

Phase 1 Archaeological Impact Assessment for MTC Minerals
concerning mining activities on the farm Twyfelaar 119 KT
compiled by

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Contents

Executive summary	p. 3.
1. Introduction	p. 4.
2. Description of surveyed area	p. 6.
3. Methodology	p. 6.
4. History and archaeology	p.11.
4.1. Early history	
4.2. Historic period	
4.3. Archaeological history	
4.4. History of Twyfelaar 119 KT	
5. Located sites, their description and suggested mitigation	p. 19.
6. Findings and recommendations	p. 25.
7. Bibliography	p. 26.
8. Appendix A – Terminology	p. 28.
9. Appendix B – List of located sites	p. 33.
10. Appendix C – Baseline EIA register	p. 36.
11. Appendix D – Maps	p. 38.
1:50 000 location map	
Aerial photo location	
12. Appendix E – Photos of located sites	p. 41.

Executive summary

A Heritage Impact assessment was undertaken by Kudzala Antiquity CC for MTC Minerals PTY LTD who plans to do underground and open cast mining on portions of the farm Twyfelaar 119 KT. The survey was conducted by making use of social consultation with representatives of the community and also a survey on foot and with the use of a motor vehicle in an effort to located archaeological remains and historical features. Seven graveyards were located, described and mapped (1:50 000 topographical 2430 CA Steelpoort). None of these graveyards will be impacted upon as they are all located outside of the proposed Project/ mining area. No archaeological or historically significant objects were located.

1. Introduction

Kudzala Antiquity conducted a Heritage Impact Assessment (HIA) on a Portion of the farm Twyfelaar 119 KT in extent 365 hectares. The affected area is located in the Magisterial District of Greater Tubatse, Limpopo Province.

The study forms part of an Environmental Impact Assessment as required by legislation, the National Heritage Resources Act (Act 25, 1999). This act requires of individuals (engineers, farmers, mines and industry) or institutions to have impact assessment studies undertaken whenever any development activities are planned. This is to ensure that heritage features or sites that qualify as part of the National Estate are not damaged or destroyed.

Heritage resources considered to be part of the national estate include those that are of cultural significance or have other special value to the present community or future generations.

The national estate may 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:
 - (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; andother human remains which are not covered in terms of the Human Tissue Act, 1983 (Act No. 65 of 1983);

- sites of significance relating to slavery in South Africa;
- 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

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 of the National Archives of South Africa Act, 1996 (Act No. 43 of 1996).

Van Vollenhoven (1995:3) describes cultural resources as all unique and non-renewable physical phenomena (of natural occurrence or made by humans) that can be associated with human (cultural) activities. These would be any man-made structure, tool, object of art or waste that was left behind on or beneath the soil surface by historic or pre-historic communities. These remains, when studied in their original context by archaeologists, are interpreted in an attempt to understand, identify and reconstruct the activities and lifestyles of past communities. When these items are disturbed from their original context, any meaningful information they possess is lost, therefore it is important to locate and identify such remains before construction or development activities commence.

An HIA consists of three phases, this document deals with the first phase. This (phase 1) investigation is aimed at getting an overview of cultural resources in a given area, thereby assessing the possible impact a proposed development may have on these resources. When the archaeologist encounters a situation where the planned project will lead to the destruction or alteration of an archaeological site, a second phase in the survey is normally recommended. During a phase two investigation, the impact assessment of

development activities on identified cultural resources is intensified and detailed investigation into the nature and origin of the cultural material is undertaken. Normally at this stage, archaeological excavation is carried out in order to document and preserve the cultural heritage.

Phase three consists of the compiling of a management plan for the safeguarding, conservation, interpretation and utilization of cultural resources (Van Vollenhoven, 2002).

Continuous communication between the developer and surveyor after the initial report has been compiled may result in the modification of a planned route or development to incorporate or protect existing archaeological sites.

2. Description of surveyed area

The study area falls within the Greater Tubatse District Municipality within Limpopo Province. The survey was carried out on a 365 ha portion of the farm Twyfelaar 119 KT which is 1 704 ha in total. The survey was conducted on foot in an effort to locate cultural remains.

3. Methodology

The methodological approach for this study should meet the requirements of relevant heritage legislation. A desktop study followed by a physical survey of the impacted areas was conducted. A detailed archival study was conducted in an effort to establish the age of the property and whether structures, graves or features of historical value exist on the property.

SAHRA recently (2005) issued the “*Minimum standards for archaeological and palaeontological components of impact assessment reports*”. This is a draft document which suggests that the following components be included in a heritage impact assessment:

- Archaeology
- Shipwrecks
- Battlefields
- Graves
- Structures older than 60 years
- Living heritage
- Historical settlements
- Landscapes
- Geological sites
- Palaeontological sites and objects

All the above-mentioned heritage components are addressed in this report, except shipwrecks, geological sites and palaeontological sites and objects.

The purpose of the archaeological study is to establish the whereabouts and nature of cultural heritage sites should they occur on the surveyed area. This includes settlements, structures and artifacts which have value for an individual or group of people in terms of historical, archaeological, architectural and human (cultural) development.

It is the aim of this study to locate and identify such objects or places in order to assess whether they are of significance and warrant further investigation or protection. This study consisted of foot surveys, a desktop archival study as well as a study of the results of previous archaeological work in the area.

3.1. Desktop study

The purpose of the desktop study is to compile as much information as possible on the heritage resources of the area. This helps to provide an historical context for located sites. Sources used for this study included published and unpublished documents, archival material and maps. Material obtained from the following institutions or individuals were consulted:

- Lydenburg Museum Archives, Lydenburg
- Published and unpublished archaeological reports and articles
- The South African National Archives
- The Deeds office (Pretoria)

3.2. Significance of sites

The South African Heritage Resources Agency (SAHRA) formulated guidelines for the conservation of all cultural resources and therefore also divided such sites into three main categories. These categories might be seen as guidelines that suggest the extent of protection a given site might receive. They include sites or features of local (Grade 3) provincial (Grade 2) and national (Grade 1) significance.

For practical purposes the surveyor uses his own classification for sites or features and divides them into three groups, those of low or no significance, those of medium significance, those of high significance.

Within the establishment of the significance of a site or feature there are certain values or dimensions connected to significance which may be allocated to a site. These include:

- **Types of significance**

The site's scientific, aesthetic and historic significance or a combination of these is established.

- **Degrees of significance**

The archaeological or historic site's rarity and representative value is considered. The condition of the site is also an important consideration.

- **Spheres of significance**

Sites are categorized as being significant in the international, national, provincial, regional or local context. Significance of a site for a specific community is also taken into consideration.

It should be noted that to arrive at the specific allocation of significance of a site or feature, the specialist considers the following:

- Historic context
- Archaeological context or scientific value
- Social value
- Aesthetic value

More specific criteria used by the specialist in order to allocate value or significance to a site include:

- The unique nature of a site
- The integrity of the archaeological deposit
- The wider historic, archaeological and geographic context of the site
- The location of the site in relation to other similar sites or features
- The depth of the archaeological deposit (when it can be determined or is known)
- The preservation condition of the site
- Quality of the archaeological or historic material of the site
- Quantity of sites and site features

In short, archaeological and historic sites that contain data which may significantly enhance the knowledge that archaeologists currently have about our cultural heritage should be considered highly valuable. In all instances these sites should be preserved and not damaged during construction activities. When development activities do however jeopardize the future of such a site, a second and third phase in the Cultural Resource Management (CRM) process is normally advised which entails the excavation or rescue

excavation of cultural material along with a management plan to be drafted for the preservation of the site or sites.

Graves are considered very sensitive sites and should never under any circumstances be jeopardized by development activities. Graves are incorporated in the National Heritage Resources Act under section 36 and in all instances where graves are found by the surveyor, the recommendation would be to steer clear of these areas. If this is not possible or if construction activities have for some reason damaged graves, specialized consultants are normally contacted to aid in the process of exhumation and reinterment of the human remains. This implies that construction activities at the particular grave site will be brought to a halt temporarily.

4. History and archaeology

4.1. Early History

Scientists are of the opinion that people roamed the Mpumalanga Lowveld and escarpment area much longer ago than anticipated. A hominid of the Australopithecine species is believed to have been the first to stake a claim as first inhabitant. He was succeeded by more modern physical types such as *Homo erectus*, evidence of both these pre-historic predecessors of modern man, was discovered on the location at the Lowveld National Botanical Gardens in Nelspruit. This evidence is in the shape of formal stone tools belonging to the Early (Approx. 1,5 – 3 million AD) and Middle Stone Age (Approx. 200 000 – 30 000 AD) periods. (Milne in Bornman, 1979).

The first inhabitants of the eastern Lowveld were probably the San or Bushmen. They were a nomadic people who lived together in small family groups and relied on hunting and gathering of food for survival. Evidence of their existence is to be found in numerous rock shelters throughout the Eastern Mpumalanga where some of their rock paintings are still visible. A number of these shelters have been documented throughout the Province (Bornman, 1995; Schoonraad in Barnard, 1975; Delius, 2007). These include areas such as Witbank, Ermelo, Barberton, Nelspruit, White River, Lydenburg and Ohrigstad. San paintings in Mpumalanga are characterized by representations of animals and human figures and are normally fine-lined paintings which are produced by using brushes made of plant material, sticks and quills. The colours are usually red and black or sometimes white. It has been argued that the red ochre source for these paintings is to be found at Dumaneni, near Malelane (Bornman, 1995).

It was only later that Bantu-speaking tribes moved into this area from the northern parts of Southern Africa and settled here. This period is referred to as the Early Iron Age (AD 200-1500 approx.). These were presumably Karanga (north-east African) herder groups. It is believed that these people may have been responsible for making of the famous Lydenburg Heads, ceramic masks dating to approximately 490 AD.

Ludwig von Bezing was a boy of more or less 10 years of age when he first saw pieces of the now famous Lydenburg heads in 1957 while playing in the veld on his father's farm near Lydenburg. Five years later von Bezing developed an interest in archaeology and went back to where he first saw the shards. Between 1962 and 1966 he frequently visited the Sterkspruit valley to collect pieces of the seven clay heads. Von Bezing joined the archaeological club of the University of Cape Town when he studied medicine at this institution. He took his finds to the university at the insistence of the club. He had not only found the heads, but potsherds, iron beads, copper beads, ostrich eggshell beads, pieces of bones and millstones. Archaeologists of the University of Cape Town Prof. Ray Innskeep and Dr Mike Evers excavated the site where von Bezing found the remains.

This site and in particular its unique finds (heads, clay masks) instantly became internationally famous and was henceforth known as the Lydenburg Heads site.

Two of the clay masks are large enough to probably fit over the head of a child, the other five are approximately half that size. The masks have both human and animal features, a characteristic that may explain that they had symbolic use during initiation- and other religious ceremonies. Carbon dating proved that the heads date to approximately 490 AD and were made by early Iron Age people. These people were Bantu herders and agriculturists and probably populated Southern Africa from areas north-east of the Limpopo river. Similar ceramics were later found in the Gustav Klingbiel Nature Reserve and researchers believe that they are related to the ceramic wares (pottery) of the Lydenburg Heads site in form, function and decorative motive. This sequence of pottery is formally known as the Klingbiel type pottery. No clay masks were found in similar context to this pottery sequence.

Two larger heads and five smaller ones make up the Lydenburg find. The heads are made of the same clay used in making household pottery. It is also made with the same technique used in the manufacture of household pottery. The smaller heads display the modeling of a curved forehead and the back neck as it curves into the skull. Around the neck of each of the heads, two or three rings are engraved horizontally and are filled in with hatching marks to form a pattern. A ridge of clay over the forehead and above the ears indicates the hairline. On the two larger heads a few rows of small clay balls indicate hair decorations. The mouth consists of lips – the smaller heads also have teeth.

The seventh head has the snout of an animal and is the only head that represents an animal.

Some research was done during the 1970's at sites belonging to the EIA (Early Iron Age), location Plaston, a settlement close to White River (Evers, 1977).

Early Iron Age pottery was excavated by archaeologist, Prof. Tom Huffman during 1997 on location where the Riverside Government complex is currently situated (Huffman, 1998).

4.2. Historic period

Various historians and ethnographers describe that the Lowveld was frequented by Swazi and Sotho-Tswana groups in historic times i.e. Late Iron Age times during the period AD 1500-1800. (Myburgh, 1949; Herbst, 1985; Bornman, 2002; Pienaar, 1990; Barnard, 1975; Delius 2007). Significant historic events took place in the vicinity of the surveyed area, including areas such as Sekhukune, Lydenburg, Ohrigstad and Burgersfort. These events contributed to the historic heritage of the area.

In 1876 Sekhukune, son of the Pedi king Sekwati, became the leader of the Pedi. In the decade that followed, relations between the Pedi and the ZAR deteriorated because of a boundary dispute and the presence of the German missionaries. In 1876 this conflict led to War, today known as the Sekhukune Wars.

When Britain annexed the Transvaal in 1876, Sekhukune continued the Wars. The British troops, under leadership of Sir Garnet Wolseley, defeated Sekhukune with the help of his half-brother Mampuru and the Swazis. Sekhukune was imprisoned.

Mampuru and Nkopodi (also known as Ramoroko) were both appointed as chiefs of the Pedi. When the ZAR came into power again in 1881, Sekhukune was released.

Mampuru and 30 men murdered his half-brother, Sekhukune, on August 23, 1882.

Mampuru then fled and went into hiding with Nyabela (Mapoch) the chief of the Ndzundza Ndebele. When Nyabela refused to deliver Mampuru, the ZAR, by means of a government proclamation, ordered Commandant-General Piet Joubert to besiege Erholweni (Mapoch's Caves) on Oct 12, 1882.

Erholweni is a natural fortress in the KoNomtjharelo district, north-east of Roossenekal.

It was only after the Boer forces, with the aid of other tribal chiefs, surrounded the fortress and cut the Ndzundza off from their water and cultivated lands, that they got the mastery.

Mampuru was sentenced to death and died at the gallows on November 22, 1883 in Pretoria. Nyabela was sentenced to life imprisonment.

4.3. Archaeological history

During the early 1970's Dr Mike Evers of the University of the Witwatersrand conducted fieldwork and excavations in the Eastern Transvaal. Two areas were studied, the Letaba area south of the Groot Letaba River, west of the Lebombo Mountains, east of the great escarpment and north of the Olifants River. The second area was the Eastern Transvaal escarpment area between Lydenburg and Machadodorp.

These two areas are referred to as the Lowveld and escarpment respectively. The earliest work on Iron Age archaeology was conducted by Trevor and Hall in 1912. This revealed prehistoric copper-, gold- and iron mines. Schwelinus (1937) reported smelting furnaces, a salt factory and terraces near Phalaborwa. In the same year D.S. van der Merwe located ruins, graves, furnaces, terraces and soapstone objects in the Letaba area.

Mason (1964, 1965, 1967, 1968) started the first scientific excavation in the Lowveld which was followed by N.J. van der Merwe and Scully. M. Klapwijk (1973, 1974) also excavated an Early Iron Age (EIA) site at Silverleaves and Evers and van den Berg (1974) excavated at Harmony and Eiland, both EIA sites.

Recent research by the National Cultural History Museum resulted in the excavation of an Early Iron Age site in Sekhukuneland, known as Mototolong (Van Schalkwyk, 2007). The site is characterized by four large cattle kraals containing ceramics which may be attributed to the Mzonjani and Doornkop occupational phases.

A few scattered stone tools and remains of destroyed Early Iron Age sites have been documented in this area (Pistorius, 2008, unpublished heritage assessment) but none of these types of artefacts could be located in the affected Project area.

4.4. History of Twyfelaar 119 KT

Twyfelaar 119 KT is located in the Sekukuni district, Limpopo Province.

Information from the old farm register in the Deeds Office, indicate that the farm was established in 1884. Only 78 documents relating to Twyfelaar was found in the National Archives Depot in Pretoria. However most of these refer to other farms with the same name.

Research was conducted in the National Archives Depot (NAD) and the Deeds Office in Pretoria. In the Deeds office the old farm registers and old Surveyor-General's maps were consulted. The information from the old farm register books in the Deeds Office was much more successful than that from the National Archives. However the farm does not have a very long history.

The specific archives that were consulted in the NAD are the South African Archives Depot (SAB), the Transvaal Archives Depot (TAD), the National Register of Manuscripts and Photographs, National Archives cartographic material, library material and copies (MAN), Archives Depot of Audio-Visual Material (OVM) and the all inclusive archives (RSA). The TAD deals with documents before 1910 and the SAD with those after 1910. The MAN deals with photographs, maps and other material indicated and OVM with audio-visual material.

The RSA is a combined database of all the other databases. This means that the number of documents found in all the other databases should also be found here. However experience has shown that it sometimes differs and therefore the search also had to be conducted here.

Key words that were used are the following: Twyfelaar, with and without the farm number 119 KT, or the combination thereof with the words Sekukuniland and Lydenburg (the farm had been in the Lydenburg districts before) and in combination with the number 172 which was the original farm number. Very little information was found relating to this farm.

4.4.1. Discussion

The only information that could be obtained from the Deeds Office, indicated that the farm used to be part of the Lydenburg district and that the original farm number was 172. Lydenburg was established in 1850 (Bergh 1999: 17). It was one of the first Voortrekker towns in the area today known as Mpumalanga.

The farm (Twyfelaar) was established as a Government farm on 12 August 1884 (Deeds Office). On 5 July 1951 it was transferred by registered title to the South African Native Trust (Deed no. 16452/1951). This indicates that the farm was used as residence for the indigenous people of the area. The oldest survey map of the farm dates to 1887 (Figure 4.1), but it does not indicate any structures (Surveyor-General, 565).

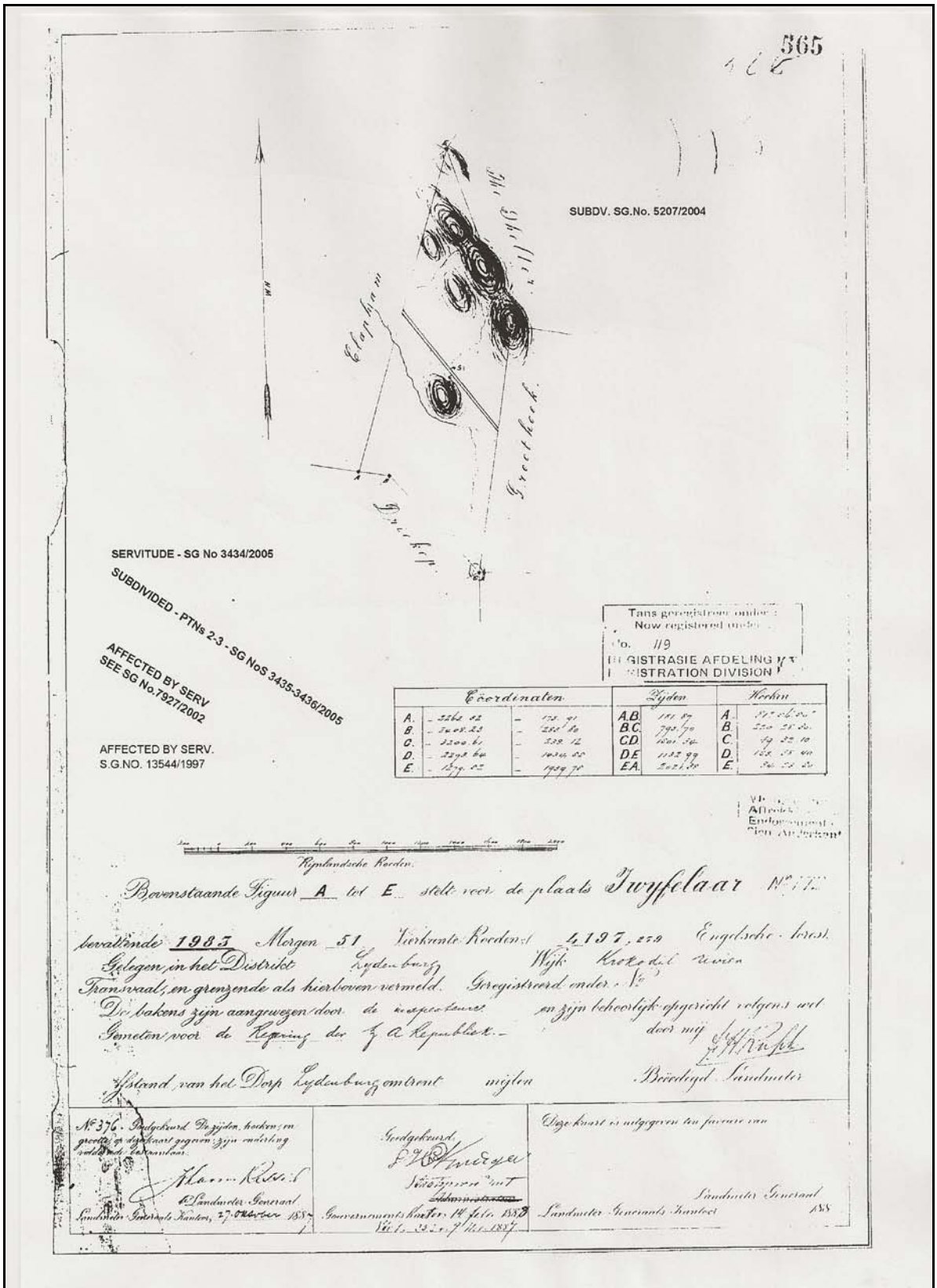


Fig. 4.1. Copy of original survey map of the farm Twyfelaar 119 KT. Surveyed 1887

(Surveyor-General, 565).

In recent times the farm became part of Lebowa and in 1985 it became owned by the Transvaal Mining and Finance Company Ltd. In 1993 it was bought by SAMANCOR Chrome Ltd. (Deeds Office, DRS01145).

As indicated earlier, 78 documents relating to the name Twyfelaar was obtained from the National Archives Depot. Almost half of these related to this particular farm, but only 10 had usefull information. The information corroborates that of the Deeds Office.

Some documents clearly indicate that the farm was part of the Native Trust area (SAB, LDE 316, 3531; SAB, LDE 316, 3531/1; SAB, NTS 1197, 691/162). Some documents also indicate that missionaries were active on the farm and that they erected schools and churches as far back as 1929 (SAB, MNW 971, MM 696/29; SAB, NTS 696, 57/110).

Prospecting on the farm started as early as 1913 (SAB, MNW 331, MM224/13). It seemed to pick up during the 1930's and 1950's (SAB, NTS 6849, 46/319; SAB, NTS 6850, 46/319; SAB, BAO 4/457, GB6/3/9/2/L42/5).

4.4.2. Concluding remarks

The farm Twyfelaar 172 was established in the Lydenburg district in 1884. It was a Government farm, probably because it was used as residence for the indigenous people. The farm number was later changed to 119 KT and it now falls in the Sekukuni district. In 1951 it was officially registered as part of the SA Native Trust. This area later on became part of Lebowa.

Prospecting started as early as 1913. Chrome was discovered and today the farm is owned by SAMANCOR.

5. Located sites, description and suggested mitigation

No significant archaeological sites and features could be located. Three graveyards were documented, however they are not located within the proposed development area (See maps).

5.1. Social consultation

Local residents were consulted prior to surveying the Project area. Informants consisted of representatives of the communities of Chakanya, Selala and Mohlala. The representatives of each community is indicated in a table below.

Informant	Community
Joyce Moeng	Chakanya
Richard Kgwete	Selala
Jack Tau	Mohlala

The representatives consulted with their respective communities in an effort to gain any information relating to graves and burial grounds, historic structures and possible archaeological features.

The informants gathered information and pointed out the location of seven (7) graveyards located outside the proposed Project area. Informants also related that the affected area served as agricultural land in the past and the present residences were only erected recently.

5.2. Description of located sites

5.2.1. Site T 1.

Location: See Appendix B and D.

Description:

This is a graveyard containing 8 graves. The graveyard was pointed out by informant, Mr

Richard Kgwete a representative of the Selala community. Only one headstone is discernible with the inscription: Mahwil Malefo Mamogale. * 03-09-1809 †20-03-1947 (It is believed that there may be a misprint on the headstone regarding the date of birth)

Impact of the proposed development/ activity:

Since the graveyard is not located within the proposed mining area, there will be no impact on the graveyard.

Mitigation:

None recommended.

5.2.2. Site T 2.

Location: See Appendix B and D.

Description:

This is a graveyard containing 14 graves. The graveyard was pointed out by informant, Mr Richard Kgwete a representative of the Selala community. Two headstones are discernible. They have the following inscriptions: Makweno Mahloko *1930-07-17 †1978-06-17. Mahloko *01-01-1907 †15-06-2005.

Impact of the proposed development/ activity:

Since the graveyard is not located within the proposed mining area, there will be no impact on the graveyard.

Mitigation:

None recommended.

5.3. Site T 3.

Location: See Appendix B and D.

Description:

This is a single grave. The grave was pointed out by informant, Mr Richard Kgwete a representative of the Selala community. No headstones are discernible. It is believed that this is the grave of a child as the burial is located close to the foundations of a ruin (dwelling).

Impact of the proposed development/ activity:

Since the graveyard is not located within the proposed mining area, there will be no

impact on the graveyard.

Mitigation: None recommended.

5.4. Site T 4.

Location: See Appendix B and D.

Description:

This is a graveyard containing 4 graves. The graveyard was pointed out by informants, Mr Richard Kgwete a representative of the Selala community and Mr Jack Tau of the Mohlala community. One headstone is discernible. It has the following inscription: In memory of our mother. Phagane Mathobela Maimela *1909 †20-03-1947.

Impact of the proposed development/ activity:

Since the graveyard is not located within the proposed mining area, there will be no impact on the graveyard.

Mitigation:

None recommended.

5.5. Site T 5.

Location: See Appendix B and D.

Description:

This is a graveyard containing 19 graves. The graveyard was pointed out by informants, Mr Richard Kgwete a representative of the Selala community and Mr Jack Tau of the Mohlala community. Three headstones are discernible. It has the following inscriptions:

Dinama Fish Mamogale *24-10-1912 †02-05-1987.

Jeffre Mamogale *1995-01-05

Maitseng Frans Mamogale *04-04-1934 †28-01-1997

Impact of the proposed development/ activity:

Since the graveyard is not located within the proposed mining area, there will be no impact on the graveyard.

Mitigation:

None recommended.

5.6. Site T 6.

Location: See Appendix B and D.

Description:

This is a graveyard containing 6 graves. The graveyard was pointed out by informants, Mr Richard Kgwete a representative of the Selala community and Mr Jack Tau of the Mohlala community. Three headstones are discernible. It has the following inscriptions:
Mokupo Stephan Maimela *06-03-1840 †22-06-1970.

Frans Maimela *02-03-1930 †25-08-1972

Thipe *1894 †12-09-1958

Impact of the proposed development/ activity:

Since the graveyard is not located within the proposed mining area, there will be no impact on the graveyard.

Mitigation:

None recommended.

5.7. Site T 7.

Location: See Appendix B and D.

Description:

This is a graveyard containing 2 graves. The graveyard was pointed out by informants, Mr Richard Kgwete a representative of the Selala community and Mr Jack Tau of the Mohlala community. One headstone is discernible. It has the following inscription:
Mokgotho Leboko Maremane *25-09-1887 †10-06-1963.

Impact of the proposed development/ activity:

Since the graveyard is not located within the proposed mining area, there will be no impact on the graveyard.

Mitigation:

None recommended.

TABLE 5.1. General Significance of located sites.

Site No.	Description	Type of significance	Degree of significance	Sphere of significance
T1	Graveyard with 8 graves	Social significance	Sensitive site high degree of significance	Communities of Chakanya, Selala, Mohlala
T2	Graveyard with 14 graves	Social significance	Sensitive site high degree of significance	Communities of Chakanya, Selala, Mohlala
T3	Graveyard with 1 graves	Social significance	Sensitive site high degree of significance	Communities of Chakanya, Selala, Mohlala
T4	Graveyard with 4 graves	Social significance	Sensitive site high degree of significance	Communities of Chakanya, Selala, Mohlala
T5	Graveyard with 19 graves	Social significance	Sensitive site high degree of significance	Communities of Chakanya, Selala, Mohlala
T6	Graveyard with 6 graves	Social significance	Sensitive site high degree of significance	Communities of Chakanya, Selala, Mohlala
T7	Graveyard with 2 graves	Social significance	Sensitive site high degree of significance	Communities of Chakanya, Selala, Mohlala

TABLE 5.2. Significance allocation of located sites

Site no.	Unique nature	Integrity of archaeological deposit	Wider context	Relative location	Depth of deposit	Quality of archaeological/historic material	Quantity of site features	Preservation condition of site
T1	Grave site	Not known	Local communities	Twyfelaar 119 KT	Not known	Archaeologically: medium potential Historically: good quality	8	Good
T2	Grave site	Not known	Local communities	Twyfelaar 119 KT	Not Known	Archaeologically: medium potential Historically: good quality	14	Good
T3	Grave site	Not known	Local communities	Twyfelaar 119 KT	Not known	Archaeologically: medium potential Historically: good quality	1	Fair
T4	Grave site	Not known	Local communities	Twyfelaar 119 KT	Not known	Archaeologically: medium potential Historically: low quality	4	Good
T5	Grave site	Not known	Local communities	Twyfelaar 119 KT	Not known	Archaeologically: medium potential Historically: low quality	19	Good
T6	Grave site	Not known	Local communities	Twyfelaar 119 KT	Not known	Archaeologically: medium potential Historically: low quality	6	Good
T7	Grave site	Not known	Local communities	Twyfelaar 119 KT	Not known	Archaeologically: medium potential Historically: good quality	2	Good

It must be noted that the bulk of archaeological remains are normally located beneath the soil surface. It is therefore possible that some significant cultural material or remains were not located during this survey and will only be revealed when the soil is disturbed. Should excavation or large scale earth moving activities reveal any human skeletal remains, broken pieces of ceramic pottery, large quantities of sub-surface charcoal or any material that can be associated with previous occupation, a qualified archaeologist should be notified immediately. This will also temporarily halt such activities until an archaeologist have assessed the situation. It must also be noted that if such a situation occurs it may have further financial implications for the mine.

6. Findings and recommendations

Mitigation measures were allocated to each site as discussed in section 5: Located sites and their description. This area revealed no archaeologically significant material. It is recommended that planned mining activities proceed.

Gravesites are always regarded as highly significant, not only because of social reasons but also in terms of legislation. The seven located gravesites will not be impacted upon as they are not located within the proposed project area. When the extent of this area does for whatever reason in future include the graveyards, a process of consultation with the affected communities must be followed prior to any planned activity.

Although no significant archaeological material or historical features were located, and the area was extensively ploughed, the possibility still exist that Early Iron Age remains which are normally located up to a metre below the soil surface, may still be present. It is recommended that when mining excavation commences the activity be monitored by a qualified archaeologist in the event that cultural remains be revealed during excavation.

7. Bibliography

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Appendix A

Terminology

“Alter” means any action affecting the structure, appearance or physical properties of a place or object, whether by way of structural or other works, by painting, plastering or other decoration or any other means.

“Archaeological” means –

- Material remains resulting from human activity which are in a state of disuse and are in or on land and which are older than 100 years, including artifacts, human and hominid remains and artificial features or structures;
- Rock Art, being any form of painting, engraving or other graphic representation on a fixed rock surface or loose rock or stone, which was executed by human agency and which is older than 100 years, including any area within 10m of such representation;
- Wrecks, being any vessel or aircraft, or any part thereof, which was wrecked in South Africa, whether on land, in the internal waters, the territorial waters or in the maritime culture zone of the Republic, as defined respectively in sections 3, 4 and 6 of the Maritime Zones Act, 1994 (Act No. 15 of 1994), and any cargo, debris or artifacts found or associated therewith, which is older than 60 years or which SAHRA considers to be worthy of conservation; and
- Features, structures and artefacts associated with military history which are older than 75 years and the sites on which they are found;

“Conservation”, in relation to heritage resources, includes protection, maintenance, preservation and sustainable use of places or objects so as to safeguard their cultural significance;

“Cultural significance” means aesthetic, architectural, historical, scientific, social, spiritual, linguistic or technological value or significance;

“Development” means any physical intervention, excavation, or action, other than those caused by natural forces, which may in the opinion of a heritage authority in any way result in a change to the nature, appearance or physical nature of a place, or influence its stability and future well-being, including –

- construction, alteration, demolition, removal or change of use of a place or a structure at a place;
- carrying out any works on or over or under a place;
- subdivision or consolidation of land comprising, a place, including the structures or airspace of a place;
- constructing or putting up for display signs or hoardings;
- any change to the natural or existing condition or topography of land; and
- any removal or destruction of trees, or removal of vegetation or topsoil;

“Expropriate” means the process as determined by the terms of and according to procedures described in the Expropriation Act, 1975 (Act No. 63 of 1975);

“Foreign cultural property”, in relation to a reciprocating state, means any object that is specifically designated by that state as being of importance for archaeology, history, literature, art or science;

“Grave” means a place of internment and includes the contents, headstone or other marker of such a place, and any other structure on or associated with such place;

“Heritage resource” means any place or object of cultural significance;

“Heritage register” means a list of heritage resources in a province;

“Heritage resources authority” means the South African Heritage Resources Agency, established in terms of section 11, or, insofar as this Act (25 of 1999) is applicable in or in respect of a province, a provincial heritage resources authority (PHRA);

“Heritage site” means a place declared to be a national heritage site by SAHRA or a

place declared to be a provincial heritage site by a provincial heritage resources authority;

“Improvement”, in relation to heritage resources, includes the repair, restoration and rehabilitation of a place protected in terms of this Act (25 of 1999);

“Land” includes land covered by water and the air space above the land;

“Living heritage” means the intangible aspects of inherited culture, and may include –

- cultural tradition;
- oral history;
- performance;
- ritual;
- popular memory;
- skills and techniques;
- indigenous knowledge systems; and
- the holistic approach to nature, society and social relationships;

“Management” in relation to heritage resources, includes the conservation, presentation and improvement of a place protected in terms of the Act;

“Object” means any moveable property of cultural significance which may be protected in terms of any provisions of the Act, including –

- any archaeological artifact;
- palaeontological and rare geological specimens;
- meteorites;
- other objects referred to in section 3 of the Act;

“Owner” includes the owner’s authorized agent and any person with a real interest in the property and –

- in the case of a place owned by the State or State-aided institutions, the Minister or any other person or body of persons responsible for the care, management or control of that place;
- in the case of tribal trust land, the recognized traditional authority;

“Place” includes –

- a site, area or region;
- a building or other structure which may include equipment, furniture, fittings and articles associated with or connected with such building or other structure;
- a group of buildings or other structures which may include equipment, furniture, fittings and articles associated with or connected with such group of buildings or other structures;
- an open space, including a public square, street or park; and
- in relation to the management of a place, includes the immediate surroundings of a place;

“Site” means any area of land, including land covered by water, and including any structures or objects thereon;

“Structure” means any building, works, device or other facility made by people and which is fixed to land, and includes any fixtures, fittings and equipment associated therewith

Appendix B

9. List of located sites

Sites located on the surveyed area was numbered T 1-7. The “T” indicates the farm Twyfelaar, followed by the number of the site. A spatial location with the aid of a GPS (Global Positioning System) was added to each site.

9.1. Site name: T 1 (Site 1)

Date of compilation: 15/04/2009

GPS reading: Longitude, 30.1114° E

Latitude, 24.49923° S

Altitude: 928 m

Photo: Fig. 1, 2.

9.2. Site name: T 2 (Site 2)

Date of compilation: 15/04/2009

GPS reading: Longitude, 30.11215° E

Latitude, 24.49859° S

Altitude: 930 m

Photo: Fig. 3.

9.3. Site name: T 3 (Site 3)

Date of compilation: 15/04/2009

GPS reading: Longitude, 30.11219° E

Latitude, 24.49804° S

Altitude: 927 m

Photo: Fig. 4, 5.

9.4. Site name: T 4 (Site 4)

Date of compilation: 15/04/2009

GPS reading: Longitude, 30.11442° E

Latitude, 24.49836° S

Altitude: 921 m

Photo: Fig. 6.

9.5. Site name: T 5 (Site 5)

Date of compilation: 15/04/2009

GPS reading: Longitude, 30.11541° E

Latitude, 24.49784° S

Altitude: 917 m

Photo: Fig. 7.

9.6. Site name: T 6 (Site 6)

Date of compilation: 15/04/2009

GPS reading: Longitude, 30.11648° E

Latitude, 24.49781° S

Altitude: 914 m

Photo: Fig. 8.

9.7. Site name: T 7 (Site 7)

Date of compilation: 15/04/2009

GPS reading: Longitude, 30.11625° E

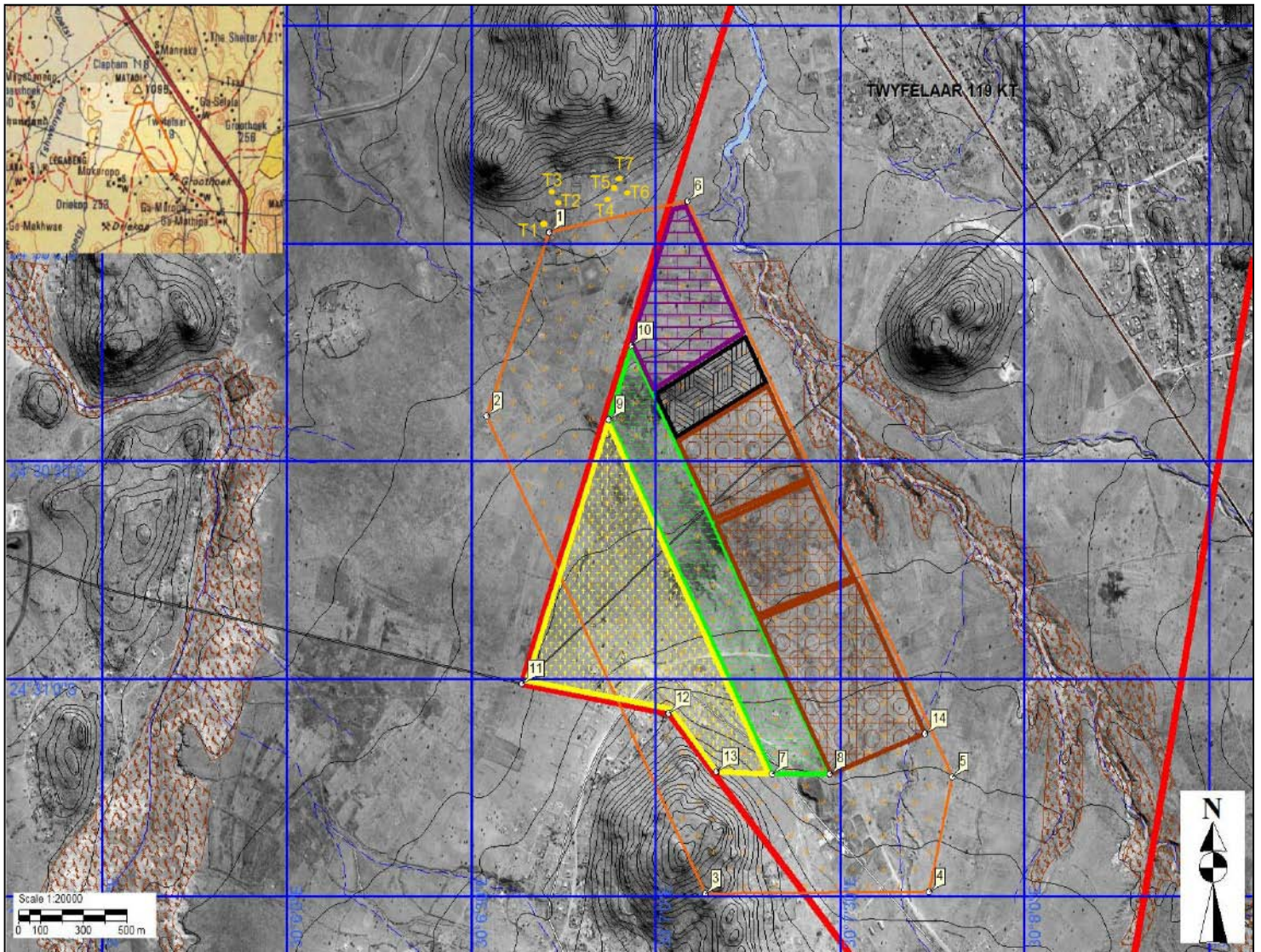
Latitude, 24.49701° S

Altitude: 920 m

Photo: Fig. 9, 10.

Appendix C – Baseline EIA register

Appendix D – Maps



LEGEND

Areas to be used for:

Yellow: Underground mining

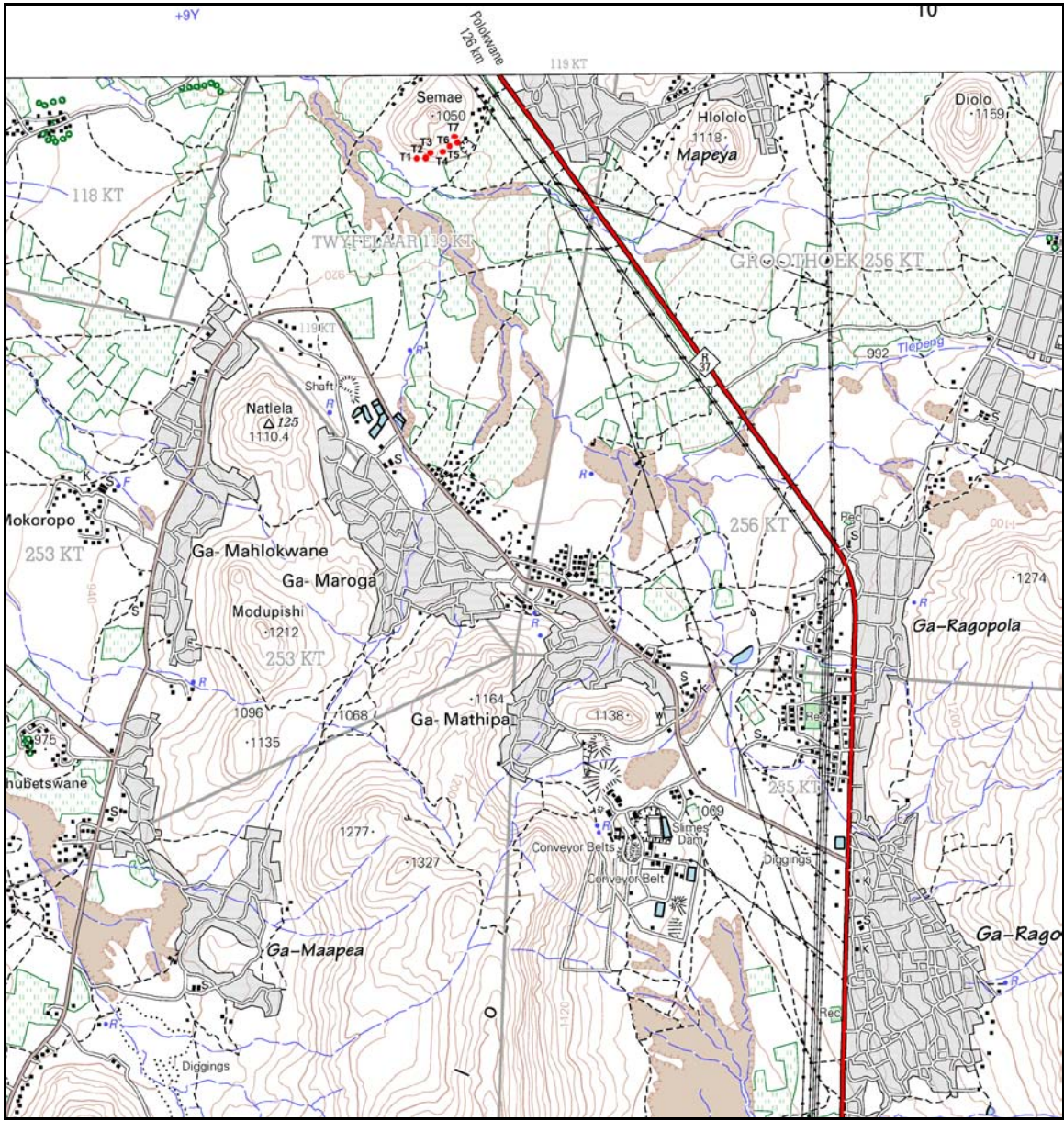
Green: Open cast area

Purple: Stock pile

Black: Workshop

Brown: Stock and service

T1-T7: Located sites



Appendix E



Fig. 1. Site T1. Graves shown by informant Mr Richard Kgwete. Total 18 graves.



Fig. 2. Site T1. View to the south.



Fig. 3. Site T2. Informants show second graveyard with 14 graves.



Fig. 4. Site T3. One grave next to the foundations of a ruin, probably a house.



Fig. 5. Site T3. The grave left (arrow) and the foundation right (arrow).



Fig. 6. Site T4. Total four graves.



Fig. 7. Site T5. Total 19 graves.



Fig. 8. Site T6. Total six graves.



Fig.9. Site T7. One of two graves.



Fig. 10. Site T7. Arrow indicates grave nest to dwelling. This is the grave of a child.