

## **AFRICAN HERITAGE CONSULTANTS CC**

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### **SURVEY OF OLD COPPER MINES ON THE PROPOSED ROUTE FOR THE NEW ROAD TO SWARTKOPFONTEIN BORDER POST**

#### **1. INTRODUCTION**

During the surveying and clearing of the proposed new route for the road to Zwartkopsfontein border post a number of shallow excavations, which might have been old mine workings, were discovered. It is a well-known fact that ancient copper workings occur along the Dwarsberg, which lies some kilometres to the south of the proposed route.

Though a phase one impact assessments of the three possible routes were undertaken in 2004 no archaeological or historical sites were found in this area (see attached report). The original option 3 route was more to the south than the new surveyed route.

#### **2. RESULT OF SURVEY**

The following old mines were recorded:

2.1 S24° 51' 13.1" and E25° 55' 27.3"

This old mine is just south of marker NW 39 and is one of the largest of the old mines. It has one open shaft, which leads underground, and another two or three shafts, which were probably closed with rubble (see photograph 1 & 2).

2.2 S24° 50' 42.8" and E25° 56' 35.8"

This mine is as large as the above mentioned mine. At the entrance of the one shaft are two wooden poles to prevent the entrance from collapsing (see Photograph 3 & 4). The mine is near marker NW 32.

2.3 S24° 50' 31.5" and E25° 56' 57.8"

The mine at this site consists of six shallow depressions, but is not as deep as the two previous mines. The mine lies east and south of marker NW 30 (see photograph 5).

2.4 S24° 50' 51.1 and E25° 56' 16.6"

Another mine lies just south of marker NW 34 (see photograph 6).

2.5 Other mines were found at the following locations:

S24° 51' 26.7" and E25° 55' 37.3"

S24° 51' 23.4" and E25° 55' 36.3"

S24° 51' 27.8" and E25° 55' 28.9"

### 3. CONCLUSION

From the investigation it is clear that these mines are prehistoric or ancient copper mines. Small pieces of copper ore were found (see photograph 7), as well as two types of stone hammers (see photograph 8 & 9). The technique of mining and back filling is typical that of ancient mines. Pieces of undecorated pottery also occur on the sites. To my knowledge these mines stretch for a distance of fifteen kilometres all along the Dwarfsberg.

In the case of the mine discussed under 2.2 the mine was later reworked for prospecting purposes as the two wooden poles at the entrance to the mine were cut with a modern saw.

These mines most probably form part of the ancient trade in copper, tin and gold linked to the Zimbabwe Empire and the east coast trade with the Arabs

### 4. RECOMMENDATIONS

Depending on the costs involved there are two options.

#### Option one

To reroute the proposed road in a northerly direction to avoid the ancient mines,

Or

Option two

To document, survey and excavate the mining sites, which will be destroyed by the road. Here after the South African Heritage Resources Agency (SAHRA) can issue a permit for destruction

**5. REFERENCES.**

Roger Summers, Ancient mining in Rhodesia 1969.

**PHOTOGRAPHS**



**No. 1 General view of ancient workings at S24° 51' 13.1" and E25° 55' 27.3"**



**No. 2 Shaft entrance of ancient mine**



**No. 3 General view of mine at S24° 50' 42.8" and E25° 56' 35.8"**





No. 4 Shaft entrance with two wooden poles supporting rock



No. 5 General view of ancient working at S24° 50' 31.5" and E25° 56' 57.8"



No. 6 Entrance of ancient mine at  $S24^{\circ} 50' 51.1$  and  $E25^{\circ} 56' 16.6''$

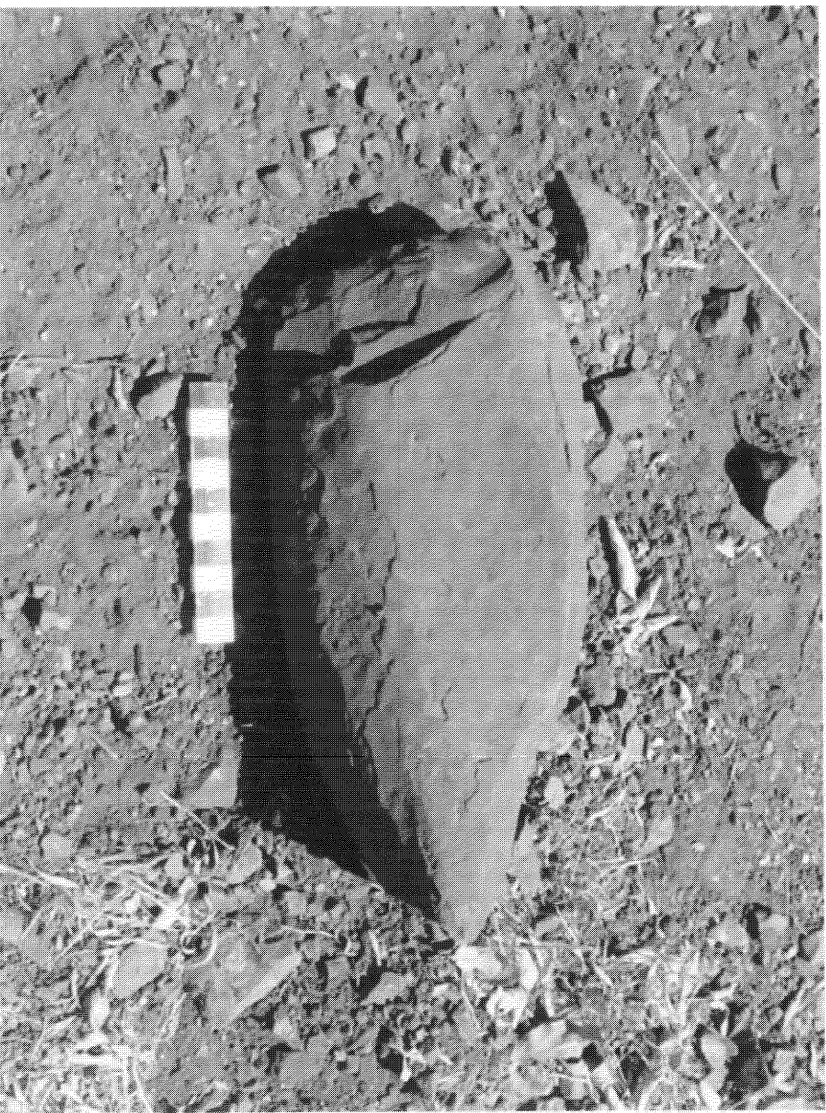


No. 7 Copper ore (malachite)





**No. 8 Stone hammer with shallow depression in the middle caused by iron chisel head**



**No. 9 Stone hammer used to break rock face**