

LEEUWKOP ARCHAEOLOGICAL ASSESSMENT

A Phase I Report Prepared for Knight Piésold Consulting

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INTRODUCTION

Southern African Resources intends to develop a new platinum mine near Brits in the North West Province. The project includes a Plant & Shaft area, Tailings Dam, Conveyor Belt and associated infrastructure.

In keeping with various Mineral, Environmental and Heritage legislation, the environmental coordinators for the project, Knight Piésold, commissioned Archaeological Resources Management (ARM) to examine the area for the remains of previous human activity 100 years or older. At this point in the project, only the Plant & Shaft Area, Tailings Dam and immediate surroundings are under consideration.

METHOD

One ARM staff visited the project area on 04 March 2005 in the company of Mr W. Lee from Knight Piésold. The team traversed on foot the two proposed impact areas as well as a few other areas with koppies. Sites were recorded with a hand-held GPS instrument and then transferred to the 1 : 50 000 map 2527 DA Wolhuterskop 1976 Edition (Figure 1).

For this project, five criteria determine site significance: integrity of deposit (primary versus secondary context), depth of deposit, number and variety of features, uniqueness and potential to answer present research questions. Following these criteria, sites with no significance do not require further consideration, low significance may require mitigation, sites with medium significance will require mitigation while sites with high significance should not be disturbed at all.

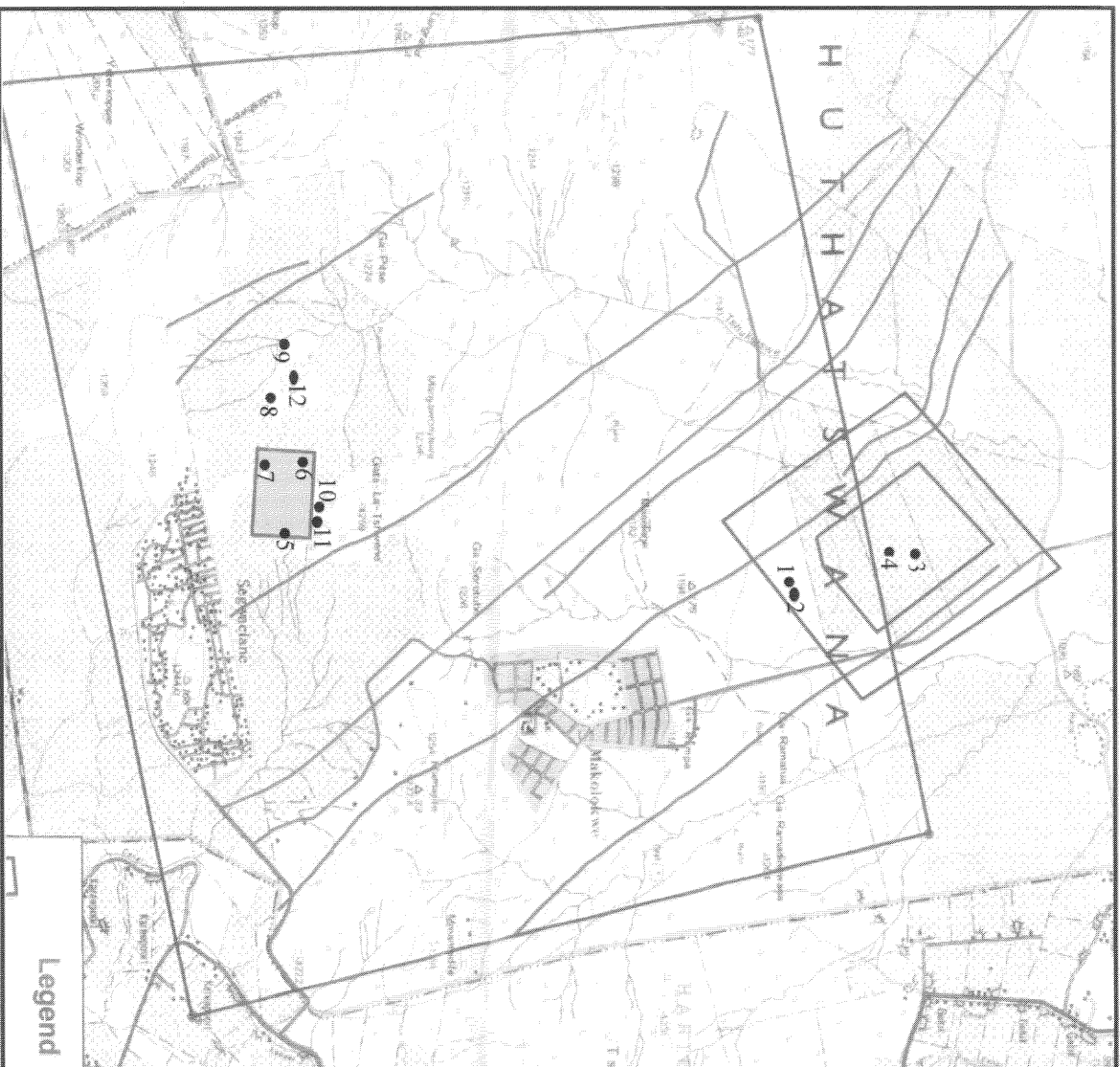


Figure 1. Archaeological sites recorded during the Leeuwkop assessment.

RESULTS

Vegetation was lush and ground visibility therefore low. Nevertheless, the team was able to identify areas of archaeological interest.

Generally, Middle Stone Age (dating from about 250 000 to 25 000 years ago) artefacts lay scattered throughout the hilly areas, but there were no obvious clusters. Rock piles cleared from agricultural lands were devoid of stone tools altogether.

Similarly, a few potsherds occurred in old agricultural lands, but there were no obvious clusters.

Tailings Dam

Only one pottery site is worth noting.

- **Site 1:** (25 36 34S 27 36 25E) lay at the foot of the hill with Beacon No. 176, north of Makolokwe Village. The hill has been a recent source of granite. *On present evidence, Site 1 has no significance.*

On the other hand, the low hills north of the granite quarry, on the edge of the Tailings Dam, contain a large area of stonewalling.

- **Site 2:** (25 36 33-35S 27 36 29-34E) includes several cattle kraals as well as low stone arcs built around bare rock surfaces. Associated pottery with rim nicking suggests the walling dates to the late 18th or early 19th century and was built by Western Sotho-Tswana, such as Bakwena. The west end of this complex also includes a man-made rock gong: a boulder has been placed on smaller blocks to create a ledge that produces vibrations when struck (Figure 2). The gong bears the signs of much use. *This unusual feature plus the extensive walling gives Site 2 medium significance*

Raised rock areas in the cultivated lands, avoided by the plough, yielded a few recent potsherds, glass and metal. These are probably the residential remains of farm labours.

- **Site 3:** (25 35 44.5S 27 36 25.2E);
- **Site 4:** (25 35 55.3S 27 36 25.2E).

Both sites have no significance.

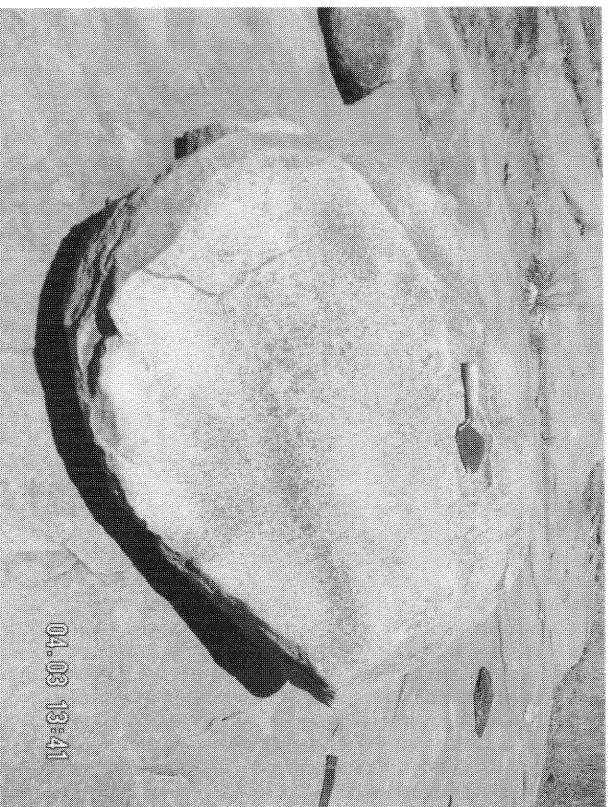
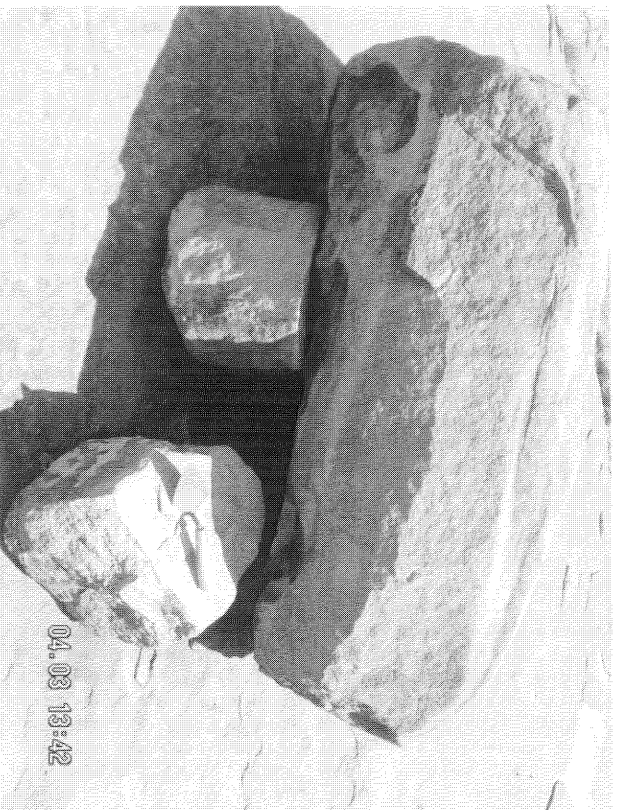


Figure 2. Unusual rock gong at Site 2.

Plant & Shaft Area

Numerous sections of stonewalling dot the northern part of this area. Some are associated with porcelain and glass, and therefore represent the residences of traditional farmers. Presumably, these sites date to the early 20th century. Examples include:

- **Site 5:** (25 39 09S 27 36 12.4E)
- **Site 6:** (25 39 07.7S 27 35 55.5E)
- **Site 7:** (25 39 18.6S 27 35 59E)
- **Site 8:** (25 39 16.8S 27 35 32.7E)
- **Site 9:** (25 39 08.6S 27 35 16E)

Sites 5 to 9 have no significance.

Three other areas contain stonewalled settlements that include cattle kraals, outer boundary walls and middens. Two stand at the base of the large hill, known as Gata La Tshwene, at the north end of the Plant Area.

- **Site 10:** (25 39 01.9S 27 36 04.2E) includes a large maize grindstone in one of the walls of a central cattle kraal, and dates the site to the late 18th or early 19th century (Figure 3).
- **Site 11:** (25 39 02.7S 27 36 08.7E to 25 39 00S 27 36 11.8E) is larger, extending over to borehole SNL 6. This borehole area also yielded older pottery, dating to the 16th century. The pottery belongs to the *Olifantspoort facies* of the Moloko group, and was made by early Southwestern Sotho-Tswana, such as Barolong. Thus this site has at least two components.

Both Site 10 and 11 have medium significance.

A third site with good stonewalling, **Site 12** (25 39 07S 27 35 25E to 25 39 06S 27 35 28E), curves around the base of a small hill west of the plant area. There are several low but definite circles. *Site 12 has medium significance.*



Figure 3. Typical stone walling in Site 10.

RECOMMENDATIONS

Most of the two designated areas lack sites of archaeological importance. The stonewalled **Sites 2 and 10 – 12** are the exceptions. **Site 2 and 12** lie outside the proposed impact zone and thus do not require mitigation. The remainder, **Sites 10 and 11**, are located on the edge of the impact zone. They could be fenced without affecting mining operations. Other mitigation would take time and be costly. We therefore recommend that these areas be avoided.

With this proviso, there are no archaeological reasons why the Leeuwkop Platinum Project should not continue in the Tailings Dam and Plant & Shaft Area.

In terms of the Conveyor belt and Pipelines, an archaeologist will need to examine the proposed routes before construction begins.