

**ARCHAEOLOGICAL IMPACT ASSESSMENT: PROPOSED
PROSPECTING ON THE KOPJE BLESKOP, FARM DOORNPAN
445, POSTMASBURG, NORTHERN CAPE.**

(Assessment conducted under Section 38 (8) of the
National Heritage Resources Act No 25 of 1999)

Prepared for
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EXECUTIVE SUMMARY

The Archaeology Contracts Office at the University of Cape Town was appointed by Coza Mining (Pty) Ltd to undertake an Archaeological Impact Assessment prior to a new prospecting application on a hill called Bleskop situated on the farm Doornpan 445, located between Olifantshoek and Postmasburg in the Northern Cape Province.

There has been previous research in the Postmasburg area on the history of prehistoric specularite mining. Recent CRM work by Webley et al. (2010), Webley & Halkett (2010), Webley & Halkett (2008) confirm the distribution of Middle and Later Stone age artefacts in calcrete deposits around pans and springs.

A baseline archaeological survey was conducted by Lita Webley and David Halkett on 17 & 18 August 2010.

The kopje has steep slopes to the north and west, but gentler sloping sides to the east. The lower slopes of the kopje are covered in thorny shrub which made a detailed survey impossible.

The survey identified a single Early Stone Age core and a single Middle Stone Age flake. There was no evidence of prehistoric specularite mining on the kopje despite the abundance of specularite breccia lying on the surface.

The foot survey failed to identify any significant heritage resources which will be impacted during the drilling process.

However, we advise that prospecting work should cease if any of the following are uncovered:

- Human remains/graves
- Concentrations of stone tools or faunal remains
- Stone walling or any sub-surface structures
- Fossils

If any of the above is uncovered, SAHRA should be notified so that an archaeologist/palaeontologist can investigate further.

GLOSSARY

ESA:	Early Stone Age – The archaeology of the Stone Age between 700 000 and 2500 000 years ago.
Khoekhoen:	Pastoralist groups, with cattle, sheep and pottery who settled in southern Africa around 2000 years ago.
Khoisan:	Collective term relating to both the Khoekhoen and the San.
LSA:	Later Stone Age – The archaeology of the last 20 000 years associated with fully modern people.
MSA:	Middle Stone Age - The archaeology of the Stone Age between 300 000 – 20 000 years ago associated with early modern humans.
NHRA:	National Heritage Resources Act, No 25 of 1999.
SAHRA:	South African Heritage Resources Agency
San:	Indigenous hunter-gatherer groups who lived in small bands spread across a wide area of southern Africa.

1. INTRODUCTION

The Archaeology Contracts Office at the University of Cape Town was appointed by Coza Mining (Pty) Ltd to undertake an Archaeological Impact Assessment prior to a new prospecting application on the kopje Bleskop situated on the farm Doornpan 445, located between Olifantshoek and Postmasburg in the Northern Cape Province (Figure 1).

The Department of Minerals and Energy in Kimberley advised that in terms of the legislation an Archaeological Impact Assessment would be required.

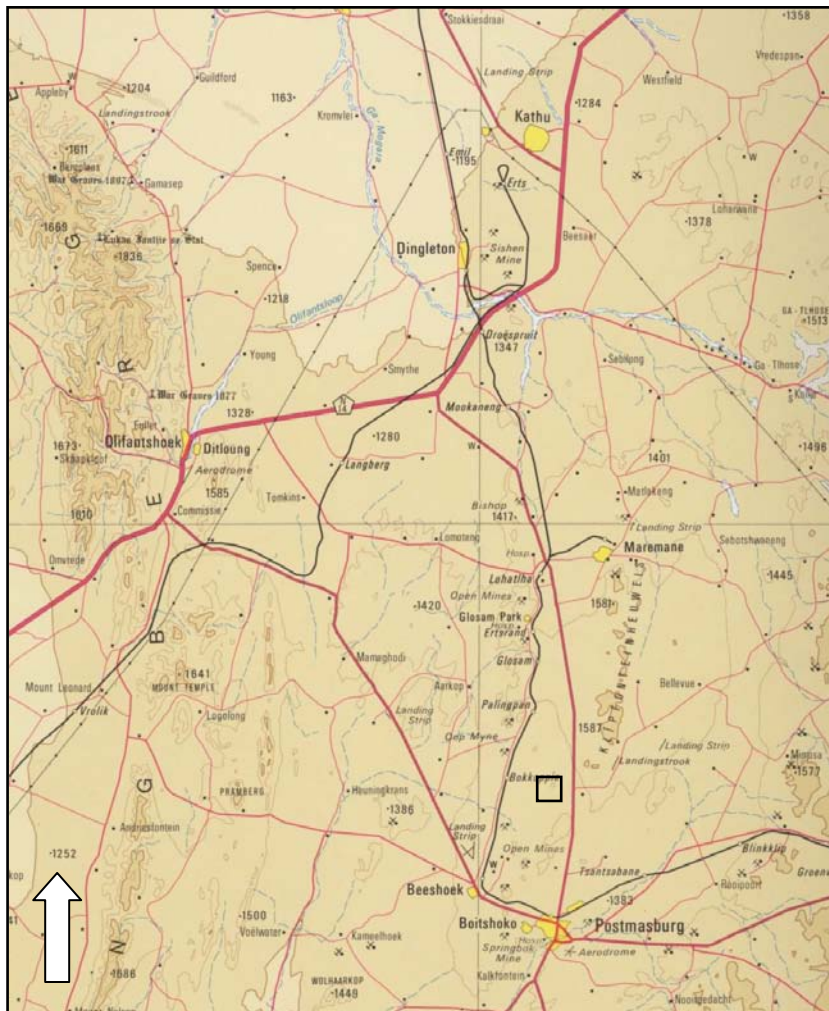


Figure 1: The approximate position of Bleskop, Doornpan 445, located on the R325, between Olifantshoek and Postmasburg.

2. BACKGROUND TO PROSPECTING

Coza Mining (Pty) Ltd intends to conduct a series of drilling programmes to prospect for iron ore and manganese on Driehoekspan 435, Doornpan 445, Jenkins 562 and Macarthy 559 between Postmasburg and Olifantshoek. *This*

report is concerned with prospecting on the kopje Bleskop and immediate surrounding area, on the farm Doornpan 445. Drilling will be conducted from truck mounted drilling rigs. Prospecting for iron and manganese ore will be done largely via core drilling of +/- 100mm diameter. Drill rigs will be wheel mounted and, thus, any vehicular traffic will produce "twin spoor" tracks. There is an access road up to the top of the kopje.

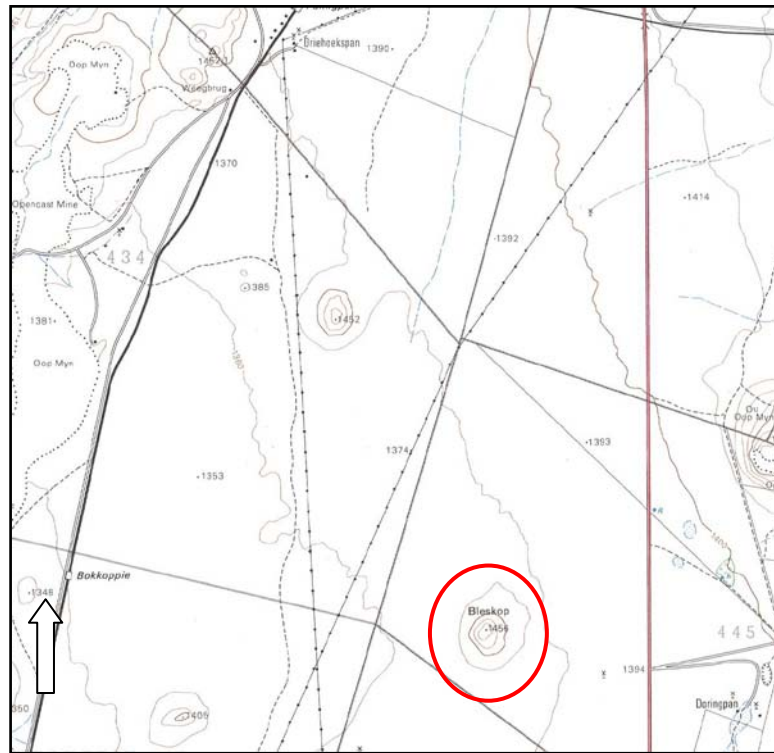


Figure 2: The 1: 50 000 map of 2823AA Lohathla – showing the position of the Bleskop hill with respect to the R325 between Olifantshoek and Postmasburg.

3. TERMS OF REFERENCE

The ACO undertook to undertake a baseline investigation including the following:

- Identification of archaeological sites through a desk top survey and site visit
- Rating of significance of archaeological sites (including the built environment where this was appropriate) on the properties
- Assessment of the impact of prospecting on the archaeology of the properties
- Recommendations for mitigation.

4. LEGISLATION

The basis for all heritage impact assessment is the National Heritage Resources Act 25 (NHRA) of 1999, which in turn prescribes the manner in which heritage is assessed and managed. The National Heritage Resources Act 25 of 1999 has defined certain kinds of heritage as being worthy of protection, by either specific or general protection mechanisms. In South Africa the law is directed towards the protection of human made heritage, although places and objects of scientific importance are covered. The National Heritage Resources Act also protects intangible heritage such as traditional activities, oral histories and places where significant events happened. Generally protected heritage which must be considered in any heritage assessment includes:

- Cultural landscapes
- Buildings and structures (greater than 60 years of age)
- Archaeological sites (greater than 100 years of age)
- Palaeontological sites and specimens
- Shipwrecks and aircraft wrecks
- Graves and grave yards.

Section 38 of the NHRA requires that Heritage Impact Assessments (HIA's) are required for certain kinds of development such as rezoning of land greater than 10 000 sq m in extent or exceeding 3 or more sub-divisions, or for any activity that will alter the character or landscape of a site greater than 5000 sq m.

5. RECEIVING ENVIRONMENT

The kopje of Bleskop rises to a height of 1456m above the remaining countryside (Plate 1). The northern and north-western slopes of the kopje are very steep and there is little evidence of any overhangs or flat terraces which would be suitable for occupation. However, there is a substantial terrace below the top of the kopje and to the south-east (Plate 2). It appears that earlier prospecting may have taken place and that the terrace may be artificial. There are very high concentrations of rocks rich in specularite on these southern slopes. They were examined closely for any evidence of pre-colonial mining.

The semi-arid area around Postmasburg supports a scrub cover, largely vaalbos (*Tarchonanthus capphoratus*), interspersed with sparse, mainly thorn-bearing bush which includes swarthaak (*Acacia detinens*), kameeldoring (*Acacia giraffae*), soetdoring (*Acacia karroo*), witgatboom (*Boschia albitrunca*) and kareeboom (*Rhus lancea*).



Plate 1: The Bleskop kopje from the south-east. The large boulder described in the text is circled in red. Note the slight depression just below the top of the kopje.



Plate 2: The flat terrace below the top of the hill, with evidence of earlier prospecting/mining.

5.1. Archaeological Background

Beaumont and Boshier (1974) excavated a prehistoric pigment (specularite) mine four (4) kilometers to the west of Bleskop at Jonas Vlakte on Doornfontein 446. This area appears to be particularly rich in specularite breccia and these deposits were mined in pre-European times. The Doornfontein site represents a number of chambers which have been dug into a hillside. Archaeological excavations resulted in the discovery of large numbers of stone artefacts comprising mainly stone choppers and hammerstones which had been used to mine the specularite. In addition, the archaeologists discovered pottery, decorated ostrich eggshell pieces, beads and bone implements as well as faunal (bone) remains which provide information on the diet of the pre-colonial miners (Beaumont & Boshier 1974: Figure 4). Radiocarbon dates place the mining activities to 1200 years ago or 800 AD. Fragmentary human remains from the Blinkklipkop mine which is 5km to the north-east of Postmasburg suggest that the early miners were of Khoisan physical type rather than representing Iron Age settlement.

Beaumont and Boshier (1974) also refer to some engraving sites nearby at Paling which is located on Driehoekspan 435 as well as on Beeshoek to the west of Postmasburg. These roughly pecked engravings occur on shale outcrops.

Further to the north, Early Stone Age handaxes have been recorded at Kathu Pan. Beaumont has excavated numerous sites around the pan and he observed (Beaumont 1990) that a combination of geological conditions resulted in the preservation of a long record of human habitation in the Northern Cape.

Similarly, excavations at Bundu Pan near Marydale in the Northern Cape (Kiberd 2006) have also revealed a sequence including Early, Middle and Later Stone Age assemblages as well as preserved faunal remains. This suggests that the margins of pans need to be investigated for early human habitation. During the Webley et al. (2010) survey, a mix of Middle and Later Stone Age artefact scatters on fine-grained raw material were found around the margins of pans.

A number of open sites around Keimoes in the Northern Cape have been tested in recent years and they suggest two possible Later Stone Age sequences (Parsons 2008). However, the development of a chronological sequence is hampered by the lack of suitably stratified deposits. Morris & Beaumont (1991:119) have described a ceramic Later Stone Age for the site of Renosterkop, also near Keimoes.

According to Humphreys and Thackeray, Iron Age farmers only settled in the Northern Cape after A.D. 1600. The main area of Iron Age settlement and the only area, in which there is direct archaeological evidence for such settlement in the form of stone walling, are to the north-east of Kuruman. By the time the first European travellers arrived in this area they met only Iron Age Tswana-speaking

people such as the Tlhaping. The Tswana settlement of Dithakong was located to the north-east of Kuruman in an area with many large springs. During the Webley et al. (2010) survey, a site on the farm Gaston (to the west of Macarthy) was discovered with pottery and stone tools. The remains could relate to the Koranna, a Khoekhoen group who were active along the Orange River in the 18th century, or conversely the Iron Age Tswana – although they are believed to have settled more to the north-east.

5.2 Historical Background

The area known as Griqualand West was first 'roughly' surveyed by F. Orpen and W. Stow in 1872. During the Webley et al. (2010) survey of 20 farms to the west of Macarthy it was discovered that they were all surveyed and beaconed between the years 1904 – 1911. This is very late when compared to the rest of the country. Many of the farmsteads contained buildings of calcrete blocks and a high percentage also had family graveyards in close proximity to the farmhouse.

6. METHODS

The boundaries of the site were loaded onto handheld GPS receivers to facilitate the identification of the search area during field work. The site was visited on the 17th and 18th August 2010 by Lita Webley and David Halkett and inspected via a combination of driving and walking. Walk paths and site locations were recorded with GPS (Figure 3) and finds were photographed and described. We were accompanied by drilling contractor, Mr Danie Brand of Washa Drilling.

6.1 Limitations

- The kopje rises steeply above the surrounding plains, with the northern and north-western side's steep and offering little opportunity for shelter from the elements. The slope on the southern and south-eastern sides is more gradual offering more opportunities for a foot survey.
- We were unable to drive around the base of the kopje due to an absence of roads. The bush is dense and covered in thorns making a detailed foot survey impractical.
- We were unable to speak to the previous owner of the property. This means that it was not possible to collect the oral history on the farm.

7. RESULTS OF FIELD SURVEY

7.1 Pre-colonial Heritage

A foot survey was conducted on the top of the kopje (Figure 3). Two stone artefacts were discovered on the flat terrace below the crown of the hill (Plate 2).

This included a single Middle Stone Age flake (Plate 3) and an Early Stone Age core (Plate 4). We then climbed down to a large black rock on the lower south-eastern slopes of the hill (Plate 5). This rock is the most prominent feature on the slopes and it appeared to offer the most protection against the winds which sweep across the top of the hill. Although the rock formed a small shelter, there was no evidence for any archaeological remains in the vicinity.

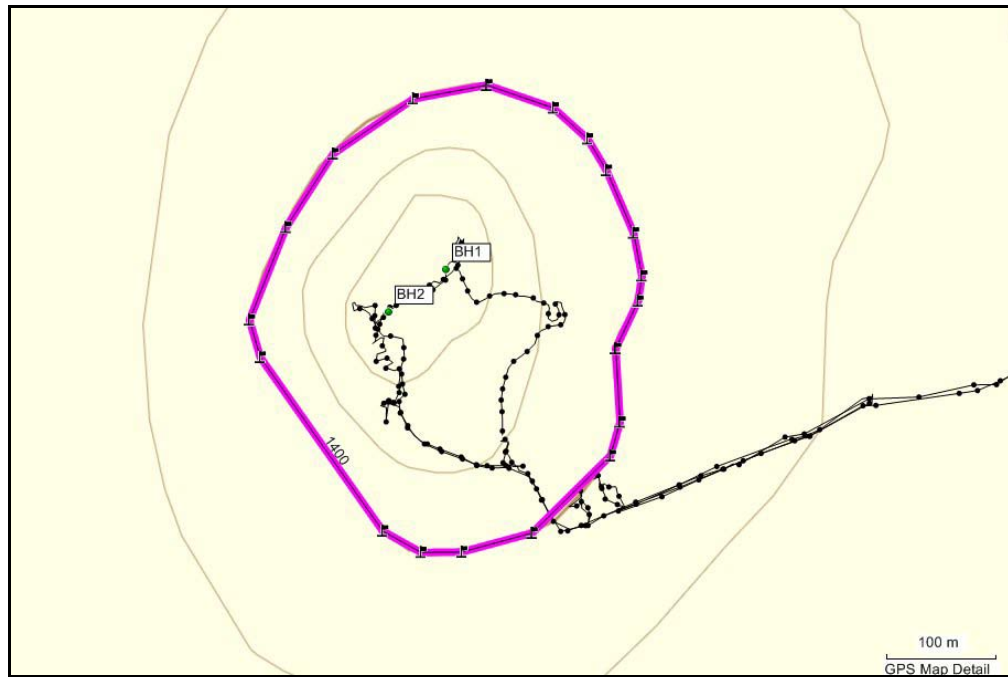


Figure 3: **Survey tracks**



Plate 3: A Middle Stone Age Flake; **Plate 4:** An Early Stone Age core.



Plate 5: Large black rock on the lower slopes of the kopje.

Scatters of specularite breccia are found on the southern and eastern slopes of the kopje. Since we were aware of prehistoric pigment mining in the area, we examined the kopje closely but no evidence of pre-colonial mining was discovered.

Table 1: List of sites discovered on Doornpan.

Site Number	Lat/Lon°	Description	Significance
BH1	S28 12 29.0 E23 03 52.6	Middle Stone Age flake, with retouch, made on fine-grained raw material	Low significance
BH2	S28 12 30.2 E23 03 50.6	Early Stone Age core made on quartzite	Low significance

8. SITE SIGNIFICANCE, IMPACT OF DEVELOPMENT AND MITIGATION

8.1 Loss of Pre-colonial Sites

The aridity of the area suggests that pre-colonial occupation would have been concentrated around sources of water, such as spring or pans. There are no sources of water on the Bleskop kopje and it is unlikely that there would have been permanent settlement on the hill. Only two stone artefacts were discovered on a little terrace below the top of the hill.

Significance: Section 35 of the NHRA prohibits any person, without a permit, from destroying, damaging, excavating, altering, defacing or disturbing any archaeological sites and material, palaeontological sites and meteorites. Two stone artefacts were found on Bleskop. They are of low significance.

Mitigation: No mitigation is required.

8.2 Loss of Colonial Sites

There are no buildings or structures on the Bleskop kopje.

Significance: Section 34 of the NHRA stipulates that no person may alter or demolish any structure or part of a structure, which is older than 60 years without a permit issued by the relevant provincial heritage resources authority.

Mitigation: No mitigation is required.

8.3 Loss of Graves

No graves were discovered on the kopje.

Significance: Section 36 (3) (b) of the NHRA clearly stipulates that no person may, without a permit issued by the relevant heritage authority or SAHRA destroy, damage or exhume any grave or burial ground older than 60 years which is situated outside a formal cemetery administered by a local authority.

Mitigation: None.

9. RECOMMENDATIONS

Prospecting for iron and manganese ore will be done largely via core drilling of +/- 100mm diameter. The prospecting will be concentrated on the Bleskop kopje, on the farm Doornpan 445. The survey failed to identify any significant heritage resources which will be impacted during the drilling process.

However, we advise that prospecting work should cease if any of the following are uncovered:

- Human remains/graves
- Concentrations of stone tools or faunal remains
- Stone walling or any sub-surface structures
- Fossils

If any of the above is uncovered, SAHRA should be notified so that an archaeologist/palaeontologist can investigate further.

10. REFERENCES

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11. ACKNOWLEDGEMENTS

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