fired local clay.
- Substantial fragments of vitrified kiln debris and several pieces of quartz in this area.

##### Room

- Storage jars (N3.6) of both grey and red-fired clay, and including a variation on the usual form.
- The diagnostic pottery dated to the first century AD.
- Small amounts of kiln debris and mud bricks in the centre of the room, of an average size of 8x15 cm.

##### Room μ

- Fragments of submarine-shaped water jars with strainers at the base of the neck, Roman, possibly fourth century AD, in date.
- A copy of an African Red Slip bowl.
- A painted vessel, of a fourth century AD form, (Compare Hope 1999: 234, 34).
- Evidence for the burning of sandstone and limestone and over-fired fragment of glass, along with large quantities of charcoal in concentrated areas.

##### Room

- Predominantly grey-fired local fabric but with some fragments of the red-fired.
- Imported buff marl amphora handle.
- Closed vessels in form and included the usual storage jars and one large krater rim.

##### Room

- Storage jars (form PS 3)
- Bowls (form PS 40).
- Small plate (form PS 27).
- Flagon fragments (PS 30)
- The base of a mixing pot (Form PS 26) with ochre inside.

- This area extends north and NNE where kiln furniture is preserved. Similar types of pottery, both fourth century and first century AD are found in the annex including lots of wasters and over-fired brick, perhaps suggesting a kiln area.

#### Room

- Kraters (PS 5 and PS 6)
- Buff marl clay fragments.
- Small undiagnostic pieces of glass.
- Several fragments fourth century AD flagons (PS 30), some of which were over-fired.
- Kiln debris and ceramic wasters and a faience waster, Augustan in date and in the form of a small bowl; the glaze on the interior and exterior was unevenly spread and had started to blister during firing.
- First century AD bowl fragments of local manufacture.
- Possible piece of metal slag.

#### Room

- This area seemed to have more of the earlier, first century AD material than other parts of the building.
- Several fragments of first century AD bowl, including an echinus-like form PS 26 (Pattern 1999: 85, no. 12), which may even be first century BC in date.
- First century AD cooking pots and kraters with nozzle, as earlier.
- Predominantly fired grey in colour.

#### Room

- Storage jars (N3.6)
- Rim fragments of spouted kraters (PS 28), predominantly grey-fired but including some red.
- There were wasters for the submarine-shaped water jars.
- Kraters with spout form PS 28.
- First century AD ribbed cooking pots (Pattern 1999: 85, no. 22, 'early Roman').

#### K1

Wheelmade bowl. Finely tempered clay with an exterior of 10 R 5/6 and core of 2.5 YR 5/4.  
Rim diameter 22 cm, 17 % preserved.  
Compare PS 29

#### K2

Wheelmade shallow bowl, medium tempered clay with an exterior of 7.5 YR 6/3, an interior slip of 10 R 5/6, and core of 10 R 5/6.  
Rim diameter 26 cm, 30 % preserved.

#### K3

Wheelmade painted bowl with a burnt surface. Interior slip 10 R 6/4, paint gley 8/10 Y and gley 1 2.5/N; the core is 2.5 YR 4/6.  
Rim diameter 19 cm 18% preserved.  
Compare form 132 in J. Dore and N. Keay Excavations at Sabratha 1948-1951 volume 2 The finds part 2 (1989) 166, and 163 fig. 43: third century AD, residual?

#### K4

Wheelmade bowl, medium-coarsely tempered with a core of 5 YR 4/1 and a slip of gley 1 8/5 GY.  
Rim diameter 19 cm 18 % preserved.

#### K5

Small wheelmade bowl, coarsely tempered marl clay: exterior gley 1 4/N and core of 2.5 YR 4/3.  
Rim diameter 6 cm, base 3.5 cm 100% preserved.

#### K6

Wheelmade closed vessel with coarsely tempered clay, and the remains of straw marks on the surface. The exterior is 5 YR 6/8 to gley 1 4/N and the core is 19 R 4/1.  
Rim diameter 16 cm 15 % preserved.

#### K7

Wheelmade cooking pot, coarsely tempered clay with an interior of 10 R 5/3 and exterior of 2.5 YR 4/8.  
Rim diameter 10 cm 20 % preserved.

#### K8

Wheelmade, finely tempered storage jar with a red slip on the exterior 10 R 5/6; the exterior clay is 10 R 6/6 and the core is 10 R 4/1.  
Rim diameter 16 cm 30 % preserved.  
Compare PS 18

#### K9

Wheelmade over-fired flagon.  
Rim diameter 4 cm 100 % preserved  
Same form as PS 30.

#### K10

Wheelmade closed vessel with a slip on the interior 7.5 YR 5/3 and a clay of 7.5 YR 3/1.

Rim diameter 2.4 cm 100% preserved.

K11

Wheelmade storage jar (?). Exterior and core gley 1 4/10 GY.  
Diameter 11 cm 30 % preserved.

### **Area 1 Structure N3: Observations on the surface pottery**

The pottery from the two rooms of this structure: the lower, west room, and the eastern, raised adjoining floor was examined in detail, in order to record the types of pottery preserved there for comparison with other structures in Area 1. Like the kiln area, it was not possible to undertake a detailed survey or collection and so the finds were recorded and remain in situ. The pottery consisted of large fragments of predominantly closed storage vessels (N3.3 and N3.6-7 and form PS 3), kraters (form PS 5 and PS 28) and cooking pots (form PS 16), similar to the types from the kiln structure and associated buildings. Any common examples that were found elsewhere on the site or unusual pieces are recorded below (N3.1-10). As with the kiln pottery, the publications of pottery types from elsewhere in Dakhleh proved to be a good source for parallels, although this was not found to be the case for all of the forms.

### **East room**

N3.1

Closed storage vessel with a medium to coarsely tempered clay is 5YR 6/4 with a slip on the exterior 5YR 6/6 and 7.5 YR 6/6 core; the surface was worn. The fabric is made up of small to medium charcoal, quartz and ceramic inclusions to the eye. Part of an inscribed relief decoration was preserved on the shoulder of the vessel in the form of tendrils and ivy leaf decoration, of a type commonly associated with Hellenistic pottery decoration. The form is not paralleled in any of the current DOP publications.

Rim diameter: 9cm 25% preserved

N3.2

Closed storage vessel, grey-fired clay with a core of gley 1 5/N and an exterior colour of 5 YR 6/6, over-fired clay. Same form as N3.3, 6 and 7.

Rim diameter 11 cm (?)

N3.3

Closed storage jar made from a medium-tempered clay (gley 1 4/N) with traces of a darker slip on the exterior. Compare Hope 1987a: 14 and 21, pl. XIX.6, (Roman, first century of Christian Era). Same form as N3.2, 6 and 7.

Rim diameter 9 cm 22% preserved

N3.4

Fragment of a bowl with a 2 cm thick slip (7.5 YR 5/1) around the outer lip, the clay is a finely tempered red (2.5 YR 6/4) with a core of 10 R 6/8. Compare Pattern 1999 fig. 2.18 for form: (Early Roman).

Rim diameter 12 cm 20% preserved

N3.5

Fragment of a glass conical lamp with opaque body and cobalt blue blobs on the body. The rim is preserved. Compare DB Harden Roman Glass form Karanis (1936): 158, no. 457 (fourth century AD)

N3.6

Closed storage jar made from a medium-tempered clay (gley 1 4/N) with traces of a darker slip on the exterior. Compare Hope 1987a: 14 and 21, pl. XIX.6, (Roman, first century of Christian Era). Same form as N3.2, 3 and 7.

Rim diameter 10 cm 22% preserved.

### **West room**

N3.7

Fragment of a closed storage vessel in the grey-fired clay (fired gley 1 4/N through). Compare Hope 1987a: 14 and 21, pl. XIX.6, (Roman, first century of Christian Era), same form as N3.2, 3 and 6.

Rim diameter 10 cm 30 % preserved

N3.8

Fragment of a cup or mug, originally red-slipped (10 YR 6/3); the clay is finely tempered; 2.5 YR 5/6 on the interior. Compare M. Fulford and R. Tomber (eds.) Excavations at Sabratha 1948-1951: Volume 2 Part 2 (1994) 138, no. 149 (early first century AD).

Rim diameter 9 cm 15 % preserved.

N3.9

Fragment of a storage jar with thin, finely tempered walls; 7.5 YR throughout.

Rim diameter 11 cm 42 %

N3.10

Fragment of a bowl; Clay is 2.5 YR 5/6 with a slip 7.5 YR 6/3. Compare Pattern 1999 86 fig. 3.36: surface find.

Rim diameter 15 cm 25 % preserved

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