Heritage impact assessment for the PROPOSED MAGNETITE MINING ACTIVITIES ON THE FARM UITVLUGT 887KS, SEKHUKHUNELAND MAGISTERIAL DISTRICT, LIMPOPO PROVINCE

THE PROJECT:

Development of magnetite mining activities

THIS REPORT:

HERITAGE IMPACT ASSESSMENT FOR THE PROPOSED MAGNETITE MINING ACTIVITIES ON THE FARM UITVLUGT 887KS, SEKHUKHUNELAND MAGISTERIAL DISTRICT, LIMPOPO PROVINCE

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Prepared for: HIGHVELD STEEL AND VANADIUM CORPORATION LIMITED Representative: Mr E Muller

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EXECUTIVE SUMMARY

HERITAGE IMPACT ASSESSMENT FOR THE PROPOSED MAGNETITE MINING ACTIVITIES ON THE FARM UITVLUGT 887KS, SEKHUKHUNELAND MAGISTERIAL DISTRICT, LIMPOPO PROVINCE

Highveld Steel and Vanadium Corporation Limited proposes to mine magnetite ore on a small area of Portion 4 of the farm Uitvlugt 887KS in the Sekhukhuneland magisterial district of Limpopo province. The mining area comprises six areas, all 1,5 hectare in extent, all adjacent to each other. For the purpose of this survey it was treated as a single unit.

In accordance with Section 38 of the National Heritage Resources Act (NHRA), No. 25 of 1999, an independent heritage consultant was appointed by **Highveld Steel and Vanadium Corporation Limited** to conduct a Heritage Impact Assessment (HIA) to determine if any sites, features or objects of cultural heritage significance occur within the boundaries of the area where it is planned to mine the magnetite ore.

• As no heritage sites occur in the study area, there would be no impact resulting from the proposed development of the mining activities.

Therefore, from a heritage point of view we recommend that the proposed development can continue. However, we request that if archaeological sites or graves are exposed during mining activities, it should immediately be reported to a museum, preferably one at which an archaeologist is available, so that an investigation and evaluation of the finds can be made.

J A van Schalkwyk Heritage Consultant September 2009

TECHNICAL SUMMARY

Property details						
Province	Lim	ооро				
Magisterial district	Sek	hukhuneland				
Topo-cadastral map	242	9DD, 2529BB				
Closest town	Witk	bank				
Farm name	Uitvlugt 887KS					
Portions/Holdings	4					
Coordinates	Cen	tre point				
	No	Latitude	Longitude	No	Latitude	Longitude
	1	S 24.98136	E 29.93027			

Development criteria in terms of Section 38(1) of the NHR Act	Yes/No
Construction of road, wall, power line, pipeline, canal or other linear	
form of development or barrier exceeding 300m in length	
Construction of bridge or similar structure exceeding 50m in length	
Development exceeding 5000 sq m	Yes
Development involving three or more existing erven or subdivisions	
Development involving three or more erven or divisions that have been	
consolidated within past five years	
Rezoning of site exceeding 10 000 sq m	
Any other development category, public open space, squares, parks,	
recreation grounds	

Development	
Description	Strip mining of magnetite ore
Project name	Uitvlugt

Land use	
Previous land use	Farming/Mining
Current land use	Farming

Heritage sites assess	ment	
Site type	Site significance	Site grading (Section 7 of NHRA)
None		
Impact assessment		
Impact	Mitigation	Permits required
None		

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GLOSSARY OF TERMS AND ABBREVIATIONS

TERMS

Study area: Refers to the entire study area as indicated by the client in the accompanying Fig. 1 - 2.

Stone Age: The first and longest part of human history is the Stone Age, which began with the appearance of early humans between 3-2 million years ago. Stone Age people were hunters, gatherers and scavengers who did not live in permanently settled communities. Their stone tools preserve well and are found in most places in South Africa and elsewhere.

Early Stone Age	2 000 000 - 150 000 Before Present
Middle Stone Age	150 000 - 30 000 BP
Late Stone Age	30 000 - until c. AD 200

Iron Age: Period covering the last 1800 years, when new people brought a new way of life to southern Africa. They established settled villages, cultivated domestic crops such as sorghum, millet and beans, and they herded cattle as well as sheep and goats. These people, according to archaeological evidence, spoke early variations of the Bantu Language. Because they produced their own iron tools, archaeologists call this the Iron Age.

Early Iron Age		AD	200 - AD 9	900
Middle Iron Age		AD	900 - AD 1	300
Late Iron Age		AD 1	300 - AD 1	830

Historical Period: Since the arrival of the white settlers - c. AD 1840 - in this part of the country

ABBREVIATIONS

ADRC	Archaeological Data Recording Centre
ASAPA	Association of Southern African Professional Archaeologists
CS-G	Chief Surveyor-General
EIA	Early Iron Age
ESA	Early Stone Age
LIA	Late Iron Age
LSA	Later Stone Age
HIA	Heritage Impact Assessment
MSA	Middle Stone Age
NASA	National Archives of South Africa
NHRA	National Heritage Resources Act
PHRA	Provincial Heritage Resources Agency
SAHRA	South African Heritage Resources Agency

HERITAGE IMPACT ASSESSMENT FOR THE PROPOSED MAGNETITE MINING ACTIVITIES ON THE FARM UITVLUGT 887KS, SEKHUKHUNELAND MAGISTERIAL DISTRICT, LIMPOPO PROVINCE

1. INTRODUCTION

Highveld Steel and Vanadium Corporation Limited proposes to mine magnetite ore on a small area of Portion 4 of the farm Uitvlugt 887KS in the Sekhukhuneland magisterial district of Limpopo province. The mining area comprises six areas, all 1,5 hectare in extent, all adjacent to each other. For the purpose of this survey it was treated as a single unit.

South Africa's heritage resources, also described as the 'national estate', comprise a wide range of sites, features, objects and beliefs. However, according to Section 27(18) of the National Heritage Resources Act (NHRA), No. 25 of 1999, no person may destroy, damage, deface, excavate, alter, remove from its original position, subdivide or change the planning status of any heritage site without a permit issued by the heritage resources authority responsible for the protection of such site.

In accordance with Section 38 of the NHRA, an independent heritage consultant was appointed by **Highveld Steel and Vanadium Corporation Limited** to conduct a Heritage Impact Assessment (HIA) to determine if any sites, features or objects of cultural heritage significance occur within the boundaries of the area where it is planned to develop the mining activities.

2. TERMS OF REFERENCE

The scope of work for this study consisted of:

- Conducting of a desk-top investigation of the area, in which all available literature, reports, databases and maps were studied;
- A visit to the proposed development area.

The objectives were to

- Identify possible archaeological, cultural and historic sites within the proposed development area;
- Evaluate the potential impacts of construction, operation and maintenance of the proposed development on archaeological, cultural and historical resources;
- Recommend mitigation measures to ameliorate any negative impacts on areas of archaeological, cultural or historical importance.

3. HERITAGE RESOURCES

3.1 The National Estate

The NHRA (No. 25 of 1999) defines the heritage resources of South Africa which are of cultural significance or other special value for the present community and for future generations that must be considered part of the national estate to include:

- places, buildings, structures and equipment of cultural significance;
- places to which oral traditions are attached or which are associated with living heritage;
- historical settlements and townscapes;
- landscapes and natural features of cultural significance;
- geological sites of scientific or cultural importance;
- archaeological and palaeontological sites;
- graves and burial grounds, including
 - o ancestral graves;
 - o royal graves and graves of traditional leaders;
 - o graves of victims of conflict;
 - o graves of individuals designated by the Minister by notice in the Gazette;
 - o historical graves and cemeteries; and
 - other human remains which are not covered in terms of the Human Tissue Act, 1983 (Act No. 65 of 1983);
- sites of significance relating to the history of slavery in South Africa;
- movable objects, including-
 - objects recovered from the soil or waters of South Africa, including archaeological and palaeontological objects and material, meteorites and rare geological specimens;
 - objects to which oral traditions are attached or which are associated with living heritage;
 - ethnographic art and objects;
 - o military objects;
 - o objects of decorative or fine art;
 - o objects of scientific or technological interest; and
 - books, records, documents, photographic 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).

3.2 Cultural significance

In the NHRA, Section 2 (vi), it is stated that "cultural significance" means aesthetic, architectural, historical, scientific, social, spiritual, linguistic or technological value or significance. This is determined in relation to a site or feature's uniqueness, condition of preservation and research potential.

According to Section 3(3) of the NHRA, a place or object is to be considered part of the national estate if it has cultural significance or other special value because of

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

4. STUDY APPROACH AND METHODOLOGY

4.1 Extent of the Study

This survey and impact assessment covers the area as presented in Section 5 and as illustrated in Figures 1 - 2.

4.2 Methodology

4.2.1 Preliminary investigation

4.2.1.1 Survey of the literature

A survey of the relevant literature was conducted with the aim of reviewing the previous research done and determining the potential of the area. In this regard, various anthropological, archaeological and historical sources were consulted.

• No publications dealing with the larger region and none with the study area specifically were identified. Some information was obtained from previous heritage impact assessment studies done in the region (Murimbika 2005, Van Schalkwyk 2007).

4.2.1.2 Data bases

The Heritage Atlas Database, the Environmental Potential Atlas, the Chief Surveyor General and the National Archives of South Africa were consulted.

- Database surveys produced a number of sites located in the larger region of the proposed development.
- A copy of the original Title Deed of the farm was in the records of either the Chief Surveyor-General. Some general information on the occupation and subdivision of the farm was found in the National Archives of South Africa.

4.2.1.3 Other sources

Aerial photographs and topocadastral and other maps were also studied - see the list of references below.

• Information of a very general nature were obtained from these sources

4.2.2 Field survey

The area that had to be investigated was identified by **Highveld Steel and Vanadium Limited** by means of maps and during a site visit. The site was surveyed by walking a number of parallel transects over it.

4.3 Limitations

None at present.

5. DESCRIPTION OF THE AFFECTED ENVIRONMENT

5.1 Site location and description

The site is an irregular piece of land located on the eastern (right hand) bank of the Steelpoort River, a few kilometres to the north of the village of Roossenekal (Fig. 1). The study area is located inside the full supply level of the new De Hoop dam, which is currently under construction. For more information, please see the Technical Summary presented above.

The geology of the study area is mainly gabbro, which is replaced to the east and west by granite, with some syenite intrusions occurring to the west. Gabbro is essentially indistinguishable from norite and occurs with the latter and other mafic to ultramafic rocks in layered intrusions that are often associated with platinum ore bodies in South Africa.

The original vegetation for the biggest part of the study area is classified as Mixed Bushveld. This changes to Moist Sandy Highveld Grassland in the upper third of the projected dam basin.

Some previous mining activities of unknown date is located on the eastern side of the current mining area.

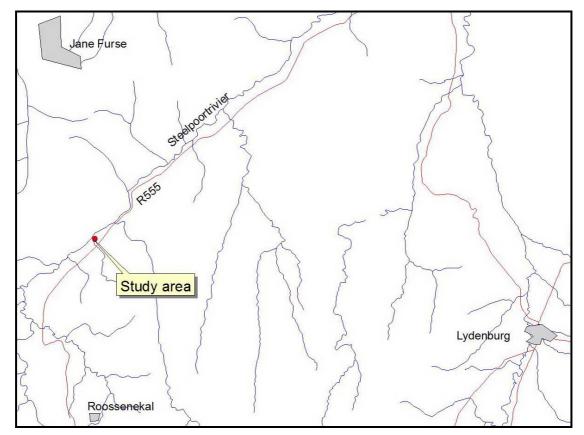


Fig. 1. Location of the study area (red dot) in regional context.

5.2 Regional overview

Based on the evidence, i.e. stone tools found scattered all over, Stone Age people probably occupied the area for thousands of years. Although the evidence for Early Stone Age is quite limited, being only a few tools dating to this period that was found, it can be determined that these people were active in the area. It was especially during the Middle Stone Age when the population numbers increased. These people have been described as the true pioneers of modern human society, exploring not only with new technology, but new territories as well.

The Stone Age is followed by the next phase in the history of settlement. A large number of sites dating to the Iron Age were identified during the initial surveys. In its essence, these sites have their origin in the occupation of the area by people of African descent, who occupied the area discontinuously over a period of nearly 1500 years.

As time passed, these early communities either left the region by their own accord, or were displaced or even assimilated by later people moving into the area. What kind of contact this was is not clear, but as the new settlements are still located out in the open it seems as if it was peaceful in nature.

However, all of this was set to change. During the middle of the 18th century, developments that started to take place on a subcontinent scale, climatic change and economic and political factors, also affected the Steelpoort River valley and its people. New people, in many cases refugees from other parts of the country, entered the valley. Competition for land and its resources gave rise to situations of stress and conflict. This can be seen by the fact that people were now abandoning sites in the open areas, settling on the various hills and at the foot of the mountains, where they built sites that are clearly defensive in nature. A new element encountered on sites dating to this period is stonewalling.

This is also the period where we encounter oral histories, praise poems and such, sources that recount the lives of people and events, for the first time giving us a direct voice from the people involved. It is also the period where we get the first written documents on the people and the region. Settlers of European descent entered the valley looking for land and resources – farmers, missionaries, traders, teachers and prospectors - all came and influenced the people and used the land according to their own needs and ambitions. Inevitably it put people on opposite sides, sides that were to become clearer over time, when the history of the next few decades were already starting to be written.

This last phase of the history is a very comprehensive section as it deals with a time period of which we not only have more information about, but also many more actors participating. Viewed on the whole, this chapter reads in micro format as the history of the country as a whole. It showed how people of different socio-cultural backgrounds came together, worked together, learned from each other, how conflict arose and touched the lives of all.

Uitvlugt 887KS:

Title deed 1047/1876 for the farm Uitvlugt 319 (later 887KS) was issued on 19 June 1875 to Hendrik de Clercq. The farm is stated to be 4165 morgen in size and in 1899 a final survey was done on behalf of E.A. de Clercq. Hendrik de Clercq was born in the Cape Colony in the Beaufort West district, and died on 8 September 1893 at the age of 67 years. His wife, Engela Adriana de Clercq (née De Jager), was born in the district of Uitenhage in the Cape Colony.

In 1903-4 several consents were given to Engela de Clercq to take over in part satisfaction of her share accruing to her out of the Estate of Hendrik de Clercq "certain quitrent farm called Uitvlugt No. 319" at the appraised value of £1500. Several title deeds followed and on 8 December 1953 title deed 2877/1953 was issued in favour of C.J. Botha, who bequeathed the remainder of the farm (size 195.7284 morgen) to Susanna Maria Botha (title deed 22018/1967).

5.3 Identified sites

The following cultural heritage resources are known to exists or are expected to exist in the study area:

5.3.1 Stone Age

• A few stone tools dating to the Middle Stone Age were identified on the surface in the study area. As they are not in their original context any more, they are viewed to have a low significance.

5.3 2 Iron Age

• No sites, features or objects dating to the Iron Age were identified in the study area.

5.3.3 Historic period

• No sites, features or objects dating to the historic period were identified in the study area.

6. SITE SIGNIFICANCE AND ASSESSMENT

6.1 Heritage assessment criteria and grading

The NHRA stipulates the assessment criteria and grading of archaeological sites. The following categories are distinguished in Section 7 of the Act:

- **Grade I**: Heritage resources with qualities so exceptional that they are of special national significance;
- **Grade II**: Heritage resources which, although forming part of the national estate, can be considered to have special qualities which make them significant within the context of a province or a region; and
- Grade III: Other heritage resources worthy of conservation, on a local authority level.

The occurrence of sites with a Grade I significance will demand that the development activities be drastically altered in order to retain these sites in their original state. For Grade II and Grade III sites, the applicable of mitigation measures would allow the development activities to continue.

6.2 Statement of significance

In terms of Section 7 of the NHRA, all the sites currently known or which are expected to occur in the study area are evaluated to have a

• Grade III significance.

6.3 Impact assessment

Impact analysis of cultural heritage resources under threat of the proposed development, are based on the present understanding of the development.

• As no heritage sites occur in the study area, there would be no impact resulting from the proposed development of the mining activities.

7. RECOMMENDED MANAGEMENT MEASURES

Heritage sites are fixed features in the environment, occurring within specific spatial confines. Any impact upon them is permanent and non-reversible. Those resources that cannot be avoided and that are directly impacted by the development can be excavated/recorded and a management plan can be developed for future action. Those sites that are not impacted on can be written into the management plan, whence they can be avoided or cared for in the future.

7.1 Objectives

- Protection of archaeological, historical and any other site or land considered being of cultural value within the project boundary against vandalism, destruction and theft.
- The preservation and appropriate management of new discoveries in accordance with the NHRA, should these be discovered during mining activities.

The following shall apply:

- Known sites should be clearly marked in order that they can be avoided during mining activities.
- The contractors and workers should be notified that archaeological sites might be exposed during the mining activities.
- Should any heritage artefacts be exposed during excavation, work on the area where the artefacts were discovered, shall cease immediately and the Environmental Control Officer shall be notified as soon as possible;
- All discoveries shall be reported immediately to a museum, preferably one at which an archaeologist is available, so that an investigation and evaluation of the finds can be made. Acting upon advice from these specialists, the Environmental Control Officer will advise the necessary actions to be taken;
- Under no circumstances shall any artefacts be removed, destroyed or interfered with by anyone on the site; and
- Contractors and workers shall be advised of the penalties associated with the unlawful removal of cultural, historical, archaeological or palaeontological artefacts, as set out in the National Heritage Resources Act (Act No. 25 of 1999), Section 51. (1).

7.2 Control

In order to achieve this, the following should be in place:

- A person or entity, e.g. the Environmental Control Officer, should be tasked to take responsibility for the heritage sites and should be held accountable for any damage.
- Known sites should be located and isolated, e.g. by fencing them off. All residents and their visitors should be informed that these are no-go areas, unless accompanied by the individual or persons representing the Environmental Control Officer as identified above.
- In areas where the vegetation is threatening the heritage sites, e.g. growing trees pushing walls over, it should be removed, but only after permission for the methods proposed has been granted by SAHRA. A heritage official should be part of the team executing these measures.

8. CONCLUSIONS

The aim of the survey was to locate, identify, evaluate and document sites, objects and structures of cultural significance found within the area in which it is proposed to mine magnetite ore.

• As no heritage sites occur in the study area, there would be no impact resulting from the proposed development of the mining activities.

Therefore, from a heritage point of view we recommend that the proposed development can continue. However, we request that if archaeological sites or graves are exposed during mining activities, it should immediately be reported to a museum, preferably one at which an archaeologist is available, so that an investigation and evaluation of the finds can be made.

9. REFERENCES

9.1 Data bases

Chief Surveyor General

Environmental Potential Atlas, Department of Environmental Affairs and Tourism.

Heritage Atlas Database, Pretoria.

National Archives of South Africa

9.2 Literature

Acocks, J.P.H. 1975. *Veld Types of South Africa*. Memoirs of the Botanical Survey of South Africa, No. 40. Pretoria: Botanical Research Institute.

Holm, S.E. 1966. *Bibliography of South African Pre- and Protohistoric archaeology*. Pretoria: J.L. van Schaik.

Murimbika, E. 2005. *Environmental Impact Assessment: Infrastructural Development Specialist Study: Cultural Heritage Assessment*. Polokwane: Nzumbululo Heritage Solutions.

Van Schalkwyk, J.A. 2007. *Final survey report and mitigation recommendations for cultural heritage resources in the De Hoop Dam, Steelpoort River, Limpopo Province*. Unpublished report DHD2007/01. Pretoria: National Cultural History Museum.

9.3 Maps and aerial photographs

1: 50 000 Topocadastral maps: 2429DD, 2529BB

Google Earth

APPENDIX 1: CONVENTIONS USED TO ASSESS THE IMPACT OF PROJECTS ON HERITAGE RESOURCES

Significance

According to the NHRA, Section 2(vi) the **significance** of heritage sites and artefacts is determined by it aesthetic, architectural, historical, scientific, social, spiritual, linguistic or technical value in relation to the uniqueness, condition of preservation and research potential. It must be kept in mind that the various aspects are not mutually exclusive, and that the evaluation of any site is done with reference to any number of these.

Matrix used for assessing the significance of each identified site/feature

1. Historic value			
Is it important in the community, or pattern of history			
Does it have strong or special association with the life or work of a person,			
group or organisation of importance in history			
Does it have significance relating to the history of slavery			
2. Aesthetic value			
It is important in exhibiting particular aesthetic characterist	ics valued	bv a	
community or cultural group		,	
3. Scientific value			
Does it have potential to yield information that will co	ontribute t	o an	
understanding of natural or cultural heritage			
Is it important in demonstrating a high degree of creati	ve or tecl	nnical	
achievement at a particular period			
4. Social value			
Does it have strong or special association with a particular community or			
cultural group for social, cultural or spiritual reasons			
5. Rarity			
Does it possess uncommon, rare or endangered aspects of natural or cultural			
heritage			
6. Representivity			
Is it important in demonstrating the principal characteristics of a particular			
class of natural or cultural places or objects			
Importance in demonstrating the principal characteristics of a range of			
landscapes or environments, the attributes of which identify it as being			
characteristic of its class	-		
Importance in demonstrating the principal characteristics of human activities			
(including way of life, philosophy, custom, process, land-use, function, design			
or technique) in the environment of the nation, province, region			
7. Sphere of Significance	High	Medium	Low
International			
National			
Provincial			
Regional			
Local			
Specific community			
8. Significance rating of feature			
1. Low			
2. Medium			
3. High			

Significance of impact:

- low where the impact will not have an influence on or require to be significantly accommodated in the project design
- medium where the impact could have an influence which will require modification of the project design or alternative mitigation
- high where it would have a "no-go" implication on the project regardless of any mitigation

Certainty of prediction:

- Definite: More than 90% sure of a particular fact. Substantial supportive data to verify assessment
- Probable: More than 70% sure of a particular fact, or of the likelihood of that impact occurring
- Possible: Only more than 40% sure of a particular fact, or of the likelihood of an impact occurring
- Unsure: Less than 40% sure of a particular fact, or the likelihood of an impact occurring

Recommended management action:

For each impact, the recommended practically attainable mitigation actions which would result in a measurable reduction of the impact, must be identified. This is expressed according to the following:

1 = no further investigation/action necessary

2 = controlled sampling and/or mapping of the site necessary

3 = preserve site if possible, otherwise extensive salvage excavation and/or mapping necessary

- 4 = preserve site at all costs
- 5 = retain graves

Legal requirements:

Identify and list the specific legislation and permit requirements which potentially could be infringed upon by the proposed project, if mitigation is necessary.

APPENDIX 2. RELEVANT LEGISLATION

All archaeological and palaeontological sites, and meteorites are protected by the National Heritage Resources Act (Act no 25 of 1999) as stated in Section 35:

(1) Subject to the provisions of section 8, the protection of archaeological and palaeontological sites and material and meteorites is the responsibility of a provincial heritage resources authority: Provided that the protection of any wreck in the territorial waters and the maritime cultural zone shall be the responsibility of SAHRA.

(2) Subject to the provisions of subsection (8)(a), all archaeological objects, palaeontological material and meteorites are the property of the State. The responsible heritage authority must, on behalf of the State, at its discretion ensure that such objects are lodged with a museum or other public institution that has a collection policy acceptable to the heritage resources authority and may in so doing establish such terms and conditions as it sees fit for the conservation of such objects.

(3) Any person who discovers archaeological or palaeontological objects or material or a meteorite in the course of development or agricultural activity must immediately report the find to the responsible heritage resources authority, or to the nearest local authority offices or museum, which must immediately notify such heritage resources authority.

(4) No person may, without a permit issued by the responsible heritage resources authority-

(a) destroy, damage, excavate, alter, deface or otherwise disturb any archaeological or palaeontological site or any meteorite;

(b) destroy, damage, excavate, remove from its original position, collect or own any archaeological or palaeontological material or object or any meteorite;

(c) trade in, sell for private gain, export or attempt to export from the Republic any category of archaeological or palaeontological material or object, or any meteorite; or

(d) bring onto or use at an archaeological or palaeontological site any excavation equipment or any equipment which assist in the detection or recovery of metals or archaeological and palaeontological material or objects, or use such equipment for the recovery of meteorites.

In terms of cemeteries and graves the following (Section 36):

(1) Where it is not the responsibility of any other authority, SAHRA must conserve and generally care for burial grounds and graves protected in terms of this section, and it may make such arrangements for their conservation as it sees fit.

(2) SAHRA must identify and record the graves of victims of conflict and any other graves which it deems to be of cultural significance and may erect memorials associated with the grave referred to in subsection (1), and must maintain such memorials.

(3) No person may, without a permit issued by SAHRA or a provincial heritage resources authority-

(a) destroy, damage, alter, exhume or remove from its original position or otherwise disturb the grave of a victim of conflict, or any burial ground or part thereof which contains such graves;

(b) destroy, damage, alter, exhume, remove from its original position or otherwise disturb any grave or burial ground older than 60 years which is situated outside a formal cemetery administered by a local authority; or

(c) bring onto or use at a burial ground or grave referred to in paragraph (a) or (b) any excavation equipment, or any equipment which assists in the detection or recovery of metals.

(4) SAHRA or a provincial heritage resources authority may not issue a permit for the destruction or damage of any burial ground or grave referred to in subsection (3)(a) unless it is satisfied that the applicant has made satisfactory arrangements for the exhumation and reinterment of the contents of such graves, at the cost of the applicant and in accordance with any regulations made by the responsible heritage resources authority.

APPENDIX 3: SURVEY RESULTS

See Appendix 1 for an explanation of the conventions used in assessing the significance of the cultural remains.

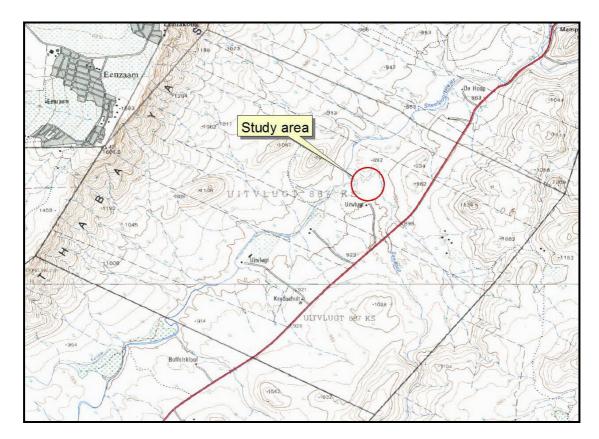


Fig. 2. Location of the study area, outlined in red. (Maps 2429DD, 2529BB: Chief Surveyor-General).

Sites identified in the study area: Nil

APPENDIX 4: ILLUSTRATIONS

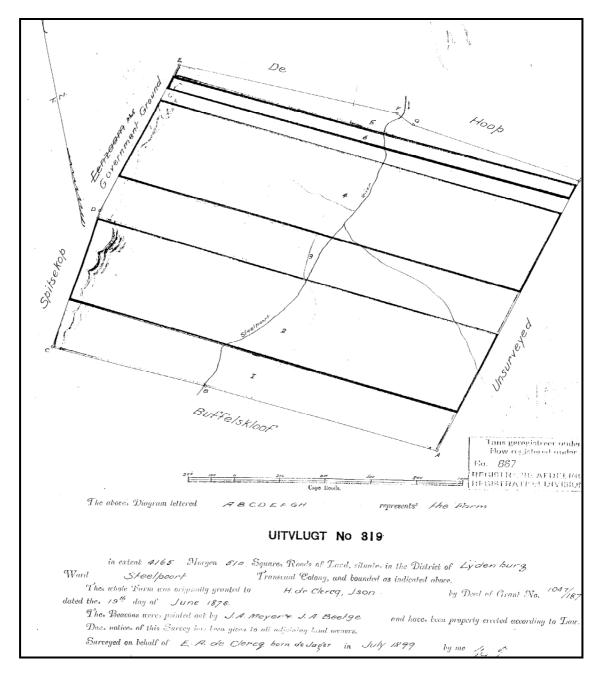


Fig. 3. Original Title Deed for the farm Uitvlugt, issued in 1876 and surveyed in 1899.



Fig. 4. View of the study area looking east.



Fig. 5. The study area looking south west.

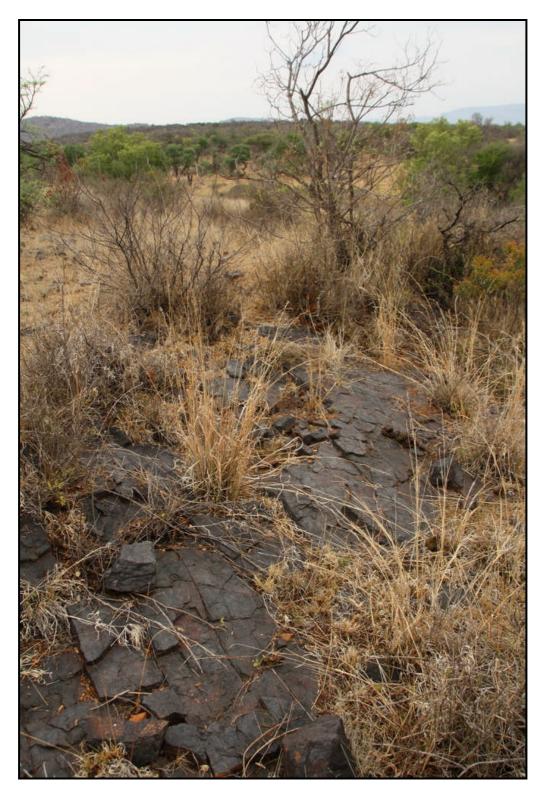


Fig. 6. Typical magnetite outcrop that will be mined.