

**A REPORT ON THE  
ARCHAEOLOGICAL MITIGATION PROGRAM  
AT DE BEERS NAMAQUALAND MINES  
MARCH 2002 TO JUNE 2003**

Prepared for

**De Beers Consolidated Mines:  
Namaqualand Mines**

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1. INTRODUCTION .....	4
2. EXCAVATED SITE SUMMARIES .....	8
2.1 Field season: March 2002 .....	9
2.1.1 Site No: AK2001/002 .....	9
2.1.2 Site No: KV2001/008 .....	11
2.1.3 Site No: KV2001/012 .....	14
2.1.4 Site No: KV2001/011 .....	16
2.1.5 Site No: KV2001/010 A,B,C .....	18
2.1.6 Site No: KV2001/010 D .....	20
2.1.7 Site No: KN2001/013 .....	22
2.1.8 Site No: LK2001/001C .....	25
2.1.9 Site No: LK2001/001B .....	27
2.1.10 Site No: LK2001/001A .....	28
2.1.11 Site No: LK2001/003 .....	30
2.1.12 Site No: LK2001/004 .....	33
2.1.13 Site No: SK2001/025 .....	36
2.1.14 Site No: SK2001/026 .....	41
2.1.15 Site No: SK2001/028 .....	43
2.1.16 Site No: SK2001/029 .....	45
2.1.17 Site No: SK2001/030 .....	46
2.1.18 Site No: SK2001/031 .....	47
2.1.19 Site No: SK2001/032 .....	48
2.1.20 Site No: SK2001/033 .....	49
2.1.21 Site No: SK2001/034 .....	50
2.1.22 Site No: SK2001/036 .....	51
2.1.23 Site No: SK2001/037 .....	52
2.1.24 Site No: SK2001/038 .....	53
2.1.25 Site No: SK2001/039 .....	54
2.1.26 Site No: SK2001/040 .....	56
2.1.27 Site No: SK2001/041 .....	58
2.1.28 Site No: SK2001/042 .....	59
2.1.29 Site No: SK2001/044 .....	60
2.1.30 Site No: SK2001/046 .....	62
2.1.31 Site No: SK2001/047 .....	63
2.1.32 Site No: SK2001/048 .....	64
2.1.33 Site No: SK2001/049 .....	65
2.1.34 Site No: SK2001/023 .....	66
2.1.35 Site No: SK2001/024 .....	68
2.1.36 Site No: SK2001/050 .....	70
2.2 Field season: March 2003 .....	72
2.2.1 Site No: KN2001/007A .....	72
2.2.2 Site No: KN2001/007B .....	75
2.2.3 Site No: KN2001/007C .....	77
2.2.4 Site No: KN2001/008A .....	79
2.2.5 Site No: KN2001/008B .....	81
2.2.6 Site No: KN2001/008C .....	83
2.2.7 Site No: KN2001/008C1 .....	85
2.2.8 Site No: KN2001/008D .....	86
2.2.9 Site No: KN2001/008E .....	87
2.2.10 Site No: KN2001/008F .....	89
2.2.11 Site No: KN2001/008G .....	91
2.2.12 Site No: KN2001/008H .....	93
2.2.13 Site No: KN2001/008I .....	95
2.2.14 Site No: KN2001/008J .....	97
2.2.15 Site No: KN2001/008K .....	99
2.2.16 Site No: KN2001/008L .....	101
2.2.17 Site No: KN2001/009 .....	103
2.3 Field season: June 2003 .....	105
2.3.1 Site No: LK2001/015A,B,C,D,E,F,G,H,I .....	105
3. SUMMARY .....	108
4. RECOMMENDATIONS .....	108
5. PROFESSIONAL TEAM .....	108

## 1. INTRODUCTION

Two assessments of the impacts of proposed mining on heritage material were undertaken in 1998<sup>1</sup> and November 2001<sup>2</sup>. During these assessments, specified mining blocks where mining was due to occur within the next few years, were identified and inspected. A number of archaeological sites were located during the fieldwork. Many of these were ephemeral and were immediately sampled to recover basic levels of information, while a smaller percentage were considered to be worthy of more detailed study, based on the indications of the surface traces.

These sites have formed the basis of an ongoing archaeological mitigation program that has taken place over three field seasons, namely March 2002, March 2003 and June 2003. The results of the excavations at one of the sites (SK400) has already led to an additional season of work undertaken in May 2003 to increase samples from this extremely interesting site. The locations of the excavated sites are shown in Figures 1 and 2.

Archaeological excavations have been conducted under a permit issued by SAHRA (South African Heritage Resources Agency) for this purpose (Permit No. 80/02/02/008/51). A separate permit was issued for the retrieval of a fragmented burial from SK300 (80/02/02/015/51) found accidentally during the mitigation program. A number of other mitigation activities have been undertaken which have been documented in separate reports. These include Collection of a sample of hand axes at Sandkop in 2001 (80/01/06/006/51), Recovery of a human burial from the farm Noup/Somnaas in 2001, (80/01/04/006/51). A permit was also issued for the collection of archaeological material from ephemeral sites during the Phase 1 mining block investigation of 2001 (80/01/09/008/51), and testing of MSA deposits on an open site at Groen river (80/01/04/005/51).

Fifty seven sites have been excavated/sampled as part of the Phase 2 program (Table 1). These excavations have generated an enormous amount of artefactual material and sorting while some sites are now sorted the work on the more recently excavated material is ongoing. Detailed analysis must still be undertaken of most of the collections although the analyses of aspects of specific sites has been undertaken where the material is being used in support of post-graduate studies. The broader analysis will be taken forward as part of a PhD project that is underway to look at settlement patterns in Namaqualand.

With regard to the funding of the program, De Beers have financed the Phase 2 excavations, the basic sorting of the material and the eventual storage costs. The analysis however will be funded through the academic program and as a result will take place as the material is used in various projects.

Although it will be some time before the all the results of the analyses will be available, and before we can make more comprehensive conclusions about the age and content of the sites, we are able to recommend that mining be allowed to proceed in most of the blocks where Phase 2 investigations have been carried out. There are 2 exceptions, where we feel additional work should be undertaken in addition to that of the Phase 2 program, before mining should proceed (see Table 1).

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<sup>1</sup> Halkett, D. J. 1998. Phase 1 archaeological survey: assessment of the proposed 1998 mining blocks on the Buffels Marine (BMC) Koingnaas (KN) and Buffels Inland (BIC) Complexes. Unpublished report prepared for De Beers Namaqualand Mines. Archaeology Contracts Office, UCT.

<sup>2</sup> Halkett, D. J. 2002. Phase 1 archaeological survey: assessment of mining blocks in the BMC and KN areas, Namaqualand. Unpublished report prepared for De Beers Namaqualand Mines. Archaeology Contracts Office, UCT.

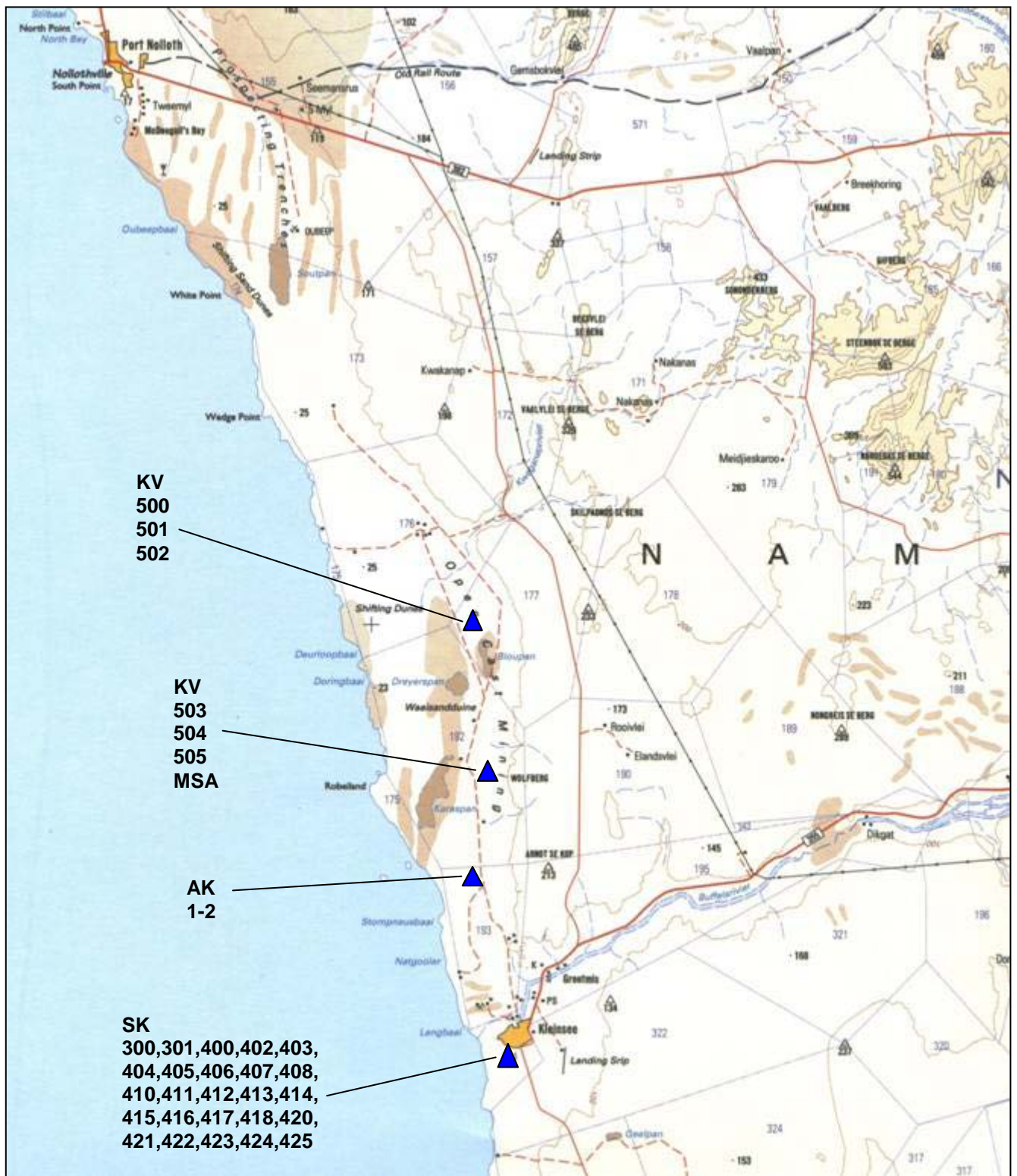
This report is therefore a record of the work undertaken to date and is presented to allow the mitigation program to be assessed by the authorities.

	SITE	OLD NAME	DATE EXCAVATED	FURTHER MITIGATION
1	AK2001/002	AK1-2	MARCH 2002	no
2	KV2001/008	KV500, TEMP2	MARCH 2002	no
3	KV2001/012*	KV501, TEMP2A,B,C	MARCH 2002	no
4	KV2001/011*	KV502	MARCH 2002	no
5	KV2001/010 A	KV06-1, KV503(A)	MARCH 2002	no
6	KV2001/010 B	KV504(B)	MARCH 2002	no
7	KV2001/010 C	KV505(C)	MARCH 2002	no
8	<b>KV2001/010 D</b>	<b>KV-MSA</b>	<b>MARCH 2002</b>	<b>yes</b>
9	LK2001/013	LK5-1	MARCH 2002	no**
10	LK2001/001C	LK1K1, LK1-1C	MARCH 2002	no
11	LK2001/001B	LK1K2, LK1-1B	MARCH 2002	no
12	LK2001/001A	LK1K3, LK1-1A	MARCH 2002	no
13	LK2001/003	LK1K4, LK1-3	MARCH 2002	no
14	LK2001/004	LK1K5, LK1-4	MARCH 2002	no
15	SK2001/025	SK300	MARCH 2002	no
16	<b>SK2001/026</b>	<b>SK400</b>	<b>MARCH 2002</b>	<b>yes</b>
17	SK2001/028	SK402	MARCH 2002	no
18	SK2001/029	SK403	MARCH 2002	no
19	SK2001/030	SK404	MARCH 2002	no
20	SK2001/031	SK405	MARCH 2002	no
21	SK2001/032	SK406	MARCH 2002	no
22	SK2001/033	SK407	MARCH 2002	no
23	SK2001/034	SK408	MARCH 2002	no
24	SK2001/036	SK410	MARCH 2002	no
25	SK2001/037	SK411	MARCH 2002	no
26	SK2001/038	SK412	MARCH 2002	no
27	SK2001/039	SK413	MARCH 2002	no
28	SK2001/040	SK414	MARCH 2002	no
29	SK2001/041	SK415	MARCH 2002	no
30	SK2001/042	SK416	MARCH 2002	no
31	SK2001/047	SK421 (aka SK417)	MARCH 2002	no
32	SK2001/044	SK418	MARCH 2002	no
33	SK2001/046	SK420	MARCH 2002	no
34	SK2001/048	SK422	MARCH 2002	no
35	SK2001/049	SK423	MARCH 2002	no
36	SK2001/023	SK11-3, SK424	MARCH 2002	no
37	SK2001/024	SK11-4, SK425	MARCH 2002	no
38	SK2001/050	SK301	MARCH 2002	no
39	KN2001/007A	KN6-2A	MARCH 2003	no
40	KN2001/007B	KN6-2B	MARCH 2003	no
41	KN2001/007C	KN6-2C	MARCH 2003	no
42	KN2001/008A	KN6-3A	MARCH 2003	no
43	KN2001/008B	KN6-3B	MARCH 2003	no
44	KN2001/008C	KN6-3C	MARCH 2003	no
45	KN2001/008C1	not previously recorded	MARCH 2003	no
46	KN2001/008D	KN6-3D	MARCH 2003	no
47	KN2001/008E	KN6-3E	MARCH 2003	no
48	KN2001/008F	KN6-3F	MARCH 2003	no
49	KN2001/008G	KN6-3G	MARCH 2003	no
50	KN2001/008H	KN6-3H	MARCH 2003	no
51	KN2001/008I	KN6-3I	MARCH 2003	no
52	KN2001/008J	KN6-3J	MARCH 2003	no
53	KN2001/008K	KN6-3K	MARCH 2003	no
54	KN2001/008L	KN6-3L	MARCH 2003	no
55	KN2001/009	KN6-4	MARCH 2003	no
56	KN2001/015A-I	LK07-1A-I	JUNE 2003	no

\* New numbers differing from previous lists

\*\* It would be good to increase the sample from this site before the block is mined but this is not mandatory.

**Table 1:** Sites excavated as part of the archaeological mitigation program



1

0 15  
km







2

0 15 km



## 2. EXCAVATED SITE SUMMARIES

The site summaries following in section 2 provide information about aspects of the mitigation that have been undertaken. These include:

- Site number - a number that identifies the period of survey during which the site was identified as well as the area in which it was found (based on the farm boundaries). Numbers will be sequential per area;
- Previous names/numbers - any other identifying names that have been used in the past prior to adopting the numbering system mentioned above. In future, field survey will utilise the new system and will avoid duplication;
- Geographical location - a geographical co-ordinate established using a hand held GPS receiver. Accuracy is probably in the order of 10-15 meters. All readings utilise the World Geodetic System datum (WGS84).
- Mining block - the number allocated to a portion of ground in the mining plan by De Beers;
- Mining area - the broader area of mining;
- Farm name - the historical farm names and boundaries are still used to sub-divide the landscape;
- Date of excavation
- Description of local environment and site context - brief description of context that should be used in conjunction with any photographs that are presented;
- Area of excavation - given in square meters, not necessarily continuous areas;
- Approximate percentage of site excavated - an attempt to estimate how much of the site was recovered. This is easier in some cases i.e. open deflation hollows with surface scatters, but more difficult in bushed areas and where sub-surface deposits are present, or where a site has already been disturbed or is mostly buried;
- Excavation units - grid size, either 1x1 meter or 50x50 cm units;
- Sieve size - mesh size, either 3mm or 1.5mm;
- Shell sampling method - e.g. all shell from all squares/stratigraphic units or, all shell from some squares/stratigraphic units or, sub-samples from squares/stratigraphic units;
- Radiocarbon dating material - what is available for dating purposes;
- Summary of stratigraphy - brief overview of stratigraphic units which will generally be an indication of depth;
- Analysis - the status of the analysis
- Artefactual material - brief listing of items that were noted in the field, or seen in analyses;
- Evidence of spatial information - an indication of whether there are recognisable features;
- Estimated age - based on artefact content, primarily formal stone artefacts or indigenous ceramics;
- Further mitigatory measures - indicates what measures if any still need to be undertaken.

The site summaries are arranged by field season and mining area.



## 2.1 Field season: March 2002

### 2.1.1 Site No: AK2001/002

**Previous names/numbers:** AK1-2

**Geographical location:** (WGS84) 29°37'18.6"S 17°03'32.5"E

**Mining Block:** AK52-PQ

**Mining area:** BMC

**Farm name:** ANNEX KLEINZEE

**Date of excavation:** 09.03.2002

### DESCRIPTION OF LOCAL ENVIRONMENT AND SITE CONTEXT

This site is situated in a badly eroded area above a road cutting about 5-6 km from the sea. It is surrounded by old mine dumps of the AK mining area. Shell is noted eroding out of gullies in the red sands indicating the presence of a once buried archaeological lens.

### METHOD

**Size of area excavated:** This site was not subject to any formal grid based excavation on account of its disturbance by erosion. Deposit was sieved to retrieve unique shell beads.

**Approximate percentage of site excavated:** n/a

**Excavation units used:** n/a

**Sieve size:** 1.5mm

**Shell sampling method:** n/a

**Radiocarbon dating material:** *Patella argenvillei*

**Summary of stratigraphy:** Site once consisted of a buried shell lens that has been cut into by erosion gullies.

### SITE SUMMARY INFORMATION

**Analysis:** Sorted, not yet analysed

**Stone:** analysed: it is very simple, almost all quartz, no tools other than 2 mrp's.

**Ceramics:** n/a

**Oes:** n/a

**Shellfish:** n/a

**Animal bone:** n/a

**Special finds:** numerous beads (bigger than oes beads: range is about 8.8 – 9.6mm) same size and shape to oes beads) made from sea shell of an as yet undetermined species ( *Haliotis* sp. *perlemoen*?)

**Evidence of spatial information:** n/a

**Comment:**

### CONCLUDING COMMENT

**Estimated Age:** >2000BP

**Further mitigatory measures:** No further mitigation required

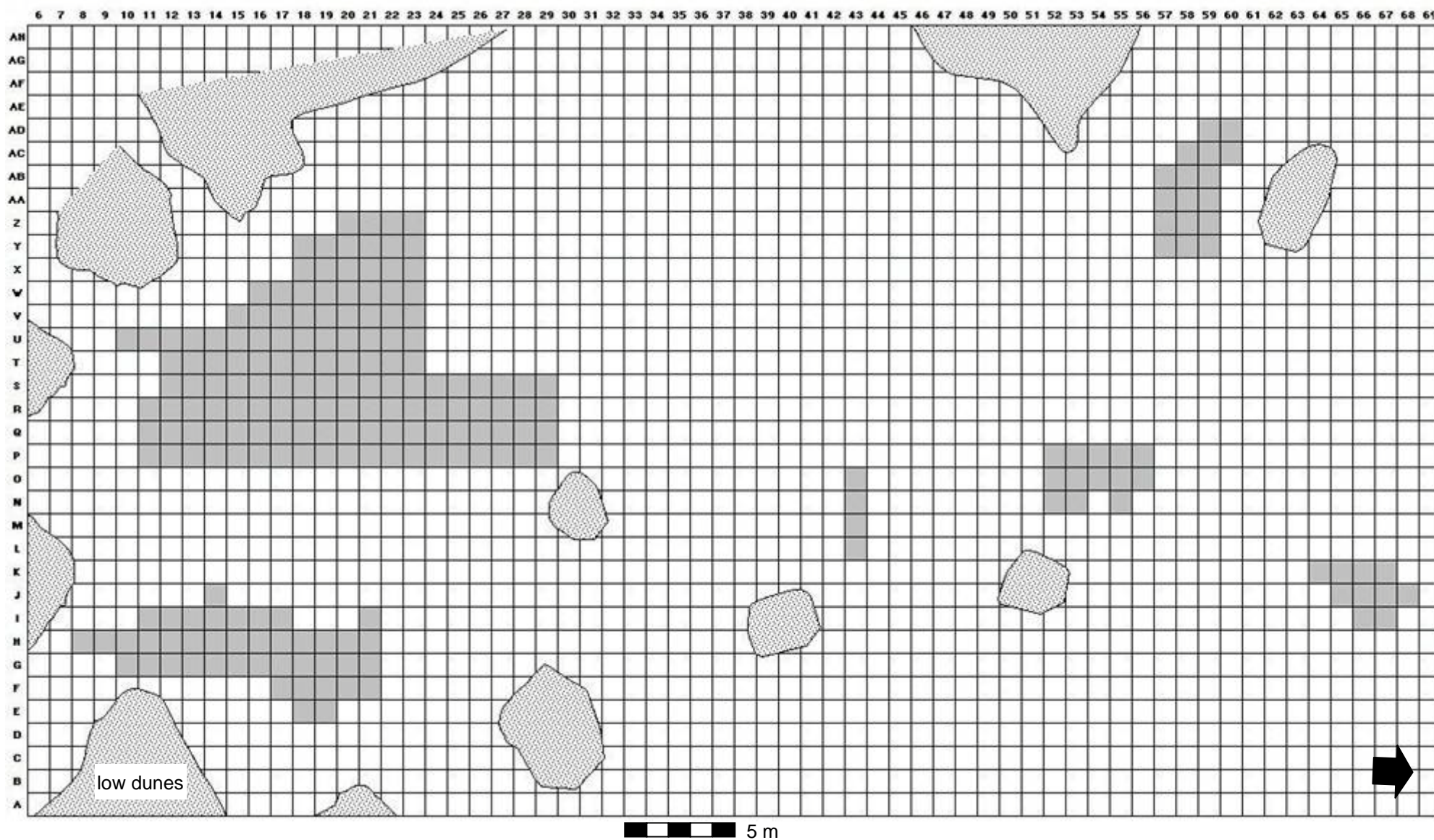
AK1-2



**2.1.2 Site No: KV2001/008****Previous names/numbers:** KV500, TEMP2,**Geographical location:** (WGS84) 29°30' 7.8"S 17°03'19.4"E**Mining Block:** KV190K-WEST**Mining area:** BMC**Farm name:** KAREEDORINGVLEI**Date of excavation:** 06.03.2002**DESCRIPTION OF LOCAL ENVIRONMENT AND SITE CONTEXT**

The cluster of sites of which this is a part lies within a complex of red dunes and deflated areas that overlook the Kareedoringvlei pan to the southwest. The environment consists of the gently sloping coastal plain to the west, the shoreline being about 5-6km away. The area consists of a very large deflation hollow (60x30m) in the eastern lee of a large red dune. Archaeological material in the deflation hollow is sparse but widely broadcast with the densest material accumulating on the highest portion of the site (north west).

**METHOD****Size of area excavated:** 216m<sup>2</sup> (from 4 shell patches)**Approximate percentage of site excavated:** Main scatters excavated which amounts to approx 60% area of site.**Excavation units used:** 1m<sup>2</sup>**Sieve size:** 1.5mm**Shell sampling method:****Radiocarbon dating material:** Marine shell**Summary of stratigraphy:** A surface scatter throughout (less than 2-3cm thick).**SITE SUMMARY INFORMATION****Analysis:** Sorted, not yet analysed**Stone:** n/a**Ceramics:** n/a**Oes:** n/a**Shellfish:** n/a**Animal bone:** n/a**Special finds:** n/a**Evidence of spatial information:****Comment:** This site may contain deflated material from different ages - i.e. may not be a single event site.**CONCLUDING COMMENT****Estimated Age:** <2000BP (but there is some older material present!)**Further mitigatory measures:** No further mitigation required





### 2.1.3 Site No: KV2001/012

**Previous names/numbers:** KV501 (Areas A,B,C), TEMP2A, 2B, 2C

**Geographical location:** (WGS84)

008A: 29°30' 05.1"S 17°03'20.8"E

008B: 29°30' 04.7"S 17°03'19.2"E

008C: 29°30' 03.0"S 17°03'18.8"E

**Mining Block:** KV190K-WEST

**Mining area:** BMC

**Farm name:** KAREEDORINGVLEI

**Date of excavation:** 05.03.2002

## DESCRIPTION OF LOCAL ENVIRONMENT AND SITE CONTEXT

The cluster of sites of which this is a part lies within a complex of red dunes and deflated areas that overlook Kareedoringvlei pan to the southwest. The environment consists of the gently sloping coastal plain to the west, the shoreline being about 5-6km away. The site is situated on the eroded edge of a large open cast mine (KV190), which has encroached into the edge of the dunefield. Accelerated erosion and deflation has occurred on the edge of the mine exposing 3 patches of archaeological material, which now lie on the underlying hard calcretised soils.

## METHOD

**Size of area excavated:** Patch A - 49m<sup>2</sup>, Patch B - 49m<sup>2</sup>, Patch C - 12m<sup>2</sup>

**Approximate percentage of site excavated:** ±70% of visible material

**Excavation units used:** 1x1m

**Sieve size:** 1.5mm

**Shell sampling method:** A bucket of shell from dense areas on each of the patches. Most squares were sorted on site and the balance of the shell discarded.

**Radiocarbon dating material:** *Patella argenvillei*, *Patella granatina*.

**Summary of stratigraphy:** All three patches were deflated surface occurrences. There is reason to believe that each of the three patches are of different ages according to the artefactual material.

## SITE SUMMARY INFORMATION

**Analysis:** Sorted, not yet analysed

**Stone:** n/a

**Ceramics:** n/a

**Oss:** n/a

**Shellfish:** n/a

**Animal bone:** n/a

**Special finds:** n/a

**Evidence of spatial information:** The spatial separation of, and difference between the content of the three patches does not represent differing activity areas on the same site, rather deflated remnants of 3 sites with different contents.

**Comment:**

## CONCLUDING COMMENT

**Estimated Age:** Patch A contains a number of ccs artefacts which are an indicator that this scatter is more than 2000 years old, possibly in the order of 3000-4000 years old. Patch B is characterised by large ostrich eggshell beads (6-9mm) which suggest an age contemporary with stock keeping herders who populated the area after 2000 years ago. The age of Patch C is indeterminate without submitting material for Radiocarbon dating.

**Further mitigatory measures:** No further measures are required.







**2.1.4 Site No:** KV2001/011  
**Previous names/numbers:** KV502  
**Geographical location:** n/a  
**Mining Block:** KV192L-WEST  
**Mining area:** BMC  
**Farm name:** KAREEDORINGVLEI  
**Date of excavation:** 07.03.2002

## **DESCRIPTION OF LOCAL ENVIRONMENT AND SITE CONTEXT**

One of a cluster of sites in a complex of red dunes and deflated areas that over-look Kareedoringvlei pan to the southwest. The environment consists of the gently sloping coastal plain to the west, the shoreline being about 5-6km away. This small site lies in a deflation hollow and appears to be a single occupation site with *in situ* material contained on a raised area in sands on a low calcretised dune. Calcrete fragments and rhizoliths emanate from underlying calcretised dunes.

## **METHOD**

**Size of area excavated:** 33.75m<sup>2</sup>  
**Approximate percentage of site excavated:** ±70%  
**Excavation units used:** 50x50cm  
**Sieve size:** 1.5mm  
**Shell sampling method:** All material from squares Q10 & Q11, R10 & R11 bulked.  
**Radiocarbon dating material:** Patella granularis  
**Summary of stratigraphy:** single layer ranging from 3 - 10cm in thickness. Material had slumped down from the elevated part of the site (*in situ*) into the lower lying areas of the deflation (out of context).

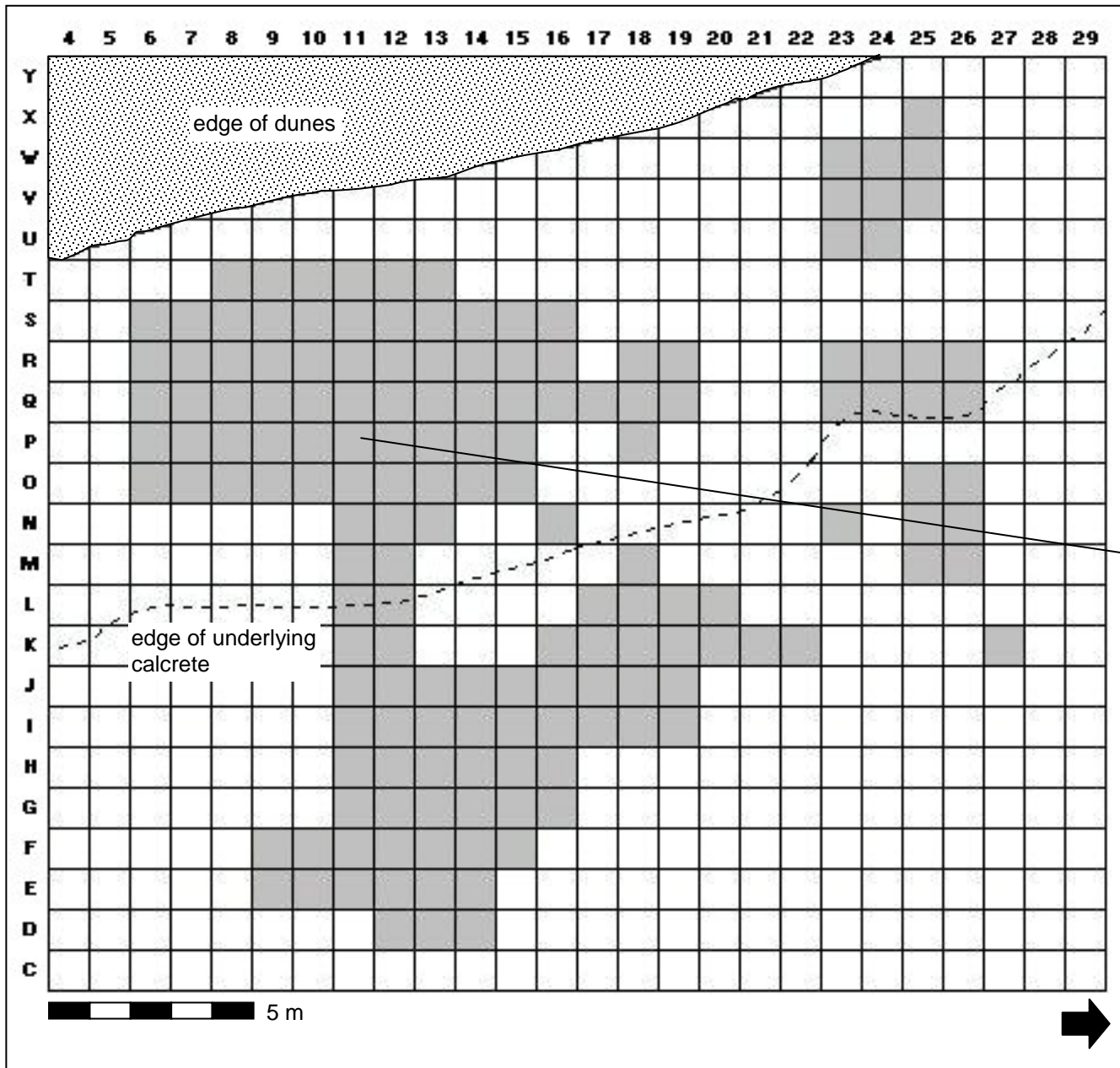
## **SITE SUMMARY INFORMATION**

**Analysis:** Sorted, not yet analysed  
**Stone:** Site contains formal tools, side scrapers and backed scrapers on CCS. Quartz also a common raw material.  
**Ceramics:** None found  
**Oes:** Present, small oes beads  
**Shellfish:** Patella granatina and Patella granularis dominate.  
**Animal bone:** Present, especially in hearth area.  
**Special finds:**

**Evidence of spatial information:** The presence of an ash patch among the calcretes on the elevated part of the site is the only clear evidence of spatial information. This area contains more animal bone than other areas.  
**Comment:** An interesting site containing a fairly high proportion of stone artefacts. It is typical in terms of its large quantity of small side scrapers.

## **CONCLUDING COMMENT**

**Estimated Age:** >2000BP  
**Further mitigatory measures:** No further mitigation required



### **2.1.5 Site No: KV2001/010 A,B,C**

**Previous names/numbers:** KV06-1, KV503(A), KV504(B), KV505(C), KV5 (1998)

**Geographical location:** (WGS84)

KV503: 29°30' 53.6"S 17°03'40.5"E

KV504: 29°30' 54.0"S 17°03'42.2"E

KV505: 29°30' 56.3"S 17°03'41.2"E

**Mining Block:** KV174KL

**Mining area:** BMC

**Farm name:** KAREEDORINGVLEI

**Date of excavation:** 10.03.2002

## **DESCRIPTION OF LOCAL ENVIRONMENT AND SITE CONTEXT**

Site originally existed in a deflated area among a cluster of red dunes on the high ridge overlooking the coastal plain. This has been subject to extensive mining with the result that the area has been subject to disturbance. The archaeological material was noticeable lying in several hollows between the red dunes, while other shell scatters were visible on the edge of a large prospecting trench. The context of the material suggested past disturbance so the site was sampled accordingly.

## **METHOD**

**Size of area excavated:** KV503 - 20m<sup>2</sup>, KV504 - surface collection from ungridded area, KV505 - 12m<sup>2</sup>,

**Approximate percentage of site excavated:** ±15%

**Excavation units used:** 2x2m

**Sieve size:** 1.5mm

**Shell sampling method:** n/a

**Radiocarbon dating material:** Marine shell

**Summary of stratigraphy:** The presence of a mixture of MSA and LSA artefacts and fossil bone lying on the surface indicates badly disturbed material from different time periods concentrated on the ground surface, possibly mixed by mining activities.

## **SITE SUMMARY INFORMATION**

**Analysis:** Sorted, not yet analysed

**Stone:** A large quantity of stone including LSA and MSA material, many manuports, grinding surfaces. CCS, quartz, silcrete and quartzite raw materials.

**Ceramics:** None found

**Oes:** Present. Some small beads less than 6mm diameter.

**Shellfish:** Patella mix

**Animal bone:** Massive amounts of highly fragmented fossil tortoise, some mammal bone.

**Special finds:**

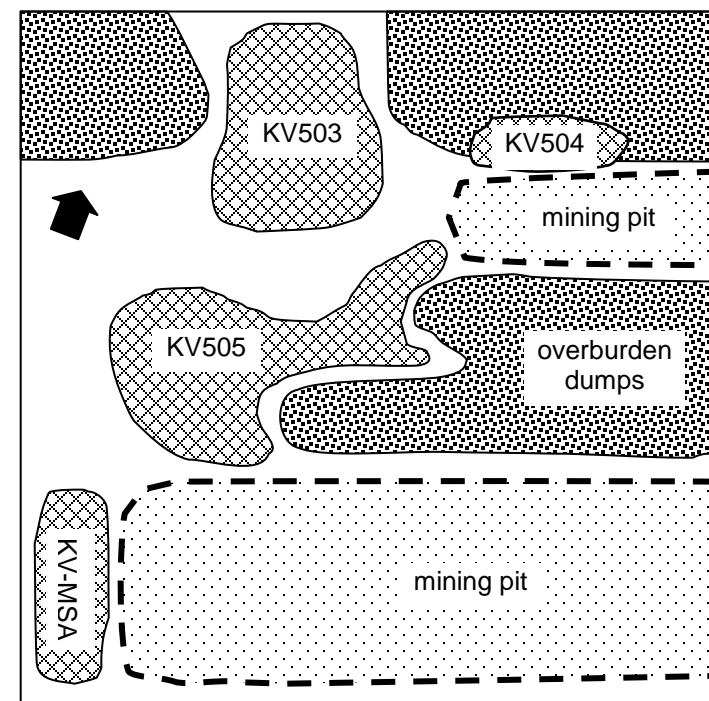
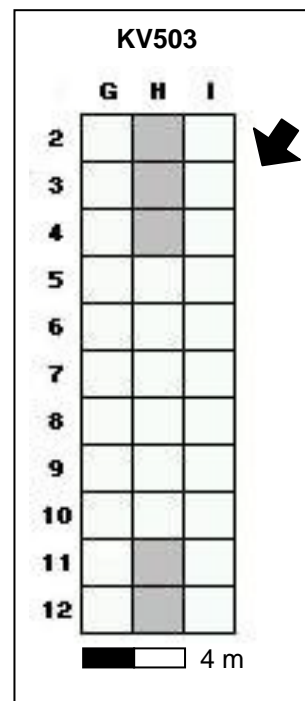
**Evidence of spatial information:** n/a

**Comment:** A very perplexing site containing both ancient and LSA material on a single surface. Some of this may be in a completely secondary context due to mining activity.

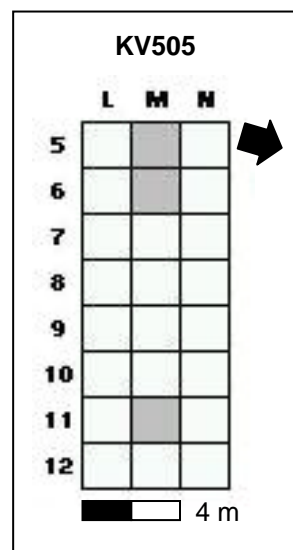
## **CONCLUDING COMMENT**

**Estimated Age:** n/a

**Further mitigatory measures:** No further mitigation required.



sketch map (not to scale)



### **2.1.6 Site No: KV2001/010 D**

**Previous names/numbers:** KV-MSA

**Geographical location:** (WGS84)

Test hole A: 29°30' 58.8"S 17°03' 37.5"E

Test hole B: 29°30' 59.7"S 17°03' 37.8"E

**Mining Block:** KV174KL

**Mining area:** BMC

**Farm name:** KAREEDORINGVLEI

**Date of excavation:** 11.03.2002

### **DESCRIPTION OF LOCAL ENVIRONMENT AND SITE CONTEXT**

Shell was noted eroding out of the western edge of a large mine trench in the high ridge overlooking the coastal plain. Closer inspection revealed this to be a large *Patella sp* midden lying under about 30 cm of windblown sand. Underlying this, separated by a layer of sterile sands is a dense mineralised tortoise bone midden. Since the site lies outside of designated mining blocks, it was briefly sampled and described.

### **METHOD**

**Size of area excavated:** 1x 50x50cm and 1x 30x30cm trial excavations

**Approximate percentage of site excavated:** Unknown

**Excavation units used:** 50x50 cm

**Sieve size:** 1.5cm

**Shell sampling method:** All material from trial excavation bulked.

**Radiocarbon dating material:** Shell (for shell midden) tortoise bone and OES from tortoise midden.

**Summary of stratigraphy:** (see insert section at end)

### **SITE SUMMARY INFORMATION**

**Analysis:** Sorted, not yet analysed

**Stone:** n/a

**Ceramics:** n/a

**Oes:** n/a

**Shellfish:** n/a

**Animal bone:** n/a

**Special finds:** n/a

**Evidence of spatial information:** The site, on account of its estimated large size, has the potential to contain spatial information.

**Comment:** The tortoise midden is a unique site, the only one of its kind (as far as can be established) to be documented to date. The massive accumulation of tortoise bone is human made (evident by other animal bone and cultural material), and represents exploitation of these animals on a scale that would certainly have not been sustainable in the recent past. This points to a period of occupation when environmental conditions were unlike those of today. The scarcity of shell in the sample indicates that occupation of the site took place before the current interglacial climax when sea levels were substantially lower and the coast was more distant than it is today.

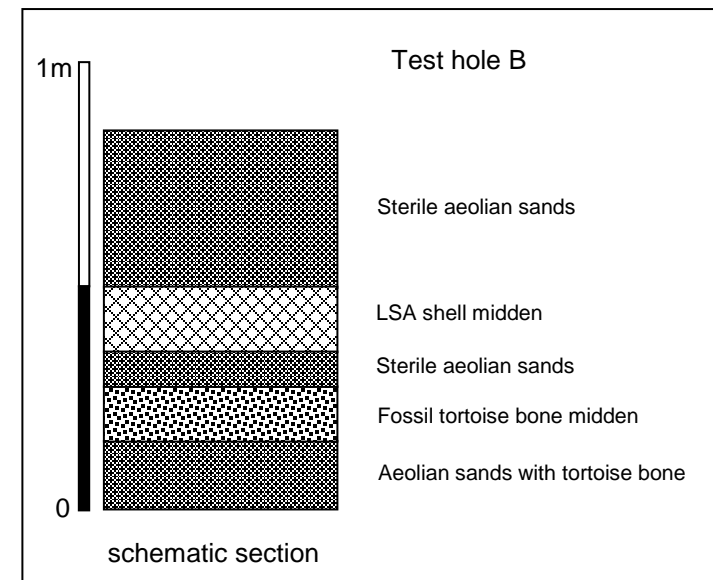
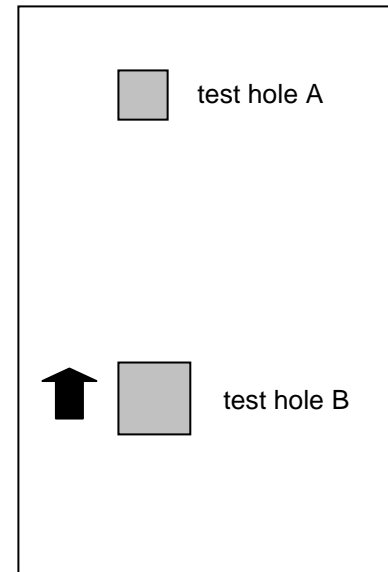
### **CONCLUDING COMMENT**

**Estimated Age:** Tests on the tortoise bone indicate that they are mineralised and depleted in collagen. It is expected that the material is over 10 000 years old.

**Further mitigatory measures:** This site deserves the most protection due to its uniqueness and high research value. It must be excluded from mining operations or any form of earthmoving activity. The Kleinsee Environmental Office has been instructed to declare the site a no-go area between the west end of the existing mine and the road to the west.



The circle shows where test holes were located. The layer of bone is far more extensive



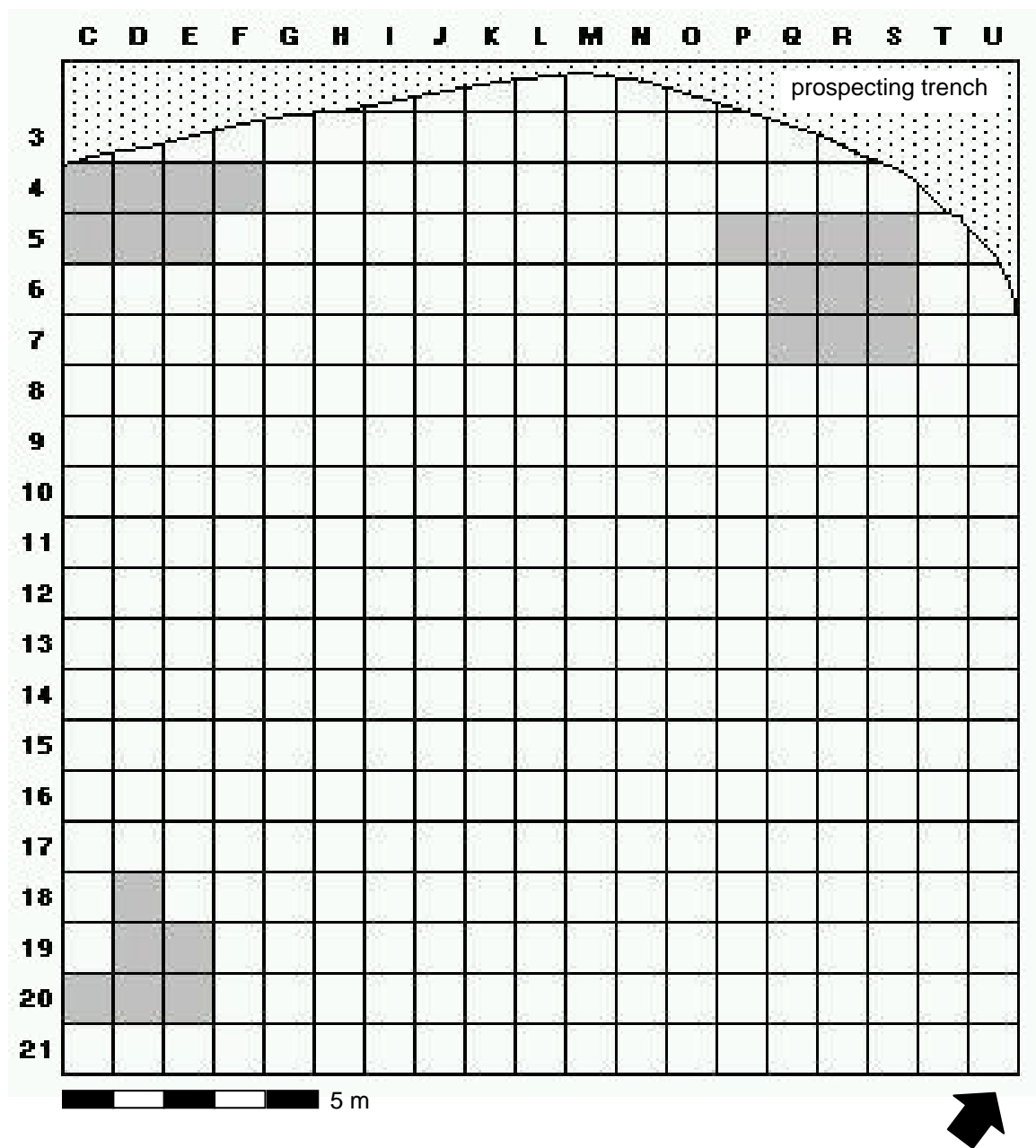


**2.1.7 Site No: KN2001/013****Previous names/numbers:** LK5-1**Geographical location:** (WGS84) 30°22' 39.5"S 17°18' 30.4"E**Mining Block:** LKC1-7**Mining area:** KNC**Farm name:** LANGKLIP**Date of excavation:** 12 March 2002**DESCRIPTION OF LOCAL ENVIRONMENT AND SITE CONTEXT**

The site is located on top of the coastal foredune overlooking a small sandy beach. Prospecting activity has cut through the dune exposing the shell midden. Rocky granite outcrops to both the north and south of the beach would have provided an environment where prehistoric people could gather marine foods.

**METHOD****Size of area excavated:** 22m<sup>2</sup>**Approximate percentage of site excavated:** This site is quite substantial showing three separate occupations – although hard to tell absolutely, it is estimated at 10-15%**Excavation units used:** 1x1m**Sieve size:** 1.5mm**Shell sampling method:** Shell bulked from selected squares.**Radiocarbon dating material:** Patella granatina**Summary of stratigraphy:** The main lens of shell (TOP) was buried under 25 - 30cm of dune sand. Unit "TOP" was characteristically 10 -15cm thick after which the frequency of shell fell off. An ephemeral second unit (LAYER 2) was encountered at a depth of about 40cm. This is far less rich than top. Sterile sands were encountered at a depth of 50cm. Some fragments of ceramic found (12m south) in the area of D19 on the grid may not be part of the same site.**SITE SUMMARY INFORMATION****Analysis:** Sorted, not yet analysed**Stone:** Thumbnail scrapers, backed and side scrapers**Ceramics:** Several sherds located on nearby dune ridge - may not be related to main site.**Oes:** Present**Shellfish:** n/a**Animal bone:** Rich in tortoise bone as well as some mammal bone (Raphicercus sp)**Special finds:** n/a**Evidence of spatial information:** Yes**Comment:** An ashy patch was found associated with the ceramics**CONCLUDING COMMENT****Estimated Age:** >2000BP for two patches, third is <2000 BP**Further mitigatory measures:** No further measures required, although it would be nice to increase the sample before the block is mined.



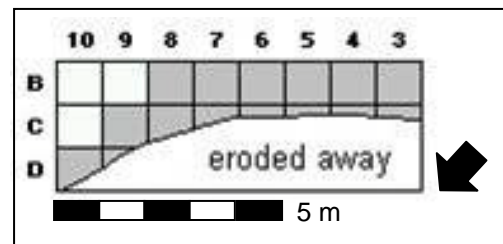




**2.1.8 Site No: LK2001/001C****Previous names/numbers:** LK1, LK1-1C**Geographical location:** (WGS84) 30°26' 59.3"S 17°20' 56.7"E**Mining Block:** LK LK22/LK B-2**Mining area:** KNC**Farm name:** LANGKLIP**Date of excavation:** 15.03.2002**DESCRIPTION OF LOCAL ENVIRONMENT AND SITE CONTEXT**

The site consists of a single lens of shell exposed in the southeast section of the LK1 mine. The mine has encroached into a dunefield on the north side of Mitchells Bay. This area was archaeologically rich (typical of coastal dune fields in the area) with the result that mining destroyed several sites. The remnants of some of these are still visible around the edge of the mine.

**METHOD****Size of area excavated:** 7m<sup>2</sup> (full), 7m (partial) - and material on slope sieved and sorted.**Approximate percentage of site excavated:** Unknown**Excavation units used:** 50x50cm**Sieve size:** 1.5mm**Shell sampling method:** Bulk sample of 50x50cm squares (?)**Radiocarbon dating material:** *Patella granularis***Summary of stratigraphy:** Single lens (10cm thick)**SITE SUMMARY INFORMATION****Analysis:** Sorted, not yet analysed**Stone:** n/a**Ceramics:** n/a**Oss:** n/a**Shellfish:** n/a**Animal bone:** n/a**Special finds:** n/a**Evidence of spatial information:** n/a**Comment:****CONCLUDING COMMENT****Estimated Age:****Further mitigatory measures:** No further measures required



**2.1.9 Site No: LK2001/001B****Previous names/numbers:** LK1K2, LK1-1B**Geographical location:** (WGS84) 30°26' 58.9"S 17°20' 57.9"E**Mining Block:** LK LK22/LK B-2**Mining area:** KNC**Farm name:** LANGKLIP**Date of excavation:** 16.03.2002**DESCRIPTION OF LOCAL ENVIRONMENT AND SITE CONTEXT**

The LK1K mine has encroached into a dune field on the north side of Mitchells Bay. This area was archaeologically rich (typical of coastal dune fields in the area) with the result that mining destroyed several sites. The remnants of some of these are still visible around the edge of the mine. One of these, highly disturbed by vehicles, was visible on the southeast corner

**METHOD****Size of area excavated:** Samples of disturbed material passed through sieve.**Approximate percentage of site excavated:** n/a**Excavation units used:** n/a**Sieve size:** 1.5mm**Shell sampling method:** n/a**Radiocarbon dating material:** not collected**Summary of stratigraphy:** Disturbed**SITE SUMMARY INFORMATION****Analysis:** Sorted, not yet analysed**Stone:** n/a**Ceramics:** n/a**Oss:** n/a**Shellfish:** n/a**Animal bone:** n/a**Special finds:** n/a**Evidence of spatial information:** n/a**Comment:** Badly disturbed LSA midden (*Patella* dominated) not worthy of further sampling.**CONCLUDING COMMENT****Estimated Age:** n/a**Further mitigatory measures:** No further measures required

**2.1.10 Site No: LK2001/001A****Previous names/numbers:** LK1K3, LK1-1A**Geographical location:** (WGS84) 30°27' 00.6"S 17°20' 53.7"E**Mining Block:** LK LK22/LK B-2**Mining area:** KNC**Farm name:** LANGKLIP**Date of excavation:** 16.03.2002**DESCRIPTION OF LOCAL ENVIRONMENT AND SITE CONTEXT**

The LK1K mine has encroached into a dune field on the north side of Mitchells Bay. This area was archaeologically rich (typical of coastal dune fields in the area) with the result that mining destroyed several sites. The remnants of some of these are still visible around the edge of the mine. This site is a disturbed midden, the remains of which lie on the southern edge of the mine. Material was broadcast and eroding down the slopes into the mine

**METHOD**

**Size of area excavated:** Samples of disturbed material passed through sieve. Area subject to surface collection from an ungridded area.

**Approximate percentage of site excavated:** n/a

**Excavation units used:** n/a

**Sieve size:** 1.5mm

**Shell sampling method:** n/a

**Radiocarbon dating material:** not collected

**Summary of stratigraphy:** Disturbed

**SITE SUMMARY INFORMATION**

**Analysis:** Sorted, not yet analysed

**Stone:** n/a

**Ceramics:** n/a

**Oss:** n/a

**Shellfish:** n/a

**Animal bone:** n/a

**Special finds:** n/a

**Evidence of spatial information:** n/a

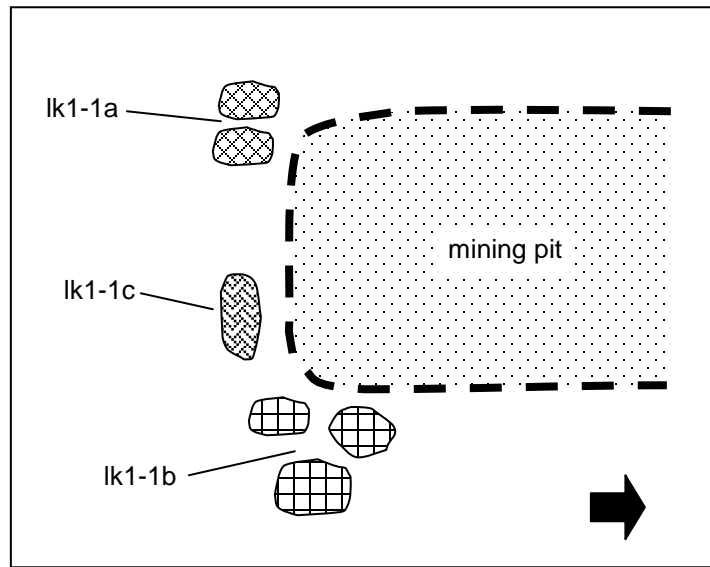
**Comment:** Badly disturbed LSA midden (*Patella* dominated) not worthy of further sampling.

**CONCLUDING COMMENT**

**Estimated Age:** n/a

**Further mitigatory measures:** No further measures required





sketch map (not to scale)





### 2.1.11 Site No: LK2001/003

**Previous names/numbers:** LK4, LK1-3

**Geographical location:** (WGS84) 30°27' 03.7"S 17°20' 55.5"E

**Mining Block:** LK LK22/LK B-2

**Mining area:** KNC

**Farm name:** LANGKLIP

**Date of excavation:** 16.03.2002

## DESCRIPTION OF LOCAL ENVIRONMENT AND SITE CONTEXT

This site is located in a small dunefield immediately north of Mitchells Bay. Deflated midden material was found in a windswept throat between two dunes. This material had derived from a small *in situ* lens situated on top of an elevated area in the throat.

## METHOD

**Size of area excavated:** 47m<sup>2</sup> of deflated area, 16.75m<sup>2</sup> of *in situ* material

**Approximate percentage of site excavated:** ±70%

**Excavation units used:** The *in situ* material was excavated using 50x50cm squares, while the deflated material was excavated using 1x1m squares.

**Sieve size:** 1.5mm

**Shell sampling method:** Squares H6A, G6B, H7D and G7C bulked.

**Radiocarbon dating material:** Charcoal, *Patella granatina*

**Summary of stratigraphy:** In general the *in situ* material took the form of a single lens 8-10cm thick, much of it fairly ashy. 2 dark patches were noted (see diagram) in the underlying dune sand. These patches, which were sterile of archaeological material, may have resulted from hearths on the soil surface. A further feature of interest was a distinct hole in the underlying dune. This contained shell midden and 2 tortoise carapaces, which may have been purposefully placed there for storage or ritual purposes.

## SITE SUMMARY INFORMATION

**Analysis:** All small finds have been sorted, packaged and labelled. The flaked stone has been fully analysed. Almost all the artefacts are made on quartz with no CCS present at all. Most of the formals consist of small backed bladelets. Pottery is present but only in very small fragments. There is a strong similarity between this assemblage and that from Dunefield Midden (650 BP) in Elands Bay. Bead sizes are not typical of the late herder period sites.

**Stone:** Quartz debitage with formal tools (backed bladelets)

**Ceramics:** Present

**Oes:** Fragments and beads present

**Shellfish:** Present

**Animal bone:** n/a

**Special finds:** n/a

### Evidence of spatial information:

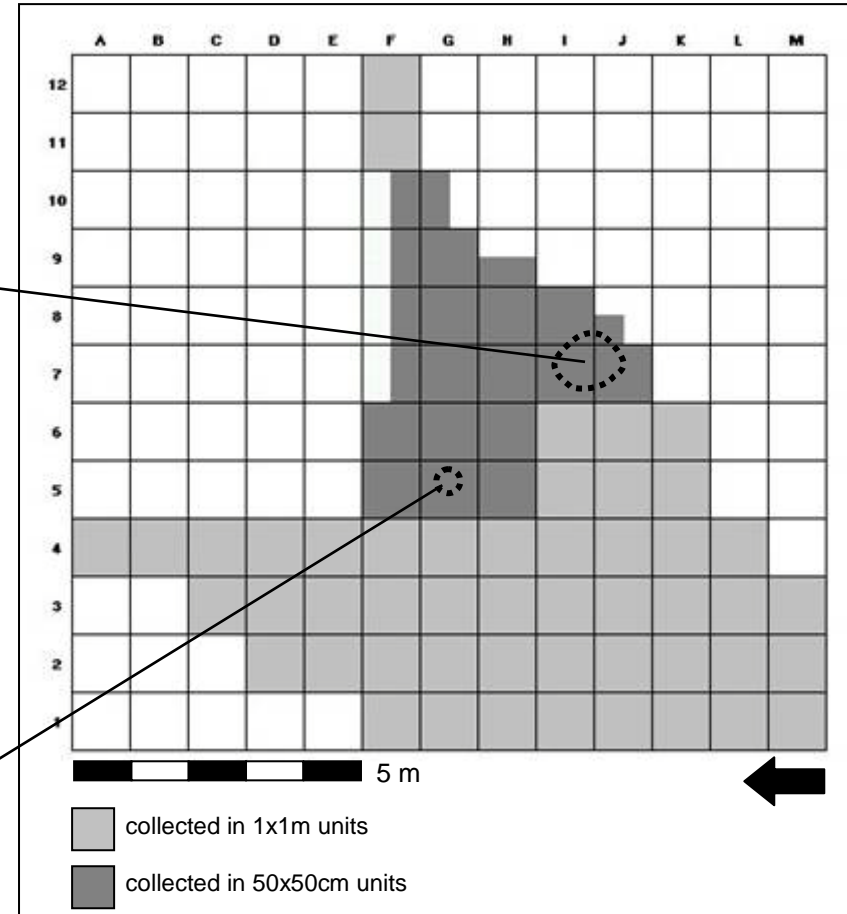
Direct evidence of spatial information is marginal. The two ashy patches may be construed as hearths that existed during the early part of the site's development. These were eventually inundated with midden material - the *in situ* midden being the remains of a communal dump. Other aspects of the site such as hearths and activity area were probably more widely distributed but these have been lost through erosion and sand movement. The southern end of the site has been impacted by diamond prospecting activities.

**Comment:** Although this site did not contain a great deal of spatial patterning, the midden contained a good bone sample, pottery and stone artefacts. Bead sizes are relatively small being in region of 5-6 mm. Of particular interest are a number of backed bladelets (crystal quartz) distinguishing this site from those excavated in the BMC this season. Backed bladelets are not unknown on post-2000 BP sites, being well documented at Dunefield Midden (Elands Bay) as well as on a recent site in the Richtersveld.

## CONCLUDING COMMENT

**Estimated Age:** A corrected (for marine shell) C<sup>14</sup> date of **577 BP** has been obtained for the site (Pta 8910).

**Further mitigatory measures:** Virtually all *in situ* midden removed - no further work required.







#### 2.1.12 Site No: LK2001/004

**Previous names/numbers:** LK1K5, LK1-4

**Geographical location:** (WGS84) 30°27' 04.4"S 17°20' 53.5"E

**Mining Block:** LK LK22/LK B-2

**Mining area:** KNC

**Farm name:** LANGKLIP

**Date of excavation:** 19.03.2002

### DESCRIPTION OF LOCAL ENVIRONMENT AND SITE CONTEXT

This site lies in a large flat deflation on the western edge of the dunefield north of Mitchells Bay. While shell is dispersed over the entire deflation hollow, noticeable were at least 4 areas of concentration. Of particular interest were two piles of shell, one dominated by *Choromytilus meridionalis*, while *Patella argenvillei* dominated the other.

### METHOD

**Size of area excavated:** 220m<sup>2</sup>

**Approximate percentage of site excavated:** ±60%

**Excavation units used:** 1x1m

**Sieve size:** 1.5mm

**Shell sampling method:** 9 squares across the identifiable scatters were bulked.

**Radiocarbon dating material:** *Patella granularis* and *Patella argenvillei* from various shell concentrations.

**Summary of stratigraphy:** This site showed no visible stratigraphy with all archaeological material lying within 2-7cm of the surface. Part was *in situ* midden and the rest deflated scatter.

### SITE SUMMARY INFORMATION

**Analysis:** All small finds have been sorted, packaged and labelled. The flaked stone has been fully analysed. Almost all the artefacts are made on quartz with a few made on CCS. The stone is similar to LK1K4.

**Stone:** Small scrapers and backed pieces

**Ceramics:** None found

**Oes:** Present. Some very small beads.

**Shellfish:** Dominated by *Patella granularis*, with patches of *Patella argenvillei* and large *Patella granatina*. 1 patch of *Choromytilus meridionalis*.

**Animal bone:** Very little mammal bone preserved.

**Special finds:** 2 bone points.

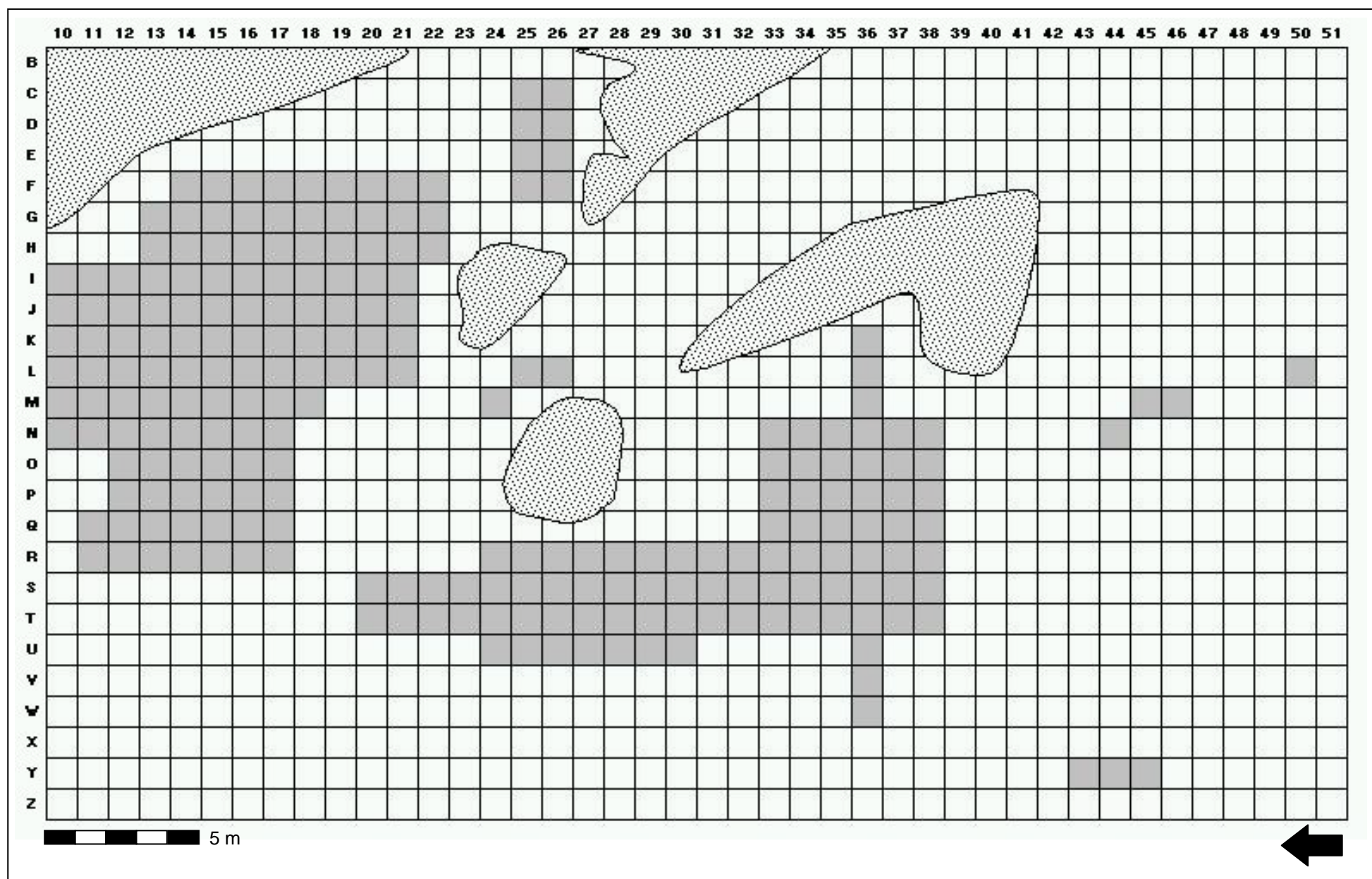
#### Evidence of spatial information:

The 4 shell patches may be a result of spatial activity or different period of occupation. The discrete patches of *Choromytilus meridionalis* and *Patella argenvillei* most certainly represent single event dumps - possibly the proceeds of a single low tide visit to the sheltered coves around Mitchells Bay.

### CONCLUDING COMMENT

**Estimated Age:** Two corrected (for marine shell) radiocarbon dates have been obtained: **1895 BP** (Pta 8909) (from a *P. argenvillei* pile) and **2059 BP** (Pta 8915) (from the shell midden).

**Further mitigatory measures:** No further measures required







### 2.1.13 Site No: SK2001/025

**Previous names/numbers:** SK300A,B,C,D,E

**Geographical location:** (WGS84)

A: 29°41' 09.0"S 17°04' 15.3"E

B: 29°41' 07.9"S 17°04' 15.2"E

C: 29°41' 07.7"S 17°04' 15.7"E

D: 29°41' 07.3"S 17°04' 15.2"E

E: 29°41' 06.5"S 17°04' 14.9"E

**Mining Block:** SK14A

**Mining area:** SK

**Farm name:** SANDKOP

**Date of excavation:** March 2002

## DESCRIPTION OF LOCAL ENVIRONMENT AND SITE CONTEXT

The site is located in a line of small deflation hollows in flat open land on the coastal plain. Windblown sands that originated from a nearby prospecting pit obscure some parts of the site. There is also a possibility that some areas of the site have been disturbed by past diamond prospecting.

## METHOD

**Size of area excavated:** 137.25m<sup>2</sup>

**Approximate percentage of site excavated:** ±60%

**Excavation units used:** 50x50cm

**Sieve size:** 1.5mm

**Shell sampling method:** Shell retained from most of site apart from disturbed area where it was sampled (site of burial).

**Radiocarbon dating material:** Marine shell

**Summary of stratigraphy:** Surface scrape only

## SITE SUMMARY INFORMATION

**Analysis:** Sorted, not yet analysed

**Stone:** Small side scrapers on ccs. Quartz & ccs dominant raw materials.

**Ceramics:** Minimal ceramics found may not be related to this site.

**Oes:** Plenty of ostrich egg shell, no decorated fragments. Small sample of beads with diameters mainly less than 6mm.

**Shellfish:** Shell dominated by *Patella sp*, *Patella granatina*, *granularis*, *argenvillei*. Mussels not common.

**Animal bone:** Poor preservation of animal bone, lobster mandibles ubiquitous

**Special finds:** n/a

**Evidence of spatial information:** Remnants of spatial information indicated by 5 distinct shelly patches.

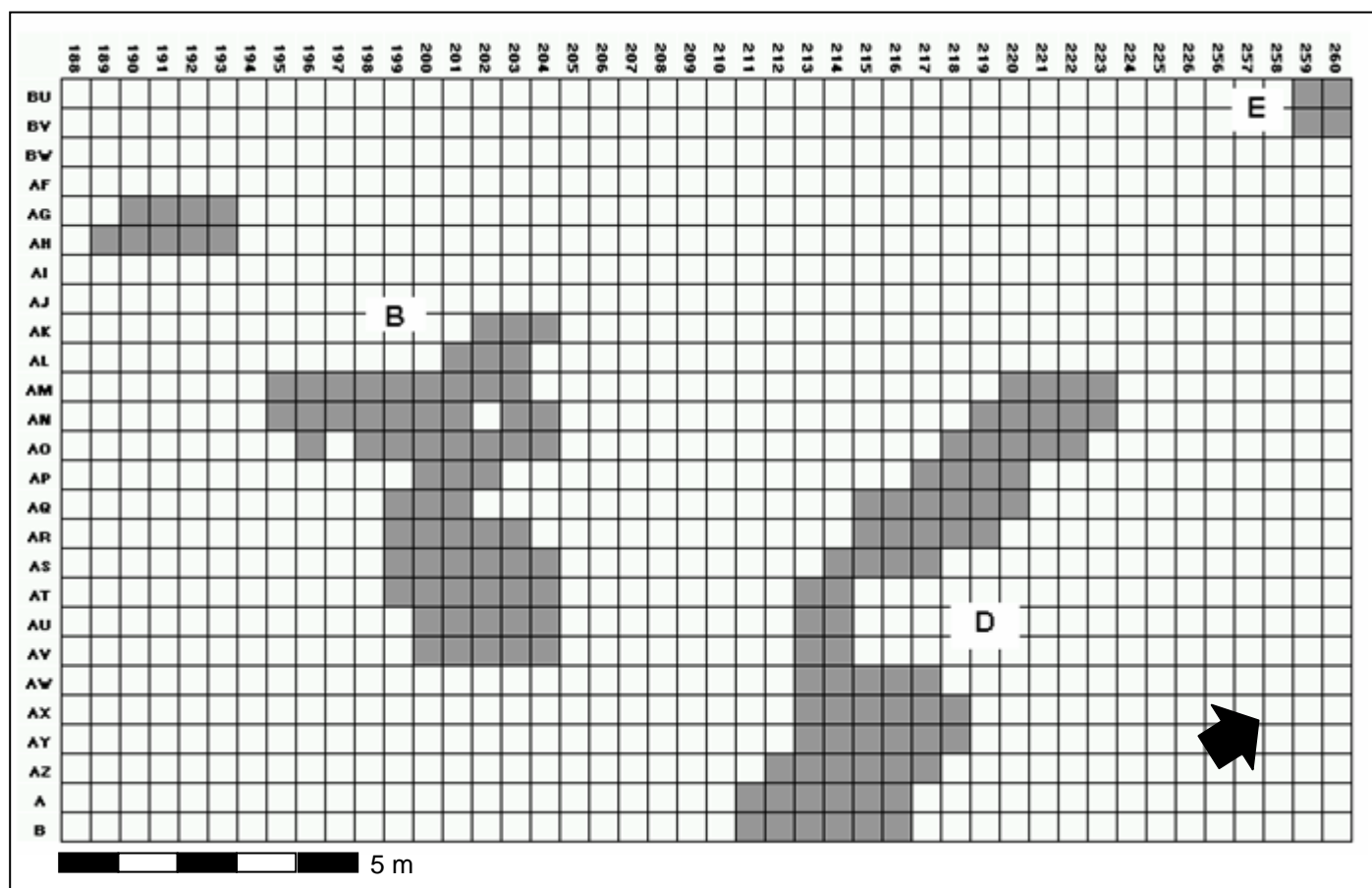
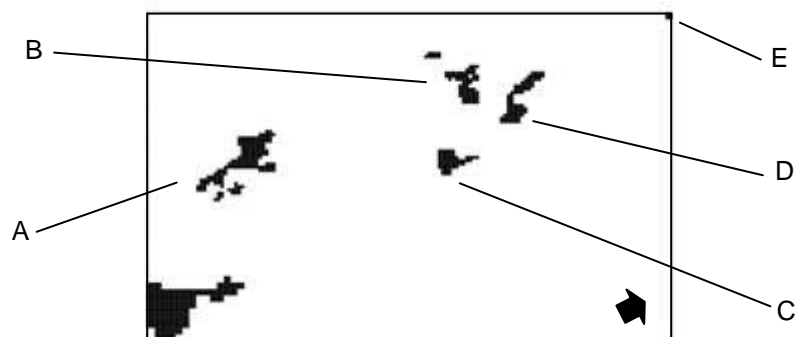
**Comment:** A partial human burial was recovered (removed under a separate permit 80/02/02/015/51). Area appears to have suffered disturbance as a result of previous prospecting activities. Only fragmentary portions of cranium and vertebral column survived *in situ*.

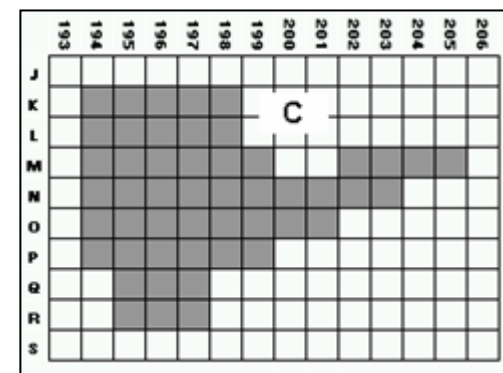
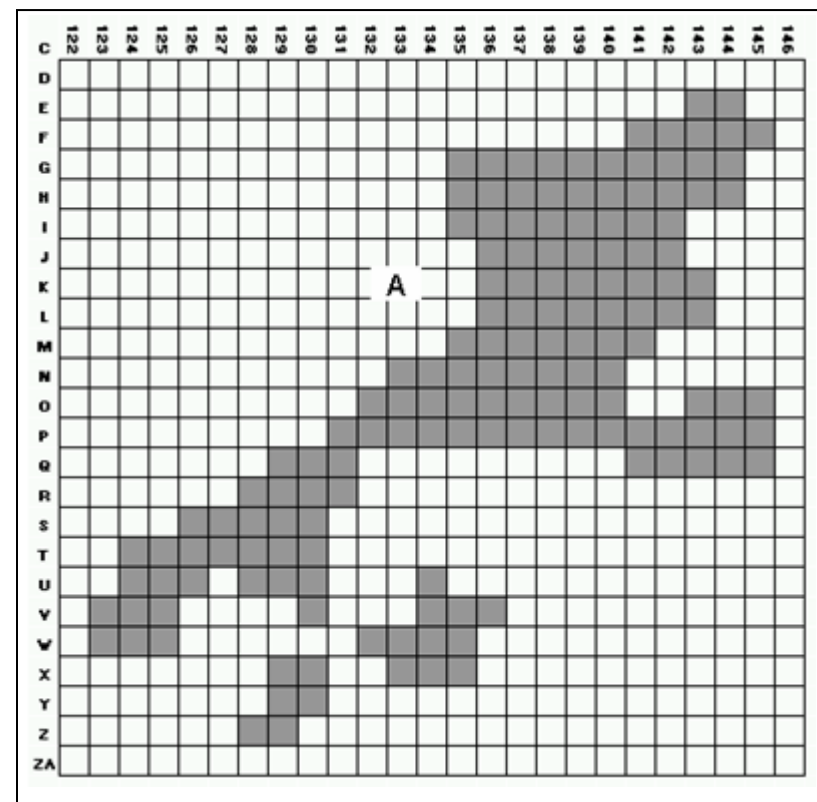
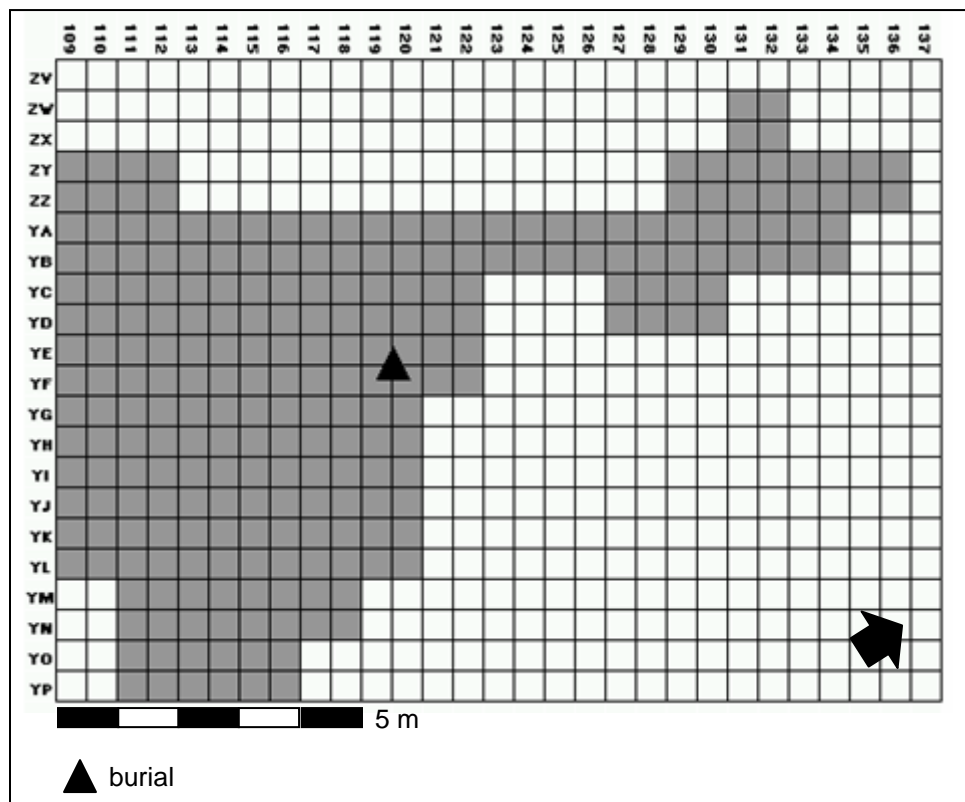
## CONCLUDING COMMENT

**Estimated Age:** The presence of formal artefacts and small ostrich eggshell beads indicated a probable age of greater than 3000BP.

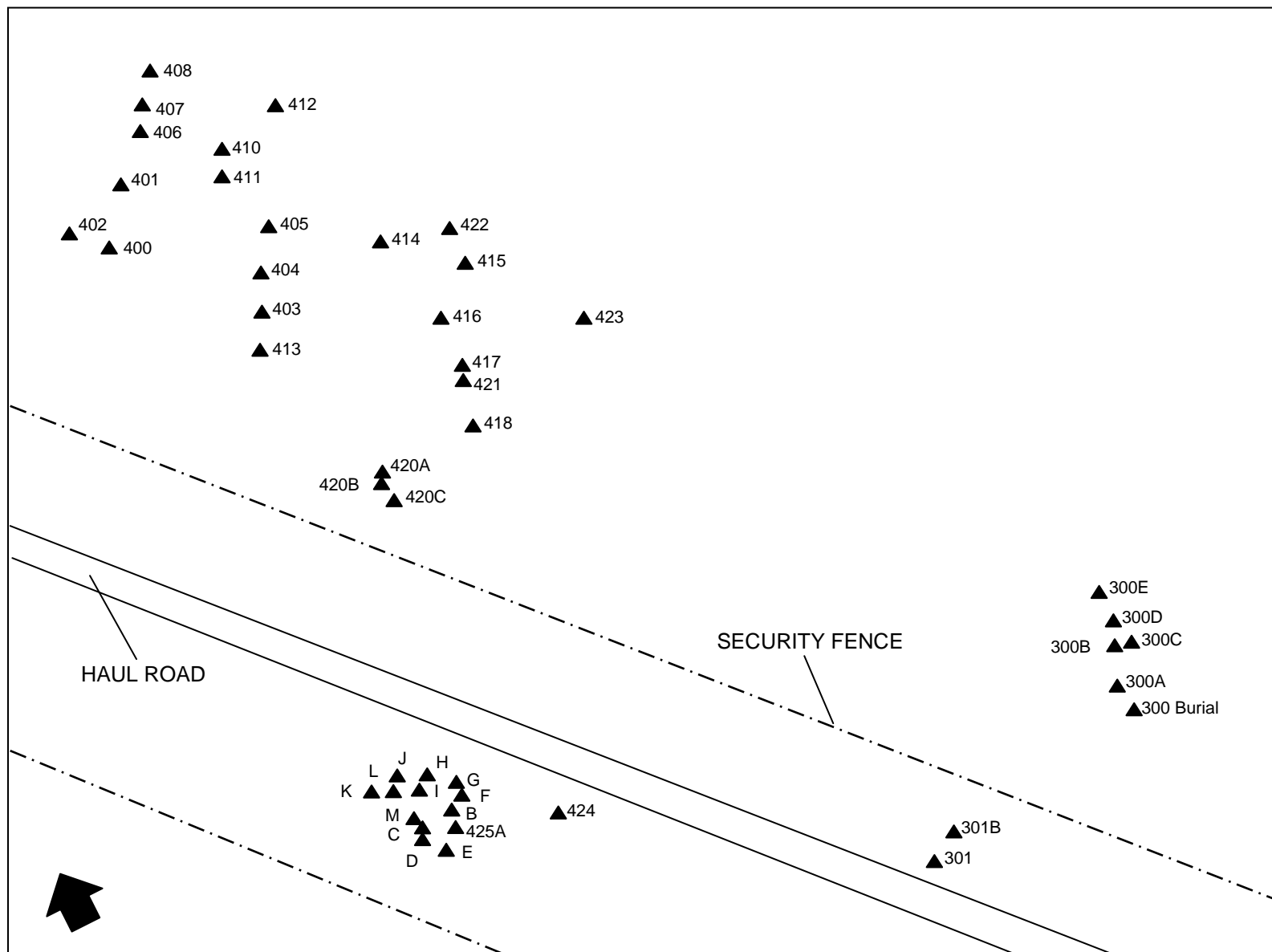
**Further mitigatory measures:** No further mitigated measures are required.











Sketch plan (not to scale) of the excavated sites in the Sandkop area

#### **2.1.14 Site No: SK2001/026**

**Previous names/numbers:** SK400

**Geographical location:** (WGS84) 29°40' 57.1"S 17°03' 46.9"E

**Mining Block:** SK SK16

**Mining area:** SK

**Farm name:** SANDKOP

**Date of excavation:** 21.02.2002

#### **DESCRIPTION OF LOCAL ENVIRONMENT AND SITE CONTEXT**

This site is one of a series of very small shell scatters (SK400, 402, 403, 404, 405, 406, 407, 408, 410, 411, 412, 413, 414, 415, 416, 418, 421, 420, 422, 423, 424) situated on the coastal flatlands south of Kleinzee, between the town and the Sandkop haul road security fence. The area is relatively featureless being characterised by low shrublands, small dunes and shallow deflation hollows. The old Kleinzee Airport was situated nearby. Site SK400 served as a datum point from which a number of the above sites were surveyed. Outward appearance of this site was a low mound with a relatively dense scatter of bone intermingled with marine shell visible on the surface.

#### **METHOD**

**Size of area excavated:** 2002: 12m<sup>2</sup> 2003: 39m<sup>2</sup>

**Approximate percentage of site excavated:** Unknown.

**Excavation units used:** 50x50cm

**Sieve size:** 1.5mm

**Shell sampling method:** Bulk samples

**Radiocarbon dating material:** Bone, charcoal or shell.

**Summary of stratigraphy:** Site indicated by a thin surface scatter with main unit 10 - 15 cm below surface. A dense ashy patch was found which probably is the remains of a small ash heap. This contained dense amounts of ash and highly fragmented burned shell.

#### **SITE SUMMARY INFORMATION**

**Analysis:** Sorted, not yet analysed

**Stone:** Very few stone artefacts, no formal tools.

**Ceramics:** Significant quantity of pottery found. Decorated sherds present.

**Oes:** Present. Large beads (greater than 6mm diameter) were recovered. The sample size is likely to increase with further excavation.

**Shellfish:** Dominated by patella species

**Animal bone:** Large quantities of mammal dominated by springbok. Lobster mandibles present.

**Special finds:** n/a

**Evidence of spatial information:** Spatial information indicated by beads and ceramics being found in different places. Ash pile/patches present. Also discrete shell and bone middens.

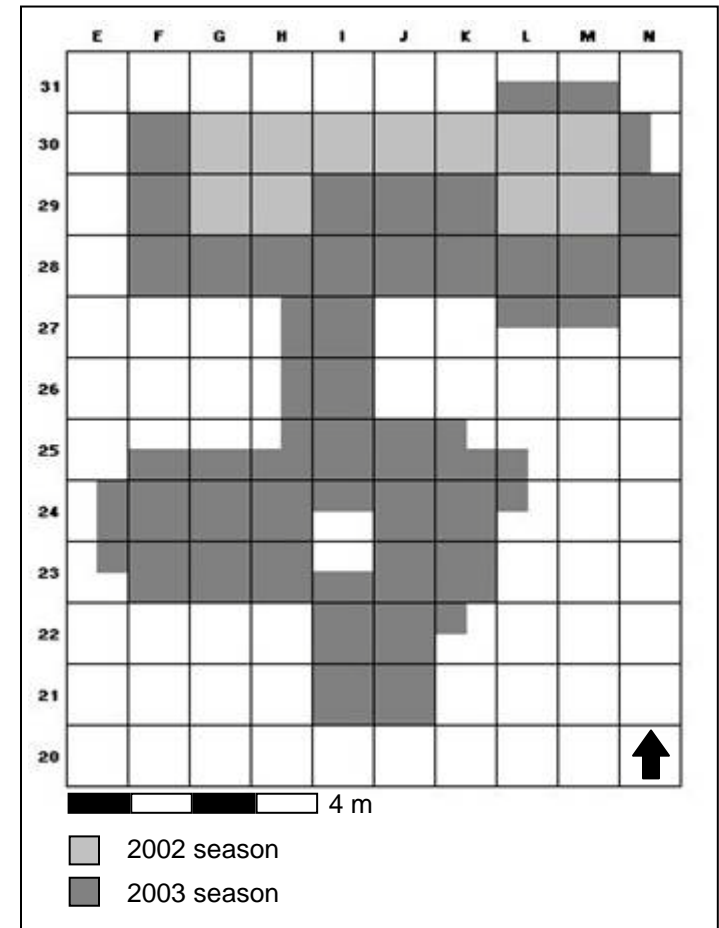
**Comment:** This site lies immediately outside of the immediate mining block. For this reason it was initially not as intensely sampled as sites that would be directly impacted by mining activities. The site is very interesting of account of its high bone content. It is very likely to represent the archaeology of prehistoric stock keeping people (Khoe Khoe), perhaps ancestors of the Nama, who lived on the west coast after 2000 years ago, but we cannot say this yet with absolute certainty. This site is of high research importance having the potential to produce further spatial information, a greater bone sample and other cultural material. The analysis of the excavated bone from 2002 has showed that the bone consists almost exclusively of springbok, and resembles a catastrophic mortality profile. It is believed at this stage that the remains may represent the results of a hunting technique that was targeting whole herds. While observations of such hunting techniques were commented on by early explorers, they have never been documented on an archaeological site.

#### **CONCLUDING COMMENT**

**Estimated Age:** Definitely less than 2000 years old, possibly less than 1000 years old. Three bone samples have been submitted for dating but the results are as yet unavailable.

**Further mitigatory measures:** The site is worthy of both conservation and more detailed research. Directives have been submitted to De Beers Namaqualand Mines for cordoning off the site as a protected area. A second period of excavation was undertaken in May 2003 to expand the bone sample.



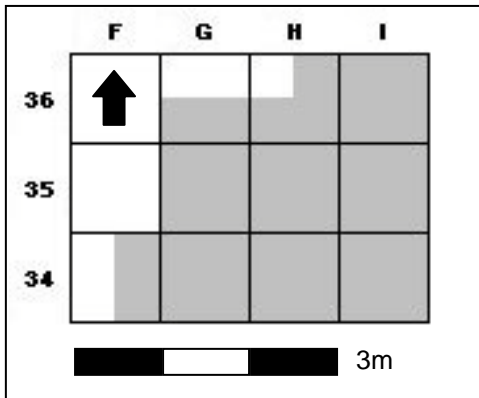




**2.1.15 Site No: SK2001/028****Previous names/numbers:** SK402**Geographical location:** (WGS84) 29°40' 56.6"S 17°03' 45.7"E**Mining Block:** SK SK16**Mining area:** SK**Farm name:** SANDKOP**Date of excavation:** 21.03.2002**DESCRIPTION OF LOCAL ENVIRONMENT AND SITE CONTEXT**

Site is situated on the coastal flatlands immediately south of Kleinzee, between the town and the Sandkop haul road and security fence. This small thin scatter lies among low bushes in the open veld

**METHOD****Size of area excavated:** 8.25m<sup>2</sup> excavated, further 5m<sup>2</sup> collected.**Approximate percentage of site excavated:** Unknown - densest areas of site collected or excavated.**Excavation units used:** 50x50 cm**Sieve size:** 1.5mm**Shell sampling method:** All shell from 1m<sup>2</sup> bulked.**Radiocarbon dating material:** Marine shell**Summary of stratigraphy:** Surface scatter.**SITE SUMMARY INFORMATION****Analysis:** Sorted, not yet analysed**Stone:** n/a**Ceramics:****Oes:** Fragments present. One large bead**Shellfish:** n/a**Animal bone:** Small amount of mammal bone, dominated by springbok.**Special finds:** n/a**Evidence of spatial information:** No discernable shell piles, ash piles or hearths, but if a part of SK400 then spatial patterning is indicated.**Comment:** This is very likely to be a part of SK2001/026 (SK 400) and could be a dump around a hearth.**CONCLUDING COMMENT****Estimated Age:** >2000BP**Further mitigatory measures:** None required.



### 2.1.16 Site No: SK2001/029

**Previous names/numbers:** SK403

**Geographical location:** (WGS84) 29°40' 58.8"S 17°03' 51.2"E

**Mining Block:** SK SK16

**Mining area:** SK

**Farm name:** SANDKOP

**Date of excavation:** 01.03.2002

## DESCRIPTION OF LOCAL ENVIRONMENT AND SITE CONTEXT

Site is situated on the coastal flatlands immediately south of Kleinzee, between the town and the Sandkop haul road security fence. Area is characterised by low shrubs, small dunes, shallow deflation hollows. This site lies in a deflated area surrounded by small hummock dunes.

## METHOD

**Size of area excavated:** 7m<sup>2</sup>

**Approximate percentage of site excavated:** Densest areas excavated.

**Excavation units used:** 1x1m

**Sieve size:** 1.5 cm

**Shell sampling method:** Bulk retained from square O23

**Radiocarbon dating material:** *Patella granularis*

**Summary of stratigraphy:** A single unit surface scatter. It was noted that shell slightly below the surface was better preserved.

## SITE SUMMARY INFORMATION

**Analysis:** Sorted, not yet analysed

**Stone:** ugs/hs

**Ceramics:** n/a

**Oes:** n/a

**Shellfish:** *Patella argenvillei* and *Patella barbara* are prominent on the surface, however, the buried deposit consists of mostly very fragmented shell of other species particularly - *Patella granularis* and *Patella granatina*.

**Animal bone:** n/a

**Special finds:** n/a

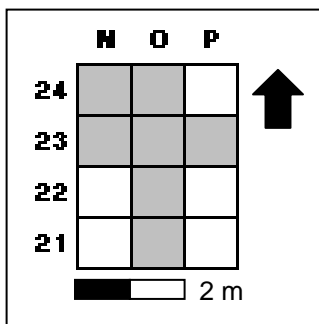
**Evidence of spatial information:** n/a

**Comment:**

## CONCLUDING COMMENT

**Estimated Age:** n/a

**Further mitigatory measures:** No further mitigation required



### 2.1.17 Site No: SK2001/030

**Previous names/numbers:** SK404

**Geographical location:** (WGS84) 29°40' 57.8"S 17°03' 51.2"E

**Mining Block:** SK SK16

**Mining area:** SK

**Farm name:** SANDKOP

**Date of excavation:** 28.02.2002 - 01.03.2002

## DESCRIPTION OF LOCAL ENVIRONMENT AND SITE CONTEXT

Site is situated on the coastal flatlands immediately south of Kleinzee, between the town and the Sandkop haul road security fence. Area is characterised by low shrubs, small dunes, shallow deflation hollows. This site lies on the inland side of a small dune.

## METHOD

**Size of area excavated:** 9m<sup>2</sup>

**Approximate percentage of site excavated:** Unknown

**Excavation units used:** 1x1m

**Sieve size:** 1.5mm

**Shell sampling method:** Bulk retained from square I42

**Radiocarbon dating material:** Marine shell

**Summary of stratigraphy:** 2 stratigraphic units were noted and excavated separately - a beige coloured surface unit and a dark grey brown lower unit lying 10 -15cm below the surface.

## SITE SUMMARY INFORMATION

**Analysis:** Sorted, not yet analysed

**Stone:** hs, ugs

**Ceramics:** n/a

**Oss:** n/a

**Shellfish:** n/a

**Animal bone:** n/a

**Special finds:** n/a

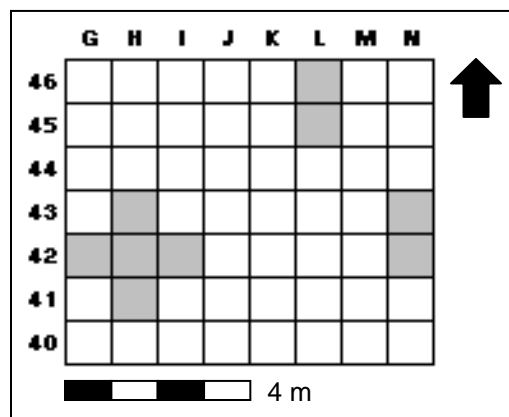
**Evidence of spatial information:** n/a

**Comment:** n/a

## CONCLUDING COMMENT

**Estimated Age:** n/a

**Further mitigatory measures:** No further mitigation required



### 2.1.18 Site No: SK2001/031

**Previous names/numbers:** SK405

**Geographical location:** (WGS84) 29°40' 56.5"S 17° 03' 51.4"E

**Mining Block:** SK SK16

**Mining area:** SK

**Farm name:** SANDKOP

**Date of excavation:** 28.02.2002

## DESCRIPTION OF LOCAL ENVIRONMENT AND SITE CONTEXT

Site is situated on the coastal flatlands immediately south of Kleinzee, between the town and the Sandkop haul road security fence. Area is characterised by low shrubs, small dunes, shallow deflation hollows. Being close to the town this site has been polluted with glass, charcoal and waste. The site is a small well defined scatter but the shell has been crushed.

## METHOD

**Size of area excavated:** 8m<sup>2</sup>

**Approximate percentage of site excavated:** Unknown

**Excavation units used:** 1x1m

**Sieve size:** 1.5mm

**Shell sampling method:** Bulk sample from square O34.

**Radiocarbon dating material:** Marine shell

**Summary of stratigraphy:** Single unit of shell, 6-7cm thick

## SITE SUMMARY INFORMATION

**Analysis:** Sorted, not yet analysed

**Stone:** Quartz core

**Ceramics:** Fragments of small pot

**Oss:** n/a

**Shellfish:** n/a

**Animal bone:** n/a

**Special finds:** n/a

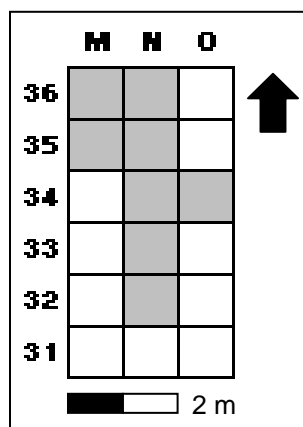
**Evidence of spatial information:** n/a

**Comment:**

## CONCLUDING COMMENT

**Estimated Age:** >2000BP

**Further mitigatory measures:** No further measures required



### 2.1.19 Site No: SK2001/032

**Previous names/numbers:** SK406

**Geographical location:** (WGS84) 29°40' 54.0"S 17°03' 47.8"E

**Mining Block:** SK SK16

**Mining area:** SK

**Farm name:** SANDKOP

**Date of excavation:** 26.02.2002

## DESCRIPTION OF LOCAL ENVIRONMENT AND SITE CONTEXT

Site is situated on the coastal flatlands immediately south of Kleinzee, between the town and the Sandkop haul road security fence.

## METHOD

**Size of area excavated:** 5m<sup>2</sup>

**Approximate percentage of site excavated:** Densest visible area excavated.

**Excavation units used:** 1x1 m

**Sieve size:** 1.5mm

**Shell sampling method:** All excavated material bulked from 5m.

**Radiocarbon dating material:** Selected *Patella granatina* shells

**Summary of stratigraphy:** A single unit site with densest material lying on average 10 cm below surface. The base of the unit contained a higher frequency quartz artefacts and ostrich eggshell.

## SITE SUMMARY INFORMATION

**Analysis:** Sorted, not yet analysed

**Stone:** n/a

**Ceramics:** n/a

**Oss:** n/a

**Shellfish:** n/a

**Animal bone:** Very little bone was present, however quantities of fish bone and scales were recovered from square H12.

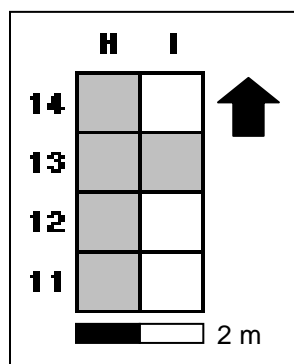
**Special finds:** n/a

**Evidence of spatial information:** Small shell scatter with no evidence of spatial patterning.

## CONCLUDING COMMENT

**Estimated Age:** n/a

**Further mitigatory measures:** No additional mitigation required





### 2.1.20 Site No: SK2001/033

**Previous names/numbers:** SK407

**Geographical location:** (WGS84) 29°40' 53.2 S 17°03' 47.8"E

**Mining Block:** SK SK16

**Mining area:** SK

**Farm name:** SANDKOP

**Date of excavation:** 26.03.2002

## DESCRIPTION OF LOCAL ENVIRONMENT AND SITE CONTEXT

Site is situated on the coastal flatlands immediately south of Kleinzee, between the town and the Sandkop haul road security fence. Area is characterised by low shrubs, small dunes, shallow deflation hollows.

## METHOD

**Size of area excavated:** 8m<sup>2</sup>

**Approximate percentage of site excavated:** Unknown

**Excavation units used:** 1x1m

**Sieve size:** 1.5mm

**Shell sampling method:** Shell from 1x1m

**Radiocarbon dating material:** Marine shell

**Summary of stratigraphy:** Shell lens 2-3cm thick extending just below the surface.

## SITE SUMMARY INFORMATION

**Analysis:** Sorted, not yet analysed

**Stone:** Upper and lower grindstones with ochre staining.

**Ceramics:** n/a

**Oes:** n/a

**Shellfish:** n/a

**Animal bone:** n/a

**Special finds:** 3 bone points

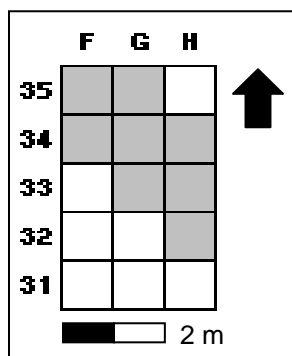
**Evidence of spatial information:** n/a

**Comment:** A small, but dense (in places) shell midden.

## CONCLUDING COMMENT

**Estimated Age:** n/a

**Further mitigatory measures:** No further mitigation required.



### 2.1.21 Site No: SK2001/034

**Previous names/numbers:** SK408

**Geographical location:** (WGS84) 29°40' 52.3"S 17°03' 48.2"E

**Mining Block:** SK SK16

**Mining area:** SK

**Farm name:** SANDKOP

**Date of excavation:** 26.03.2002

## DESCRIPTION OF LOCAL ENVIRONMENT AND SITE CONTEXT

Site is situated on the coastal flatlands immediately south of Kleinzee, between the town and the Sandkop haul road security fence. This site is only about 30m away from SK407 and may therefore be related or a part of it. Site is sandy due to bushes which have trapped windblown sands.

## METHOD

**Size of area excavated:** 6m<sup>2</sup>

**Approximate percentage of site excavated:** Unknown

**Excavation units used:** 1x1 m

**Sieve size:** 1.5 cm

**Shell sampling method:** Shell sample retained from 5 buckets sieved from G24

**Radiocarbon dating material:** *Patella granatina*

**Summary of stratigraphy:** Single lens midden, not very dense. All material lies within 10 cm of the surface.

## SITE SUMMARY INFORMATION

**Analysis:** Sorted, not yet analysed

**Stone:** n/a

**Ceramics:** n/a

**Oss:** n/a

**Shellfish:** Dominated by *Patella granatina* and *Patella granularis*, *Patella argenvilleae* present. *Choromytilus meridionalis* and *Burnupena* sp present in very small quantities.

**Animal bone:** Small quantities, scapula fragment.

**Special finds:** n/a

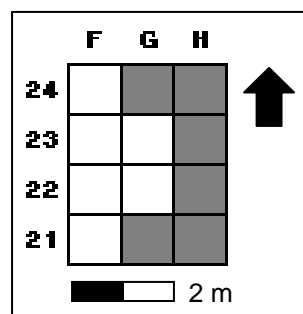
**Evidence of spatial information:** n/a

**Comment:**

## CONCLUDING COMMENT

**Estimated Age:** n/a

**Further mitigatory measures:** No further mitigation required.



### 2.1.22 Site No: SK2001/036

**Previous names/numbers:** SK410

**Geographical location:** (WGS84) 29°40' 54.4"S 17°03' 50.1"E

**Mining Block:** SK SK16

**Mining area:** SK

**Farm name:** SANDKOP

**Date of excavation:** 27.02.2002

## DESCRIPTION OF LOCAL ENVIRONMENT AND SITE CONTEXT

Ephemeral surface scatter among bushes. Site is situated on the coastal flatlands immediately south of Kleinzee, between the town and the Sandkop haul road security fence.

## METHOD

**Size of area excavated:** 4m<sup>2</sup>

**Approximate percentage of site excavated:** Unknown

**Excavation units used:** 1x1 m

**Sieve size:** 1.5mm

**Shell sampling method:** Shell retained from square N34.

**Radiocarbon dating material:** Patella granatina and granularis

**Summary of stratigraphy:** Ephemeral single unit surface scatter.

## SITE SUMMARY INFORMATION

**Analysis:** Sorted, not yet analysed

**Stone:** n/a

**Ceramics:** n/a

**Oes:** n/a

**Shellfish:** Patella granatina and granularis dominated. Very little whole shell.

**Animal bone:** n/a

**Special finds:** n/a

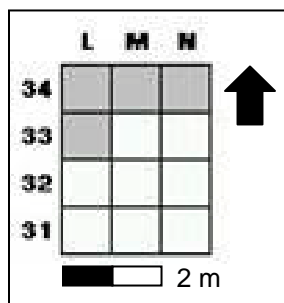
**Evidence of spatial information:** n/a

**Comment:**

## CONCLUDING COMMENT

**Estimated Age:** n/a

**Further mitigatory measures:** No further mitigation required



### 2.1.23 Site No: SK2001/037

**Previous names/numbers:** SK411

**Geographical location:** (WGS84) 29°40' 55.1"S 17°03' 50.1"E

**Mining Block:** SK SK16

**Mining area:** SK

**Farm name:** SANDKOP

**Date of excavation:** 27.02.2002

## DESCRIPTION OF LOCAL ENVIRONMENT AND SITE CONTEXT

Site is situated on the coastal flatlands immediately south of Kleinzee, between the town and the Sandkop haul road security fence. Area is characterised by low shrubs, small dunes, shallow deflation hollows. This particular site is extremely ephemeral.

## METHOD

**Size of area excavated:** 6m<sup>2</sup>

**Approximate percentage of site excavated:** Unknown

**Excavation units used:** 1x1m

**Sieve size:** 1.5mm

**Shell sampling method:** Bulk samples from J24&K24

**Radiocarbon dating material:** *Patella granularis* collected

**Summary of stratigraphy:** Surface scatter not more than 5cm deep.

## SITE SUMMARY INFORMATION

**Analysis:** Sorted, not yet analysed

**Stone:** n/a

**Ceramics:** n/a

**Oss:** n/a

**Shellfish:** n/a

**Animal bone:** n/a

**Special finds:** n/a

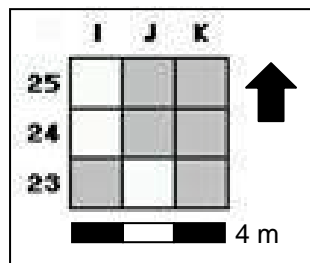
**Evidence of spatial information:** n/a

**Comment:**

## CONCLUDING COMMENT

**Estimated Age:** n/a

**Further mitigatory measures:** No further mitigation required.



#### 2.1.24 Site No: SK2001/038

**Previous names/numbers:** SK412

**Geographical location:** (WGS84) 29°40' 53.3"S 17°03' 51.7"E

**Mining Block:** SK SK16

**Mining area:** SK

**Farm name:** SANDKOP

**Date of excavation:** 27.02.2002

### DESCRIPTION OF LOCAL ENVIRONMENT AND SITE CONTEXT

Site is situated on the coastal flatlands immediately south of Kleinzee, between the town and the Sandkop haul road security fence. Area is characterised by low shrubs, small dunes, shallow deflation hollows. This site has been disturbed by a jeep track which runs through it.

### METHOD

**Size of area excavated:** 7m<sup>2</sup> excavated, surface collection made over the entire site.

**Approximate percentage of site excavated:** Unknown

**Excavation units used:** 1x1m

**Sieve size:** 1.5mm

**Shell sampling method:** Shell sample collected from square N43

**Radiocarbon dating material:**

**Summary of stratigraphy:** Single lens site, with shell extending to 12 cm below surface. Deflated sands in jeep track have concentrated the cultural material.

### SITE SUMMARY INFORMATION

**Analysis:** Sorted, not yet analysed

**Stone:** qtz and ccs debitage, ugs, ugs/hs

**Ceramics:** 2 fragments

**Oes:** present

**Shellfish:** n/a

**Animal bone:** crayfish mandibles

**Special finds:** n/a

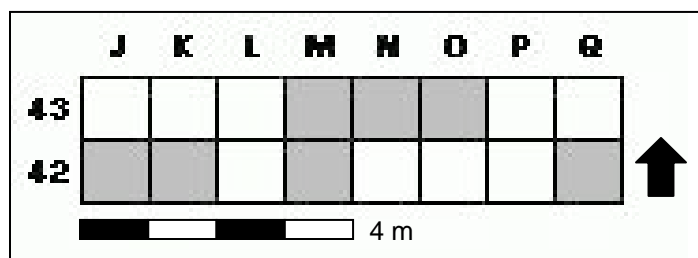
**Evidence of spatial information:** n/a

**Comment:** Site has been subject to some disturbance.

### CONCLUDING COMMENT

**Estimated Age:** >2000BP

**Further mitigatory measures:** No further measures required.

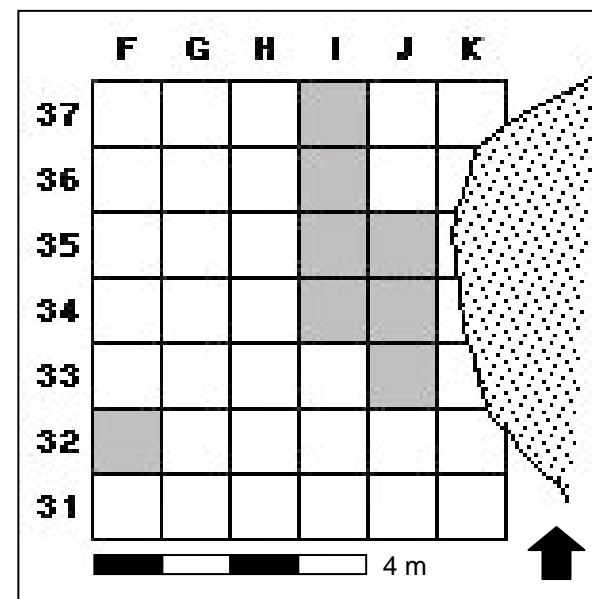


**2.1.25 Site No: SK2001/039****Previous names/numbers:** SK413**Geographical location:** (WGS84) 29°40' 59.8"S 17°03' 51.2"E**Mining Block:** SK SK16**Mining area:** SK**Farm name:** SANDKOP**Date of excavation:** 01.03.2002**DESCRIPTION OF LOCAL ENVIRONMENT AND SITE CONTEXT**

Site is situated on the coastal flatlands immediately south of Kleinzee, between the town and the Sandkop haul road security fence. Area is characterised by low shrubs, small dunes, shallow deflation hollows. Site is situated on top of a low dune ridge/terrace which slopes downwards on the seaward side.

**METHOD****Size of area excavated:** 8m<sup>2</sup>**Approximate percentage of site excavated:** Unknown**Excavation units used:** 1x1m**Sieve size:** 1.5mm**Shell sampling method:** Bulk sample from square J34.**Radiocarbon dating material:** *Patella granatina***Summary of stratigraphy:** A single unit site with densest deposit forming a small "dump" tucked against a low dune on the east side of the site.**SITE SUMMARY INFORMATION****Analysis:** Sorted, not yet analysed**Stone:** n/a**Ceramics:** n/a**Oes:** n/a**Shellfish:** n/a**Animal bone:** n/a**Special finds:** n/a**Evidence of spatial information:** n/a**Comment:****CONCLUDING COMMENT****Estimated Age:** n/a**Further mitigatory measures:** No further measures required.





**2.1.26 Site No: SK2001/040****Previous names/numbers:** SK414A, SK414B**Geographical location:** (WGS84)

A: 29°40' 57.3"S 17°03' 54.7"E

B: 29°40' 56.9"S 17°03' 54.5"E

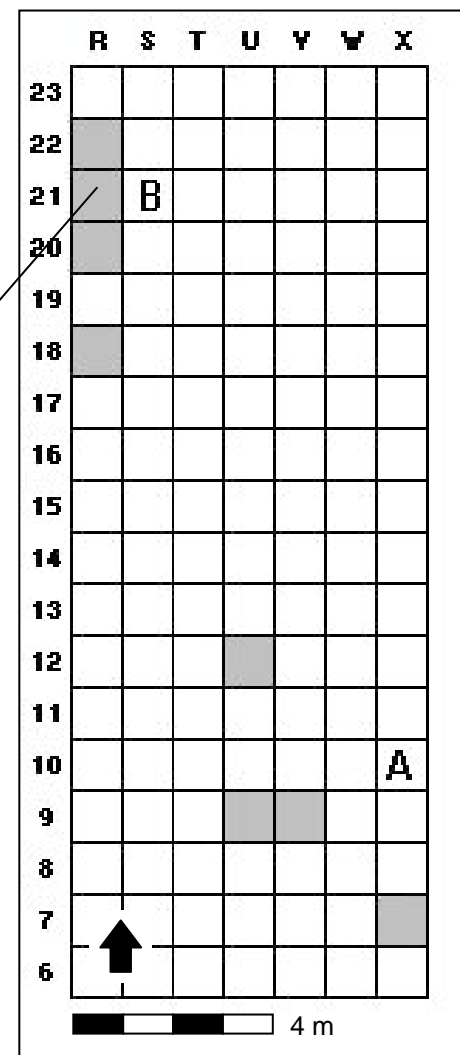
**Mining Block:** SK SK16**Mining area:** SK**Farm name:** SANDKOP**Date of excavation:** 02.03.2002**DESCRIPTION OF LOCAL ENVIRONMENT AND SITE CONTEXT**

Site is situated on the coastal flatlands immediately south of Kleinzee, between the town and the Sandkop haul road security fence. Area is characterised by low shrubs, small dunes, shallow deflation hollows. The site consists of 2 well defined shell patches (A&B) lying on a hard flat sterile surface.

**METHOD****Size of area excavated:** 4m<sup>2</sup> Patch A, 4m<sup>2</sup> Patch B**Approximate percentage of site excavated:** 50%**Excavation units used:** 1x1m**Sieve size:** 1.5mm**Shell sampling method:** Squares V9 and R21 bulked**Radiocarbon dating material:** Patella granatina**Summary of stratigraphy:** Surface unit approximately 11-13cm deep lying on a compacted soil.**SITE SUMMARY INFORMATION****Analysis:** Sorted, not yet analysed**Stone:** n/a**Ceramics:** n/a**Oes:** n/a**Shellfish:** n/a**Animal bone:** n/a**Special finds:** n/a**Evidence of spatial information:**

**Comment:** Shell patches are probably the remains of shell piles that have subsided over time. Both patches were excavated on a common grid. 7 potsherds and a quartzite flake from a grinding stone were collected from just outside the grid of SK414B.

**CONCLUDING COMMENT****Estimated Age:** n/a**Further mitigatory measures:** No further mitigation required.



**2.1.27 Site No: SK2001/041**  
**Previous names/numbers:** SK415  
**Geographical location:** (WGS84) 29°40' 57.5S" 17°03' 57.0E"  
**Mining Block:** SK SK16  
**Mining area:** SK  
**Farm name:** SANDKOP  
**Date of excavation:** 02.03.2002

## **DESCRIPTION OF LOCAL ENVIRONMENT AND SITE CONTEXT**

One of a series of very small archaeological occurrences situated on the coastal flatlands immediately south of Kleinzee, between the town and the Sandkop haul road security fence. Area is characterised by low shrubs, small dunes, shallow deflation hollows.

## **METHOD**

**Size of area excavated:** 1m<sup>2</sup> excavated and bulked. All cultural material collected from surface as per sampling strategy used during phase 1 assessments of the area.  
**Approximate percentage of site excavated:** Unknown  
**Excavation units used:** 1x1m  
**Sieve size:** 1.5mm  
**Shell sampling method:** Four 50x50 quadrants bulked due to low density of shell  
**Radiocarbon dating material:** Shell available from bulk  
**Summary of stratigraphy:** Single unit surface site

## **SITE SUMMARY INFORMATION**

**Analysis:** Sorted, not yet analysed  
**Stone:** n/a  
**Ceramics:** n/a  
**Oes:** n/a  
**Shellfish:** *Patella granatina* and *granularis* mix.  
**Animal bone:** n/a  
**Special finds:** n/a

**Evidence of spatial information:** n/a  
**Comment:**

## **CONCLUDING COMMENT**

**Estimated Age:** n/a  
**Further mitigatory measures:** No further mitigation required.

**2.1.28 Site No: SK2001/042****Previous names/numbers:** SK416**Geographical location:** (WGS84) 29°40' 59.0S" 17°03' 56.2E"**Mining Block:** SK SK16**Mining area:** SK**Farm name:** SANDKOP**Date of excavation:** 02.03.2002**DESCRIPTION OF LOCAL ENVIRONMENT AND SITE CONTEXT**

One of a series of very small archaeological occurrences situated on the coastal flatlands immediately south of Kleinzee, between the town and the Sandkop haul road security fence. Area is characterised by low shrubs, small dunes, shallow deflation hollows.

**METHOD**

**Size of area excavated:** 1m<sup>2</sup> excavated and bulked. All cultural material collected from surface as per sampling strategy used during phase 1 assessments of the area.

**Approximate percentage of site excavated:** Unknown

**Excavation units used:** 1x1m

**Sieve size:** 1.5mm

**Shell sampling method:** 1 square bulked

**Radiocarbon dating material:** Shell available from bulk

**Summary of stratigraphy:** Single unit surface site

**SITE SUMMARY INFORMATION**

**Analysis:** Sorted, not yet analysed

**Stone:** Fragments of quartz

**Ceramics:** Present

**Oes:** n/a

**Shellfish:** *Patella granatina* and *granularis* mix.

**Animal bone:** n/a

**Special finds:** n/a

**Evidence of spatial information:** n/a

**Comment:**

**CONCLUDING COMMENT**

**Estimated Age:** >2000BP

**Further mitigatory measures:** No further measures required.

**2.1.29 Site No: SK2001/044****Previous names/numbers:** SK418 A,B,C**Geographical location:** (WGS84) 29°41' 01.9S" 17°03' 57.2E"**Mining Block:** SK SK16**Mining area:** SK**Farm name:** SANDKOP**Date of excavation:** 03.03.2002**DESCRIPTION OF LOCAL ENVIRONMENT AND SITE CONTEXT**

A series of 3 shelly patches situated on the coastal flatlands immediately south of Kleinzee, between the town and the Sandkop haul road security fence. Area is characterised by low shrubs, small dunes, shallow deflation hollows.

**METHOD**

**Size of area excavated:** 1m<sup>2</sup> excavated and bulked from each patch A-C. All cultural material collected from surface as per sampling strategy used during phase 1 assessments of the area.

**Approximate percentage of site excavated:** Unknown

**Excavation units used:** 1x1m

**Sieve size:** 1.5mm

**Shell sampling method:** 1 square bulked

**Radiocarbon dating material:** Shell available from bulks A or B.

**Summary of stratigraphy:** Patches A and C were surface only. Patch B contained 3 layers, each of which was sampled (surface, middle and bottom). "Surface" 3-5 cm, Middle - darker soil with shell 10 cm thick and "Bottom", a 5-6 cm layer of *Patella granatina* and *Patella argenvillei* on a hard surface.

**SITE SUMMARY INFORMATION**

**Analysis:** Sorted, not yet analysed

**Stone:** Quartz debitage

**Ceramics:** Present

**Oes:** n/a

**Shellfish:** *Patella granatina* and *granularis* mix.

**Animal bone:** n/a

**Special finds:** n/a

**Evidence of spatial information:** n/a

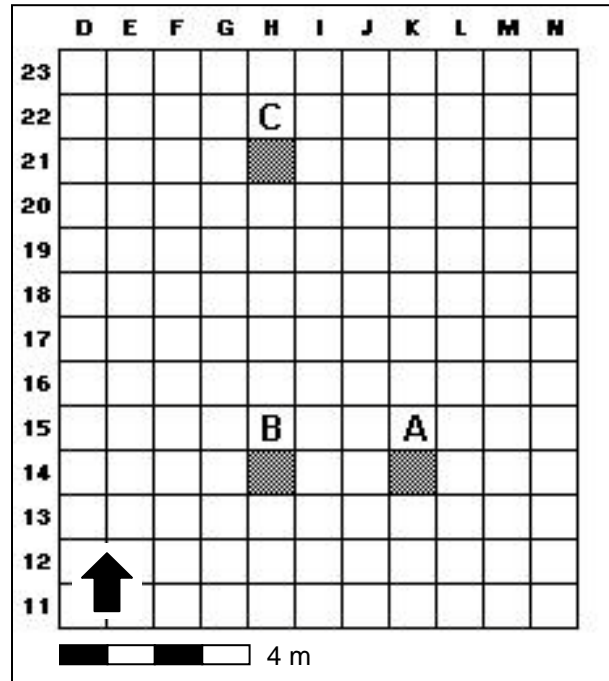
**Comment:**

**CONCLUDING COMMENT**

**Estimated Age:** >2000BP

**Further mitigatory measures:** No further mitigation required.





### 2.1.30 Site No: SK2001/046

**Previous names/numbers:** SK420A,C

**Geographical location:** (WGS84) 29°41' 03.0"S 17°03' 55"E

**Mining Block:** SK SK16

**Mining area:** SK

**Farm name:** SANDKOP

**Date of excavation:** 03.03.2002

## DESCRIPTION OF LOCAL ENVIRONMENT AND SITE CONTEXT

2 shelly patches situated among small hummock dunes on the coastal flatlands immediately south of Kleinzee, between the town and the Sandkop haul road security fence.

## METHOD

**Size of area excavated:** 3m<sup>2</sup> excavated and bulked from patch a, 2m<sup>2</sup> from patch c. All cultural material collected from surface as per sampling strategy used during phase 1 assessments of the area.

**Approximate percentage of site excavated:** Minimal sampling of marginal archaeological sites.

**Excavation units used:** 1x1m

**Sieve size:** 1.5mm

**Shell sampling method:** All squares bulked

**Radiocarbon dating material:** *Patella granularis*

**Summary of stratigraphy:** Patches a and c were very similar - a single layer of shell 8-10cm thick.

## SITE SUMMARY INFORMATION

**Analysis:** Sorted, not yet analysed

**Stone:** Fragments of quartz

**Ceramics:** Present. 1 decorated rim sherd in Patch C

**Oss:** n/a

**Shellfish:** *Patella granatina* and *granularis* mix.

**Animal bone:** n/a

**Special finds:** n/a

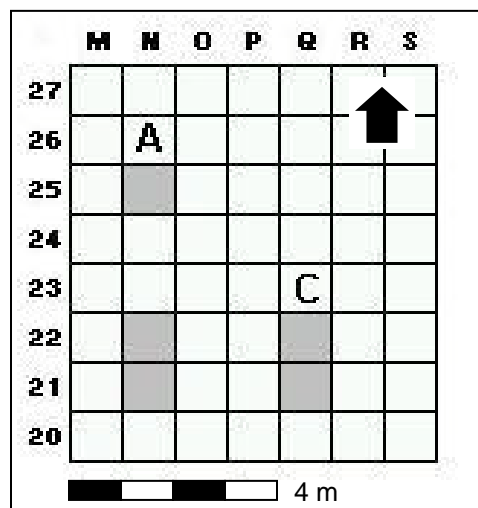
**Evidence of spatial information:** n/a

**Comment:**

## CONCLUDING COMMENT

**Estimated Age:** n/a

**Further mitigatory measures:** No further mitigation required.



### 2.1.31 Site No: SK2001/047

**Previous names/numbers:** SK421 (aka SK417)

**Geographical location:** (WGS84) 29°41' 00.6S" 17°03' 56.9E"

**Mining Block:** SK SK16

**Mining area:** SK

**Farm name:** SANDKOP

**Date of excavation:** 03.03.2002

## DESCRIPTION OF LOCAL ENVIRONMENT AND SITE CONTEXT

One of a series of very small archaeological occurrences situated on the coastal flatlands immediately south of Kleinzee, between the town and the Sandkop haul road security fence. Area is characterised by low shrubs, small dunes, shallow deflation hollows.

## METHOD

**Size of area excavated:** 3m<sup>2</sup> excavated and bulked. All cultural material collected from surface as per sampling strategy used during phase 1 assessments of the area.

**Approximate percentage of site excavated:** Minimal sampling of marginal archaeological site.

**Excavation units used:** 1x1m

**Sieve size:** 1.5mm

**Shell sampling method:** Shell from F10 bulked

**Radiocarbon dating material:** Shell available from bulk

**Summary of stratigraphy:** Single unit surface site

## SITE SUMMARY INFORMATION

**Analysis:** Sorted, not yet analysed

**Stone:** Quartz and ccs debitage, 2 ccs thumbnail scrapers

**Ceramics:** Present

**Oes:** n/a

**Shellfish:** *Patella granatina* and *granularis* mix with some *P. argenvillei*.

**Animal bone:** n/a

**Special finds:** n/a

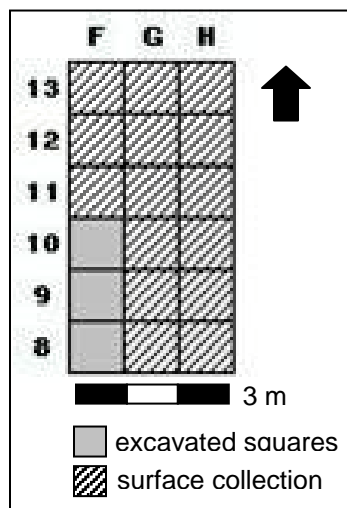
**Evidence of spatial information:** n/a

**Comment:**

## CONCLUDING COMMENT

**Estimated Age:** n/a

**Further mitigatory measures:** No further mitigation required.



**2.1.32 Site No: SK2001/048****Previous names/numbers:** SK422**Geographical location:** (WGS84) 29°40' 56.6S" 17°03' 56.5E"**Mining Block:** SK SK16**Mining area:** SK**Farm name:** SANDKOP**Date of excavation:** 02.03.2002**DESCRIPTION OF LOCAL ENVIRONMENT AND SITE CONTEXT**

One of a series of very small archaeological occurrences situated on the coastal flatlands immediately south of Kleinzee, between the town and the Sandkop haul road security fence. Area is characterised by low shrubs, small dunes, shallow deflation hollows.

**METHOD**

**Size of area excavated:** 0.25m<sup>2</sup> excavated and bulked. All cultural material collected from surface as per sampling strategy used during phase 1 assessments of the area.

**Approximate percentage of site excavated:** Unknown

**Excavation units used:** 50x50cm

**Sieve size:** 1.5mm

**Shell sampling method:** 1 quadrant bulked

**Radiocarbon dating material:** Shell available from bulk

**Summary of stratigraphy:** Surface, sub-surface

**SITE SUMMARY INFORMATION**

**Analysis:** Sorted, not yet analysed

**Stone:** Quartz debitage, 1ugs fragment

**Ceramics:** n/a

**Oes:** n/a

**Shellfish:** *Patella granatina* and *granularis* mix

**Animal bone:** n/a

**Special finds:** n/a

**Evidence of spatial information:** n/a

**Comment:**

**CONCLUDING COMMENT**

**Estimated Age:** n/a

**Further mitigatory measures:** No further mitigation required.

**2.1.33 Site No: SK2001/049**

**Previous names/numbers:** SK423

**Geographical location:** (WGS84) 29°40' 59.0S" 17°04' 00.3E"

**Mining Block:** SK SK16

**Mining area:** SK

**Farm name:** SANDKOP

**Date of excavation:** 03.03.2002

## **DESCRIPTION OF LOCAL ENVIRONMENT AND SITE CONTEXT**

One of a series of very small archaeological occurrences situated on the coastal flatlands immediately south of Kleinzee, between the town and the Sandkop haul road security fence. Area is characterised by low shrubs, small dunes, shallow deflation hollows.

## **METHOD**

**Size of area excavated:** Surface collection and informal trial excavation only.

**Approximate percentage of site excavated:** Unknown

**Excavation units used:** n/a

**Sieve size:** n/a

**Shell sampling method:** n/a

**Radiocarbon dating material:** Marine shell

**Summary of stratigraphy:** Single unit surface site, ephemeral fragmented shell with no depth.

## **SITE SUMMARY INFORMATION**

**Analysis:** Sorted, not yet analysed

**Stone:** Quartz debitage

**Ceramics:** n/a

**Oes:** Present

**Shellfish:** *Patella granatina* and *granularis* mix

**Animal bone:** n/a

**Special finds:** n/a

**Evidence of spatial information:** n/a

**Comment:**

## **CONCLUDING COMMENT**

**Estimated Age:** n/a

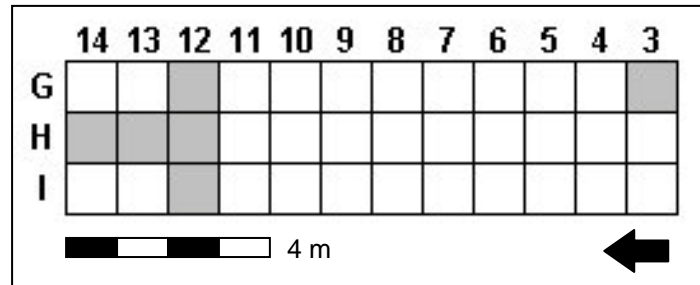
**Further mitigatory measures:** No further mitigation required.

**2.1.34 Site No: SK2001/023****Previous names/numbers:** SK11-3, SK424**Geographical location:** (WGS84) 29°41' 12.1S" 17°03' 59.4E"**Mining Block:** SK SK16**Mining area:** SK**Farm name:** SANDKOP**Date of excavation:** 08.03.2002**DESCRIPTION OF LOCAL ENVIRONMENT AND SITE CONTEXT**

Featureless flat lands with low bushes situated on the south side of the Sandkop haul road (no mans land between haul road and beach road). Bedrock is very close to the surface protruding occasionally. Site is a small scatter of shell very typical of the many of the SK series sites excavated so far.

**METHOD****Size of area excavated:** 6m<sup>2</sup> with surface collection over entire site.**Approximate percentage of site excavated:** Unknown**Excavation units used:** 1m<sup>2</sup>**Sieve size:** 1.5mm**Shell sampling method:** Shell bulk from square A14**Radiocarbon dating material:** Patella granatina**Summary of stratigraphy:** Single unit**SITE SUMMARY INFORMATION****Analysis:** Sorted, not yet analysed**Stone:** Quartz and minor silcrete debitage**Ceramics:** Present**Oes:** Present**Shellfish:** n/a**Animal bone:** n/a**Special finds:** n/a**Evidence of spatial information:** n/a**Comment:****CONCLUDING COMMENT****Estimated Age:** >2000BP**Further mitigatory measures:** No additional measures required.





**2.1.35 Site No: SK2001/024****Previous names/numbers:** SK11-4, SK425**Geographical location:** (WGS84) 29°41' 12.5" S 17°03' 56.5"E**Mining Block:** SK SK16**Mining area:** SK**Farm name:** SANDKOP**Date of excavation:** 08.03.2002**DESCRIPTION OF LOCAL ENVIRONMENT AND SITE CONTEXT**

Featureless flat lands with low bushes situated on the south side of the Sandkop haul road (no mans land between haul road and beach road). Bedrock is very close to the surface protruding occasionally. This site consists of 14 small piles of shell contained within an area of about 1 hectare. Each pile looks very similar and contains the same kind of material. We interpret this as perhaps the remains of a series of shell dumps relating to individual huts of a small community.

**METHOD**

**Size of area excavated:** Samples were excavated from 3 of 14 piles to compare contents. 3m<sup>2</sup> was excavated from pile A.

**Approximate percentage of site excavated:** Unknown

**Excavation units used:** 1x1m.

**Sieve size:** 1.5mm

**Shell sampling method:** 1 bucket of shell from selected piles, surface collection.

**Radiocarbon dating material:** Assorted Patella species

**Summary of stratigraphy:** Single units

**SITE SUMMARY INFORMATION**

**Analysis:** Sorted, not yet analysed

**Stone:** Present

**Ceramics:** Present on some scatters

**Oes:** Present

**Shellfish:** *P. granatina*, *P. granularis* and *P. argenvillei*

**Animal bone:** Present

**Special finds:** n/a

**Evidence of spatial information:** Each of the 14 scatters were surveyed using GPS to get an idea of the spatial layout of the scatters. Scatters form an imperfect circle (see map).

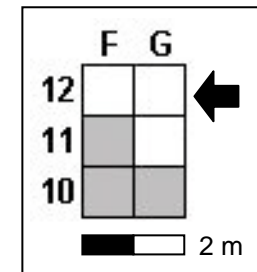
**Comment:**

**CONCLUDING COMMENT**

**Estimated Age:** >2000BP

**Further mitigatory measures:** No further measures required.

SK425A



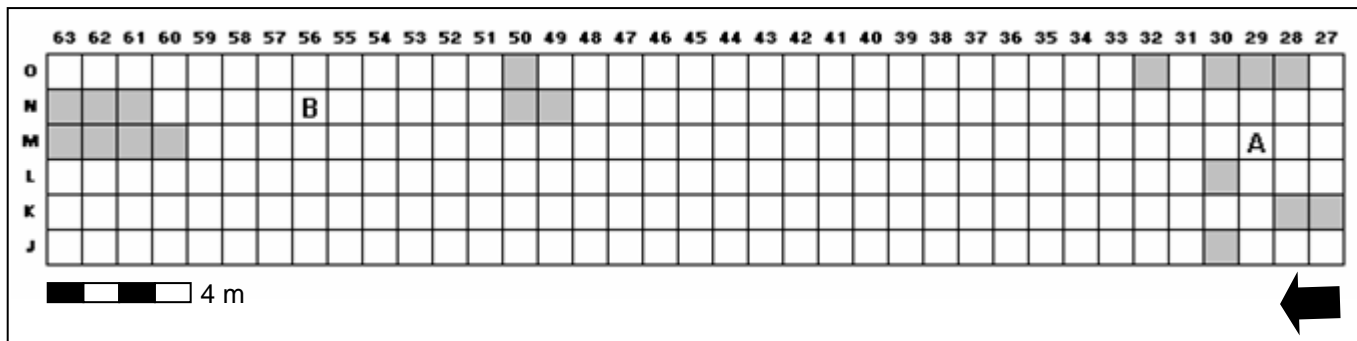
SK425C

**2.1.36 Site No: SK2001/050****Previous names/numbers:** SK301**Geographical location:** (WGS84) 29°41' 13.6" S 17°04' 10.0"E**Mining Block:** SK SK16**Mining area:** SK**Farm name:** SANDKOP**Date of excavation:** 08.03.2002**DESCRIPTION OF LOCAL ENVIRONMENT AND SITE CONTEXT**

The site is located in a line of small deflation hollows in flat open land on the coastal plain due south of SK300 and in the same low dune ridge.

**METHOD****Size of area excavated:** 8m<sup>2</sup> (A) 10m<sup>2</sup> (B)**Approximate percentage of site excavated:** Unknown**Excavation units used:** 1x1m**Sieve size:** 1.5mm**Shell sampling method:** Shell bulk from J30**Radiocarbon dating material:** Marine shell**Summary of stratigraphy:** Single unit**SITE SUMMARY INFORMATION****Analysis:** Sorted, not yet analysed**Stone:** Ccs thumbnail scraper**Ceramics:** n/a**Oes:** n/a**Shellfish:** n/a**Animal bone:** n/a**Special finds:** n/a**Evidence of spatial information:** n/a**Comment:****CONCLUDING COMMENT****Estimated Age:** n/a**Further mitigatory measures:** No additional measures required.





## **2.2 Field season: March 2003**

### **2.2.1 Site No: KN2001/007A**

**Previous names/numbers:** KN6-2A

**Geographical location:** (WGS84) 30°13'17.5"S 17°14'24.6"E

**Mining Block:** KN15-1

**Mining area:** KNC

**Farm name:** KOINGNAAS

**Date of excavation:** 27.03.2003

### **DESCRIPTION OF LOCAL ENVIRONMENT AND SITE CONTEXT**

All but one of the sites (KN6-4) excavated in the KN15-1 block lie on the deflating embankments of an old prospecting trench or in deflations immediately adjacent to it. The high density of material is undoubtedly as a result of the proximity to the shoreline (less than 200 meters at the western edge) and to a rocky headland to which many shellfish adhere. The sites probably formed in marginal deflations which were periodically blown closed. Several of the sites are marked by lenses of shell exposed in the upper part of the side of the trench and these would not have been visible from the surface. The individual site photographs show the specific local context.

### **METHOD**

**Size of area excavated:** 14m<sup>2</sup>, and surface collection of artefacts.

**Approximate percentage of site excavated:** Unknown

**Excavation units used:** 1x1m

**Sieve size:** 1.5mm

**Shell sampling method:** all shell

**Radiocarbon dating material:** shell

**Summary of stratigraphy:** Surface

### **SITE SUMMARY INFORMATION**

**Analysis:** Sorted, not yet analysed

**Stone:** Qtz debitage

**Ceramics:** 2 sherds from surface collection. 1 decorated rim sherd recovered during Phase 1 (incised horizontal bands)

**Oes:** Some fragments

**Shellfish:** *P. argenvillei*/granatina/granularis

**Animal bone:** n/a

**Special finds:** n/a

**Evidence of spatial information:** n/a

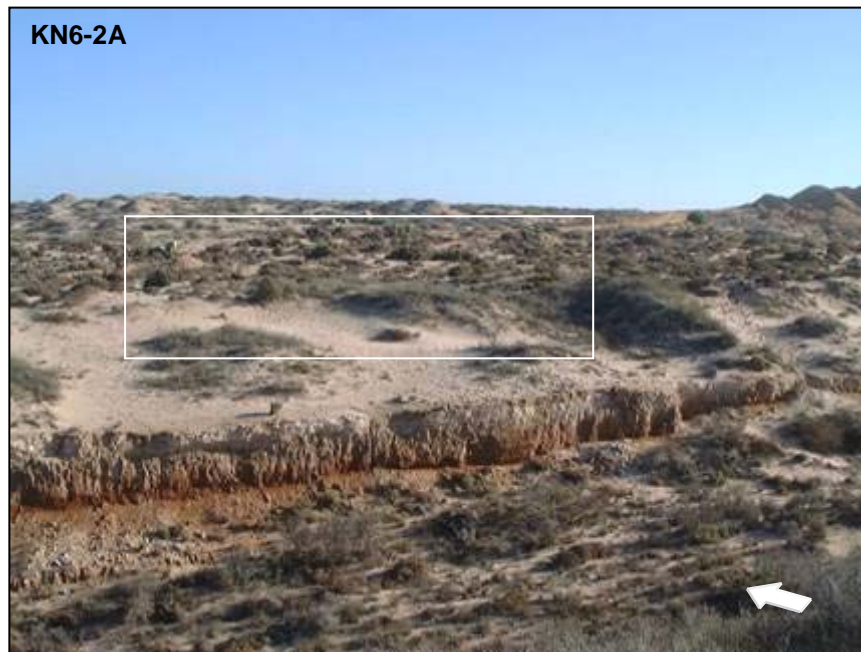
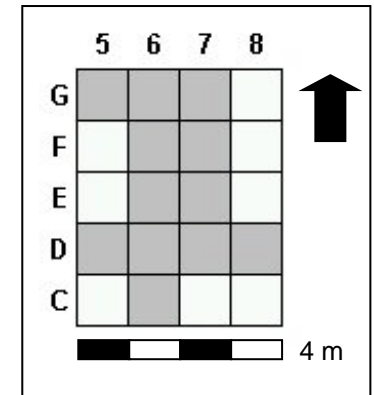
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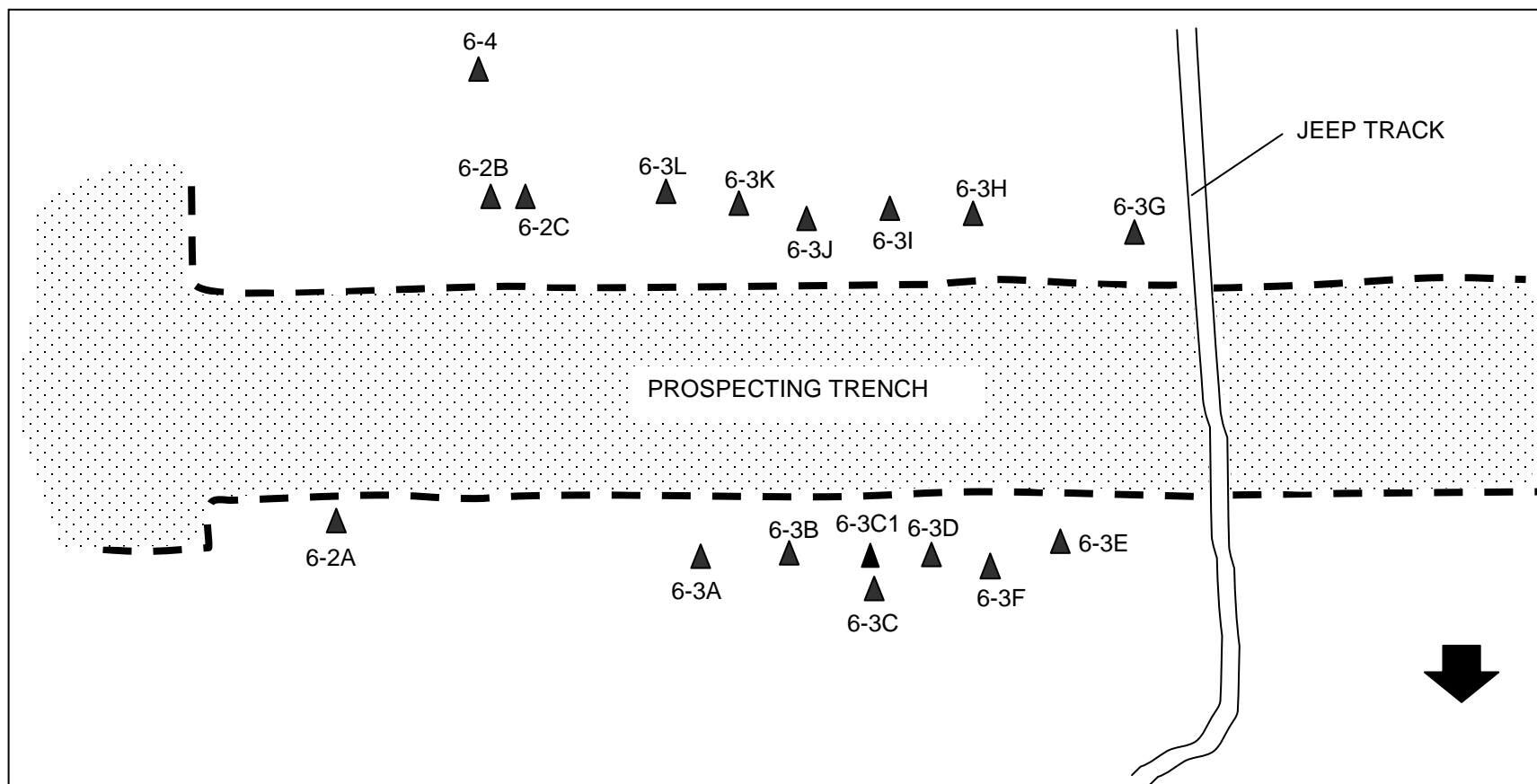
### **CONCLUDING COMMENT**

**Estimated Age:** >2000BP

**Further mitigatory measures:** No further mitigation required





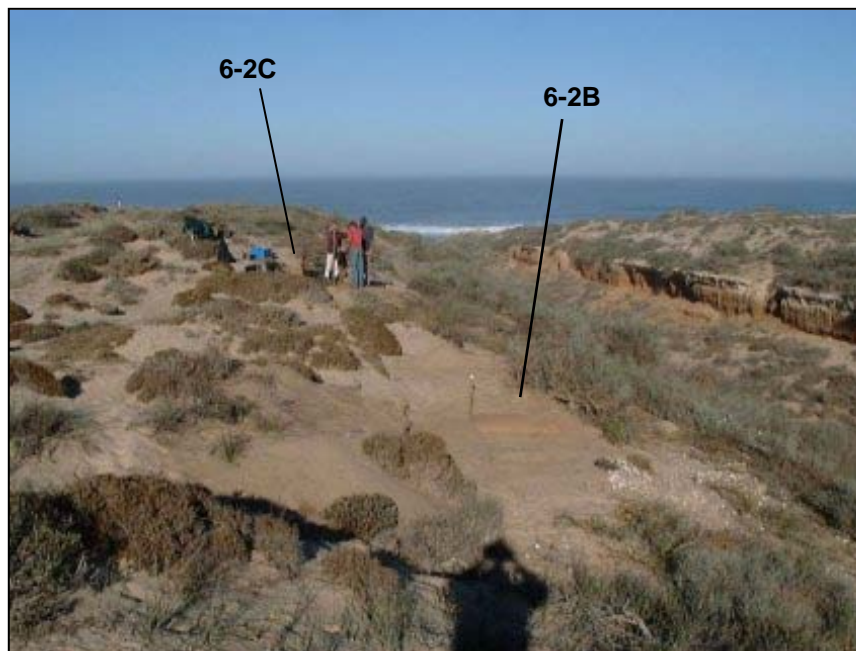
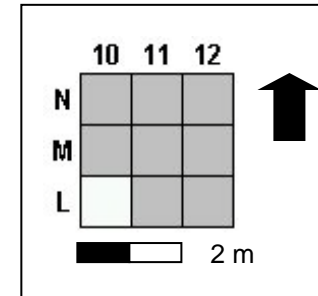
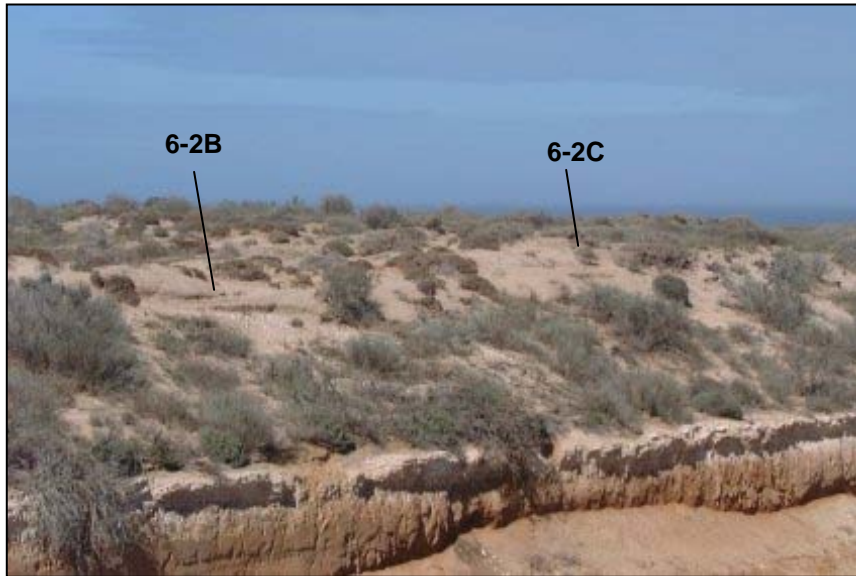


Sketch Plan (not to scale) of excavated archaeological sites in Block KN15-1

**2.2.2 Site No: KN2001/007B****Previous names/numbers:** KN6-2B**Geographical location:** (WGS84) 30°13'19.0"S 17°14'23.4"E**Mining Block:** KN15-1**Mining area:** KNC**Farm name:** KOINGNAAS**Date of excavation:** 14.03.2003**DESCRIPTION OF LOCAL ENVIRONMENT AND SITE CONTEXT**

All but one of the sites (KN6-4) excavated in the KN15-1 block lie on the deflating embankments of an old prospecting trench or in deflations immediately adjacent to it. The high density of material is undoubtedly as a result of the proximity to the shoreline (less than 200 meters at the western edge) and to a rocky headland to which many shellfish adhere. The sites probably formed in marginal deflations which were periodically blown closed. Several of the sites are marked by lenses of shell exposed in the upper part of the side of the trench and these would not have been visible from the surface. The individual site photographs show the specific local context.

**METHOD****Size of area excavated:** 8m<sup>2</sup>**Approximate percentage of site excavated:** Unknown**Excavation units used:** 1x1m**Sieve size:** 1.5mm**Shell sampling method:** Shell from L11 and L12 Surface and LS2 not retained**Radiocarbon dating material:** Shell**Summary of stratigraphy:** Surface, Lower Shell 1 (LS1), Lower Shell 2 (LS2)**SITE SUMMARY INFORMATION****Analysis:** Sorted, not yet analysed**Stone:** Lgs on slope**Ceramics:** Few large sherds on slope. Decorated neck sherd found during Phase 1- incised horizontal lines**Oes:** 1x decorated oes frag on slope**Shellfish:** *P. granatina*, *P. granularis*, *P. argenvillei*. Also 1 *Oxysteles* and 1 razor clam**Animal bone:** Quite a bit of bone (s – sm bov), fish bone**Special finds:** n/a**Evidence of spatial information:** Unknown due to disturbance**Comment:** Pot sherds, lgs and decorated oes found immediately downslope rather than in situ**CONCLUDING COMMENT****Estimated Age:** >2000BP**Further mitigatory measures:** No further mitigation needed



### **2.2.3 Site No: KN2001/007C**

**Previous names/numbers:** KN6-2C

**Geographical location:** (WGS84) 30°13'18.8"S 17°14'24.1"E

**Mining Block:** KN15-1

**Mining area:** KNC

**Farm name:** KOINGNAAS

**Date of excavation:** 13.03.2003

## **DESCRIPTION OF LOCAL ENVIRONMENT AND SITE CONTEXT**

All but one of the sites (KN6-4) excavated in the KN15-1 block lie on the deflating embankments of an old prospecting trench or in deflations immediately adjacent to it. The high density of material is undoubtedly as a result of the proximity to the shoreline (less than 200 meters at the western edge) and to a rocky headland to which many shellfish adhere. The sites probably formed in marginal deflations which were periodically blown closed. Several of the sites are marked by lenses of shell exposed in the upper part of the side of the trench and these would not have been visible from the surface. The individual site photographs show the specific local context. KN6-2C is a lens of shell exposed in the south edge of prospecting pit below white aeolian sands.

## **METHOD**

**Size of area excavated:** 9m<sup>2</sup>

**Approximate percentage of site excavated:** Unknown

**Excavation units used:** 1x1m

**Sieve size:** 1.5mm

**Shell sampling method:** Shell sampled (1bkt per unit)

**Radiocarbon dating material:** Shell

**Summary of stratigraphy:** Surface, Main Shell (MS)

## **SITE SUMMARY INFORMATION**

**Analysis:** Sorted, not yet analysed

**Stone:** Small amount of quartz debitage

**Ceramics:** 1 sherd

**Oes:** Broken, unfinished beads present – 1 whole.

**Shellfish:** *P. argenvillei*, *P. granatina*, *P. granularis* and minimal *P. barbara*

**Animal bone:** Some mammal (steenbok/sheep?), crayfish mandibles

**Special finds:** n/a

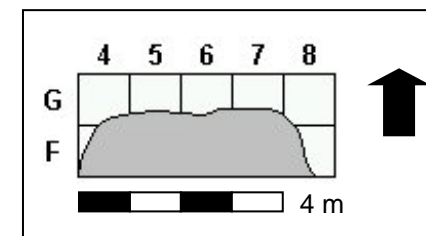
**Evidence of spatial information:** Unknown – the site is a vestige of the original due to prospecting disturbance and subsequent slumping. The midden was also subsurface probably as a result of earthmoving and so we cannot be sure of the remaining extent to the south or if it was part of a complex. The shell did not appear to continue south.

**Comment:** Shell residues sorted on site, surfaces of a few random squares (slumped MS) from the talus scraped and checked for artefactual material.

## **CONCLUDING COMMENT**

**Estimated Age:** >2000BP

**Further mitigatory measures:** No further mitigation required





#### **2.2.4 Site No: KN2001/008A**

**Previous names/numbers:** KN6-3A

**Geographical location:** (WGS84) 30°13'18.6"S 17°14'20.2"E

**Mining Block:** KN15-1

**Mining area:** KNC

**Farm name:** KOINGNAAS

**Date of excavation:** 26.03.2003

#### **DESCRIPTION OF LOCAL ENVIRONMENT AND SITE CONTEXT**

All but one of the sites (KN6-4) excavated in the KN15-1 block lie on the deflating embankments of an old prospecting trench or in deflations immediately adjacent to it. The high density of material is undoubtedly as a result of the proximity to the shoreline (less than 200 meters at the western edge) and to a rocky headland to which many shellfish adhere. The sites probably formed in marginal deflations which were periodically blown closed. Several of the sites are marked by lenses of shell exposed in the upper part of the side of the trench and these would not have been visible from the surface. The individual site photographs show the specific local context.

#### **METHOD**

**Size of area excavated:** 12m<sup>2</sup>, and random surface collection over approximately 25m<sup>2</sup>

**Approximate percentage of site excavated:** Unknown

**Excavation units used:** 1x1m

**Sieve size:** 1.5mm

**Shell sampling method:** all shell

**Radiocarbon dating material:** shell

**Summary of stratigraphy:** Surface

#### **SITE SUMMARY INFORMATION**

**Analysis:** Sorted, not yet analysed

**Stone:** Qtz and ccs debitage

**Ceramics:** n/a

**Oes:** Some fragments

**Shellfish:** n/a

**Animal bone:** n/a

**Special finds:** n/a

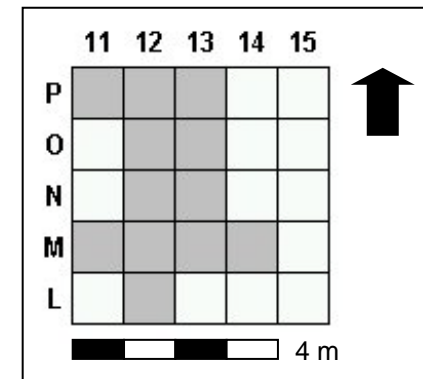
**Evidence of spatial information:** n/a

**Comment:**

#### **CONCLUDING COMMENT**

**Estimated Age:** n/a

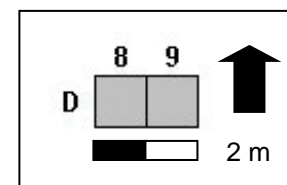
**Further mitigatory measures:** No further mitigation required.



**2.2.5 Site No: KN2001/008B****Previous names/numbers:** KN6-3B**Geographical location:** (WGS84) 30°13'19.0"S 17°14'18.7"E**Mining Block:** KN15-1**Mining area:** KNC**Farm name:** KOINGNAAS**Date of excavation:** 26.03.2003**DESCRIPTION OF LOCAL ENVIRONMENT AND SITE CONTEXT**

All but one of the sites (KN6-4) excavated in the KN15-1 block lie on the deflating embankments of an old prospecting trench or in deflations immediately adjacent to it. The high density of material is undoubtedly as a result of the proximity to the shoreline (less than 200 meters at the western edge) and to a rocky headland to which many shellfish adhere. The sites probably formed in marginal deflations which were periodically blown closed. Several of the sites are marked by lenses of shell exposed in the upper part of the side of the trench and these would not have been visible from the surface. The individual site photographs show the specific local context.

**METHOD****Size of area excavated:** 2m<sup>2</sup>, with random surface collection also undertaken**Approximate percentage of site excavated:** Unknown**Excavation units used:** 1x1m**Sieve size:** 1.5mm**Shell sampling method:** all shell**Radiocarbon dating material:** 1 bag of *P. argenvillei*, 1 bag *P. granatina* additional to excavated shell**Summary of stratigraphy:** Surface**SITE SUMMARY INFORMATION****Analysis:** Sorted, not yet analysed**Stone:** 1 lgs on deflating slope**Ceramics:** n/a**Oes:** n/a**Shellfish:** n/a**Animal bone:** n/a**Special finds:** n/a**Evidence of spatial information:** n/a**Comment:****CONCLUDING COMMENT****Estimated Age:** n/a**Further mitigatory measures:** No further mitigation needed



### 2.2.6 Site No: KN2001/008C

**Previous names/numbers:** KN6-3C

**Geographical location:** (WGS84) 30°13'18.9"S 17°14'17.9"E

**Mining Block:** KN15-1

**Mining area:** KNC

**Farm name:** KOINGNAAS

**Date of excavation:** 18.03.2003 - 28.03.2003

## DESCRIPTION OF LOCAL ENVIRONMENT AND SITE CONTEXT

All but one of the sites (KN6-4) excavated in the KN15-1 block lie on the deflating embankments of an old prospecting trench or in deflations immediately adjacent to it. The high density of material is undoubtedly as a result of the proximity to the shoreline (less than 200 meters at the western edge) and to a rocky headland to which many shellfish adhere. The sites probably formed in marginal deflations which were periodically blown closed. Several of the sites are marked by lenses of shell exposed in the upper part of the side of the trench and these would not have been visible from the surface. The individual site photographs show the specific local context.

## METHOD

**Size of area excavated:** 78m<sup>2</sup>

**Approximate percentage of site excavated:** Unknown

**Excavation units used:** 1x1m

**Sieve size:** 1.5mm, 3mm

**Shell sampling method:** up to 1 bkt of shell/unit/square

**Radiocarbon dating material:** shell

**Summary of stratigraphy:** Surface – deflated surface scatter, Surface Midden (SM) – in situ shell, Hearth, Surface Midden Upper (SMU) – a refinement of SM to indicate that in places an upper unit and a lower unit can be recognised (SML), Surface Midden Lower (SML), Top Midden (TM) – refers to in situ midden in the southern area of shell, Surface 1 and 2 (SURF1, SURF2) – only taken in a few squares as a test. SURF1 = SMU and SURF2 = SML, Surface 3 (SURF3) – seen in limited areas only. Mussel Midden (MM), Mussel Midden Lower (MML), Black Mussel Patch (BMP), Top Midden 2 (TM2).

## SITE SUMMARY INFORMATION

**Analysis:** All the small finds have been sorted, packaged and labelled. The flaked stone has been fully analysed. In total there are 2829 flaked artefacts, including 136 formal tools. The assemblage includes segments and backed scrapers as well as many other types of backed artefacts and scrapers. A significant inclusion is a total of 26 drills/borers.

**Stone:** Segment, bkd scraper, bkd point, borer. Both qtz and ccs debitage are present. Grindstone with ochre staining

**Ceramics:** n/a

**Oes:** Fragments and beads

**Shellfish:** *P. granatina*, *P. granularis*, *P. argenvillei*, *P. barbara*

**Animal bone:** Quite heavily fragmented for marrow removal, also large quantities of kreek

**Special finds:** n/a

**Evidence of spatial information:** The site is composed of 2 distinct shell areas. Within the northernmost area are hearth remains as well as clusters of large manuports and grindstones.

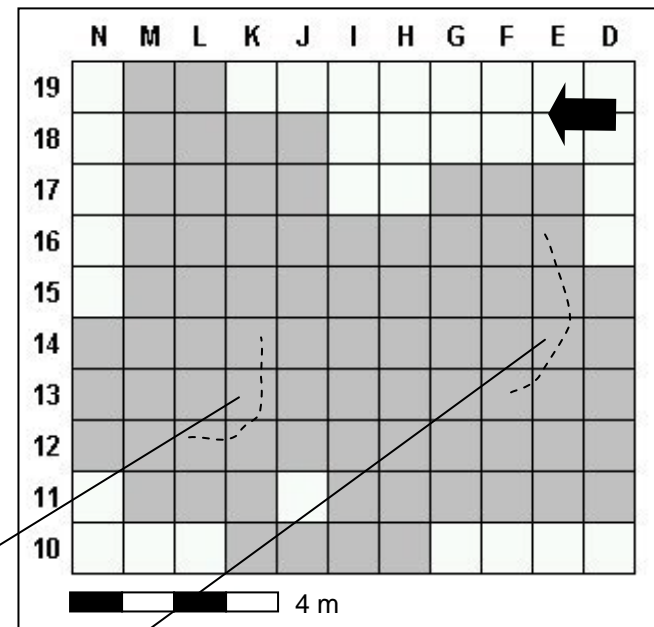
**Comment:**

## CONCLUDING COMMENT

**Estimated Age:** 3000-5000BP

**Further mitigatory measures:** No further mitigation needed





**2.2.7 Site No: KN2001/008C1****Previous names/numbers:** KN6-3C1**Geographical location:** n/a**Mining Block:** KN15-1**Mining area:** KNC**Farm name:** KOINGNAAS**Date of excavation:** 24.03.2003**DESCRIPTION OF LOCAL ENVIRONMENT AND SITE CONTEXT:**

A disturbed shell scatter where no in situ lenses were detected in section. A large amount of quartz debitage was associated with the deflated shell.

**METHOD****Size of area excavated:** random surface collection and some sieving of deposit**Approximate percentage of site excavated:** Unknown**Excavation units used:** random**Sieve size:** 1.5mm**Shell sampling method:** Some shell retained**Radiocarbon dating material:** shell**Summary of stratigraphy:** Surface**SITE SUMMARY INFORMATION****Analysis:** Sorted, not yet analysed**Stone:** Quartz debitage and minimal ccs**Ceramics:** n/a**Oss:** minimal**Shellfish:** *P. granatina*, *P. argenvillei* (seem very large)**Animal bone:** Minimal bone and crayfish**Special finds:** n/a**Evidence of spatial information:** n/a**Comment:** n/a**CONCLUDING COMMENT****Estimated Age:** n/a**Further mitigatory measures:** No further mitigation required.



**2.2.8 Site No: KN2001/008D****Previous names/numbers:** KN6-3D**Geographical location:** (WGS84) 30°13'19.3"S 17°14'17.5"E**Mining Block:** KN15-1**Mining area:** KNC**Farm name:** KOINGNAAS**Date of excavation:** 24.03.2003**DESCRIPTION OF LOCAL ENVIRONMENT AND SITE CONTEXT**

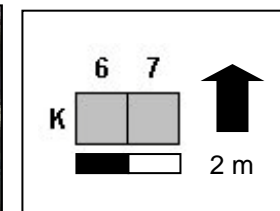
All but one of the sites (KN6-4) excavated in the KN15-1 block lie on the deflating embankments of an old prospecting trench or in deflations immediately adjacent to it. The high density of material is undoubtedly as a result of the proximity to the shoreline (less than 200 meters at the western edge) and to a rocky headland to which many shellfish adhere. The sites probably formed in marginal deflations which were periodically blown closed. Several of the sites are marked by lenses of shell exposed in the upper part of the side of the trench and these would not have been visible from the surface. The individual site photographs show the specific local context.

**METHOD****Size of area excavated:** 1m<sup>2</sup>**Approximate percentage of site excavated:** Unknown**Excavation units used:** 1x1m**Sieve size:** 1.5mm**Shell sampling method:** up to 1 bkt of shell/unit/square**Radiocarbon dating material:** shell**Summary of stratigraphy:** Surface**SITE SUMMARY INFORMATION****Analysis:** Sorted, not yet analysed**Stone:** Quartz debitage**Ceramics:** n/a**Oes:** n/a**Shellfish:** *P. granatina*, *P. argenvillei* and some thinly scattered *C. meridionalis***Animal bone:** Minimal bone and crayfish**Special finds:** n/a**Evidence of spatial information:****Comment:** Also did surface collection and took two additional shell samples (*granatina* and *choromitilis*) from the surface for dating.**CONCLUDING COMMENT****Estimated Age:** n/a**Further mitigatory measures:** No further mitigation required.

**2.2.9 Site No: KN2001/008E****Previous names/numbers:** KN6-3E**Geographical location:** (WGS84) 30°13'19.5"S 17°14'16.9"E**Mining Block:** KN15-1**Mining area:** KNC**Farm name:** KOINGNAAS**Date of excavation:** 18.03.2003**DESCRIPTION OF LOCAL ENVIRONMENT AND SITE CONTEXT**

All but one of the sites (KN6-4) excavated in the KN15-1 block lie on the deflating embankments of an old prospecting trench or in deflations immediately adjacent to it. The high density of material is undoubtedly as a result of the proximity to the shoreline (less than 200 meters at the western edge) and to a rocky headland to which many shellfish adhere. The sites probably formed in marginal deflations which were periodically blown closed. Several of the sites are marked by lenses of shell exposed in the upper part of the side of the trench and these would not have been visible from the surface. The individual site photographs show the specific local context.

**METHOD****Size of area excavated:** 2m<sup>2</sup>**Approximate percentage of site excavated:** Unknown**Excavation units used:** 1x1m**Sieve size:** 1.5mm**Shell sampling method:** up to 1 bkt of shell/unit/square**Radiocarbon dating material:** shell**Summary of stratigraphy:** Surface**SITE SUMMARY INFORMATION****Analysis:** Sorted, not yet analysed**Stone:** Some qtz and ccs debitage**Ceramics:** n/a**Oes:** n/a**Shellfish:** n/a**Animal bone:** Some crayfish mandibles**Special finds:** n/a**Evidence of spatial information:** n/a**Comment:** The scatter is a slumped shell lens**CONCLUDING COMMENT****Estimated Age:** n/a**Further mitigatory measures:** No further measures required.

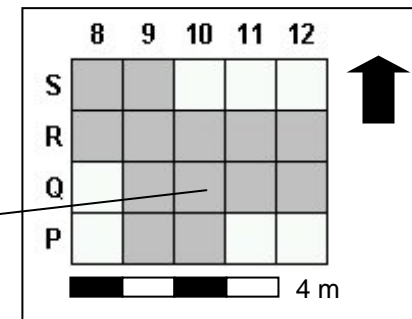


**2.2.10 Site No: KN2001/008F****Previous names/numbers:** KN6-3F**Geographical location:** (WGS84) 30°13'19.6"S 17°14'16.4"E**Mining Block:** KN15-1**Mining area:** KNC**Farm name:** KOINGNAAS**Date of excavation:** 18.03.2003**DESCRIPTION OF LOCAL ENVIRONMENT AND SITE CONTEXT**

All but one of the sites (KN6-4) excavated in the KN15-1 block lie on the deflating embankments of an old prospecting trench or in deflations immediately adjacent to it. The high density of material is undoubtedly as a result of the proximity to the shoreline (less than 200 meters at the western edge) and to a rocky headland to which many shellfish adhere. The sites probably formed in marginal deflations which were periodically blown closed. Several of the sites are marked by lenses of shell exposed in the upper part of the side of the trench and these would not have been visible from the surface. The individual site photographs show the specific local context.

**METHOD****Size of area excavated:** 13m<sup>2</sup> and surface collection for additional artefactual material**Approximate percentage of site excavated:** Unknown**Excavation units used:** 1x1m**Sieve size:** 1.5mm**Shell sampling method:** up to 1 bkt of shell/unit/square**Radiocarbon dating material:** shell**Summary of stratigraphy:** Surface, Below Surface (1 square only)**SITE SUMMARY INFORMATION****Analysis:** Sorted, not yet analysed**Stone:** n/a**Ceramics:** n/a**Oes:** n/a**Shellfish:** More P.barbara than before?**Animal bone:** n/a**Special finds:** n/a**Evidence of spatial information:****Comment:** Although we started to remove lower shell "as below surface" we soon realised that both units were one and the same.**CONCLUDING COMMENT****Estimated Age:** n/a**Further mitigatory measures:** No further mitigation required.

KN6-3F



KN6-3F

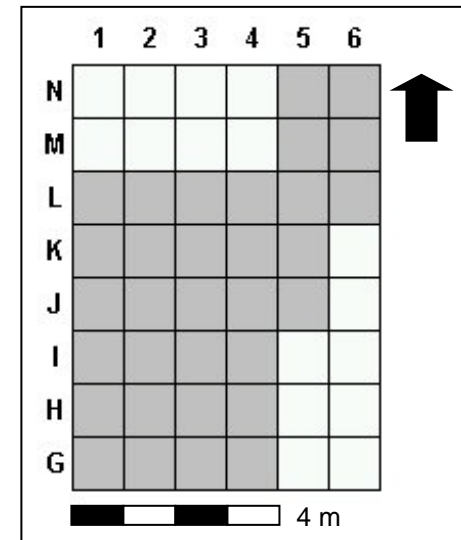


**2.2.11 Site No: KN2001/008G****Previous names/numbers:** (WGS84) 30°13'21.2"S 17°14'15.4"**Geographical location:** KN6-3G**Mining Block:** KN15-1**Mining area:** KNC**Farm name:** KOINGNAAS**Date of excavation:** 10.03.2003**DESCRIPTION OF LOCAL ENVIRONMENT AND SITE CONTEXT**

All but one of the sites (KN6-4) excavated in the KN15-1 block lie on the deflating embankments of an old prospecting trench or in deflations immediately adjacent to it. The high density of material is undoubtedly as a result of the proximity to the shoreline (less than 200 meters at the western edge) and to a rocky headland to which many shellfish adhere. The sites probably formed in marginal deflations which were periodically blown closed. Several of the sites are marked by lenses of shell exposed in the upper part of the side of the trench and these would not have been visible from the surface. The individual site photographs show the specific local context.

**METHOD****Size of area excavated:** 32m<sup>2</sup>**Approximate percentage of site excavated:** Unknown**Excavation units used:** 1m<sup>2</sup>**Sieve size:** 1.5mm**Shell sampling method:** All shell collected**Radiocarbon dating material:** shell**Summary of stratigraphy:** surface unit only – 5cm thick**SITE SUMMARY INFORMATION****Analysis:** Sorted, not yet analysed**Stone:** n/a**Ceramics:** n/a**Oes:** n/a**Shellfish:** n/a**Animal bone:** n/a**Special finds:** n/a**Evidence of spatial information:** n/a**Comment:****CONCLUDING COMMENT****Estimated Age:** n/a**Further mitigatory measures:** No further mitigation required.

KN6-3G

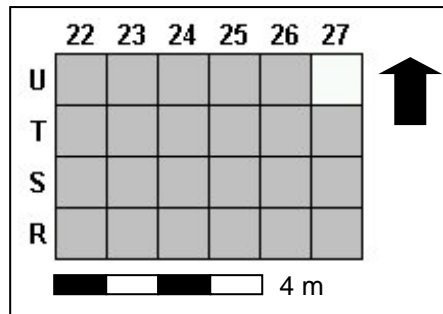




**2.2.12 Site No: KN2001/008H****Previous names/numbers:** KN6-3H**Geographical location:** (WGS84) 30°13'20.7"S 17°14'17.3"E**Mining Block:** KN15-1**Mining area:** KNC**Farm name:** KOINGNAAS**Date of excavation:** 17.03.2003 - 18.03.2003**DESCRIPTION OF LOCAL ENVIRONMENT AND SITE CONTEXT**

All but one of the sites (KN6-4) excavated in the KN15-1 block lie on the deflating embankments of an old prospecting trench or in deflations immediately adjacent to it. The high density of material is undoubtedly as a result of the proximity to the shoreline (less than 200 meters at the western edge) and to a rocky headland to which many shellfish adhere. The sites probably formed in marginal deflations which were periodically blown closed. Several of the sites are marked by lenses of shell exposed in the upper part of the side of the trench and these would not have been visible from the surface. The individual site photographs show the specific local context.

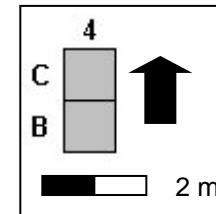
**METHOD****Size of area excavated:** 23m<sup>2</sup>**Approximate percentage of site excavated:** Unknown**Excavation units used:** 1x1m**Sieve size:** 1.5mm**Shell sampling method:** all shell**Radiocarbon dating material:** shell**Summary of stratigraphy:** Surface**SITE SUMMARY INFORMATION****Analysis:** Sorted, not yet analysed**Stone:** n/a**Ceramics:** n/a**Oes:** n/a**Shellfish:** n/a**Animal bone:** n/a**Special finds:** n/a**Evidence of spatial information:** n/a**Comment:****CONCLUDING COMMENT****Estimated Age:** n/a**Further mitigatory measures:** No further mitigation required.



**2.2.13 Site No: KN2001/008I****Previous names/numbers:** KN6-3I**Geographical location:** (WGS84) 30°13'S 17°14'E**Mining Block:** KN15-1**Mining area:** KNC**Farm name:** KOINGNAAS**Date of excavation:** 18.03.2003**DESCRIPTION OF LOCAL ENVIRONMENT AND SITE CONTEXT**

All but one of the sites (KN6-4) excavated in the KN15-1 block lie on the deflating embankments of an old prospecting trench or in deflations immediately adjacent to it. The high density of material is undoubtedly as a result of the proximity to the shoreline (less than 200 meters at the western edge) and to a rocky headland to which many shellfish adhere. The sites probably formed in marginal deflations which were periodically blown closed. Several of the sites are marked by lenses of shell exposed in the upper part of the side of the trench and these would not have been visible from the surface. The individual site photographs show the specific local context.

**METHOD****Size of area excavated:** 2m<sup>2</sup> and collected additional artefactual material from surface**Approximate percentage of site excavated:** Unknown**Excavation units used:** 1x1m**Sieve size:** 1.5mm**Shell sampling method:** up to 1 bkt of shell/unit/square**Radiocarbon dating material:** shell**Summary of stratigraphy:** Surface**SITE SUMMARY INFORMATION****Analysis:** Sorted, not yet analysed**Stone:** Some quartz debitage**Ceramics:** n/a**Oes:** n/a**Shellfish:** n/a**Animal bone:** n/a**Special finds:** n/a**Evidence of spatial information:** n/a**Comment:** No evidence of in situ shell lenses and the site is therefore most likely slump material.**CONCLUDING COMMENT****Estimated Age:** n/a**Further mitigatory measures:** No further mitigation required.



KN6-3I

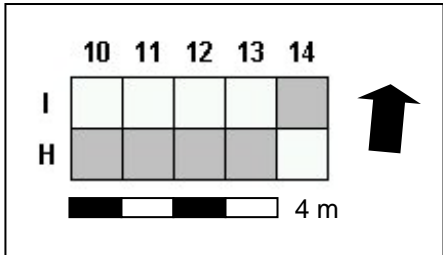


**2.2.14 Site No: KN2001/008J****Previous names/numbers:** KN6-3J**Geographical location:** (WGS84) 30°13'20.1"S 17°14'18.9"E**Mining Block:** KN15-1**Mining area:** KNC**Farm name:** KOINGNAAS**Date of excavation:** 17.03.2003**DESCRIPTION OF LOCAL ENVIRONMENT AND SITE CONTEXT**

All but one of the sites (KN6-4) excavated in the KN15-1 block lie on the deflating embankments of an old prospecting trench or in deflations immediately adjacent to it. The high density of material is undoubtedly as a result of the proximity to the shoreline (less than 200 meters at the western edge) and to a rocky headland to which many shellfish adhere. The sites probably formed in marginal deflations which were periodically blown closed. Several of the sites are marked by lenses of shell exposed in the upper part of the side of the trench and these would not have been visible from the surface. The individual site photographs show the specific local context.

**METHOD****Size of area excavated:** 4m<sup>2</sup>**Approximate percentage of site excavated:** Unknown**Excavation units used:** 1x1m**Sieve size:** 1.5mm**Shell sampling method:** up to 1 bkt of shell/unit/square**Radiocarbon dating material:** shell**Summary of stratigraphy:** Surface, Limpet Lens (LL)**SITE SUMMARY INFORMATION****Analysis:** Sorted, not yet analysed**Stone:** n/a**Ceramics:** 1 sherd**Oes:** n/a**Shellfish:** *P. granatina*, *P. granularis* and a few *P. argenvillei***Animal bone:** Many crayfish mandibles**Special finds:** n/a**Evidence of spatial information:****Comment:** The exposed shell lens was only the very edge of a shell dump with most having been lost to slumping and disturbance.**CONCLUDING COMMENT****Estimated Age:** >2000BP**Further mitigatory measures:** No further mitigation required.

KN6-3J



KN6-3J





**2.2.15 Site No: KN2001/008K**

**Previous names/numbers:** KN6-3K

**Geographical location:** (WGS84) 30°13'20.1"S 17°14'19.9"E

**Mining Block:** KN15-1

**Mining area:** KNC

**Farm name:** KOINGNAAS

**Date of excavation:** 15.03.2003

## **DESCRIPTION OF LOCAL ENVIRONMENT AND SITE CONTEXT**

All but one of the sites (KN6-4) excavated in the KN15-1 block lie on the deflating embankments of an old prospecting trench or in deflations immediately adjacent to it. The high density of material is undoubtedly as a result of the proximity to the shoreline (less than 200 meters at the western edge) and to a rocky headland to which many shellfish adhere. The sites probably formed in marginal deflations which were periodically blown closed. Several of the sites are marked by lenses of shell exposed in the upper part of the side of the trench and these would not have been visible from the surface. The individual site photographs show the specific local context.

## **METHOD**

**Size of area excavated:** 8m<sup>2</sup>

**Approximate percentage of site excavated:** Unknown

**Excavation units used:** 1x1m

**Sieve size:** 1.5mm

**Shell sampling method:** Shell units sub-sampled (1 bkt shell per/unit)

**Radiocarbon dating material:** Shell

**Summary of stratigraphy:** Surface, Sub-surface

## **SITE SUMMARY INFORMATION**

**Analysis:** Sorted, not yet analysed

**Stone:** Ccs and qtz, some material with backing/retouch

**Ceramics:** n/a

**Oes:** Small beads, 1 decorated frag

**Shellfish:** C.meridionalis in surface, P.granatina/granularis in sub-surface

**Animal bone:** Bone and crayfish mandibles

**Special finds:** n/a

**Evidence of spatial information:** n/a

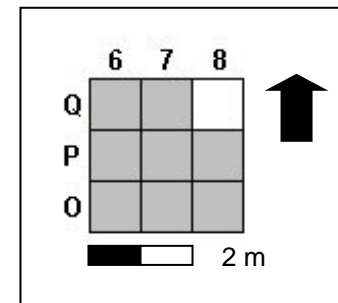
**Comment:** Mussel found in the surface unit while the sub-surface does not contain any. This appears to be single shell dump that was re-used and showing varying shell species exploitation (either during a single visit or over time).

## **CONCLUDING COMMENT**

**Estimated Age:** 3000 – 5000BP

**Further mitigatory measures:** No further mitigation needed.

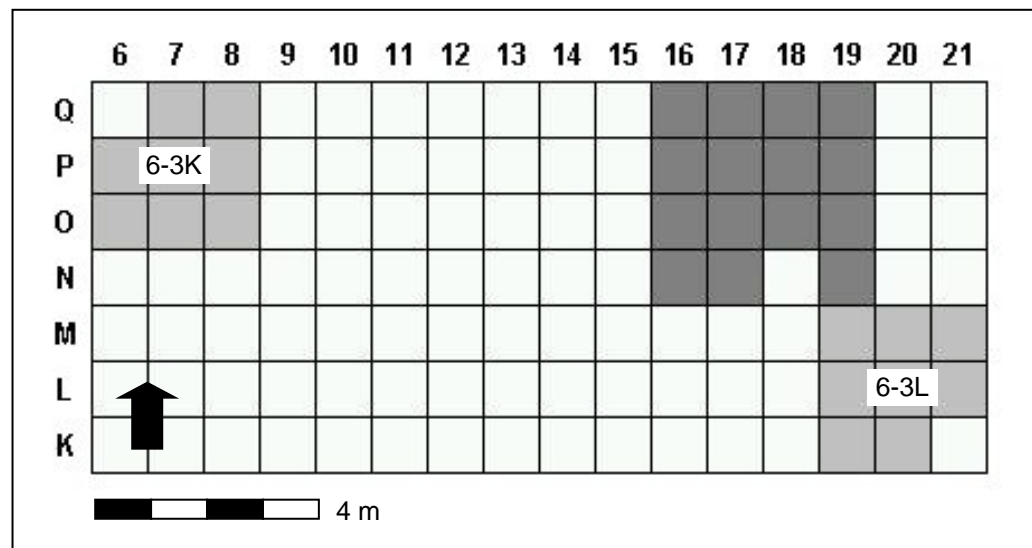
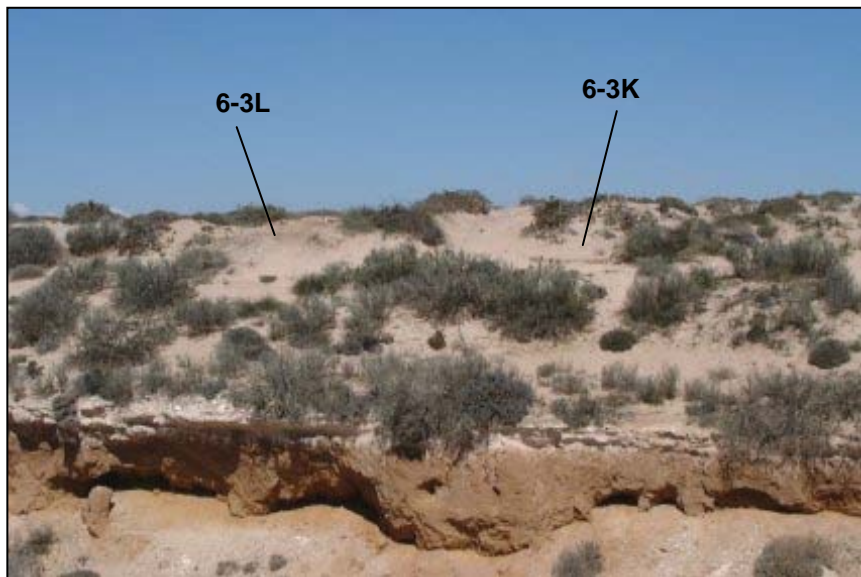
KN6-3K



**2.2.16 Site No: KN2001/008L****Previous names/numbers:** KN6-3L**Geographical location:** (WGS84) 30°13'20.1"S 17°14'20.2"E**Mining Block:** KN15-1**Mining area:** KNC**Farm name:** KOINGNAAS**Date of excavation:** 15.03.2003 - 17.03.2003**DESCRIPTION OF LOCAL ENVIRONMENT AND SITE CONTEXT**

All but one of the sites (KN6-4) excavated in the KN15-1 block lie on the deflating embankments of an old prospecting trench or in deflations immediately adjacent to it. The high density of material is undoubtedly as a result of the proximity to the shoreline (less than 200 meters at the western edge) and to a rocky headland to which many shellfish adhere. The sites probably formed in marginal deflations which were periodically blown closed. Several of the sites are marked by lenses of shell exposed in the upper part of the side of the trench and these would not have been visible from the surface. The individual site photographs show the specific local context.

**METHOD****Size of area excavated:** 9m<sup>2</sup> (excavation), 20m<sup>2</sup> (slope collection)**Approximate percentage of site excavated:****Excavation units used:** 1x1m**Sieve size:** 1.5mm**Shell sampling method:** up to 1 bkt of shell/unit/square**Radiocarbon dating material:** shell**Summary of stratigraphy:** Surface, Patella Midden (PM)**SITE SUMMARY INFORMATION****Analysis:** Sorted, not yet analysed**Stone:** Lithics present particularly in slope collection, backed formalis present (bkd scrapers, bkd bladelets)**Ceramics:** n/a**Oes:** 1 small bead**Shellfish:** *P. granatina*, *P. granularis* and *P. argenvillei*. Some *Burnupena***Animal bone:** n/a**Special finds:** n/a**Evidence of spatial information:** n/a**Comment:****CONCLUDING COMMENT****Estimated Age:** >2000BP**Further mitigatory measures:** No further mitigation needed.



Site No: KN2001/009

**Previous names/numbers:** KN6-4

**Geographical location:** (WGS84) 30°13'22.1"S 17°14'23.7"

**Mining Block:** KN15-1

**Mining area:** KNC

**Farm name:** KOINGNAAS

**Date of excavation:** 10.03.2003 -12.03.2003

## **DESCRIPTION OF LOCAL ENVIRONMENT AND SITE CONTEXT**

All but one of the sites (KN6-4) excavated in the KN15-1 block lie on the deflating embankments of an old prospecting trench or in deflations immediately adjacent to it. The high density of material is undoubtedly as a result of the proximity to the shoreline (less than 200 meters at the western edge) and to a rocky headland to which many shellfish adhere. The sites probably formed in marginal deflations which were periodically blown closed. Several of the sites are marked by lenses of shell exposed in the upper part of the side of the trench and these would not have been visible from the surface. The individual site photographs show the specific local context.

## **METHOD**

**Size of area excavated:** 35m<sup>2</sup>

**Approximate percentage of site excavated:** ±80%

**Excavation units used:** 1m<sup>2</sup>

**Sieve size:** 1.5mm

**Shell sampling method:** All shell collected

**Radiocarbon dating material:** Shell

**Summary of stratigraphy:** Surface, Below surface

## **SITE SUMMARY INFORMATION**

**Analysis:** Sorted, not yet analysed

**Stone:** No grindstones

**Ceramics:** n/a

**Oes:** n/a

**Shellfish:** n/a

**Animal bone:** n/a

**Special finds:** n/a

**Evidence of spatial information:** There are distinct piles of shell probably associated with individual activity areas.

**Comment:**

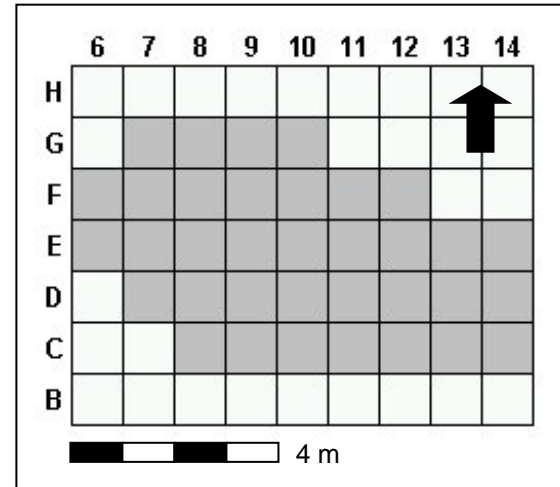
## **CONCLUDING COMMENT**

**Estimated Age:** n/a

**Further mitigatory measures:** No further mitigation required.



KN6-4



KN6-4



KN6-4





## 2.3 Field season: June 2003

### 2.3.1 Site No: LK2001/015A,B,C,D,E,F,G,H,I

**Previous names/numbers:** LK07-1A,B,C,D,E,F,G,H,I

**Geographical location:** (WGS84)

Original 2001 readings

A: 30°21'38.7"S 17°17'36.1"E;  
B: 30°21'38.9"S 17°17'36.1"E;  
C: 30°21'38.4"S 17°17'36.2"E;  
D: 30°21'38.2"S 17°17'35.8"E;  
E: 30°21'37.7"S 17°17'36.2"E;  
F: 30°21'38.2"S 17°17'36.2"E;  
G: 30°21'38.9"S 17°17'36.6"E;  
H: 30°21'39.4"S 17°17'36.5"E;  
I: 30°21'39.6"S 17°17'36.2"E;

Location of excavated areas

1. 30°21'39.2"S 17°17'36.9"E  
2. 30°21'38.7"S 17°17'36.2"E  
3. 30°21'38.5"S 17°17'36.0"E  
4. 30°21'38.0"S 17°17'35.8"E  
5. 30°21'37.9"S 17°17'35.9"E  
6. 30°21'37.9"S 17°17'35.5"E  
7. 30°21'37.6"S 17°17'35.7"E  
8. 30°21'37.7"S 17°17'36.1"E  
9. 30°21'37.9"S 17°17'36.3"E  
10. 30°21'37.6"S 17°17'36.3"E  
11. 30°21'37.5"S 17°17'36.4"E

**Mining Block:** LK R1B

**Mining area:** KNC

**Farm name:** LANGKLIP

**Date of excavation:** 30.06.2003 - 04.07.2003

### DESCRIPTION OF LOCAL ENVIRONMENT AND SITE CONTEXT

The site complex lies on a flat vegetated plain approximately 500-800 meters from the present rocky shoreline. A large dune cordon is present to the east. The site does not focus on any form of deflation. A number of shell scatters are found to cluster in a relatively small area.

### METHOD

**Size of area excavated:** 43m<sup>2</sup> (from 10 discrete shell patches)

**Approximate percentage of site excavated:** Unknown

**Excavation units used:** 1x1m

**Sieve size:** 1.5mm

**Shell sampling method:** All shell retained

**Radiocarbon dating material:** Marine shell and charcoal

**Summary of stratigraphy:** Surface (Surf), Lower, Hearth/Ash, Under Lower, Below Lower, Argenvillei Patch.

### SITE SUMMARY INFORMATION

**Analysis:** In progress

**Stone:** Some quartz debitage on one shell patch

**Ceramics:** Pot sherds found on one patch

**Oes:** Fragments found on all patches, Large beads found on 2 patches, 1 small bead also found

**Shellfish:** *P. granatina*, *P. granularis* and *P. argenvillei*. Some whelk and *P. barbara*

**Animal bone:** Bone found on all patches but most bone around hearth. Much tortoise and steenbok. Many crayfish mandibles.

**Special finds:** 1 decorated bone (scapula) fragment found

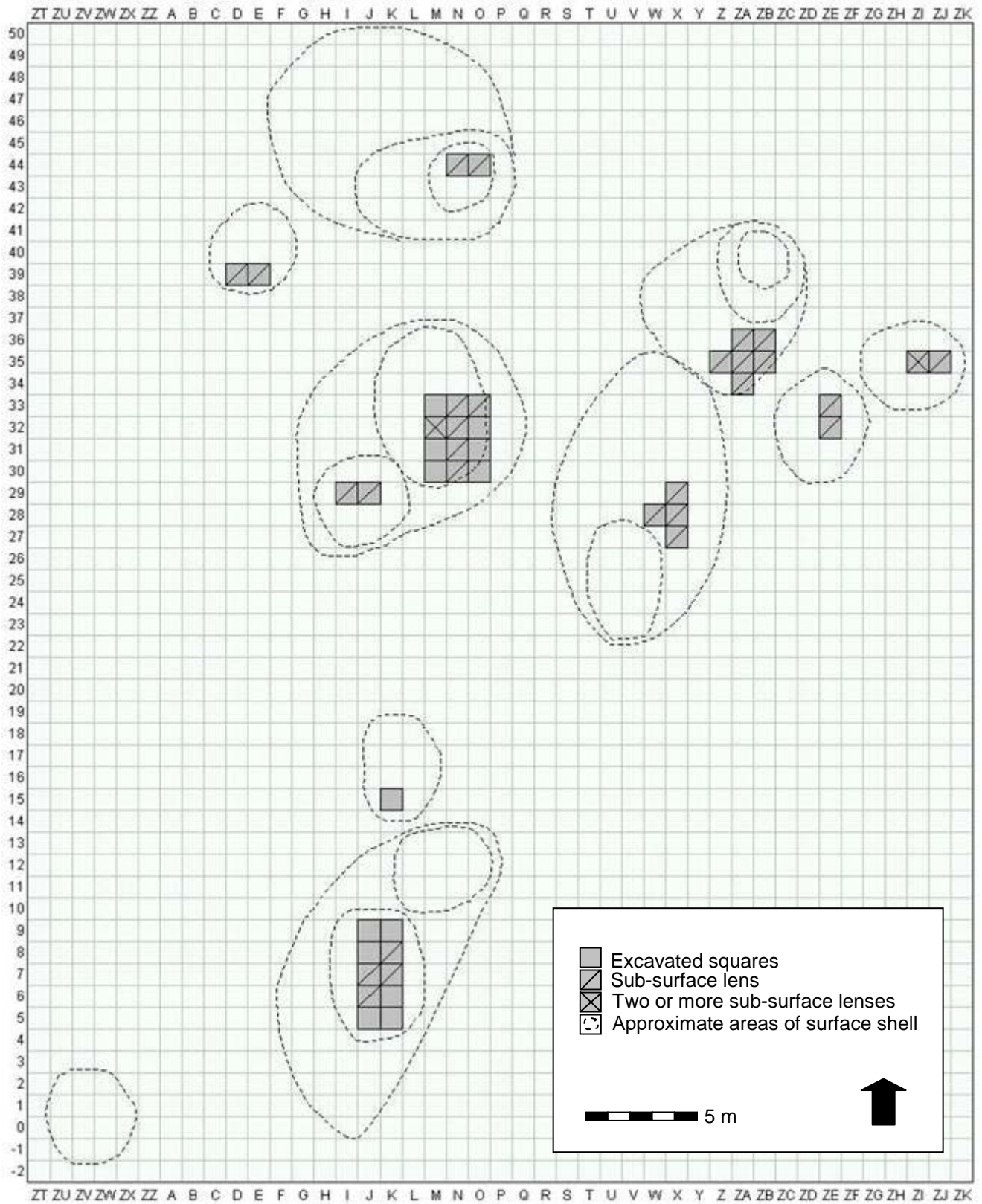
**Evidence of spatial information:** Yes

**Comment:** Our interpretation is that the shell patches are individual shell dumps of a number of dwellings (huts) which may or may not be contemporary.

### CONCLUDING COMMENT

**Estimated Age:** >2000BP

**Further mitigatory measures:** No further mitigation necessary





LK07-1



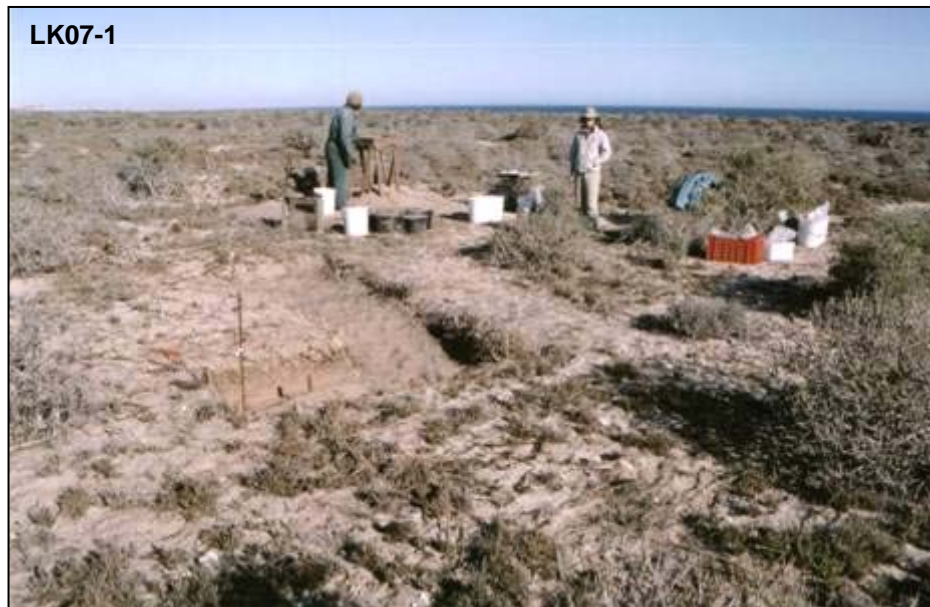
LK07-1



LK07-1



LK07-1



### 3. SUMMARY

The mitigation has investigated a number of sites that represent the range of archaeological traces represented in the mining area. Although these represent only a small percentage of all the sites located, they were chosen because they had the potential to provide the most information about various aspects of the archaeology. Sites that were not subjected to a full Phase 2 mitigation program were sampled in the field during the Phase 1 assessment.

The sites investigated include:

- a middle stone age bone concentration with artefactual material;
- various sites dating to the pre-ceramic period rich in stone formal tools and other artefactual and food remains related to this period;
- various sites from the ceramic period containing indigenous ceramics and other artefactual and food remains related to this period;

The full analysis will require a lot more time to complete as this is largely being financed from research budgets. Results will probably be forthcoming as post-graduate theses or published papers.

### 4. RECOMMENDATIONS

Two sites, namely SK400 and KV-MSA require additional mitigation to be undertaken. Some additional work has already been undertaken at SK400 during which it became evident that some additional material still needed to be recovered.

### 5. PROFESSIONAL TEAM

March 2002:	Dave Halkett, Tim Hart, Jayson Orton, Mzwandile Sasa, Mzuzima Mjikaliso;
March 2003:	Dave Halkett, Jayson Orton, Mzwandile Sasa, Struan Henderson;
May 2003:	Tim Hart, Jayson Orton, Antonietta Jerardino, Genevieve Dewar;
June 2003:	Dave Halkett, Mzwandile Sasa, Antonietta Jerardino, Genevieve Dewar;
Report preparation:	Dave Halkett