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9 September 2011

Per e-mail:mgalimberti@sahra.org.za Attention: Dr Mariagrazia Galimberti

South African Heritage Resources Agency PO Box 4637 Cape Town 8000

Madam

REQUEST FOR A HERITAGE IMPACT ASSESSMENT: CONSULTATION IN TERMS OF SECTION 40 OF THE MPRDA 2002 (ACT 28 OF 2002) DOR THE APPROVAL OF THE EMP IN RESPECT OF THE FARMS PORTION 2 (VERDUN) AND 5 (ELANDSVLEI) OF THE FARM PREDIKANTSVLEI NO 190, PORTIONS OF PORTION 1 (VERDUN) AND 2 (ROOI ZAND) OF THE FARM ROODE VLEY NO 1189 AND PORTION OF THE FARM JOUMAT NO 178 ADMINISTRATIVE DISTRICT: NAMAQUALAND.

We act on behalf of Albetros Inland Diamond Exploration (Pty) Ltd.

We refer to your letter dated 20 June 2011.

Attached herewith a copy of the Archaeological and Heritage Assessment compiled by Cobus Dreyer.

We trust that you will find this in order.

If you need more information, please do not hesitate to contact us.

Yours faithfully

Milnex 189 CC Per: Døreen Steyn P.O. Box 12910 BRANDHOF 9324 Bloemfontein dreyerj@telkomsa.net Tel: 051-444 1187 Fax: 051-444 4395 Cell: 083 357 7982

14 JUNE 2011

# FIRST PHASE ARCHAEOLOGICAL & HERITAGE ASSESSMENT OF THE PROPOSED DIAMOND MINING DEVELOPMENTS AT PREDIKANTVLEI 190, NEAR KLEINSEE, NAMAQUALAND DISTRICT

#### **EXECUTIVE SUMMARY**

Diamond mining activities are planned at Predikant Vlei 190 and adjacent pieces of land on Portions 1 and 2 (Verdun), Portion 5 (Elandsvlei), Potion 2 (Rooi Zand), of Roodevley 189 and a Portion of Journat 178 near Kleinzee in the Administrative District of Namaqualand.

Existing open cast diamond mining made a serious impact on the land along the shore. Many archaeological sites could have been destroyed already by the mining activities. Mining sites are also located adjacent to the proposed area.

Archaeological material occurred in the form of stone flakes at certain places. Although the sample is relatively small, the flakes show features characteristic of the Middle Stone Age.

No other historical or cultural material was found at the site.

I recommend that the proposed development and planning of the mining activities may proceed. Mitigation measures will be needed in the case of the discovery of archaeological material during the mining phases.

#### **INTRODUCTION & DESCRIPTION**

A survey of archaeological and heritage sites along the Namaqualand coast, by the Archaeology Contracts Office in the Department of Archaeology at the University of Cape Town, started in 1991 (Halkett & Hart 1997, 2000).

During the survey, over 700 archaeological sites were recorded. Cultural material in the form of decorated ostrich eggshell, clay potsherds and pendants were

recorded. Lithic material from the Early Stone Age (200 000 – 1 000 000 years ago), Middle Stone Age (40 000 – 200 000 years ago), Late Stone Age (40 000 until the arrival European colonists), and the Colonial Period, which started in the 15<sup>th</sup> century and settled in the 17<sup>th</sup> century, were found. Human burials and stone cairns have also been recorded.

Various pre-colonial campsites containing clusters of middens and scatters of artefacts associated with coastal dunes occur within one kilometre from the shore. It has been found that these areas had been occupied between 3000 to 5000 years ago. Although a significant number of other sites occur on coastal flatlands, is obvious that early humans were attracted to the food resources of the coast, resulting in a variation of site localities.

Glass bottles and earthenware containers dating from the 18<sup>th</sup> and 19<sup>th</sup> centuries occur near old farm buildings, suggesting that the finds represent historical material from the colonial period.

Some isolated scatters of material are sometimes associated with shell middens and may be the remains of temporary stock herders or shipwreck survivor camps.

Graves are found on farmyards, together with other indications of early settlements.

Observations from the finds during the previous survey along the west coast line (Halkett & Hart 1997, 2000) indicate the following:

- Artefacts display clear chronological variation.
- Shifts in habitation patterns were observed.
- MSA artefacts are proving occupation during the Pleistocene.
- Few sites show occupation between the later part of the MSA period to about 5000 years ago.
- Ceramics indicate occupation by hunter/gatherers who also exploited marine food.
- Certain variations in food remains suggest sea level fluctuations.
- Stock keeping represents changes in material culture.
- Further research will produce additional patterns and new interpretations.

# Scope and Limitations of the present project

The present investigation provided the opportunity to examine the land earmarked for mining activities near Kleinzee. Because all internal fences had

been removed, not all the pieces of land could be identified separately. No other limitations were experienced during site visit.

## Methodology

Standard archaeological survey and recording methods were used.

- 1. The land was investigated on foot and by vehicle.
- 2. The different points were plotted by GPS and recorded on camera.

#### INVESTIGATION

Diamond mining activities are planned at Predikant Vlei 190 and adjacent pieces of land on Portion 2 (Verdun), Portion 5 (Elandsvlei), Portion 1 (Verdun), Potion 2 (Rooi Zand), of Roodevley 189 and a Portion of Journat 178 near Kleinzee in the Administrative District of Namaqualand.

The site was examined on 10 June 2011. Officials from Milnex Consultants at Schweizer Reneke and Mr Jaco Maas, the owner of the farm gave directions to the site.

The study aims to locate and evaluate the significance of cultural heritage sites, archaeological material, manmade structures older than 60 years, and sites associated with oral histories and graves that might be affected by the proposed development.

The area was examined for possible archaeological and historical material and to establish the potential impact on any cultural material that might be found. The Heritage Impact Assessment (HIA) is done in terms of the National Heritage Resources Act (NHRA), (25 of 1999) and under the Environmental Conservation Act, (73 of 1989).

## LOCALITY

Diamond mining activities are planned at Predikant Vlei 190 and adjacent pieces of land on Portion 2 (Verdun), Portion 5 (Elandsvlei), Portion 1 (Verdun), Potion 2 (Rooi Zand), of Roodevley 189 and a Portion of Journat 178 near Kleinzee in the Administrative District of Namaqualand (Map 2).

The area is reached by road from the town of Springbok across the Spektakel Pass via the village of Komaggas (Map 1).

The land is located about 8km north of Kleinzee, along the gravel road to the ports of McDougall's Bay and Port Nolloth (Map 1). The major part of the farmland lies between 1 - 2km from the sea.

The towns of Kleinzee and Koiingnaas, as well as other remains of diving camps such as Noup (Fig. 17), and in fact the whole industry along the upper part of the West Coast, are part of the coastal diamond mining industry.

The vegetation of the area is described as part of the Succulent Desert plant cover (Figs. 4,6,16). A small stand of the Dwarf Aloe, *Krapohliana dumoulinii* was found in one specific area (Van Wyk & Smith 2008) (Figs. 9&10).

The following GPS coordinates (Cape scale) were taken:

A	29°32'48"S 017°06'02"E	Altitude 147m	(Fig.1).
В	29°32'50"S 017°05'44"E	Altitude 140m	(Fig.2)
С	29°32'56"S 017°05'19"E	Altitude 147m	(Fig.4).
D	29°33'01"S 017°04'35"E	Altitude 107m	(Fig.6).
E	29°32'38"S 017°04'36"E	Altitude 117m	(Fig.7)
F	29°31'54"S 017°05'54"E	Altitude 167m	(Fig.8).
G	29°3'55"S 017°06'03"E	Altitude 151m	(Figs.11&12).
Н	29°32'25"S 017°05'33"E	Altitude 140m	(Fig.13)
J	29°32'50"S 017°06'02"E	Altitude 145m	(Fig.14).
K	29°33'57"S 017°06'02"E	Altitude 158m	(Fig.15).
L	29°34'06"S 017°06'01"E	Altitude 159m	(Fig.16)

#### **RESULTS**

#### DISCUSSION

It has now been established that the settlement chronology of the occupation of Namaqualand during the Late Stone age is long and complex (Halkett & Hart 1997, 2000). Elsewhere in South Africa, the prevalence of refined microlithic artefacts such as segments, backed scrapers, and bladelets indicate occupation during the Holocene, between 3000 to 5000 years ago. In Namaqualand, a number of sites with matching types of artefacts indicate occupation from a slightly later era during the mid-Holocene. Artefacts are often accompanied by decorated ostrich egshell, emphasising the mid-late Holocene occupation. Similar layers elsewhere, dated to between 4000 to 5000 years ago.

#### **FINDS**

The land inside the border fences along the gravel road between Kleinzee and Port Nolloth was investigated (Map 2).

Archaeological material was found in the form of small surface scatters of stone flakes of Silcrete, Chalcedony and conglomerates containing pellets of Silcrete. The artefacts resemble material from the Middle Stone Age (MSA). It has been stated that material of this type is not often found in this area (Hallett & Hart 1997), some of the flakes at the site are triangular with convergent flaking on the dorsal side (Fig. 3).

No other cultural material, such as any clay pottery, bone or marine shell or ostrich eggshell, was found in association with the stone flakes.

### **IMPACT ASSESSMENT**

The land is part of the total diamond-mining strip along the West Coast. The scatter of stone tools seems to be a small and isolated occurrence in the general area.

The finds are inconclusive and of minor significance and mitigation, measures will be required in case of the discovery of archaeological material in the form of stone flakes.

#### RECOMMENDATIONS

There are no obvious reasons to delay the commencement of further planning and development of the mining activities.

I recommend that the proposed developments and planning of the sites may proceed.

It could be wise to contact the Archaeology Contracts Office at the Department of Archaeology, University of Cape Town, before any excavations take place.

# **ACKNOWLEDGEMENTS**

I thank Japie Loubser and Hennie Kotzee from Milnex Consultants at Schweizer Reneke and Jaco Maas from Pofadder, the owner of the land, for directions to the site.

I also thank Dr Lita Webley from the Archaeology Contracts Office, Department of Archaeology, University of Cape Town, for tracing the heritage survey reports by Dave Hallett and Tim Hart and to bring the publications by the Deacons to my attention.

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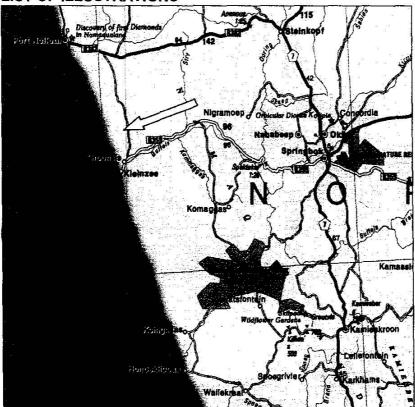
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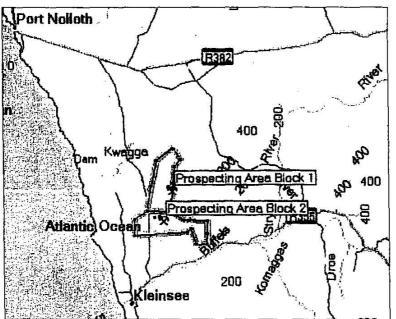
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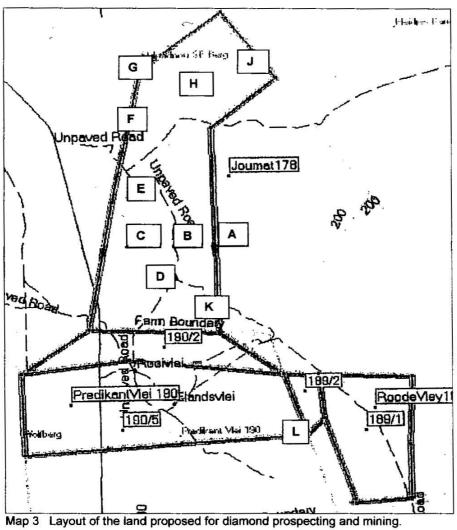
# LIST OF ILLUSTRATIONS

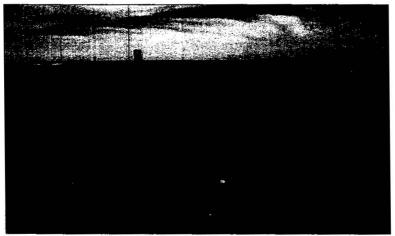


Map 1 Locality of Kleinzee and the proposed area in relation to Springbok in the Northern Cape.

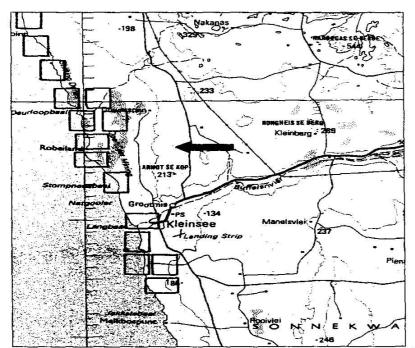


Map 2 Locality of the prospecting area north of Kleinzee (2916 Springbok).





Entrance to Predikantsvlei near Kleinzee, Northern Cape. Fig.1



Map 4 Distribution of archaeological finds along the coast in the area of the present location. (Hallett & Hart 1997).

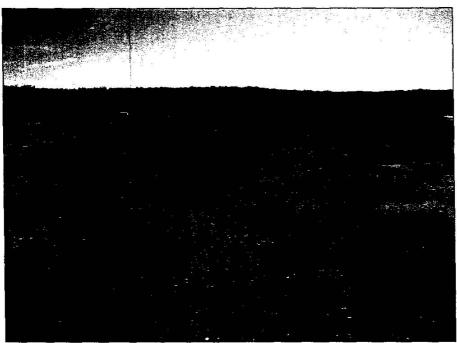


Fig.2 Point B at Predikantsvlei near Kleinzee, Northern Cape.



Fig.3 Stone artefacts at Point B, Predikantsvlei near Kleinzee (Pocketknife = 83mm).

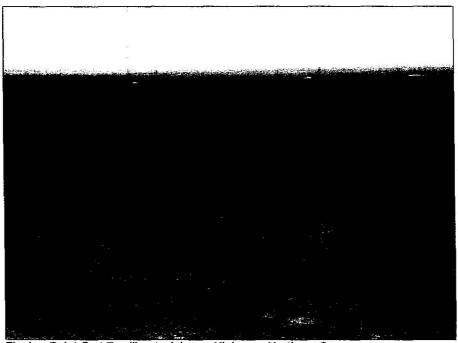


Fig.4 Point C at Predikantsvlei near Kleinzee, Northern Cape.



Fig.5 Stone core from Point C at Predikantsvlei (Pocketknife = 83mm).

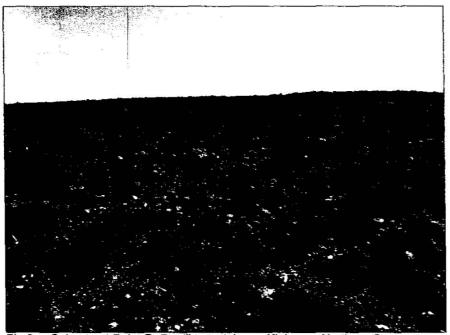


Fig.6 Calcrete at Point D, Predikantsvlei near Kleinzee, Northern Cape.



Fig.7 Point E, along the border fence at Predikantsvlei near Kleinzee, Northern Cape.



Fig.8 Point F, Predikantsvlei near Kleinzee, Northern Cape.



Fig.9 Stand of dwarf Aloe Krapohliana dumoulinii near Point F.



Fig.10 Dwarf Aloe Krapohliana dumoulinii near Point F.



Fig.11 Point G, Predikantsvlei near Kleinzee, Northern Cape.



Fig.12 Borrow pit at Point G, Predikantsvlei near Kleinzee, Northern Cape.

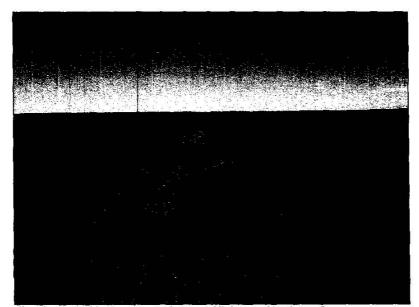


Fig.13 Point H, Predikantsvlei near Kleinzee, Northern Cape.



Fig.14 Borrow pit at Point J, Predikantsvlei near Kleinzee, Northern Cape.



Fig.15 Borrow pit at Point K, Predikantsvlei near Kleinzee, Northern Cape.

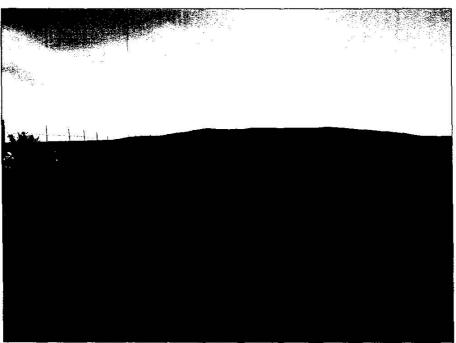


Fig.16 Point L, Predikantsvlei near Kleinzee, Northern Cape.



Fig.17 Accommodation at Noup, the old diver's camp south of Kleinzee, Northern Cape.