

PRELIMINARY REPORT ON A SURVEY IN EDOM, 1984

by
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Introduction

In the introduction to the third volume of his *Explorations in Eastern Palestine*, Glueck states that "despite the large number of sites visited... the possibilities of discovery of still additional ancient sites there have definitely not been exhausted". A little further down the page he states "On the whole, however, the writer is confident that not very many sites in Edom and Moab whose ruins have not been completely obliterated remain undiscovered".²

While the former statement is undeniable, results of such undertakings as the recent surveys in the Wadi el Hasa belie the latter.³ A vast amount still remains to be discovered.

A number of sites of the historic periods have been excavated on the Edom plateau, although little has yet been finally published. Iron Age sites have been excavated at Umm el Biyara, Tawilan and Buseirah;⁴ Nabataean and Roman material has flowed abundant out of Petra;⁵ and Nabataean-Roman and Islamic material

has been found at Udruh.⁶ This growing body of material, together with his own researches on the ceramics of Tawilan and Buseirah helped the author to decide that the time was auspicious to undertake some modern survey work in the area.⁷

A relatively large area was chosen for the first season's work, namely between Tafila in the north and Ras en-Naqb in the south, bounded on the west by the escarpment and on the east by the desert (Map 1). An area in the south was surveyed in considerable detail with a scatter of sites being visited further north. A further season of work is planned to fill in the gaps. The area around Udruh has already been surveyed by Killick⁸ and so was not visited.

The survey took place in August-September 1984, funded by the British Institute at Amman for Archaeology and History.⁹ Due to a lack of expertise in matters lithic, flints were not collected, the survey concentrating on ceramic material only.

The results of the survey are summarised in Table 1, which is to be interpreted

¹ Falkner is responsible for the Islamic period notes; Hart for the rest.

² N. Glueck, *Explorations in Eastern Palestine III*, AASOR, New Haven, 1939.

³ B. MacDonald, et. al., *The Wadi el Hasa Survey 1981: A Preliminary Report*, ADAJ, XXVI (1982) p. 117-132; and *The Wadi el Hasa Archaeological Survey 1982: A Preliminary Report*, ADAJ, XXVII (1983) p. 311-324.

⁴ C.-M. Bennett, *Fouilles d'Umm el-Biyara*, RB, LXXIII (1966) p. 372-403; and, *Excavations at Buseira, Southern Jordan 1971: A Preliminary Report*, Levant, V (1973) p. 1-11; and, *Excavations at Buseirah, Southern Jordan 1972: Preliminary Report*, Levant, VI (1974) p.1-24; and, *Excavations at Buseirah, South Jordan, 1973: Third Preliminary Report*, Levant, VII (1975) p. 1-19; and, *Excavations at Buseirah, Southern Jordan, 1974: Fourth Preliminary Report*, Levant, IX (1977) p. 1-10; *Excavations at Tawilan in Southern Jordan, 1982*, Levant, XVI (1984) p.

1-24.

⁵ Various excavators including Hammond, Khairy, Parr and Zayadine.

⁶ A.C. Killick, *Udruh-1980, 1981 Seasons: A Preliminary Report*, ADAJ, XXVII (1983) p. 231-243; and, *Udruh-The Frontier of an Empire: 1980 and 1981 Seasons, A Preliminary Report*, Levant, XV (1983) p. 110-131.

⁷ I.E., Hart. *An Analysis of the Iron Age Pottery from Tawilan now nears completion and the final report on the site may be anticipated in the near future.*

⁸ Personal communication.

⁹ The survey team consisted of Stephen Hart (Director), Mr. Stephen Bourke, Ms. Susan Thorpe and Ms. Pamela Watson, with Mr. Ghasan Ramahi representing the Department of Antiquities. Our thanks to Dr. Hadidi and the Department of Antiquities for their valuable assistance and for allowing us to use Shobak Castle as a base of operations.

as follows:

- O : No architecture obviously associated with this period, Sherds only.
- B : Isolated building or watchtower
- H : Hamlet or small group of buildings
- V : Village
- W : Walled settlement
- F : Fortress
- Q : Function uncertain
- T : Tombs
- ? : Possible sherds of this period

Dating in all cases is provisional and subject to change when the material has been more fully examined. Symbols in parentheses refer to an inferred form of settlement not positively identified.

Pre-Iron Age

Virtually no material pre-dating the Iron Age was found. A mat-impressed flat base from site 024 may be Chalcolithic and a rolled rim from site 021 may belong to the Chalco-EB corpus but neither is certain. All other finds were Iron Age or later.

Iron Age (Map II)

Nearly all the Iron Age material fits into the corpus of excavated material from Tawilan and Buseirah, i.e., seventh-sixth centuries B.C. A representative selection is illustrated in Figures 1 and 2.

The necked bowls Figure 1: 1-3 are a common Edomite form with many parallels.¹⁰ Bowls with slightly thickened rims, Figure 1: 5 and 7 are common in many variations. Parallels may be found in Glueck.¹¹ The simple bowl rim Figure 1: 9 probably comes from a carinated bowl.¹² Cooking pots Figure 1: 10-13 are the most common form and, with small variations are mostly very similar. Parallels may be

found in Bennett.¹³

The storage jars published in Figure 2 are all common Edomite forms although few have yet been published. Glueck¹⁴ provides parallels to No. 2. The handle with the potter's mark (Fig. 2: 6) is of clear Iron Age fabric although no parallel for this particular mark has yet been found.

The cooking pot Figure 1: 14 does not fit well into the Seventh-Sixth Century corpus. The small size of the sherd makes it difficult to be certain but perhaps it belongs rather in Iron II A-B.¹⁵ Numbers 15-18 also do not fit well into the standard Edomite ware-shape interface and may perhaps be earlier forms. A rather inexact parallel for No. 17 may be found in Lachish III Pl. 98 No. 587 Level III (Ninth-Eighth Centuries B.C.).

Classical Periods (Map III)

The majority of classical pottery found appears to belong to the First Century A.D., shading a little into the centuries on either side. The period seems to have been one of great prosperity and countryside is covered with farms, hamlets and villages. Later material is much scarcer, being confined to a few, generally larger, sites. Whether this decline can be tied to the Roman takeover of A.D. 106 or whether other factors are involved remains to be determined. A representative sample of the material is published in Figure 3.

Number 1 is of Nabataean Sigillata.¹⁶ No exact parallel has yet been found but the form is probably First Century B.C.

Number 2 and 3 are of Khairy's¹⁷ Type F7- "not of the very fine ware". They are dated "Turn of the Christian Era until around the end of the Third Century A.D." although this is now to be refined to

¹⁰ Bennett, *Levant*, 1974, *ibid.*, Fig. 15:4, Bennett, *Levant*, 1975, *ibid.*, Fig. 5:13, 18; Bennett, *Levant*, 1984, *ibid.*, Fig. 3: 799.

¹¹ N. Glueck, *Explorations in Eastern Palestine II*, AASOR, New Haven, 1935, Pl. 23:13, 15, 16.

¹² Bennett, *Levant*, 1975, *ibid.*, Fig. 5:45.

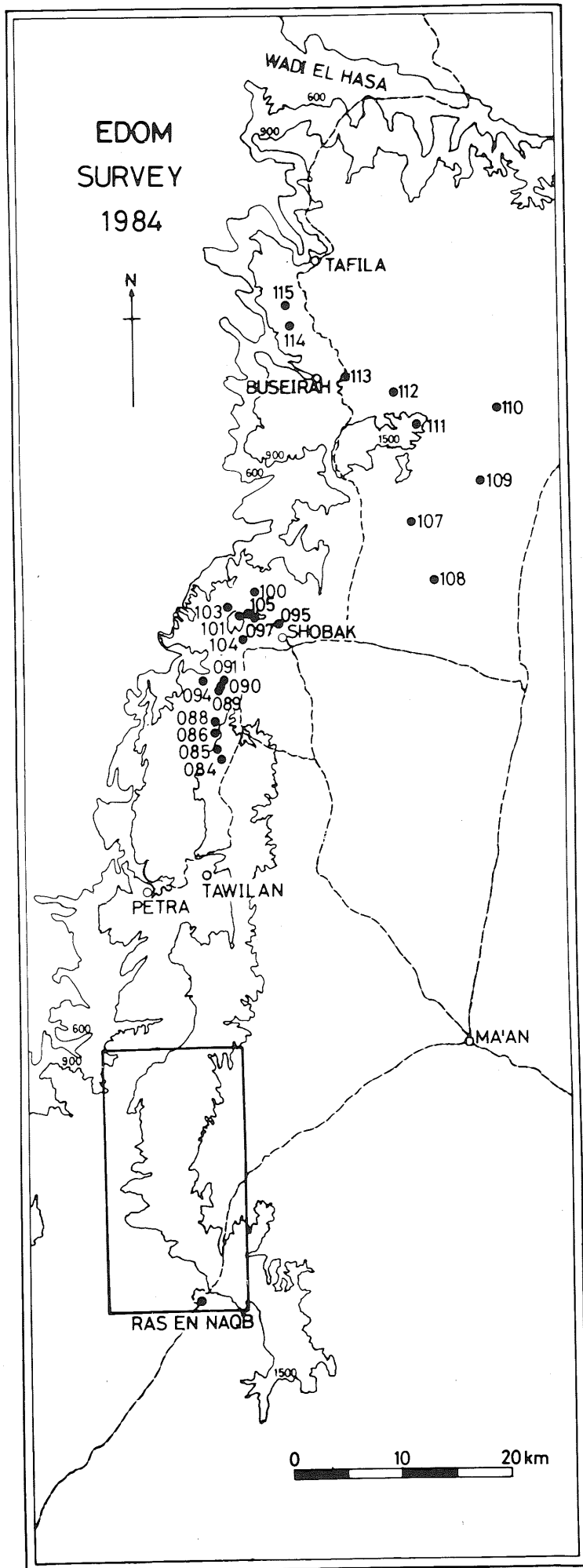
¹³ Bennett, *Levant*, 1984, *ibid.*, Fig. 5: 842, 796, 837.

¹⁴ Glueck, 1935, *ibid.*, Pl. 26B:13, 14.

¹⁵ Ruth Amiran, *Ancient Pottery of the Holy Land*, Jerusalem, 1969, p. 76:7.

¹⁶ A. Negev, Nabataean Sigillata, *RB*, 3 (1972) p. 381-398.

¹⁷ N.I. Khairy, A Typological Study of the Un-painted Pottery from the Petra Excavations, Ph.D., University of London, unpublished, 1975.



Map. I

the First Century¹⁸ A.D.

Number 4 is a development of the Hellenistic Fish Plate, First Century B.C.-First A.D.

Number 5 belongs with Khairy's Bowls F.17 in general type, although there is no specific parallel. An example from Petra is similar and is dated to Phase V, First Century B.C. by Parr.¹⁹

Bowls, numbers 6-9, are the very common type F.1 "last quarter of the Second Century B.C. until about the first half of the Second Century A.D." with a revised date for these examples being probably the second half of the First Century A.D.

Cooking pots 10-16 (and perhaps also 17 and 18) are of Cooking Pot types F6 and F7 "first half of the First Century B.C. until the late Roman period". A revised date for those examples is the First Century A.D. Other examples are published by Parr and Hammond.²⁰

Numbers 19-23 are Cooking pots Type F.8 "beginning of First Century B.C. until the middle of the Second Century A.D." to be revised to the First Century A.D. Parr publishes no exact parallels but Fig. 4 No. 53 is similar and dates to Phase VIII, late First Century B.C.²¹

Numbers 24-27 belong to Jar type F.11 "beginning of the First Century B.C. until about A.D. 70" revised to a general First Century date.

Number 28 is of jar form F. 14 "second half of the First Century B.C. until about the third-fourth centuries A.D." revised to a general First Century date.

Numbers 29-31 belong to the late Roman-Byzantine corpus. Number 31 may perhaps be considered as a development of the fine Nabataean bowls.

Islamic Periods (Map IV)

With the exception of sherds 34 and 37 which would seem to be Umayyad and 'Abbāsid respectively, this corpus deals with post-Ayyubid forms. As the material comes from a survey, dating evidence is extremely limited and this, together with the paucity of publications for this period in the area, makes the dating here only tentative especially in the case of the Ottoman sherds. Summary on Table 2.

No definite parallels will be cited here as with hand-made pottery it is hard to decide, except in rare cases, what exactly constitutes a congruent sherd. The general forms are however found elsewhere, see Sauer 1973, Fig. 4; Tushingham 1972, Fig. 7 and 8; Gilmore et al 1982, Plate 33B; Ingraham et al 1981, Plates 83-87; Smith 1973, Plates 73-76). For the painted pottery see especially Franken and Kalsbeek (1975, chapter 9), and Sauer's review of the same (Sauer 1976).

All sherds illustrated are hand-made unless otherwise stated. "Ware as 1" means that the inclusions are the same (as seen by eye). The ware may not be technically congruent. Figs. 4, 5 & 6.

Conclusions

One curious factor clearly revealed by this survey is that settlement on the Edomite plateau suffers from a strong "ebb and flow". The area is well settled in the Seventh and Sixth centuries B.C., in the First Centuries B.C. and A.D. and again in the 'Ayyūbid/Mamlūk period. A number of reasons may be tentatively put forward:

1) Geographical: because of the great differences in altitude found at the edges of the rift valley here (below sea level in the

¹⁸ I am most grateful to Dr. Nabil Khairy for his valuable comments on my material and for lending me a copy of his thesis. For the remainder of these Classical pottery notes I shall quote first from Dr. Khairy's thesis and then add his personal comments as to a revised date without acknowledgement in each case.

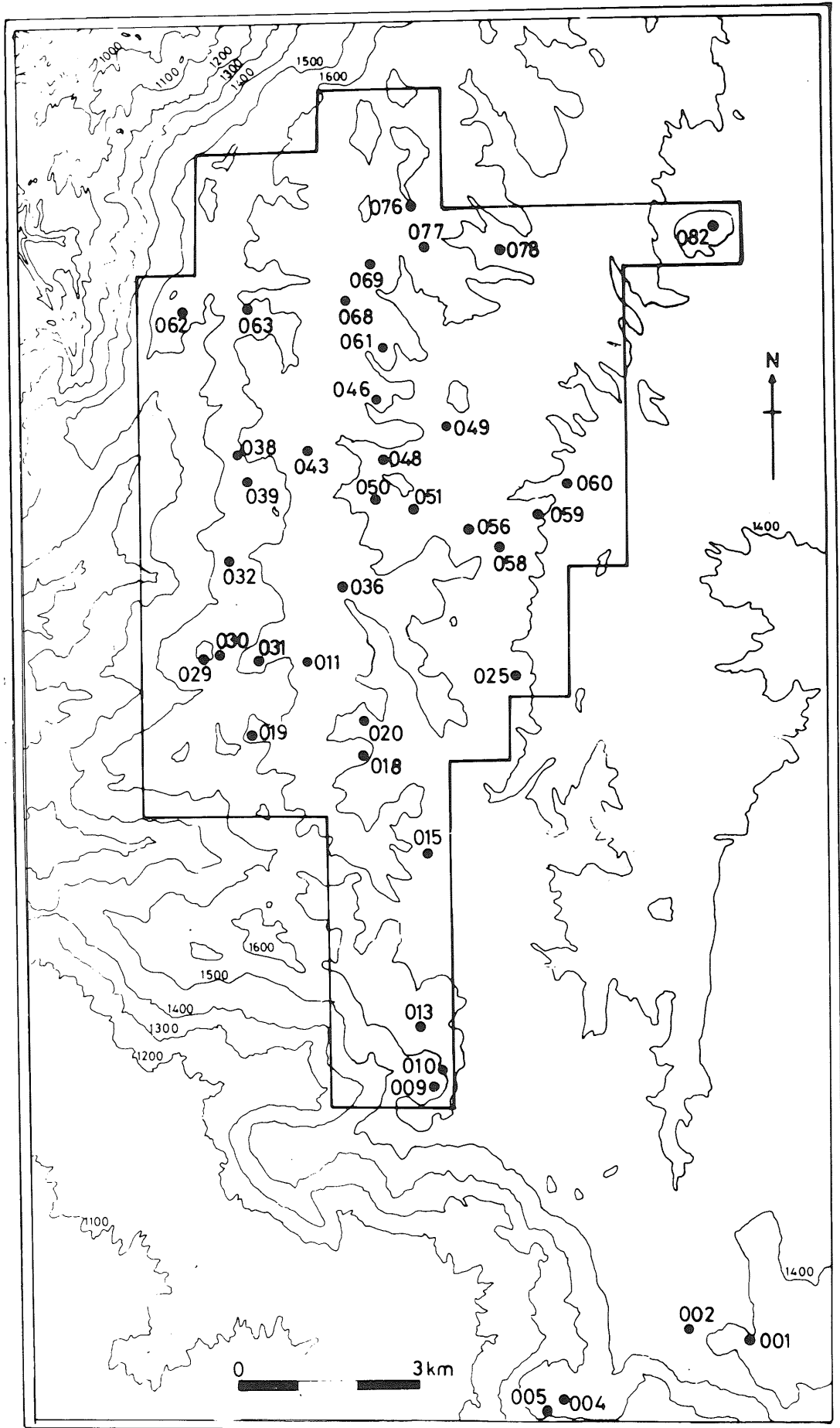
¹⁹ P. J. Parr, *A Sequence of Pottery from Petra in Near Eastern Archaeology in the Twentieth Century: Essays in Honor of Nelson Glueck*, New

York, 1970, Fig. 3:5.

²⁰ *Ibid.*, Fig. 6:83, 86; Fig. &: 104-105, Fig. 3:33 and, Philip C. Hammond, *The Excavation of the Main Theater at Petra, 1961-1962, Final Report*, Colt Archaeological Institute, 1965, Pl. LVIII.

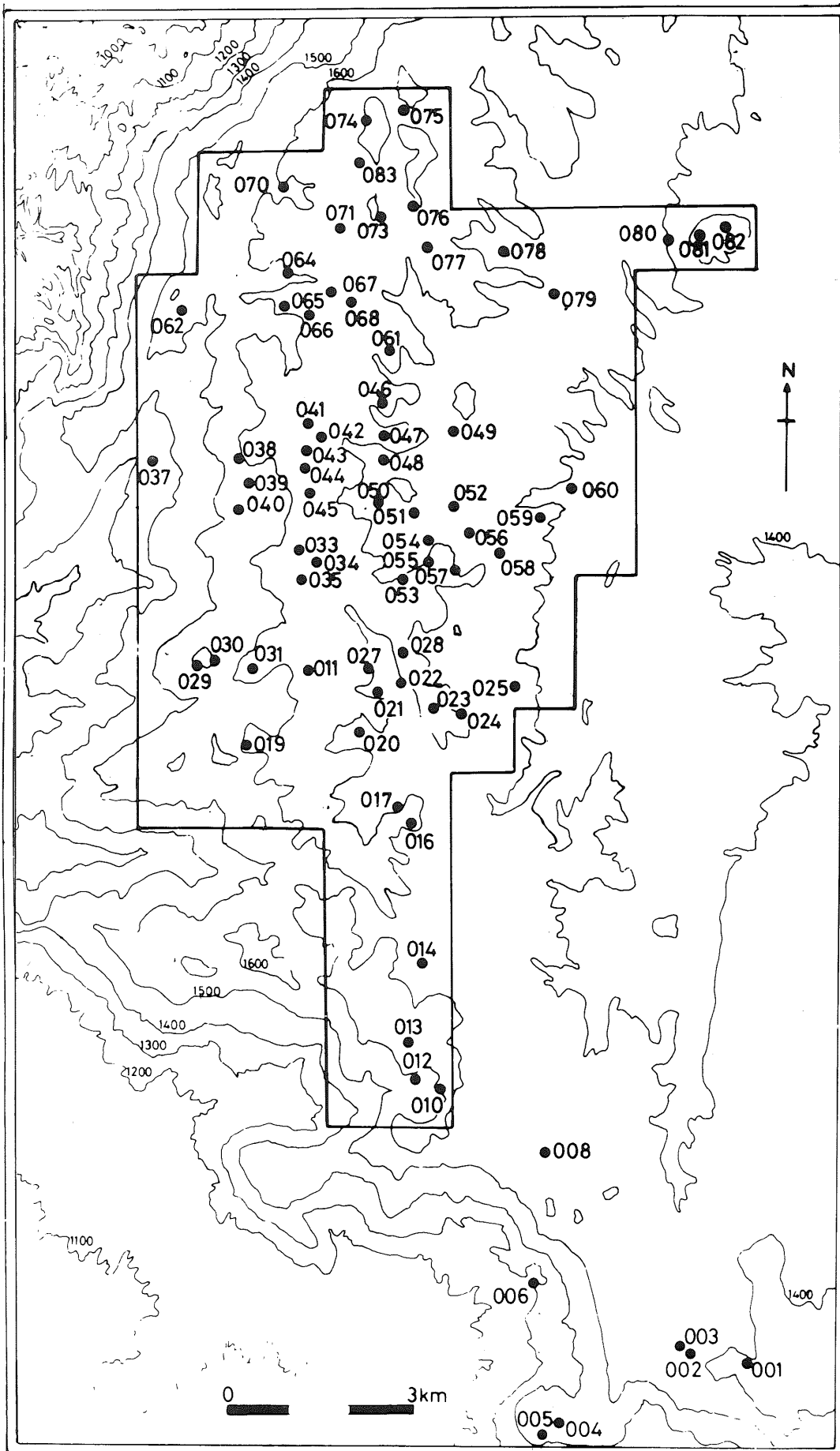
²¹ Alistair Killick has indicated, when he kindly undertook to look at this material, that forms 19-23 and 24-27 may occur in Late Roman contexts at Udruh.

IRON AGE SITES



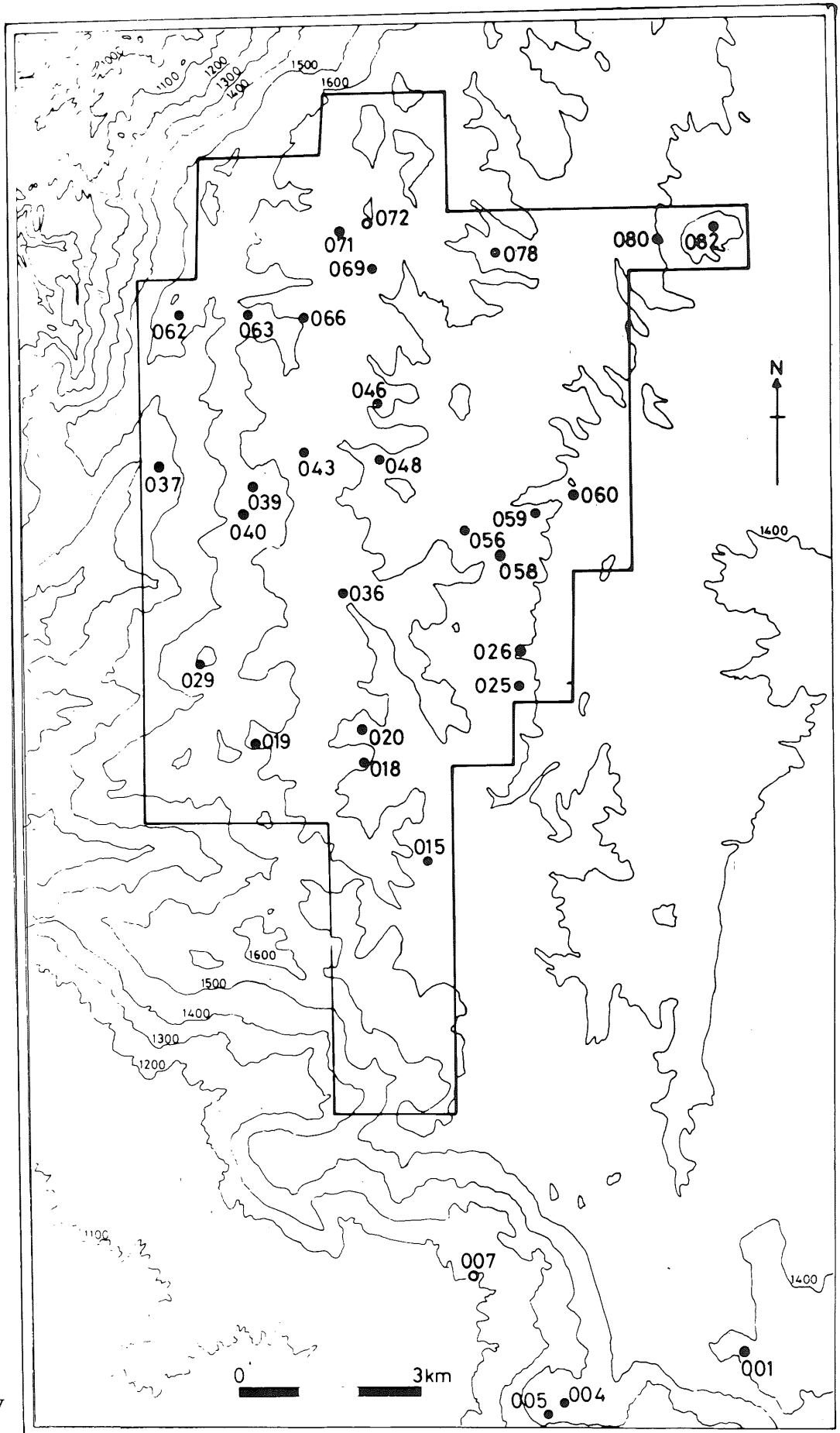
Map. II

CLASSICAL SITES

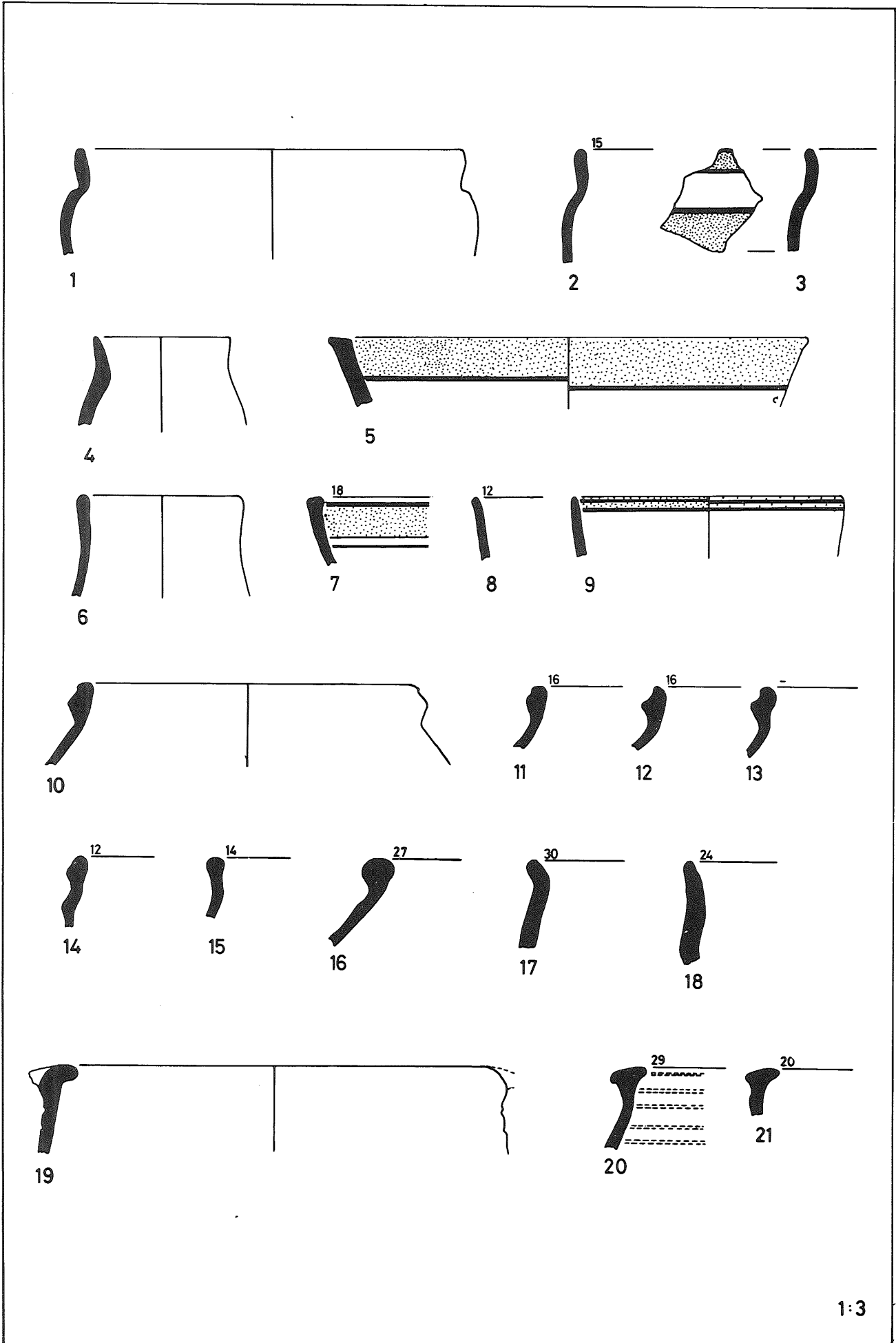


Map. III

ISLAMIC SITES

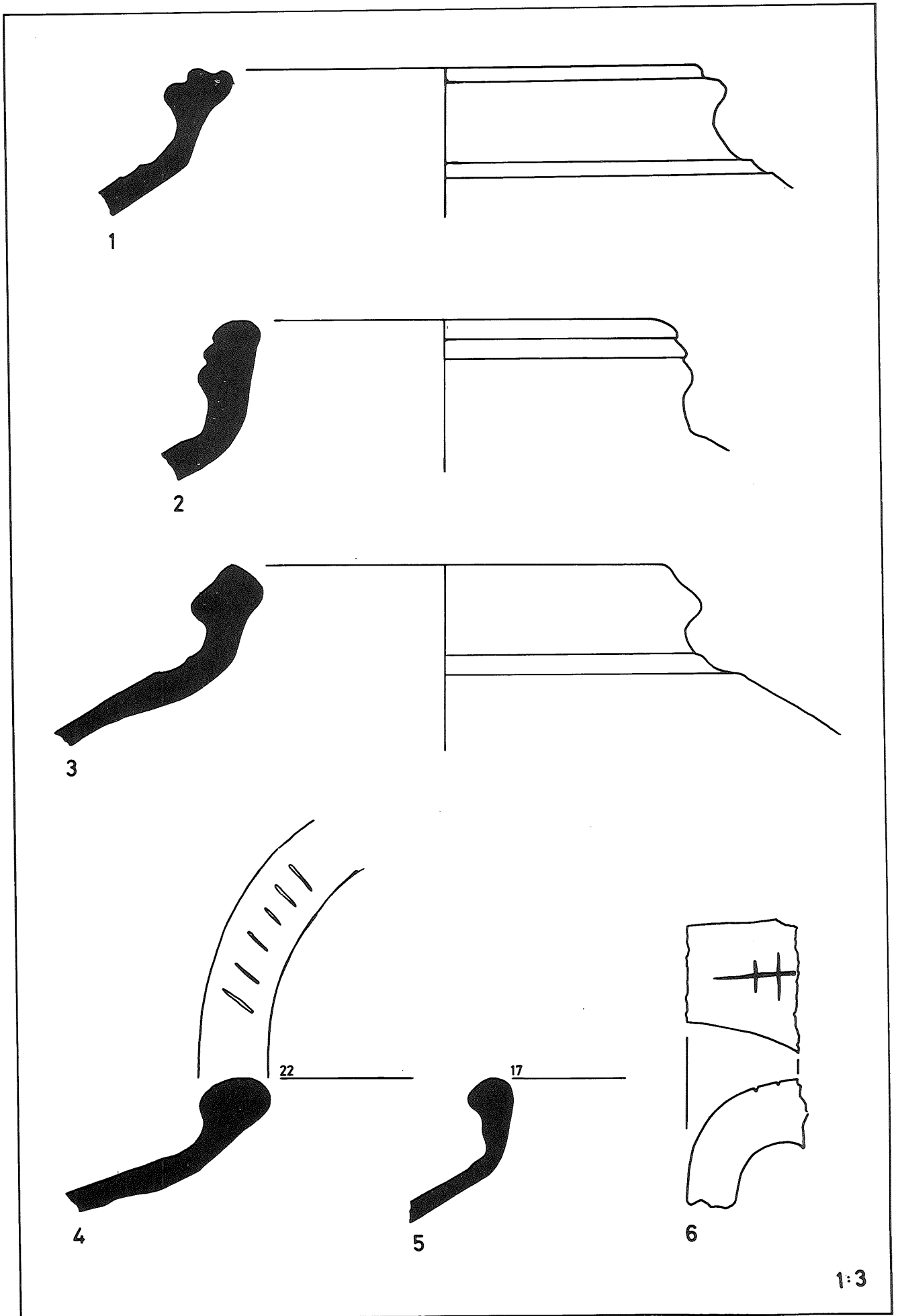


Map. IV



1:3

Fig. 1:



1:3

Fig. 2:

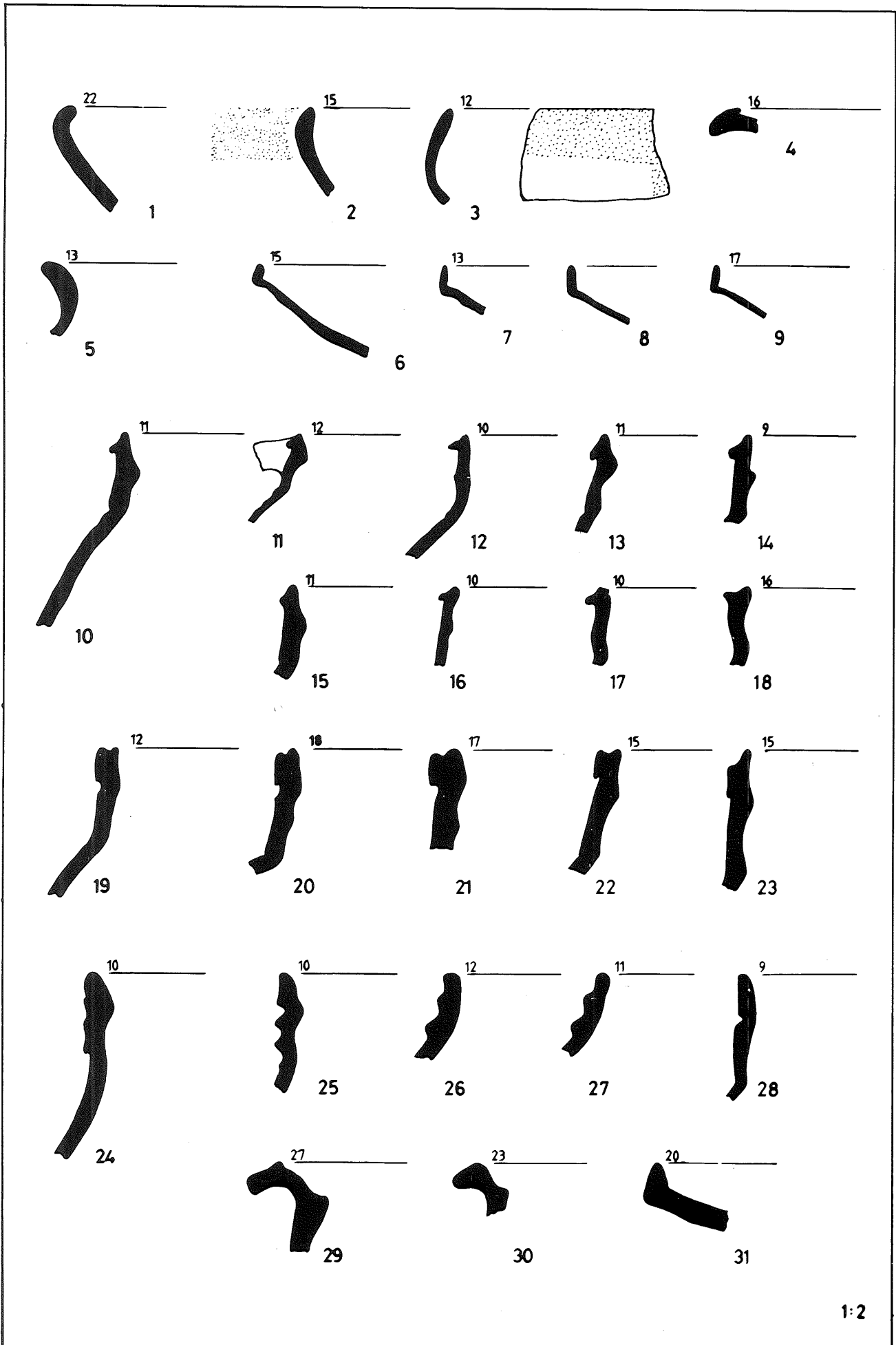


Fig. 3:

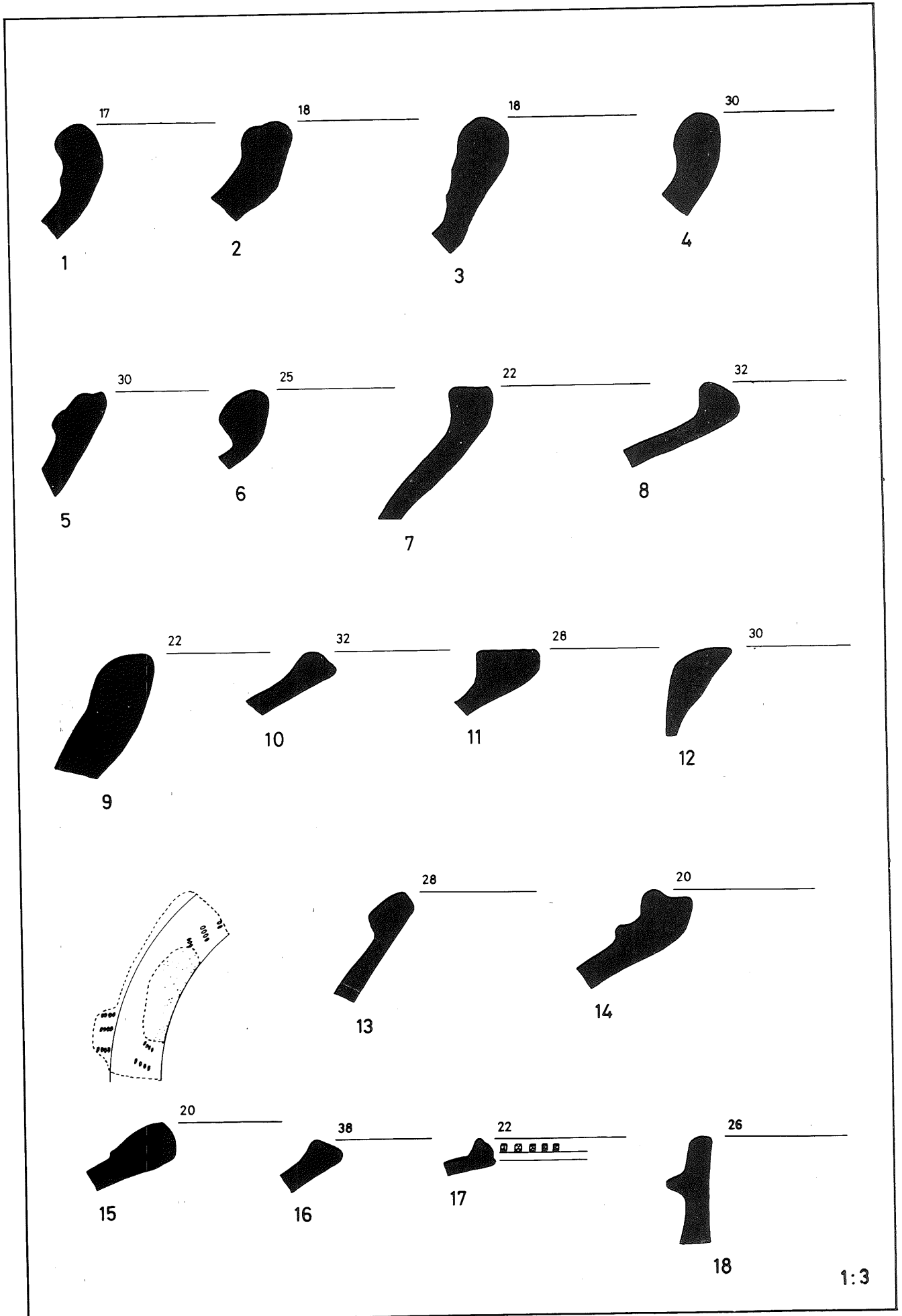


Fig. 4:

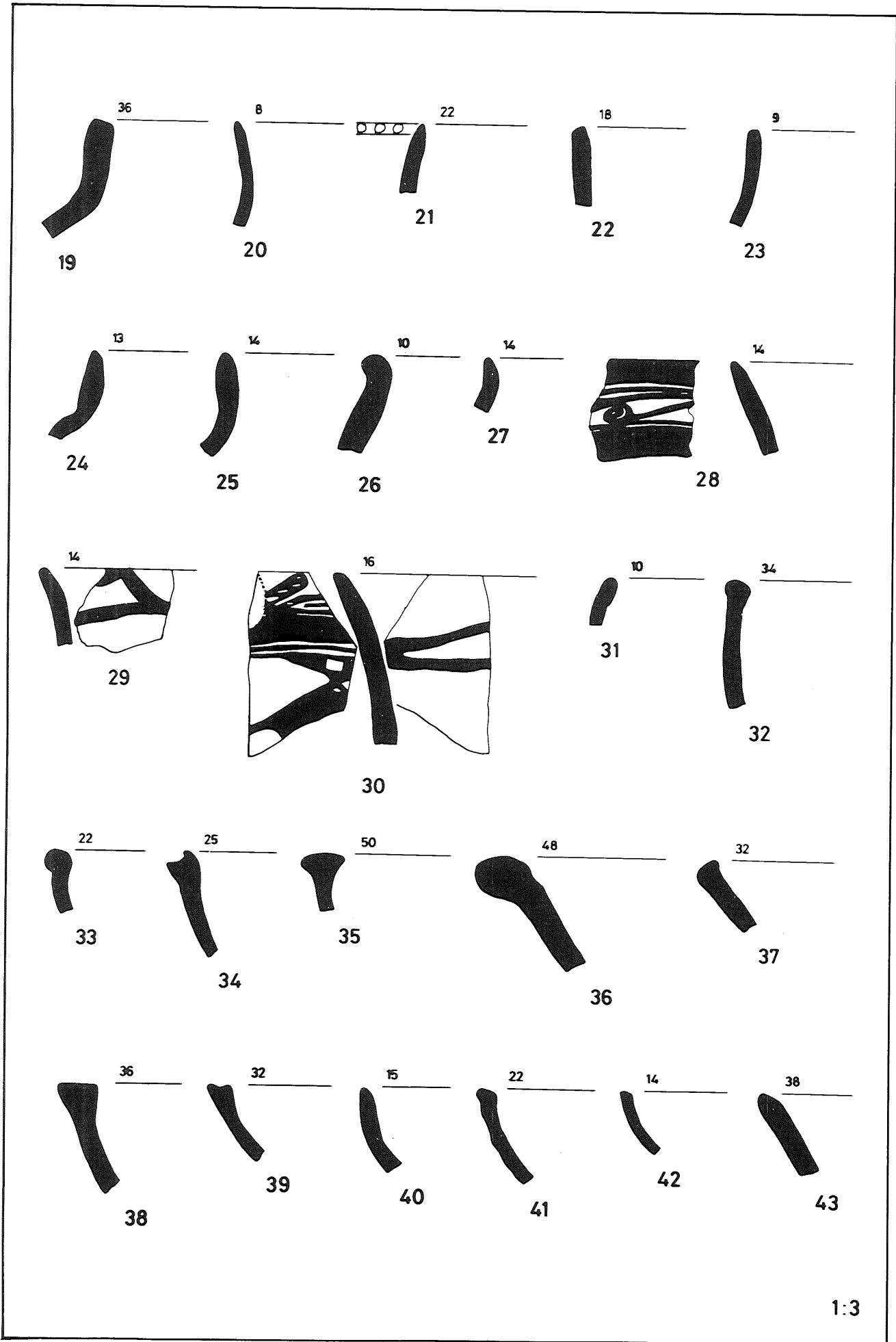


Fig. 5:

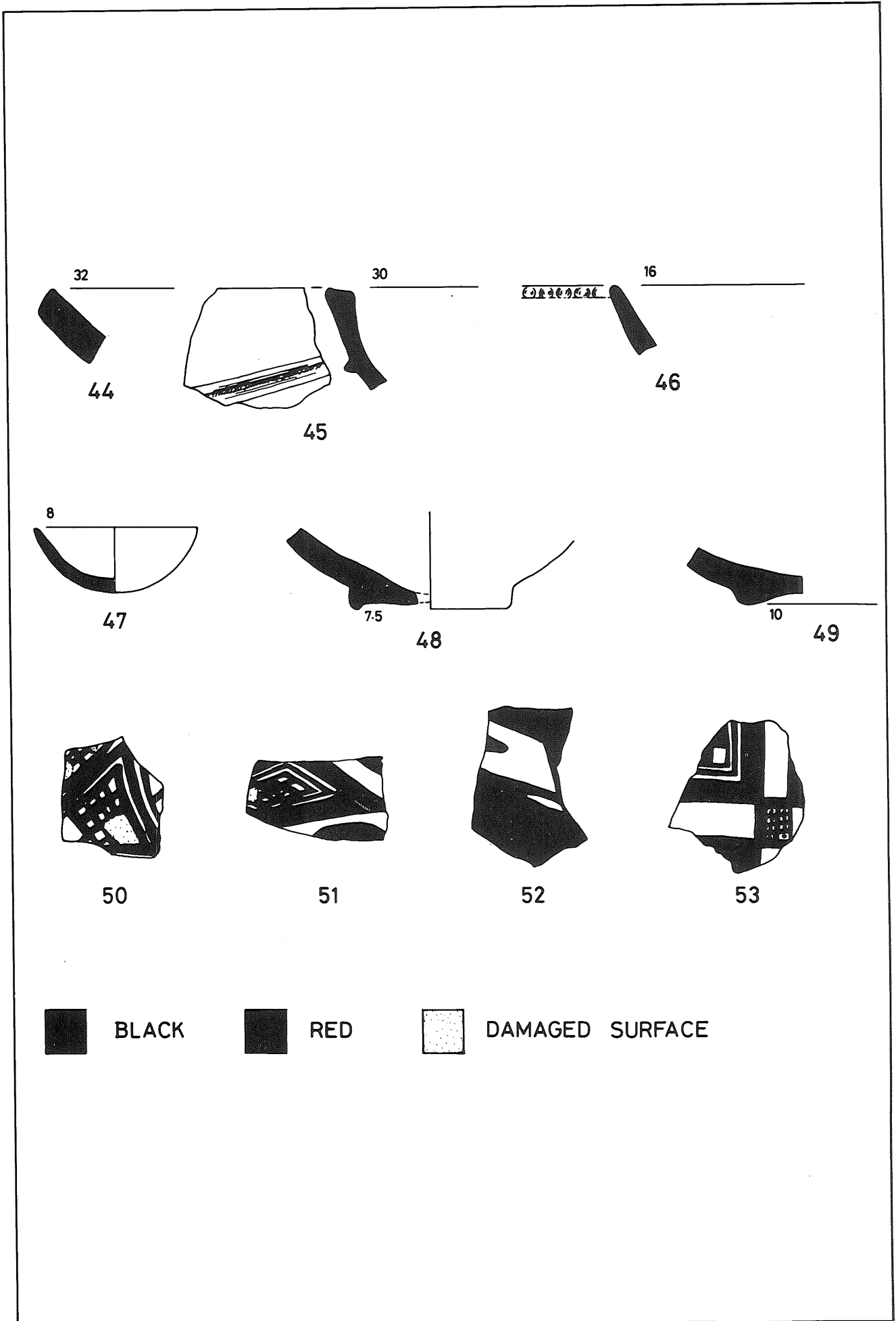


Fig. 6:

Wadi 'Arabah to over 1600 m. on the plateau) and the numerous springs to be found on the plateau the area is best suited to nomadic utilisation. The plateau is bitterly cold in winter but well supplied with water in summer. The 'Arabah is stiflingly hot in summer and virtually waterless but is pleasant in winter. Thus, all other factors being equal, the nomadic life is by far the most comfortable. It is still indulged in by many bedouin today.

2) Political: the change from the putative nomadism of the early Iron Age to the settlements of the Seventh Century B.C. may most probably be attributed to the Assyrians — a people with ferocious organisational ability. Assyrian motives would have concerned the security of the trade routes into northern Arabia. After the fall of the Assyrian empire the Babylonians and Persians would have held Edom together for a while (see for instance the cuneiform tablet recently discovered at Tawilan²² dating to the accession year of a Darius, probably Darius I) but by the mid-Fifth Century B.C. a reversion to nomadism seems to have taken place.

It is not until the First Century B.C. that Edom again rises to prominence with the civilisation of the Nabataeans. The Nabataeans as a people are, of course, known much earlier but there is little evidence that they were a settled people much before the First Century B.C. The question of continuity between the Edomites and the Nabataeans is a vexed one I have no intention of pursuing here but I think it is fair to say that there is little continuity of settlement whatever similarities of language, art or anything else may be traced. Iron Age villages such as 015, 018, 030, 032, 036, 051, 063, 069, 076, 094,

not to mention Tawilan and Buseirah show no evidence of major Nabataean re-occupation. Political factors presumably also contribute to the fall of the Nabataean Kingdom in as much as there seems to be a severe decline following Roman annexation.

Another gap in settlement follows — a few villages and fortresses can be traced in the late Roman and Early Islamic periods but it is not until the 'Ayyūbid-Mamlūk period that settlement again becomes extensive. The pottery of the late Mamlūk and early Ottoman periods is little understood in this area but a gap in occupation is not impossible here also. The Islamic material however requires much more analysis before any firm conclusions can be made.

3) Land Use: geomorphologist Phillip Macumber²³ has pointed out that the intensive sort of agriculture apparent on the plateau in the Nabataean and probably Iron Age as well is very likely to result in a dropping of the water table. This is a factor still to be investigated but it might well prove to be most important and may well go a long way towards explaining the cyclical nature of settlement in this area.

A further season of work is planned for 1985 which will continue the survey and make soundings at a few selected sites. It is hoped that the situation will become a little clearer following the analysis of this material.

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²² Bennett, *Levant*, 1984, *ibid.*, p. 19-21.

²³ Personal communication.

Table 1

Site No.	Glueck No.	Name	IA IIA-B	IA IIC	2nd-1st B.C.	1st-2nd A.D.	L. Rom- Byz	Umm	Ayy.- Mam.	Ott.	Mod.	Class. Indeter	Period Uncer.
001	34	Kh. esh-Shudaiyid	—	F	B	H	—	—	O	?	—	—	—
002			—	O	—	—	—	—	—	—	—	O	—
003	33	Kh. el-Fuweilah	—	—	—	—	—	—	—	—	—	(H)	—
004	31	Kh. Neqb esh-Shtar	—	O	—	F	—	—	—	O	—	—	—
005	31	Kh. Neqb esh-Shtar	—	B	—	—	—	—	—	O	—	—	—
006	44	Ain Umm Mansur	—	—	—	B	—	—	—	—	—	—	—
007	45	Ain Jemmam	—	—	—	—	—	—	—	—	—	—	—
008			—	—	—	—	—	—	—	—	—	H	—
009	49	Rujm Bir Turki	—	F	—	O	—	—	—	—	B	—	—
010			—	?	—	V	O	—	—	—	—	—	—
011			—	O	—	B	—	—	—	—	B	—	—
012	50	Kh. Bir Turki	—	—	—	H	—	—	—	—	B	—	—
013			—	O	—	O	—	—	—	—	H	—	—
014			—	—	—	(H)	—	—	—	—	H	—	—
015			—	V	—	O	—	—	—	O	—	—	—
016			—	—	—	?	—	—	—	—	—	—	—
017			—	—	—	V	—	—	—	—	—	—	—
018			—	V	—	—	—	—	—	O	—	O	—
019			—	O	—	?	—	—	V	—	H	—	—

Site No.	Glueck No.	Name	IA IIA-B	IA IIC	2nd-1st B.C.	1st-2nd A.D.	L. Rom- Byz	Umm	Ayy.- Mam.	Ott.	Mod.	Class. Indeter	Period Uncer.
020			—	O	—	—	B	—	—	?	—	—	—
021			—	—	—	B	O	—	—	—	—	—	—
022			—	—	—	—	—	—	—	—	—	B	—
023			—	—	—	—	B	—	—	—	—	—	—
024			—	—	—	V	—	—	—	—	—	—	—
025	73	Kh. Qurein South	—	O	—	?	V	—	?	V	—	—	—
026		Kh. Qurein North	—	—	—	—	—	—	?	V	—	—	—
027		Rujm Sallam	—	—	—	—	—	—	—	—	—	B	—
028			—	—	—	B	—	—	—	—	—	—	—
029			—	?	—	—	—	—	?	—	—	(B)	—
030			—	V	—	O	—	—	—	—	H	—	—
031			—	O	—	(B)	—	—	—	—	—	—	—
032		Kh. Khilal	—	F	—	—	—	—	—	—	—	O	—
033			—	—	—	B	—	—	—	—	—	—	—
034			—	—	—	B	—	—	—	—	—	—	—
035		Fera' Dor	—	—	—	V	—	—	—	—	—	—	—
036		Kh. el Munsouria	—	W	—	B	—	—	?	O	—	—	—
037	(90)	Kh. Dilaghah (East)	—	—	—	—	—	?	(V)	—	V	—	—
038			—	?	—	H	—	—	—	—	—	—	—
039		Ain (Kh.) Mudeilija	—	F	?	F	—	—	—	—	—	—	—
040		Ain (Kh.) Mudeilija	—	—	—	H	—	—	?	B	—	—	—

Site No.	Glueck No.	Name	IA IIA-B	IA IIC	2nd-1st B.C.	1st-2nd A.D.	L. Rom- Byz	Umm	Ayy.- Mam.	Ott.	Mod.	Class. Indeter	Period Uncer.
081			—	—	—	B	—	—	—	—	—	—	
082	82	Rujm Sadaqa	—	?	—	F	—	—	—	?	—	—	
083			—	—	—	—	—	—	—	—	—	B	
084	145	Kh. el-Maqdas	—	(V)	—	(V)	—	—	—	—	V	—	
085			—	O	—	—	—	—	—	—	—	O	
086	140	Kh. el-Kur	—	W	—	—	—	—	—	—	—	O	
087		Ain el-Iraq	—	O	—	B	—	—	—	—	—	—	
088	141	Kh. el-Iraq	—	B	—	—	—	—	—	—	—	O	
089	163	Kh. el-Weibdeh	—	O	?	?	?	—	—	—	—	—	
090	164	Kh. Ishra	—	V	V	?	—	—	(V)	(V)	B	—	
091	166	Kh. Shemmakh	—	O	—	O	—	—	—	?	—	—	
092			—	—	—	—	—	—	V	?	(V)	O	
093			—	—	—	—	—	—	V	?	(V)	—	
094	167	Kh. Usdur el-Leweimeh	—	F	—	0	—	—	—	—	—	—	
095			—	?	—	—	—	—	?	?	—	O	
096			—	?	—	B	—	—	—	—	—	—	
097			—	—	—	?	—	—	—	—	—	O	
098			—	—	—	H	—	—	—	—	—	—	
099			—	—	—	B	—	—	—	—	—	—	
100			—	—	—	B	—	—	—	—	—	—	

Site No.	Glueck No.	Name	IA IIA-B	IA IIC	2nd-1st B.C.	1st-2nd A.D.	L. Rom- Byz	Umm	Ayy.- Mam.	Ott.	Mod.	Class. Indeter	Period Uncer.
101			—	—	—	—	—	—	—	—	O	O	Q
102			—	—	—	B	—	—	—	—	—	—	
103		Umm Shbeik	—	—	—	—	—	—	V	V	—	O	
104			—	—	—	V	—	—	—	—	—	—	
105		Kh. Sihan	—	O	—	—	—	—	V	V	H	O	
106			—	—	—	H	—	—	—	—	—	—	
107		Hudeira	—	—	—	—	—	—	V	V	—	—	
108	183	Tawil Ifjeij	—	O	—	F	—	—	—	?	—	—	
109		Tell el Juheira	—	F	?	F	—	—	—	—	—	—	
110	185	Jebel el Qiranah	?	(F)	?	F	—	—	—	—	—	—	
111		Kh. Ata'ita	—	(F)	—	F	—	—	—	—	—	—	
112	(184)	(Ras el-Hala)	—	O	—	T	—	—	O	—	—	—	
113		Umm Dayiea	?	O	?	V	V	—	V	V	—	—	
114		Kh./Qalat es-Se'la	—	(V)	(V)	?	—	?	F	?	—	—	
115	203	Kh. Qasr ed-Deir	—	O	—	(V)	—	—	O	—	—	—	

Site No.	Glueck No.	Name	IA IIA-B	IA IIC	2nd-1st B.C.	1st-2nd A.D.	L. Rom- Byz	Umm	Ayy.- Mam.	Ott.	Mod.	Class. Indeter	Period Uncer.
041			—	—	—	B	—	—	—	—	—	—	
042			—	—	—	B	—	—	—	—	—	—	
043		(Kh.) Rassif	—	O	?	V	—	—	?	O	—	—	
044			—	—	—	B	—	—	—	—	—	—	
045			—	—	—	(B)	—	—	—	—	—	—	
046			—	O	—	H	—	—	—	?	B	—	
047			—	—	—	—	—	—	—	—	—	B	
048			—	O	—	—	—	—	?	O	—	F	
049			—	?	?	B	—	—	—	—	—	—	
050			—	O	—	V	—	—	—	—	—	—	
051			—	F	—	O	—	—	—	—	—	—	
052			—	—	—	H	—	—	—	—	—	—	
053			—	—	—	B	—	—	—	—	—	—	
054			—	—	—	B	—	—	—	—	—	—	
055			—	—	—	B	—	—	—	—	—	—	
056			—	O	—	V	—	—	—	?	—	—	
057			—	—	—	B	—	—	—	—	—	—	
058	77	Kh. Umm Hashas	—	F	O	?	—	—	O	O	—	—	
059	76	Kh. Umm Ras	—	O	—	V	—	—	O	?	—	—	
060	75	Kh. Dhor	—	?	—	F	—	—	V	?	—	—	

Site No.	Glueck No.	Name	IA IIA-B	IA IIC	2nd-1st B.C.	1st-2nd A.D.	L. Rom- Byz	Umm	Ayy.- Mam.	Ott.	Mod.	Class. Indeter	Period Uncer.
061			—	O	—	B	—	—	—	—	—	—	
062	89	Kh. er-Reseis	—	O	?	?	—	—	—	O	—	—	
063		Kh. esh-Sharat	—	W	—	O	—	—	—	O	—	—	
064		Mowt al Binat	—	—	—	B	—	—	—	—	—	—	
065			—	—	—	B	—	—	—	—	—	—	
066			—	—	—	H	—	—	O	?	—	—	
067			—	—	—	B	—	—	—	—	—	—	
068	(87)	(Ain Jenab esh-Shemsh)	O	O	—	B	—	—	—	—	—	—	
069		Rujm al-Niswan	—	F	—	—	—	—	—	O	—	O	
070			—	—	—	V	—	—	—	—	—	—	
071		(Juweiza)	—	—	—	H	—	—	?	V	H	—	
072		(Juweiza)	—	O	—	—	—	—	—	O	—	O	Q
073		(Juweiza)	—	—	—	V	—	—	—	—	—	—	
074		Kh. Saqri	—	—	—	B	—	—	—	—	—	—	
075	96	Qabr Shaker	—	—	V	V	—	—	—	—	—	—	
076			—	F	—	—	—	—	—	—	—	O	
077	85	Ain Juweiza Sharqiyyeh	—	O	—	V	—	—	—	—	—	—	
078	84	Kh. el Megheitah	—	H	(H)	H	—	—	—	O	—	—	
079	83	Kh. Mufleseh	—	—	—	V	—	—	—	—	—	—	
080	81	Sadaqa	—	—	—	V	—	(V)	—	—	V	—	

Table II - Islamic Period Pottery

<i>Site</i>	<i>Umm.</i>	<i>Abb.</i>	<i>H.M. Unpainted</i>	<i>H.M. Painted Monochrome</i>	<i>H.M. Painted Bichrome</i>	<i>Green Glaze</i>	<i>Fine Ware</i>
001	—	—	x	—	—	—	—
004	—	—	x	—	—	—	—
005	—	—	x	—	—	—	—
015	—	—	x	—	—	—	—
018	—	—	x	—	—	—	—
019	—	—	x	x	—	—	—
020	—	—	x	—	—	—	—
025	—	—	x	—	—	—	—
026	—	—	x	—	—	—	—
036	—	—	x	x	—	—	—
037	—	?	x	—	—	—	x
040	—	—	x	—	—	x	—
043	—	—	x	x	—	—	—
046	—	—	x	—	—	—	—
048	—	—	x	x	—	—	—
056	—	—	x	—	—	—	—
058	—	—	x	—	—	—	—
059	—	—	x	x	—	x	—
060	—	—	x	x	—	—	—
062	—	—	x	—	—	—	—
063	—	—	x	—	—	—	—
066	—	—	x	x	—	—	—
069	—	—	x	—	—	—	—
071	—	—	x	—	—	—	—
078	—	—	x	—	—	—	—
080	x	—	—	—	—	—	—

Site	Umm.	Abb.	H.M. Unpainted	H.M. Painted Monochrome	H.M. Painted Bichrome	Green Glaze	Fine Ware
082	—	—	x	—	—	—	—
090	—	—	x	x	—	—	—
092	—	—	x	x	x	—	x
093	—	—	x	x	—	x	—
095	—	—	x	—	—	—	—
101	—	—	x	—	—	—	—
103	—	—	x	x	—	—	—
105	—	—	x	x	—	x	—
107	—	—	x	x	x	—	—
108	—	—	x	—	—	—	—
112	—	—	x	x	—	—	—
113	—	—	x	x	x	—	—
114	?	—	x	x	—	—	—
115	—	—	x	—	—	x	—

Table II: H.M.: Hand-made. Fine ware refers to Smith's "medieval group B" (Smith 1973) which he mistakenly calls Abassid (see Sauer 1974).

Figure I - Iron Age

1. Necked Bowl. Site 005. Buff coloured ware, moderately well levigated and fired evenly throughout. Small-med. lime and chert? Inclusions. 7th-6th C.B.C.
2. Necked Bowl. Site 015. Similar ware to 1 but less well fired - grey core, surface colour varies from buff to pink. 7th-6th C.B.C.
3. Necked Bowl. Site 039. Moderately well levigated with small-med. lime and chert? Inclusions. Light red ware fired evenly throughout. Painted ext. in black bands enclosing red. Lower section of red is unevenly ring burnished. 7th-6th C.B.C.
4. Jar. Site 025. Moderately well levigated with small lime and chert? Inclusion. Self-slipped in and out. 7th-6th C.B.C.
5. Bowl. Site 090. Moderately well levigated with small-med. lime and chert? Inclusions. Fired light brown in and out darkening to thick, grey core. Brown paint over rim in and out bordered by dark bands, the outside band having fired brown rather than black. 7th-6th C.B.C.
6. Jar. Site 059. Moderately well levigated with small-med. lime and chert? Inclusions. Fired buff-brown throughout. Smoothed surfaces in and out. 7th-6th C.B.C.
7. Bowl. Site 088. Fired orange in and out with dull beige core; small lime inclusions. Moderately well levigated. Black painted bands with red-painted zone between. 7th-6th C.B.C.
8. Bowl. Site 109. Moderately well levigated. Fired buff throughout with small-med. lime and chert? inclusions. Undecorated. 7th-6th C.B.C.
9. Bowl. Site 090. Moderately well levigated with small-med. lime and chert? Inclusions. Fired orange-red in and out to a dull brown core. Red slip int. over rim and cream ext. with black bands. Smooth self-slip below bands int. 7th-6th C.B.C.
10. Cooking Pot. Site 005. Fired orange-red ext. and dull brown int. with a thick grey core. Many small and med. lime and chert? Inclusions., Rough surface finish. 7th-6th C.B.C.
11. Cooking Pot. Site 005. Fired red-brown in and out with thick grey core. Ware similar to no. 10. 7th-6th C.B.C.
12. Cooking Pot. Site 058. Fired dull grey throughout with orange-brown tinges near rim in and out. Poorly fired and levigated with small-med. lime inclusions. 7th-6th C.B.C.
13. Cooking Pot. Site 058. As No. 12. 7th-6th C.B.C.
14. Cooking Pot. Site 068. Poorly levigated with small and med. lime inclusions. Fired orange at surfaces with thick grey core. 9th-8th C.B.C.
15. Bowl or jar. Site 113. Moderately well levigated with many small and medium lime inclusions. Fired light brown at surfaces with thick grey core. 9th-8th C.B.C.?
16. Jar. Site 110. Moderately well levigated with many small and med. lime inclusions. Fired light brown in and out with greyish-brown core. 9th-8th C.B.C.?
17. Jar. Site 089. Well levigated with a few small lime inclusions. Fired even brown at surfaces only with thick grey core. 9th-8th C.B.C.?
18. Bowl. Site 039. Fired orange in and out with dull-brown core. Small to med. lime and Chert? Inclusions with some chaff temper. Surfaces worn. Date uncertain.
19. Bowl or Krater. Site 088. Moderately well levigated with small and med. lime and chert? Inclusions. Fired dull brown at surfaces ext. and orange-brown int. with a thick grey core. 7th-6th C.B.C.
20. Jar. Site 109. Moderately well levigated with mostly small-med. lime inclusions with some chert?. Fired light orange-red shading to cream buff ext., brown int. with thick grey core. Darker bands of burnishing int. 7th-6th C.B.C.
21. Jar. Site 058. Poorly levigated with mostly small-med. Lime inclusions with some chert? And quartz. Fired red in and out with thick grey core. 7th-6th C.B.C.

Figure II - Iron Age

1. Storage Jar. Site 088. Moderately well levigated with many lime, quartz and chert? Inclusions. Fired red at surfaces with thick grey core. White slip applied unevenly ext. 7th-6th C.B.C.
2. Storage Jar. Site 050. Poorly levigated with med.-large lime and quartz inclusions. Fired grey throughout except for red bloom on/lip. 7th-6th C.B.C.
3. Storage Jar. Site 088. Moderately well levigated with med. and large mostly lime inclusions. Fired red in and out with thick grey core. 7th-6th C.B.C.
4. Storage Jar. Site 088. Moderately well levigated with med. and large mostly lime inclusions. Fired brown at surfaces with thick grey core. Series of six cuts made across lip with sharp implement. 7th-6th C.B.C.
5. Jar. Site 088. Moderately well levigated with small and med. lime and chert? Inclusions. Fired red-brown in and out with thick grey core. Probably 7th-6th C.B.C. but perhaps slightly earlier.
6. Handle from storage Jar. Site 088. Moderately well levigated with med.-large lime and quartz inclusions. Fired grey throughout. Potter's mark cut in with sharp implement. 7th-6th C.B.C.?

Figure III - Classical

1. Bowl. Site 090. Nabataean Sigillata. Finely levigated buff coloured ware with no visible inclusions. Brown glaze shading to black in places. 1st C.B.C. – 1st C.A.D.
2. Bowl. Site 001. Moderately well levigated with few small lime inclusions. Unevenly applied black paint below rim ext. 1st C.B.C. – 1st C.A.D.
3. Bowl. Site 090. Moderately well levigated with few small lime inclusions. Dark red paint-slip all over ext. and below rim and dribbled int. 1st C.B.C. – 1st C.A.D.
4. Bowl. Site 090. Moderately well levigated with few small lime inclusions. Two non-joining sherds, one fired orange throughout, one poorly fired dull grey-brown. 1st B.C. – 1st A.D.
5. Jar. Site 090. Moderately well levigated with few small inclusions. Fired orange-brown throughout. Dark brown paint ext. and firing reddish over rim int. 1st B.C. – 1st A.D.
6. Bowl. Site 110. Well levigated with few small lime inclusions. Firing red-brown with grey core in thicker sections. Dark paint over rim ext. 1st C.A.D.
7. Bowl. Site 090. Well levigated with few small and occasional medium lime inclusions. Fired brown at surface with thick grey core. 1st C.A.D.
8. Bowl. Site 068. Well levigated with no visible inclusions. Fired orange throughout. 1st C.A.D.
9. Bowl. Site 054. Well levigated with occasional small lime inclusions. Fired brown in and out with a thick grey core. 1st C.A.D.
10. Cooking Vessel. Site 020. Moderately well levigated with few fine lime and occasional quartz inclusions. Dark brown surface ext. Otherwise fired orange-brown throughout. 1st C.A.D.
11. Cooking Vessel. Site 004. Well levigated with few lime inclusions. Thin creamy buff wash ext. Fired orange-brown throughout. 1st C.A.D.
12. Cooking Vessel. Site 080. Moderately well levigated with small and medium lime inclusions. Thin grey core. Fired dull grey-brown at surface ext, dark brown surface int. and in section. 1st C.A.D.
13. Cooking Vessel. Site 066. Well levigated with occasional small lime and quartz inclusions. Dark red slip ext. Fired orange-brown throughout. 1st C.A.D.
14. Cooking Vessel. Site 036. Well levigated with occasional fine lime inclusions. Thin cream wash ext. Fired orange-brown throughout. 1st C.A.D.
15. Cooking Vessel. Site 078. Moderately well levigated with numerous small lime and quartz inclusions. Fired orange-brown throughout but duller at surface ext. 1st C.A.D.
16. Cooking Vessel. Site 104. Well levigated with occasional small lime inclusions. White slip ext. Fired orange-brown throughout. 1st C.A.D.
17. Cooking Vessel. Site 053. Well levigated with “sandy” feel to surface. Few lime inclusions. Dark brown slip in and out. Fired orange throughout. 1st C.A.D.
18. Cooking Vessel. Site 053. Moderately well levigated with numerous small lime and quartz inclusions. Fired orange-brown throughout. Dark brown slip ext. 1st C.A.D.
19. Cooking Vessel. Site 062. Moderately well levigated with small and medium lime and quartz inclusions. Fired orange-brown in and out with a darker brown core. 1st C.A.D.
20. Cooking Vessel. Site 083. Well levigated with small and medium lime and quartz inclusions. Fired orange-brown in section, firing redder at surface. 1st C.A.D.
21. Cooking Vessel. Site 033. Well levigated with small and medium lime and quartz inclusions. Fired orange-brown in section, slightly lighter at core. Slip firing dull reddish-brown int. and dark brown ext. 1st C.A.D.
22. Cooking Vessel. Site 068. Well levigated with small and occasional medium lime and quartz inclusions. Fired orange-brown throughout. Very light white wash ext. 1st C.A.D.
23. Cooking Vessel. Site 027. Well levigated with small and occasional medium lime and quartz inclusions. Fired orange-brown throughout. 1st C.A.D.
24. Jar. Site 068. Well levigated with small and occasional medium lime and quartz inclusions. Fired orange-brown, somewhat darker at core. Remains of thin dark wash ext. 1st C.A.D.
25. Jar. Site 052. Moderately well levigated with small and occasional medium lime inclusions. Fired grey ext. muddy brown int. orange brown in section with thick grey core. 1st C.A.D.
26. Jar. Site 087. Moderately well levigated with small and medium lime and quartz inclusions. Fired orange-brown with grey core. Red paint over rim int. slip ext. firing buff at rim to dark on body. 1st C.A.D.
27. Jar. Site 033. Moderately well levigated with small and medium lime and quartz inclusions. Firing unevenly from dull orange-brown to grey. Section mostly grey with dark brown in places. 1st C.A.D.
28. Jar. Site 010. Moderately well levigated with few small lime inclusions. Fired red-brown throughout. Grey at surface ext.
29. Krater. Site 025. Moderately well levigated with few small lime and quartz inclusions. Thick greyish core. Fired red-brown in and out. Surface ext. and on overhanging lip fired dark grey. Late Roman/Byz.
30. Krater. Site 113. Moderately well levigated with few small lime inclusions. Thick grey core. Fired light brown in and out. Black paint ext. and int. to just below internal lip. Late Roman/Byz.
31. Bowl. Site 113. Moderately well levigated with few small-med. lime inclusions. Fired reddish-brown throughout. Dark paint over rim ext. Late Roman/Byz.

Figure IV - Islamic

1. Large Jar. Site 058. Orange-brown surface, large black core. The ware is chaff-tempered with white grits. Mamluk/Ottoman. Also occurs at Site 059.
2. Large Jar. Site 090. Brown surface, large black core. Ware as 1. Mamluk/Ottoman.
3. Large Jar. Site 025. Creamy orange surface, large black core. Ware as 1. Mamluk/Ottoman. Also occurs at site 058.
4. Large Jar. Site 060. Orange surface, large black core. Ware as 1. Mamluk/Ottoman. Also occurs at site 059.
5. Large Jar. Shobak Castle. Light brown, grey core. Ware as 1. Mamluk/Ottoman.
6. Large Jar. Site 058. Red fabric, off-white slip, small grey core. Chaff-tempered ware. Ayyubid/Mamluk.
7. Large Jar. Site 113. Red-brown fabric, large grey core. Ware as 1. Mamluk/Ottoman.
8. Large Jar. Site 113. Red to orange, Large grey core. Ware as 1. Mamluk/Ottoman.
9. Large Jar. Site 060. Buff to orange, large grey core. Ware as 6. Mamluk/Ottoman. Also occurs at site 059.
10. Large Jar. Site 103. Brown, very roughly made. Chaff and grit tempered. Mamluk/Ottoman.
11. Large Jar. Site 113. Light brown fabric, orange-brown slip, large grey core. Ware as 1. Mamluk/Ottoman.
12. Large Jar. Site 113. Patchy red-brown slip, light brown fabric, grey core. Ware as 1. Mamluk/Ottoman.
13. Large Jar. Site 107. Red-brown surface, large grey core. Ware as 1. Mamluk/Ottoman.
14. Large Jar. Site 113. Orange fabric, creamy grey slip, light grey core. Quartz tempered, high-fired ware. Mamluk/Ottoman.
15. Large Jar. Site 113. Orange. High-fired ware with small black and translucent grits. Impressed decoration. Mamluk/Ottoman.
16. Large Jar. Site 113. Pinkish fabric, large grey core, traces of red slip. Ware as 1. Mamluk/Ottoman. Also occurs at site 114.
17. Jar. Site 113. Wheel-turned, orange brown, light grey core. The ware contains many small black grits. Impressed decoration on inside of rim. Ayyubid/Mamluk.

Figure V - Islamic

18. Jar. Site 105. Light grey to orange fabric, large black core, reddish grey slip. Ware as 1. Mamluk/Ottoman.
19. Large Jar. Site 113. Orange-brown fabric, grey core, red-brown slip. Ware as 1. Mamluk/Ottoman.
20. Jar. Site 025. Orange surface, black core, high-fired. Mamluk/Ottoman. Also occurs at site 059.
21. Jar. Site 025. Pinkish surface, brown fabric. Ware as 1. Cut circles on exterior of rim. Mamluk/Ottoman. Also occurs at site 026.
22. Jar. Site 026. Orange surface, light grey core. Ware as 15. Mamluk/Ottoman.
23. Jar. Site 093. Red surface, black core, very roughly made. Ware as 1. Mamluk/Ottoman? Also occurs at sites 026 and 103.
24. Jar. Site 040. Light Pinkish-brown, large black core, very roughly made. Ware as 6. Mamluk/Ottoman. Also occurs at sites 001, 090, 026, 113.
25. Jar. Site 026. Pinkish fabric, large grey core, cream slip outside. Ware as 1. Mamluk/Ottoman.
26. Jar. Site 040. Dark grey, roughly made. Ware as 1. Ayyubid/Mamluk.
27. Jar. Site 107. Orange surface, large black core. Ware as 1. Ottoman. Also occurs at sites 103 and 113.
28. Jar. Site 113. Light orange-brown fabric, large grey core. Red slip inside, black painted design outside on white background. Ware as 1. Ayyubid/Mamluk.
29. Jar. Site 092. Orange fabric, large black core. Thin cream wash on exterior, dark red painted design on interior. Ware as 1. Ayyubid/ Mamluk. Also occurs at site 058 (without paint).
30. Large Jar. Site 107. Orange fabric, large grey core, black and dark red painted design outside on red-brown slip; dark brown painted design on interior. Black grit-tempered ware. Ayyubid/Mamluk.
31. Jar. Site 001. Light grey fabric, dark grey slip. The ware is fine with small black and shiny particles visible in the section. Ayyubid/Mamluk.
32. Bowl. Site 113. Light orange-brown fabric, large grey core, red patchy slip. Ware as 1. Ayyubid/Mamluk.
33. Bowl. Site 114. Grey to buff fabric, Orange-brown core, black slip on exterior. Wheel-turned. The ware has a sandy surface with black and translucent grits visible in the section. Ayyubid/Mamluk?
34. Bowl. Site 114. Dark red fabric, black core, black slip. Wheel-turned. Ware as 33. Umayyad?
35. Bowl. Site 113. Light brown fabric, black core, orange to red slip. Ware as 1. Ayyubid/Mamluk.
36. Bowl. Shobak Castle. Buff. smoothed surface, wheel-turned. The ware has many black and white grits and a few large translucent grits. Ottoman/Modern.
37. Bowl. Site 037. Light brown to orange fabric with slightly darker core, dull reddish-brown slip. Wheel-turned. fine ware with white and translucent grits and the occasional black grit. Abbasid?
38. Bowl. Site 113. Orange-brown fabric, red-brown slip. Ware as 1. Ayyubid/Mamluk.
39. Bowl. Site 103. Orange-brown fabric, large black core. Traces of red-painted decoration on interior. Ware as 1. Ayyubid/Mamluk.
40. Bowl. Site 001. Dull brown fabric, large black core, light grey slip outside. Very roughly made. Ware as 6. Ottoman? Also occurs at sites 113 and 105.

41. Bowl. Site 113. Orange-brown fabric, large black core. Ware as 1. Ayyubid/Mamluk? Also occurs at site 113.
42. Small Bowl. Site 101. Orange to grey fabric, cream slip inside. Ware as 1 but finer. Ayyubid/Mamluk.
43. Bowl. Site 103. Pinkish-buff surface, large grey core, orange-brown slip inside. Ware as 1. Ottoman? Also occurs at sites 090 and 040.

Figure VI - Islamic

44. Large Bowl. Site 114. Dull orange-brown fabric, black core. The ware is chaff-tempered with a few large white, and many small black grits. Ayyubid/Mamluk?
45. Large Bowl. Site 114. Orange-brown fabric, large black core, traces of red slip inside and on top of rim. Ridge on exterior. Ware as 1. Ayyubid/Mamluk? Also occurs at sites 103 and 113 (but neither with ridge).
46. Small Bowl. Site 026. Orange-brown fabric, grey slip. Lightly impressed decoration around rim. Ware as 42. Ottoman?
47. Small Bowl. Site 101. Black fabric, orange-brown slip. Ware as 42. Ottoman/Modern.
48. Base. Site 113. Dull orange-brown fabric, large black core, dark red to brown wash outside. Ware as 1. Ayyubid/Mamluk.
49. Base. Site 093. Dull orange fabric, grey core, cream slip on exterior. Ware as 1. Ayyubid/Mamluk.
50. Jar neck. Site 103. Dull orange fabric, grey core, black painted design on light grey slip outside. Ware as 1. Ayyubid/Mamluk.
51. Jar neck. Site 113. Dark red fabric, large grey core. Red and black painted design on white slip outside (traces of paint and slip on inside too). Ware as 1. Ayyubid/Mamluk.
52. Body sherd. Site 113. Orange to grey fabric, reddish brown and black painted design on cream slip on exterior. Ware as 1. Ayyubid/Mamluk.
53. Body sherd. Site 113. Dull orange-brown fabric, large black core, buff to orange surface with black and red painted design outside. Ware as 1. Ayyubid/Mamluk.

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