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**A PHASE I HERITAGE IMPACT ASSESSMENT STUDY FOR  
SAMANCOR'S PROPOSED MINING RIGHT APPLICATION FOR  
PORTIONS OF THE FARM VARKENSVLEI 403KQ AND  
NOOITGEDACHT 406KQ NEAR NORTHAM IN THE NORTH-  
WEST AND LIMPOPO PROVINCES**

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## EXECUTIVE SUMMARY

A Phase I Heritage Impact Assessment (HIA) study as required in terms of Section 38 of the National Heritage Resources Act (Act 25 of 1999) was done for Samancor's proposed Mining Right Application (MRA) for portions of the farm Varkensvlei 403KQ and Nooitgedacht 406KQ near Northam in the North-West and Limpopo Provinces.

The aims with the Phase I HIA were the following:

- To establish whether any of the types and ranges of heritage resources ('national estate') as outlined in Section 3 of the National Heritage Resources Act (Act 25 of 1999) (except paleontological) remains do occur in the Project Area.
- To determine the significance of these heritage resources and whether they will be affected by the Mining Project.
- To propose mitigation measures for those heritage resources that may be affected by the proposed Mining Project.

The Phase I HIA study for the Project Area revealed the following types and ranges of heritage resources as outlined in Section 3 of the National Heritage Resources Act (No 25 of 1999), namely:

- A formal graveyard in the village of Mantserre.
- No archaeological or pre-historical remains were recorded. Neither did this study provide for a paleontological study.

The graveyard was geo-referenced (Table 1) but not mapped as it is located in the village of Mantserre.

### **Possible impact on the heritage resources**

It seems as if the Project Area is devoid of any conspicuous heritage resources. The most obvious to exist are stone walled sites and these may possible be found in the Mmopyane mountain range outside the northern border of the Project Area.

### **Mitigating heritage resources**

The graveyard of Mantserre is located in the village itself. Although no mine plan is currently available it is unlikely that any significant heritage resources or the graveyard will be affected by the mining project.

Consequently, no mitigation measures for any heritage resources can be recommended.

**Disclaimer**

It is possible that this Phase HIA study may have missed heritage resources in the Project Area as heritage remains may occur in thick clumps of vegetation while others may lie below the surface of the earth and may only be exposed once the Mining Project commences.

If any heritage resources of significance is exposed during the Mining Project the South African Heritage Resources Authority (SAHRA) should be notified immediately, all development activities must be stopped and an archaeologist accredited with the Association for Southern African Professional Archaeologist (ASAPA) should be notify in order to determine appropriate mitigation measures for the discovered finds. This may include obtaining the necessary authorisation (permits) from SAHRA to conduct the mitigation measures.

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## **1 INTRODUCTION**

This document contains the report on the results of the Phase I Heritage Impact Assessment (HIA) study that was done for Samancor's proposed Mining Right Application (MRA) for portions of the farm Varkensvlei 403KQ and Nooitgedacht 406KQ near Northam in the North-West and Limpopo Provinces.

Focused archaeological research has been conducted in the North-West and Limpopo Provinces for several decades. This research consists of surveys and of excavations of Stone Age and Iron Age sites as well as of the recording of rock art and historical sites in this area. The Limpopo and North-West Provinces have a rich heritage comprised of remains dating from the pre-historical and from the historical (or colonial) periods of South Africa. Pre-historical and historical remains in the Limpopo and North-West Provinces of South Africa form a record of the heritage of most groups living in South Africa today.

Various types and ranges of heritage resources that qualify as part of South Africa's 'national estate' (as outlined in the National Heritage Resources Act [No 25 of 1999]) occur in the North-West and Limpopo Provinces (see Box 1, next page).

**Box 1: Types and ranges of heritage resources (the national estate) as outlined in Section 3 of the National Heritage Resources Act, 1999 (No 25 of 1999).**

The National Heritage Resources Act (Act No 25 of 1999, Art 3) outlines the following types and ranges of heritage resources that qualify as part of the National Estate, namely:

- (a) places, buildings structures and equipment of cultural significance;
- (b) places to which oral traditions are attached or which are associated with living heritage;
- (c) historical settlements and townscapes;
- (d) landscapes and natural features of cultural significance;
- (e) geological sites of scientific or cultural importance;
- (f) archaeological and palaeontological sites;
- (g) graves and burial grounds including-
  - (i) ancestral graves;
  - (ii) royal graves and graves of traditional leaders;
  - (iii) graves of victims of conflict;(iv) graves of individuals designated by the Minister by notice in the Gazette;
  - (v) historical graves and cemeteries; and
  - (vi) other human remains which are not covered by in terms of the Human Tissues Act, 1983 (Act No 65 of 1983);
- (h) sites of significance relating to the history of slavery in South Africa;
- (i) movable objects, including -
  - (i) objects recovered from the soil or waters of South Africa, including archaeological and palaeontological objects and material, meteorites and rare geological specimens;
  - (ii) objects to which oral traditions are attached or which are associated with living heritage;
  - (iii) ethnographic art and objects;
  - (iv) military objects;
  - (v) objects of decorative or fine art;
  - (vi) objects of scientific or technological interest; and
  - (vii) books, records, documents, photographs, positives and negatives, graphic, film or video material or sound recordings, excluding those that are public records as defined in section 1(xiv) of the National Archives of South Africa Act, 1996 (Act No 43 of 1996).

The National Heritage Resources Act (Act No 25 of 1999, Art 3) also distinguishes nine criteria for places and objects to qualify as 'part of the national estate if they have cultural significance or other special value ...'. These criteria are the following:

- (a) its importance in the community, or pattern of South Africa's history;
- (a) its possession of uncommon, rare or endangered aspects of South Africa's natural or cultural heritage;
- (b) its potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage;
- (c) its importance in demonstrating the principal characteristics of a particular class of South Africa's natural or cultural places or objects;
- (e) its importance in exhibiting particular aesthetic characteristics valued by a community or cultural group;
- (f) its importance in demonstrating a high degree of creative or technical achievement at a particular period;
- (g) its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons; (h)
- (h) its strong or special association with the life or work of a person, group or organisation of importance in the history of South Africa;
- (i) sites of significance relating to the history of slavery in South Africa

## **2 AIMS WITH THIS REPORT**

Samancor Chrome (Samancor) intends to apply for a Mining Right Application (MRA) for portions of the farms Varkensvlei 403KQ and Nooitgedacht 406KQ near Northam in the North-West and Limpopo Provinces. Samancor intends to establish open cast chrome mining activities on these farms. These mining activities may have an influence on any of the types and ranges of heritage resources which are listed in Section 3 of the National Heritage Resources Act (No 25 of 1999).

In order to comply with heritage legislation, Samancor requires knowledge of the presence, relevance and the significance of any heritage resources that may be affected by the Mining Project. Samancor needs this knowledge in order to take proactive measures with regard to any heritage resources that may be affected, damaged or destroyed when the chrome mining project is implemented. Golder Associates Africa (Pty) Ltd (Golder), the environmental company responsible for compiling the Environmental Impact Assessment (EIA) report for the mining project therefore commissioned the author to undertake a Phase I HIA study for the Project Area.

The aims with the Phase I HIA were the following:

- To establish whether any of the types and ranges of heritage resources ('national estate') as outlined in Section 3 of the National Heritage Resources Act (Act No 25 of 1999) (except paleontological) remains do occur in the Project Area.
- To determine the significance of these heritage resources and whether they will be affected by the mining project.
- To propose mitigation measures for those heritage resources that may be affected by the proposed mining project.



### **3 METHODOLOGY**

This Phase I HIA study was conducted by means of the following:

- Surveying the larger Project Area with a vehicle and spots in the Project Area on foot.
- Briefly surveying literature relating to the pre-historical and historical context of the Project Area.
- Consulting maps of the proposed Project Area.
- Consulting archaeological (heritage) data bases.
- Consulting spokespersons regarding the possible presence of graves and graveyards in the Project Area.
- Synthesising all information obtained from the data bases, fieldwork, maps and literature survey in this report.

#### **3.1 Field survey**

The Project Area was surveyed with a vehicle as it mainly comprises agricultural fields or areas which have been subjected to agriculture in the past. Relatively undisturbed bush and some cleared surface areas were surveyed on foot. However, the largest part of the Project Area is covered with agricultural fields.

The town of Mantserre occurs in the central part of Varkensvlei 403KQ. The expanding outskirts of the town, where new inhabitants are continuously constructing new dwellings, encompasses as much as twenty five percent of the surface of the farm. This area as well as a buffer zone around the village will not be affected by the proposed mining activities. This area also has been severely affected in the past as a result of deforestation and over grazing.

The main environmental characteristic of the Project Area are the presence of dry land agricultural fields in the centre, south and east and a deforested and degraded area around the village of Mantserre. Some remaining indigenous bush occurs towards the north-east on both Varkensvlei 403KQ and Nooitgedacht 406KQ.

A reconstructed GPS track log outlines the main pathway that was recorded during the survey for the Project Area (Figure 00).



**Figure 00- The survey for the Project Area followed the black dotted route indicated on the Google image (above).**

### **3.2 Databases, literature survey and maps**

Databases kept and maintained at institutions such as the Provincial Heritage Resources Agency (PHRA), the Archaeological Data Recording Centre at the National Flagship Institute (Museum Africa) in Pretoria and SAHRA's national archive (SAHRIS) were consulted to determine whether any heritage resources of significance has been identified during earlier heritage surveys in or near the Project Area.

The author is acquainted with the Project Area at large as he had done several heritage impact assessment studies near the project area (see Part 9, 'Select Bibliography').

Literature relating to the pre-historical and the historical unfolding of the Project Area was reviewed (see Part 5, 'Contextualising the Project Area').

Maps outlining the Project Area were studied (2427CC Middelwit 1: 50 000 topographical map and Pretoria 1 250 000 map).

### **3.3 Consulting spokespersons**

Spokespersons living and working in the Project Area were consulted regarding the possible presence of graveyards within its boundaries (see Part 10, 'Consulting spokespersons').

### **3.4 Assumptions and limitations**

It is possible that this Phase I HIA study may have missed heritage resources in the Project Area as heritage sites may occur in thick clumps of vegetation while others may lie below the surface of the earth and may only be exposed once development commences.

If any heritage resources of significance is exposed during the mining project the South African Heritage Resources Authority (SAHRA) should be notified immediately, all development activities must be stopped and an archaeologist accredited with the Association for Southern African Professional Archaeologist (ASAPA) should be notify in order to determine appropriate mitigation measures for the discovered finds. This may include obtaining the necessary authorization (permits) from SAHRA to conduct the mitigation measures.

### **3.5 Some remarks on terminology**

Terms that may be used in this report are briefly outlined below:

- Conservation: The act of maintaining all or part of a resource (whether renewable or non-renewable) in its present condition in order to provide for its continued or future use. Conservation includes sustainable use, protection,

maintenance, rehabilitation, restoration and enhancement of the natural and cultural environment.

- Conservation (*in-situ*): The conservation and maintenance of ecosystems, natural habitats and cultural resources in their natural and original surroundings.
- Cultural (heritage) resources: A broad, generic term covering any physical, natural and spiritual properties and features adapted, used and created by humans in the past and present. Cultural resources are the result of continuing human cultural activity and embody a range of community values and meanings. These resources are non-renewable and finite. Cultural resources include traditional systems of cultural practice, belief or social interaction. They can be, but are not necessarily identified with defined locations.
- Cultural (heritage) resource management: A process that consists of a range of interventions and provides a framework for informed and value-based decision-making. It integrates professional, technical and administrative functions and interventions that impact on cultural resources. Activities include planning, policy development, monitoring and assessment, auditing, implementation, maintenance, communication, and many others. All these activities are (or will be) based on sound research.
- Heritage resources: The various natural and cultural assets that collectively form the heritage. These assets are also known as cultural and natural resources. Heritage (cultural) resources include all human-made phenomena and intangible products that are the result of the human mind. Natural, technological or industrial features may also be part of heritage resources, as places that have made an outstanding contribution to the cultures, traditions and lifestyles of the people or groups of people of South Africa.
- Stone Age: Refers to the prehistoric past, although Late Stone Age peoples lived in South Africa well into the Historical Period. The Stone Age is divided into an Earlier Stone Age (3 million years to 150 000 thousand years ago) the Middle Stone Age (150 000 years to 40 000 years ago) and the Late Stone Age (40 000 years to 300 years ago).

- Iron Age: Refers to the last two millennia and 'Early Iron Age' to the first thousand years AD. 'Late Iron Age' refers to the period between the 16<sup>th</sup> century and the 19<sup>th</sup> century and can therefore include the Historical Period.
- Historical period: Refers to the first appearance or use of 'modern' Western writing in a particular area or region of the world.
- Pre-historical: Refers to the time before any historical documents were written or any written language developed in a particular area or region of the world.
- Recent past: Refers to the 20<sup>th</sup> century. Remains from this period are not necessarily older than sixty years and therefore may not qualify as archaeological or historical remains. Some of these remains, however, may be close to sixty years of age and may, in the near future, qualify as heritage resources.
- Maintenance: Keeping something in good health or repair.
- Preservation: Conservation activities that consolidate and maintain the existing form, material and integrity of a cultural resource.
- Protected area: A geographically defined area designated and managed to achieve specific conservation objectives. Protected areas are dedicated primarily to the protection and enjoyment of natural or cultural heritage, to the maintenance of biodiversity, and to the maintenance of life-support systems.
- Reconstruction: Re-erecting a structure on its original site using original components.
- Replication: The act or process of reproducing by new construction the exact form and detail of a vanished building, structure, object, or a part thereof, as it appeared at a specific period.
- Restoration: Returning the existing fabric of a place to a known earlier state by removing additions or by reassembling existing components.
- Sustainability: The ability of an activity to continue indefinitely, at current and projected levels, without depleting social, financial, physical and other resources required to produce the expected benefits.
- Translocation: Dismantling a structure and re-erecting it on a new site using original components.
- Project Area: refers to the area (footprint) where the developer wants to focus its development activities (refer to plan).

- Phase I studies refer to surveys using various sources of data in order to establish the presence of all possible types and ranges of heritage resources in any given Project Area.
- Phase II studies include in-depth cultural heritage studies such as archaeological mapping, excavating and sometimes laboratory work. Phase II work may include the documenting of rock art, engraving or historical sites and dwellings; the sampling of archaeological sites or shipwrecks; extended excavations of archaeological sites; the exhumation of human remains and the relocation of graveyards, etc. Phase II work involve permitting processes, require the input of different specialists and the co-operation and approval of SAHRA.

## 4 THE PROJECT AREA

### 4.1 Location

The Project Area comprises Portion 1, 2 and the Remainder of the farm Varkensvlei 403KQ and Portion 2 and 10 of the farm Nooitgedacht 406KQ north-west of Northam a mining town on the road that runs between the Pilanesberg mountain range and Thabazimbi. Although Varkensvlei 403KQ and Nooitgedacht 406KQ adjoins, Varkensvlei 403KQ occurs in the North-West and Nooitgedacht 406KQ in the Limpopo Province (Middelwit 2427CC 1: 50 000 topographical & 2426 Thabazimbi 1: 250 000 map) (Figures 1-3).

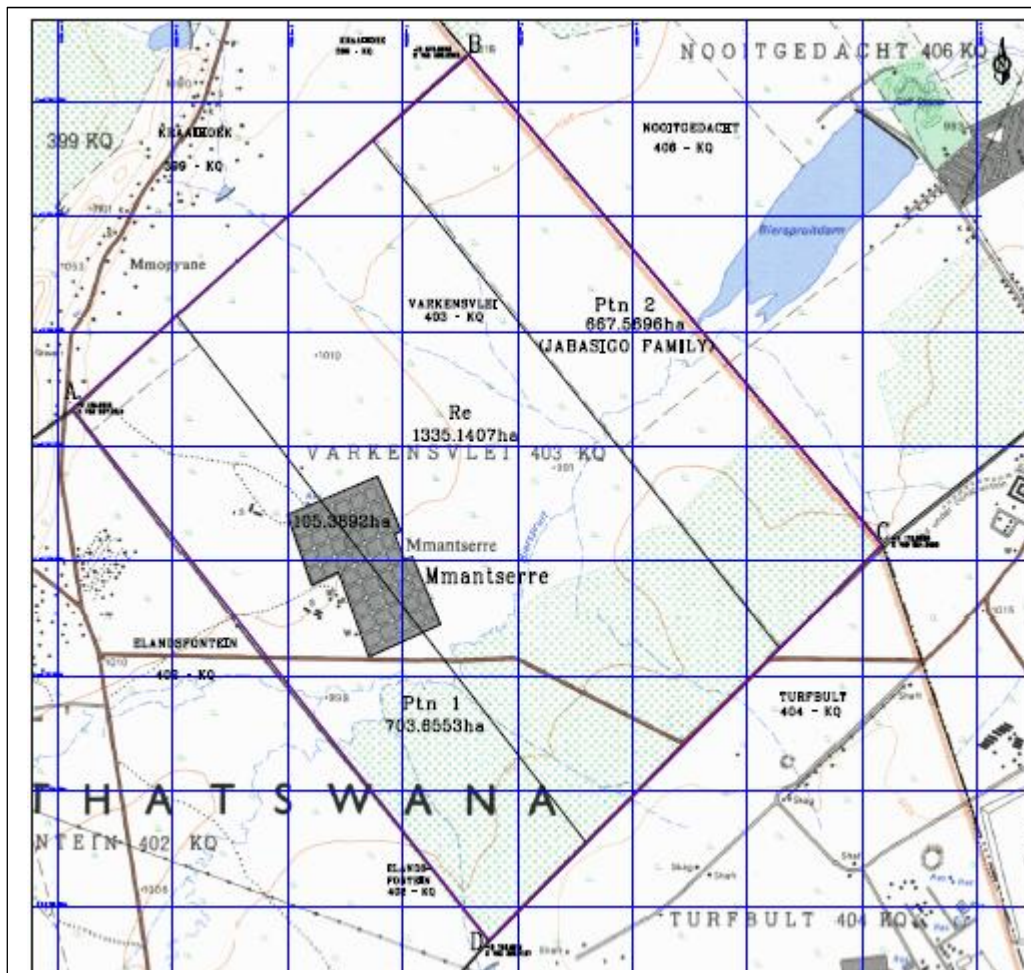


Figure 1 – The Project Area on portions of Varkensvlei 403KQ and Nooitgedacht 406KQ comprises two pieces of land to the west and to the east of the Bierspruit near Northam in the north-West and Limpopo Provinces. The Project Area mainly comprises agricultural fields (above).



**Figure 2- The most outstanding features of the Project Area is the presence of agricultural fields, whether actively being utilized, laying foul waiting for the next season to be planted again or abandoned and now covered with vegetation which are regenerating. The natural vegetation that does occur is being depleted as a result of deforestation due to expanding populations in the villages of Mantserre and Mmopyane (above).**

The Project Area is situated to the north of the Pilanesberg and to the south of the extensive 'Vliegepoort' and 'Berg van Winde' mountain range which is located to the south of Thabazimbi. The Project Area is a flat, outstretched homogenous eco-zone which is covered with acacia and other bushveld trees on mixed red and turf soils.

The mining town of Northam serves as a business hub for the booming platinum and chrome mining complex which have developed after Hans Merensky has discovered platinum bearing deposits at Swartklip in the early 20<sup>th</sup> century. Other economic interests in the area include dry land agriculture and wild game farming although the mining sector is gradually gaining the most prominent economic influence in the region.





**Figure 3- The Project Area falls within the boundaries of Varkensvlei 403KQ and Nooitgedacht 406KQ, respectively located in the North-West and Limpopo Provinces. The Project Area is covered with older inactive and younger active agricultural fields whilst the last remaining indigenous bush closer to Mantserre and Mmopyane is being depleted for firing purposes (above).**

#### **4.2 The nature of the Project Area**

The Project Area used to be covered with acacia and a wide range of bushveld trees and grass veld in the past. This tree and grass plain (savannah veld) was home to a wide range of antelope and other game. This flat landscape is broken in the north where the Mopyane range of kopjes is located outside the border of the Project Area.

The natural characteristic features of the Project Area have been transformed during the last decades, firstly as a result of dry land agriculture and in more recent times due to the establishment and expanding of the village of Mantserre as well as other villages in the area. The impact of platinum mining is prominent towards the south where the Swartklip Platinum Mine and town exist.

The Project Area cannot be described as a pristine piece of land any longer. It has largely been transformed except for some natural vegetation that still exists. This transformation was initially triggered by the occupation of the Project Area and the establishment of the village of Mantserre towards its centre. This was followed by large scale agriculture activities which resulted in the ploughing of the soil and the planting of agricultural crops. In general, however, it can also be said that the area is not rich in any particular heritage resources except stone walled sites which are mostly found at kopjes and randjes outside the larger Project Area.

### **4.3 The nature of the Mining Project**

Samancor Chrome is currently preparing to apply for a Mining Rights Application and intends undertaking open cast chrome mining in the future. As such no mine plans are currently available for the future planned mining of chrome in the Project Area.

### **4.4 The heritage potential of the Project Area**

The Project Area falls on a piece of land which is surrounded by areas which are characterised by cultural landscapes of significance, some of which have been researched and documented in the past. The immediate and larger Project Area has also been subjected to several heritage surveys, namely:

- Miller, S. 2007-2012. The heritage resources of Kumba Iron Ore Company, Thabazimbi, Limpopo Province of South Africa. Part 1 The archaeology, Part 2 The town and mine, Part 3 Human remains Part IV Heritage management plan.
- Pistorius, J.C.C. 2008. A Phase I Heritage Impact Assessment (HIA) study for Eskom's proposed new 132kV Simthabi power line running between the existing Thabazimbi Combined Substation and the proposed new Simthabi Substation in the Limpopo Province. Unpublished report prepared for EPA International.
- Pistorius, J.C.C. 2009. A Base line Heritage Assessment report for Eskom's Thabatsipi Substation and 132kV power line project near Amandelbult and

Thabazimbi in the Limpopo Province. Unpublished report prepared for EPA International.

- Pistorius J.C.C. 2011. Report on monitoring a seismic survey for heritage resources on several farms to the west of Northam in the Limpopo Province of South Africa. Unpublished report for Anglo Platinum.
- Pistorius, J.C.C. 2013a. A Phase I Heritage Impact Assessment study for Eskom's proposed Letlhabane Project near Northam in the Limpopo Province. Unpublished report prepared for URGENEG.
- Pistorius, J.C.C. 2013b. A Phase I Heritage Impact Assessment study for Samacor's proposed Mining Right Application on portions of the farm Haadoringdrift 473KQ in the Limpopo Province. Unpublished report prepared for Golder Associates Africa (Pty) Ltd.

These heritage surveys revealed that the larger Project Area is not rich in a wide range of heritage resources. The most common heritage resources which do occur are stone walled sites which date from the Late Iron Age. These heritage sites are mostly found along the base lines of kopjes and randjes in the region.

## 5 CONTEXTUALISING THE PROJECT AREA

The Project Area is located in a region that is wedged between Koedoeskop and Thabazimbi in the north and the Pilanesberg in the south and falls across the border of the North-West and Limpopo Provinces. The Project Area falls on a flat piece of land which is bisected by the Bierspruit which flows into the Bierspruitdam. The farm Varkensvlei 403KQ is situated to the west of this spruit whilst Nooitgedacht 407KQ is located to the east of the Bierspruit. The Mmopyane mountain range occurs to the north of the Project Area whilst Anglo Platinum's Swartklip mining village and associated mine infrastructure delineates its southern boundary (Middelwit 2427CC 1; 50 000 topographical map & 2426 Thabazimbi 1: 250 000 map).

Important historical and pre-historical centres occur around the Project Area. These include the Thabazimbi-Rooiberg area further to the north which is known for the presence of early tin mines (possibly Late Iron Age) in the Rooiberg as well as for Late Iron Age settlements which were occupied by specialist metal working groups who occupied the mountain range near Thabazimbi (Bauman 1912, Trevor 1919, Hall 1991). The Pilanesberg region to the south is where the Kgatla Kgafêla established a sphere of influence at capitals such as Moruleng and Boretele along the north-eastern perimeter of the Pilanesberg as early as the seventeenth century. Descendants of the original Kgatla Kgafêla clan who contributed to the historical and cultural significance of this group still occupy the larger area today (Breutz 1954, 1986; Schapera 1942, 1952).

Madibeng and Rustenburg further to the south-west and south-east were both home to various pre-historical and historical Tswana clans such as the Kwena and Kgatla (Breutz 1954, 1986) whilst some of these settlements, amongst others who were occupied by Mzilikazi's Ndebele, have been archaeological investigated (Pistorius 1997a, 1997b, 1998).

Ramakoka, east of the Project Area, today is still home to the Kwena Phalane a pre-historical and historical Tswana clan whose origins, earlier abodes and settlement history has not yet received any thorough attention from researchers (Breutz 1954,

1986). Members of the Kwena Phalane community are prominent occupants of the larger Project Area.

The Project Area itself is not known to contain a diverse range of heritage resources. The most common heritage resources in this region are the presence of Late Iron Age stone walled sites which occur near randjes and kopjes in the larger area.

The following brief overview of archaeological (pre-historical) and historical information will help to contextualise the Project Area within the context of the wider area.

## **5.1 Stone Age sites**

Stone Age sites are marked by stone artefacts that are found scattered on the surface of the earth or that are parts of the deposits in caves and rock shelters. The Stone Age is divided into the Early Stone Age (ESA) (from 2.5 million years ago to 250 000 years ago), the Middle Stone Age (MSA) (from 250 000 years ago to 22 000 years ago) and the Late Stone Age (LSA) (from 22 000 years ago to about 2 000 years ago).

The LSA is associated with the rock paintings and engravings which were done by the San, Khoi Khoi and, in more recent times, by Negroid (Iron Age) farmers.

No significant recordings of Stone Age sites, rock paintings or engravings have been made near the Project Area, except for a few engravings near Maanhaarrand and Rustenburg whilst some rock paintings have been recorded in the Pilanesberg.

It can be expected that stone artefacts dating from the Stone Age may occur in the larger Project Area as stone tools also occur on the Springbokflats which represents a very similar environment or habitat as the Project Area.

## **5.2 Iron Age remains**

It is highly unlikely that the Project Area was occupied by Early Iron Age (EIA) Bantu-Negroid people who lived elsewhere in the Limpopo, Mpumalanga, KwaZulu-Natal and North-West Provinces of South Africa during the 3<sup>rd</sup> to 9<sup>th</sup> centuries AD.

The earliest Iron Age settlers who moved into the larger project area were Late Iron Age Sotho-speaking groups who belonged to the Moloko tradition. These Kgatla and Kwena communities are associated with stone walled settlements which date from AD1600 although earlier settlements, devoid of any stone walls, also probably occur in the region. Moloko sites have been recorded in Rooiberg, north of the Project Area (Hall 1991), at the Pilanesberg and in Madibeng and Rustenburg further to the south where these sites are associated with kopjes and randjes. Iron Age settlements occur in the Ben Alberts Nature Reserve and elsewhere in the Thabazimbi district (Miller 2007-2012).

The Rooiberg area is also renowned for early tin mining activities, possibly dating from the Late Iron Age. It seems as if large quantities of tin ore was mined from the Rooiberg and transported to an unknown destination. The abundance of iron ore in the area, particularly around Thabazimbi, also led to the smelting of these ores by local Late Iron Age people in order to manufacture products such as weapons (spears) and tools (hoes, axes, etc) (Bauman 1912, Trevor 1919, Hall 1991).

## **5.3 Historical period**

The closest towns to the Project Area are Thabazimbi and Northam. Thabazimbi's name is derived from the Tswana words for 'mountain of iron'. This was due to the discovery of the exceptionally rich iron ore deposits at Vliegpoort ('defile of flies') by the geologists J.H. Williams in 1919. The South African government bought the ore body and production for the Iscor Iron Ore mine in 1928. The mine started with its operations in 1931

A branch railway line was built from Northam to Thabazimbi on the Pretoria-Middelwit line. The town of Thabazimbi was laid out on the farm Kwaggashoek and proclaimed

on 4 May 1953. Millions of tons of iron ore are annually mined and hauled by train to Vanderbijlpark and New Castle (Erasmus 1995).

The town of Northam was laid out by E.H. Fulls on the farm Leeukoppie and formally proclaimed in 1946. This farm together with several others was owned by H. Herd who had purchased the properties from British soldiers to whom they have been allocated after the Anglo Boer War. Herd was allowed to choose the name for the new village which he called Northam after the village Northam in Devonshire, England (Erasmus 1995).

## 6 THE PHASE I HERITAGE SURVEY

### 6.1 The heritage field survey

The Phase I HIA is briefly described and illuminated with photographs according to the main environmental characteristics of the Project Area, namely agricultural fields in different stages of production and the outskirts of Mantserre.



**Figures 4 & 5- Varkensvlei 403KQ is largely covered with agricultural fields in different stages of production, namely freshly ploughed and planted fields in the north, east and south (above) and agricultural fields that are laying foul for a season or longer in the southern and central parts of this farm. These fields are mainly covered with grass and no trees (above).**





**Figures 6 & 7- Abandoned agricultural fields where grass and trees have regenerated are found towards the central part of Varkensvlei 403KQ (above). Young fowl laying agricultural fields on Nooitgedacht 407KQ with some indigenous bush along the northern fringe of the farm (below).**



**Figures 8 & 9- The south-western corner of Varkensvlei 403KQ looking towards Anglo Platinum's Swarklip Mine as well as a broad buffer zone around the village of Matserre is severely degraded as a result of deforestation and over grazing (above).**



## 6.2 Types and ranges of heritage resources

The Phase I HIA study for the Project Area revealed the following types and ranges of heritage resources as outlined in Section 3 of the National Heritage Resources Act (No 25 of 1999), namely:

- A formal graveyard in the village of Mantserre.
- No archaeological or pre-historical remains were recorded. Neither did this study provide for a paleontological study.

The graveyard was geo-referenced (Table 1) but not mapped as it is located in the village of Mantserre.

### 6.2.1 Formal graveyard in Mantserre

A large formal graveyard with hundreds of graves is located near the southern perimeter of the village of Mantserre. Many of the graves are older than sixty years.



Figure 10– A formal graveyard located in the village of Mantserre (above).

### 6.2.2 Table

Table outlining the coordinates and level of significance for the graveyard in the village of Mantserre.

Mantserre graveyard		Coordinates	Significance
No			
GY01	Large graveyard with hundreds of graves	24° 56 542S' 27° 06 113E'	<b>HIGH</b>

**Table 1- Coordinates for graveyard in Mantserre and its level of significance (above).**

## **7 THE HERITAGE IMPACT ASSESSMENT**

### **7.1 Possible impact on the heritage resources**

It seems as if the Project Area is devoid of any conspicuous heritage resources. The most obvious to exist are stone walled sites and these may possibly be found in the Mmopyane mountain range outside the northern border of the Project Area.

### **7.2 Mitigating heritage resources**

The graveyard of Mantserre is located in the village itself. Although no mine plan is currently available it is unlikely that any significant heritage resources or the graveyard will be affected by the mining project.

Consequently, no mitigation measures for any heritage resources can be recommended.

## 8 CONCLUSION AND RECOMMENDATION

The Phase I HIA study for the Project Area revealed the following types and ranges of heritage resources as outlined in Section 3 of the National Heritage Resources Act (No 25 of 1999), namely:

- A formal graveyard in the village of Mantserre.
- No archaeological or pre-historical remains were recorded. Neither did this study provide for a paleontological study.

The graveyard was geo-referenced (Table 1) but not mapped as it is located in the village of Mantserre.

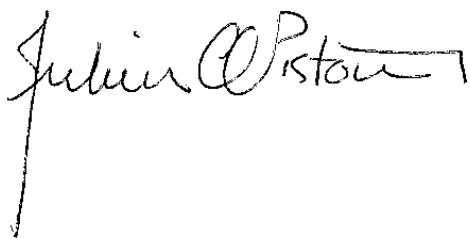
### **Possible impact on the heritage resources**

It seems as if the Project Area is devoid of any conspicuous heritage resources. The most obvious to exist are stone walled sites and these may possible be found in the Mmopyane mountain range outside the northern border of the Project Area.

### **Mitigating heritage resources**

The graveyard of Mantserre is located in the village itself. Although no mine plan is currently available it is unlikely that any significant heritage resources or the graveyard will be affected by the mining project.

Consequently, no mitigation measures for any heritage resources can be recommended.



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## 9 SELECT BIBLIOGRAPHY

Bergh, J.S. (red.) 1998. *Geskiedenisatlas van Suid Afrika. Die vier noordelike provinsies*. J.L. van Schaik: Pretoria.

Breutz, P.L. 1953. *The tribes of the Rustenburg and Pilanesberg districts*. Pretoria: Government Printer.

Breutz, P.L. 1986. *A history of the Batswana and origin of Bophuthatswana*. Margate, Natal: Thumbprint.

Hall, S. 1981. Iron Age sequence and settlement in the Rooiberg, Thabazimbi area. *Unpublished MA dissertation*. University of the Witwatersrand.

Inskeep, R.R. 1978. *The peopling of Southern Africa*. David Philip: Cape Town.

Mason, R. 1962. *Prehistory of the Transvaal*. Johannesburg: Witwatersrand University Press.

Mason, R.J. 1986. *Origins of black people of Johannesburg and the Southern Western Central Transvaal, AD350-1880*. Occasional Paper No. 16 of the Archaeological Research Unit, University of the Witwatersrand. Wits University Press.

Miller, S. 2007-2012. The heritage resources of Kumba Iron Ore Company, Thabazimbi, Limpopo Province of South Africa. Part 1 The archaeology, Part 2 The town and mine, Part 3 Human remains Part IV Heritage management plan. Unpublished report for Kumba Resources.

Naude, M. 1990. Die Transvaalse Boerewoning. *Africana Society of Pretoria* (8): 46-49.

Naude, M. 2004. Oral evidence on the construction of vernacular farm dwellings in the Waterberg (Limpopo Province). *South African Journal of Cultural History*. 18(1): 34-61

Pistorius, J.C.C. 2003 -2006. Various Phase I HIA studies for Eskom's rural power lines on the following farms in the Project Area: Doornhoek 57JQ, Wentzel 342LQ, Mooivallei 342KQ, Haakdoringdrift 573KQ, Varkensvlei 403KQ and Nooitgedacht 406KQ, Groothoek 278KQ, Ouhoek 345LQ, Leeuwpan 43KQ, Knopieskop 547KQ, Rietfontein 541KQ, Buisdoorns 55KP, Doornhoek 318KQ, Rietfontein 497KQ, Seringhoek 495KQ, Sweet Home 322KQ, Marekeli 437KQ, Patrysvley 58KQ Eensaamheid 376JP, Vaalpenskraal, St Agnes, Kameelnek 278 and Dwars-in-de-Weg.

Pistorius, J.C.C.. 2006. A Phase I Heritage Impact Assessment (HIA) study for a proposed new 132kV power line between the existing Thabazimbi Combined Substation and the proposed new Rooiberg Substation in the Limpopo Province of South Africa. Unpublished report for Enviro Excellent Services.

Van Warmelo, N. J. 1930. *Transvaal Ndebele texts*. Government Printer: Pretoria.

Pistorius, J.C.C. 1997a. The Matabele village which eluded history, Part I. *South African Journal of Ethnology*, 20(1):26-38.

Pistorius, J.C.C. 1997b. The Matabele village which eluded history, Part II. *South African Journal of Ethnology*, 20(2):43-55.

Pistorius, J.C.C. 1998. EmHlalandlela, a Matabele settlement in the Bankeveld. *South African Journal of Ethnology*, 21(2):55-65.

Pistorius J.C.C. 2011. Report on monitoring a seismic survey for heritage sites on several farms to the west of Northam in the Limpopo Province of South Africa. Unpublished report for Anglo Platinum.

Pistorius, J.C.C. 2013a. A Phase I Heritage Impact Assessment study for Eskom's proposed Letlhabane Project near Northam in the Limpopo Province. Unpublished report prepared for Eskom.

Pistorius, J.C.C. 2013b. A Phase I Heritage Impact Assessment study for Samacor's proposed Mining Right Application on portions of the farm Haadoringdrift 473KQ in



the Limpopo Province. Unpublished report prepared for Golder Associates Africa (Pty) Ltd.

Schapera, I. 1942. *A short history of the Bakgatla Bagakgafela of Bechuanaland Protectorate*. Communications from the School of African Studies. University of Cape Town.

Schapera, I. 1952. *The ethnic composition of Tswana tribes*. Monographs on Social Anthropology, No 11. London School of Economics and Political Science.

Viljoen, M.J. & Reinhold, W.U. 1999. *An introduction to South Africa's geological and mining heritage*. Randburg: Mintek.

Wagner, P.A. & Gordon, H.S. 1929. Further notes on ancient bronze smelters in the Waterberg District. Transvaal. *South African Journal of Science*. 26:263-575.

## **10 SPOKESPERSONS CONSULTED**

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