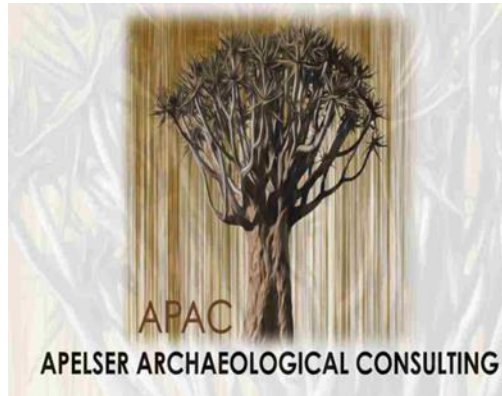


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APPENDIX 12

HERITAGE IMPACT ASSESSMENT



Comprehensive and Professional Solutions for all Heritage Related Matters
CK 2006/014630/23 **VAT NO.: 4360226270**

**A HERITAGE IMPACT ASSESSMENT REPORT
FOR THE ZEE MINERALS (PTY) LTD PROSPECTING RIGHTS APPLICATION
ON VARIOUS PORTIONS OF THE FARM VAALBANK 38HU
IN THE ZULULAND DISTRICT MUNICIPALITY, ABAQULISI LOCAL MUNICIPALITY
(HLOBANE), KWAZULU-NATAL PROVINCE**

For:

Licebo Environmental and Mining (Pty) Ltd

REPORT: **APAC024/28**

by:

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DISCLAIMER:

Although all efforts are made to identify all sites of cultural heritage (archaeological and historical) significance during an assessment of study areas, the nature of archaeological and historical sites are as such that it is always possible that hidden or subterranean sites, features or objects could be overlooked during the study. APELSER Archaeological Consulting can't be held liable for such oversights or for costs incurred as a result thereof.

Clients & Developers should not continue with any development actions until SAHRA or one of its subsidiary bodies has provided final comments on this report. Submitting the report to SAHRA is the responsibility of the Client unless required of the Heritage Specialist as part of their appointment and Terms of Reference

In this case Amafa in KwaZulu Natal needs to provide Final Comments

A handwritten signature in black ink, appearing to be 'A. Pelser', is centered below the text.

SUMMARY

APelser Archaeological Consulting (APAC) was appointed by Licebo Environmental and Mining (Pty) Ltd, on behalf of the Applicant (Zee Minerals (Pty) Ltd), to conduct Heritage Impact Assessment for their Prospecting Rights Application. This forms part of their Basic Assessment for Environmental Authorization. The study and proposed Application Area fall in the Zululand District Municipality, Abaqulisi Local Municipality in the Province of KwaZulu-Natal, near Hlobane/Vaalbank. Various Portions of the original farm Vaalbank 38HU forms part of the application area.

Background research indicates that there are several cultural heritage (archaeological & historical) sites and features in the larger geographical area within which the study area falls, but no known ones in the study area and specific farm portion. This report discusses the results of the background research and provides recommendations on the way forward at the end.

From a Cultural Heritage point of view, it is recommended that the proposed Prospecting Rights Application be allowed to continue, taking into consideration the recommendations put forward at the end.

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1. INTRODUCTION

APelser Archaeological Consulting (APAC) was appointed by Licebo Environmental and Mining (Pty) Ltd, on behalf of the Applicant (Zee Minerals (Pty) Ltd), to conduct a based Heritage Impact Assessment for their Prospecting Rights Application. This forms part of their Basic Assessment for Environmental Authorization. The study and proposed Application Area fall in the Zululand District Municipality, Abaqulisi Local Municipality in the Province of KwaZulu-Natal, near Hlobane/Vaalbank. Various Portions of the original farm Vaalbank 38HU forms part of the application area.

Background research indicates that there are several cultural heritage (archaeological & historical) sites and features in the larger geographical area within which the study area falls, but no known ones in the study area and specific farm portion.

The client indicated the location and boundaries of the study area and the research & assessment focused on this.

2. TERMS OF REFERENCE

The Terms of Reference for the study was to:

1. Identify all objects, sites, occurrences and structures of an archaeological or historical nature (cultural heritage sites) located on the portion of land that will be impacted upon by the proposed development;
2. Assess the significance of the cultural resources in terms of their archaeological, historical, scientific, social, religious, aesthetic and tourism value;
3. Describe the possible impact of the proposed development on these cultural remains, according to a standard set of conventions;
4. Propose suitable mitigation measures to minimize possible negative impacts on the cultural resources;
5. Review applicable legislative requirements;

It should be noted that No Field-Based Assessment was conducted as part of this Appointment and that the results and recommendations made in this report are based on the scrutiny of previous research and assessments in the larger geographical area, as well as archival research and aerial images of the study area.

3. LEGISLATIVE REQUIREMENTS

Aspects concerning the conservation of cultural resources are dealt with mainly in two Acts. These are the National Heritage Resources Act (Act 25 of 1999) and the National Environmental Management Act (Act 107 of 1998).

3.1. The National Heritage Resources Act (Act 25 of 1999)

According to the Act the following is protected as cultural heritage resources:

- a. Archaeological artifacts, structures and sites older than 100 years
- b. Ethnographic art objects (e.g. prehistoric rock art) and ethnography
- c. Objects of decorative and visual arts
- d. Military objects, structures and sites older than 75 years
- e. Historical objects, structures and sites older than 60 years
- f. Proclaimed heritage sites
- g. Grave yards and graves older than 60 years
- h. Meteorites and fossils
- i. Objects, structures and sites of scientific or technological value.

The National Estate includes the following:

- 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 features of cultural significance
- e. Geological sites of scientific or cultural importance
- f. Sites of Archaeological and paleontological importance
- g. Graves and burial grounds
- h. Sites of significance relating to the history of slavery
- i. Movable objects (e.g. archaeological, paleontological, meteorites, geological specimens, military, ethnographic, books etc.)

A Heritage Impact Assessment (HIA) is the process to be followed in order to determine whether any heritage resources are located within the area to be developed as well as the possible impact of the proposed development thereon. An Archaeological Impact Assessment (AIA) only looks at archaeological resources. An HIA must be done under the following circumstances:

- a. The construction of a linear development (road, wall, power line, canal etc.) exceeding 300m in length
- b. The construction of a bridge or similar structure exceeding 50m in length
- c. Any development or other activity that will change the character of a site and exceed 5 000m² or involve three or more existing erven or subdivisions thereof
- d. Re-zoning of a site exceeding 10 000 m²
- e. Any other category provided for in the regulations of SAHRA or a provincial heritage authority

Structures

Section 34 (1) of the Act states that no person may demolish any structure or part thereof which is older than 60 years without a permit issued by the relevant provincial heritage resources authority.

A 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.

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 the decoration or any other means.

Archaeology, palaeontology and meteorites

Section 35(4) of the Act deals with archaeology, palaeontology and meteorites and states that no person may, without a permit issued by the responsible heritage resources authority (National or Provincial):

- a. destroy, damage, excavate, alter, deface or otherwise disturb any archaeological or paleontological site or any meteorite;
- b. destroy, damage, excavate, remove from its original position, collect or own any archaeological or paleontological 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 paleontological material or object, or any meteorite;
- d. bring onto or use at an archaeological or paleontological site any excavation equipment or any equipment that assists in the detection or recovery of metals or archaeological and paleontological material or objects, or use such equipment for the recovery of meteorites;
- e. alter or demolish any structure or part of a structure which is older than 60 years as protected.

The above mentioned may only be disturbed or moved by an archaeologist, after receiving a permit from the South African Heritage Resources Agency (SAHRA). In order to demolish such a site or structure, a destruction permit from SAHRA will also be needed.

Human remains

Graves and burial grounds are divided into the following:

- a. ancestral graves
- b. royal graves and graves of traditional leaders
- c. graves of victims of conflict

- d. graves designated by the Minister
- e. historical graves and cemeteries
- f. human remains

In terms of Section 36(3) of the National Heritage Resources Act, no person may, without a permit issued by the relevant heritage resources authority:

- a. destroy, damage, alter, exhume or remove from its original position of 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 or 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, or any equipment which assists in the detection or recovery of metals.

Human remains that are less than 60 years old are subject to provisions of the Human Tissue Act (Act 65 of 1983) and to local regulations. Exhumation of graves must conform to the standards set out in the **Ordinance on Excavations (Ordinance no. 12 of 1980)** (replacing the old Transvaal Ordinance no. 7 of 1925).

Permission must also be gained from the descendants (where known), the National Department of Health, Provincial Department of Health, Premier of the Province and local police. Furthermore, permission must also be gained from the various landowners (i.e. where the graves are located and where they are to be relocated to) before exhumation can take place.

Human remains can only be handled by a registered undertaker or an institution declared under the **Human Tissues Act (Act 65 of 1983 as amended)**.

3.2. The National Environmental Management Act (Act 107 of 1998)

This Act states that a survey and evaluation of cultural resources must be done in areas where development projects, that will change the face of the environment, will be undertaken. The impact of the development on these resources should be determined and proposals for the mitigation thereof are made.

Environmental management should also take the cultural and social needs of people into account. Any disturbance of landscapes and sites that constitute the nation's cultural heritage should be avoided as far as possible and where this is not possible the disturbance should be minimized and remedied.

The specific requirements that specialist studies and reports must adhere to are contained in Appendix 6 of the EIA Regulations.

4. METHODOLOGY

4.1. Review of literature

A review of available literature was undertaken in order to place the development area in an archaeological and historical context. The sources utilized in this regard are indicated in the bibliography. These include Bergh (1999), Huffman (2007) & Lombard et.al (2012).

4.2. Field survey

The field assessment section of the study is normally conducted according to generally accepted HIA practices and aimed at locating all possible objects, sites and features of heritage significance in the area of the proposed development. The location/position of all sites, features and objects is determined by means of a Global Positioning System (GPS) where possible, while detail photographs are also taken where needed.

No field work was undertaken as part of this assessment.

4.3. Oral histories

People from local communities are sometimes interviewed in order to obtain information relating to the surveyed area. It needs to be stated that this is not applicable under all circumstances. When applicable, the information is included in the text and referred to in the bibliography.

4.4. Documentation

All sites, objects, features and structures identified are documented according to a general set of minimum standards. Co-ordinates of individual localities are determined by means of the Global Positioning System (GPS). The information is added to the description in order to facilitate the identification of each locality.

5. DESCRIPTION OF THE AREA & PROJECT

The study and Mining Rights Application Area is located on various Portions of the farm Vaalbank 38HU, approximately 24km south-west of Vryheid in KwaZulu-Natal. The area is located in the Zululand District Municipality and Abaqulisi Local Municipality (Hlobane/Vaalbank) of the province. Zee Minerals (Pty) Ltd is applying for Prospecting Rights on the farm.

Activities to be undertaken includes but not limited the following:

- The exploration of drilling boreholes will cover the extent of approximately 1614.35 ha that will be transformed by the proposed project. This will also include the establishment of water management structures, offices, ablution facilities, access and haul roads;
- Access to the Vaalbank 38 HU study area will be via existing farm access roads. Additional unpaved access roads will be required to access the exact location of the exploration boreholes;
- The site office and laydown area that will be used by the construction team;
- Water supply and demand for the prospecting activities;
- The stripping of topsoil in all areas where prospecting activities will be done; and
- The prospecting right study area will be fenced off and be manned by security personnel to ensure effective access control

The topography and general landscape of the study and application area footprint can't be described from a personal observation perspective as no physical fieldwork was undertaken for this study. However, based on aerial images (Google Earth) of the area it is clear that the large portions of the study and application area is relatively flat and open, although there are also some low hills, ridges and rocky outcrops. A number of streams/rivers also run through sections of the area, with some erosion dongas present as a result as well. Large parts of the study and application area has been transformed from its original natural and historical landscape through forestry (and possibly earlier farming) activities, while other extensive impacts include Vaalbank/Hlobane residential areas, as well as fairly extensive informal settlement on parts of the area. The R69 Provincial Road runs approximately through the centre of the area, while other smaller roads and tracks have also impacted. If any significant cultural heritage (archaeological and/or historical) sites, features or material existed in these areas in the past, it would have been extensively disturbed or even destroyed as a result, diminishing the potential of cultural heritage resources being located here.



Figure 1: General location of the study & application area indicated by the red polygon (Google Earth 2024).

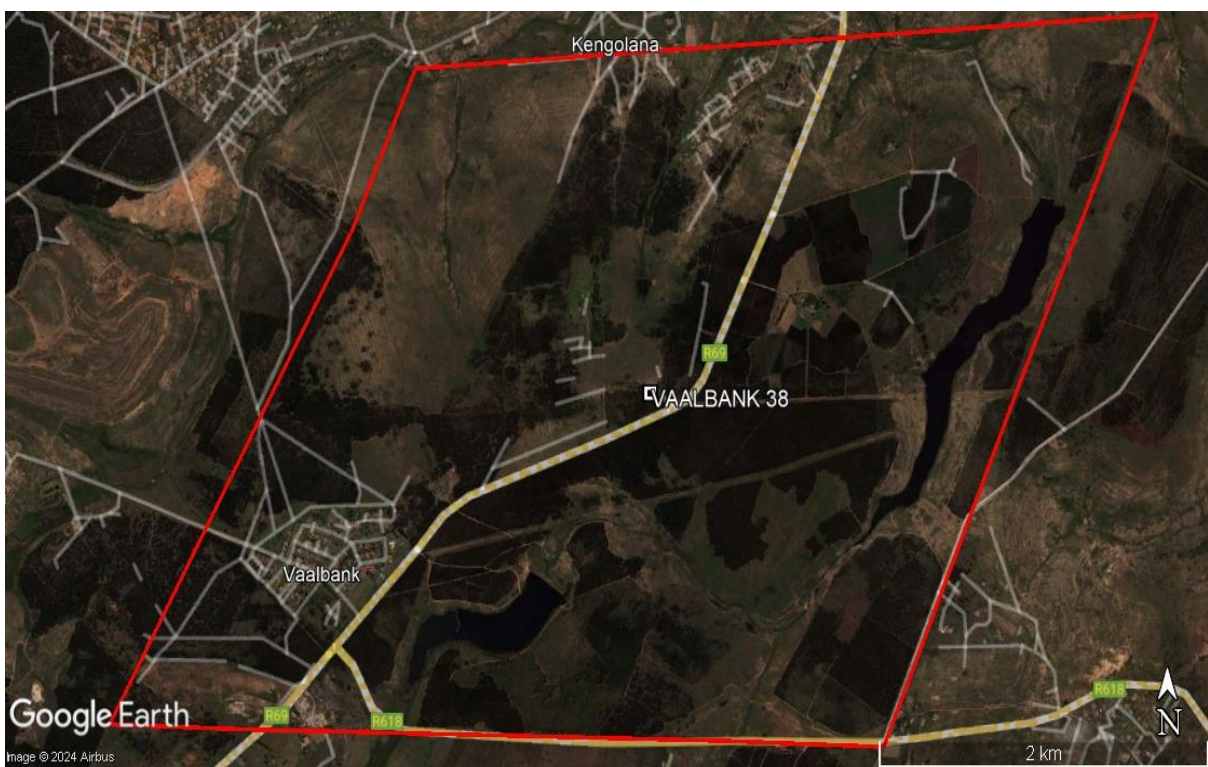


Figure 2: Closer view of study & application area location and extent/footprint in 2012 (Google Earth 2024). The town of Vaalbank is evident, as well as the patches of forestry areas.

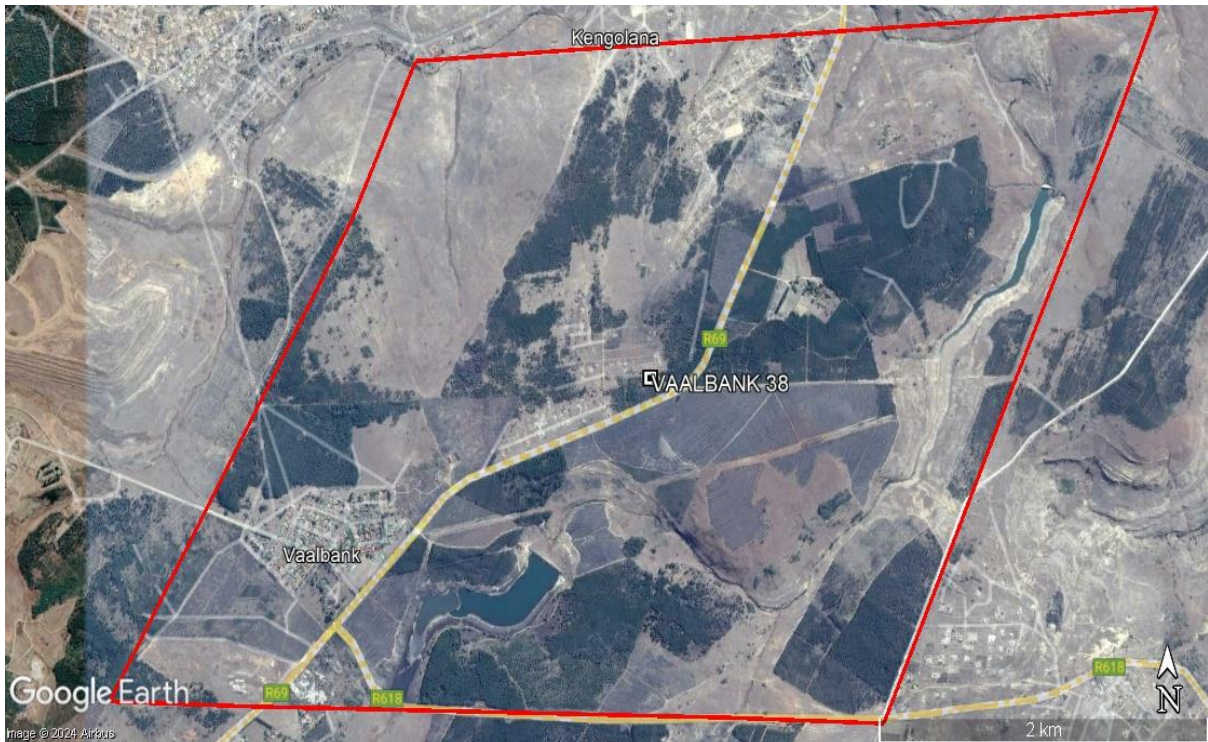


Figure 3: Closer view of the study & application area in 2017 (Google Earth 2024). The forestry areas have expanded, while some informal settlement has also encroached onto the area.

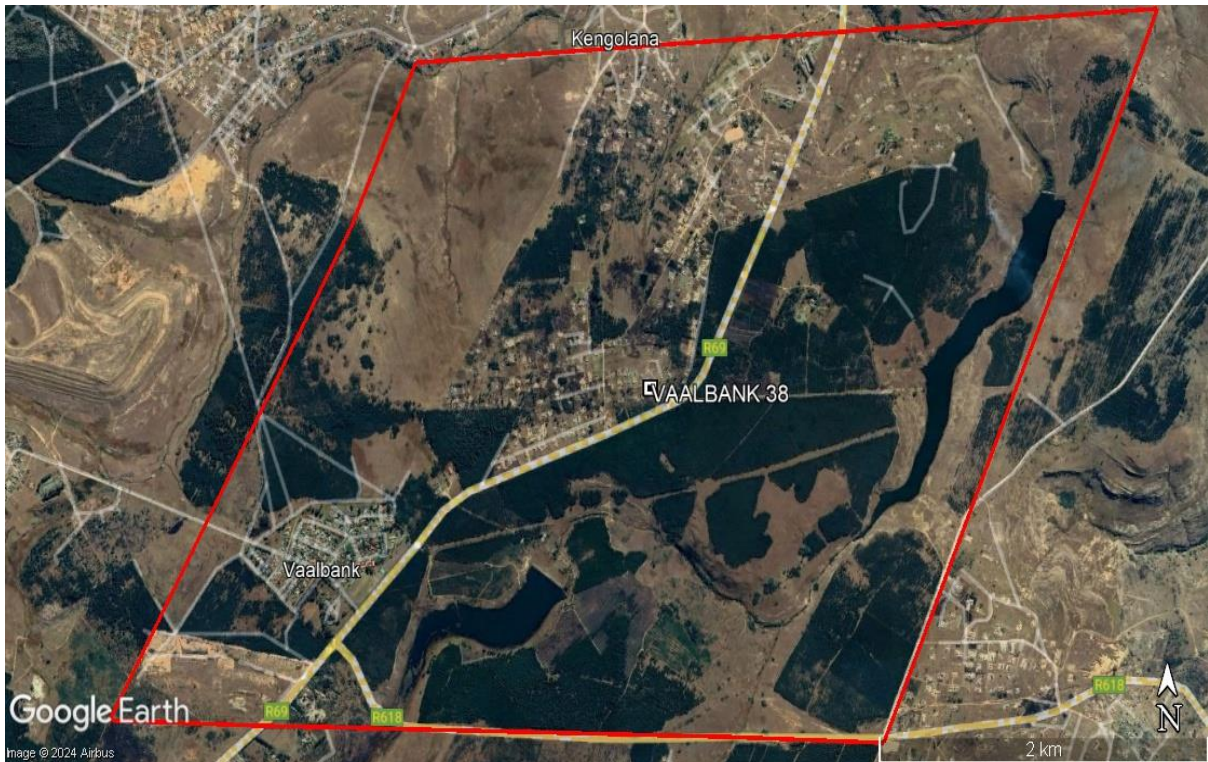


Figure 4: Closer view of the area in early 2024 (Google Earth 2024). The impacts of the increasing forestry activities, as well as ever-growing formal/informal settlement in the area is clearly evident.

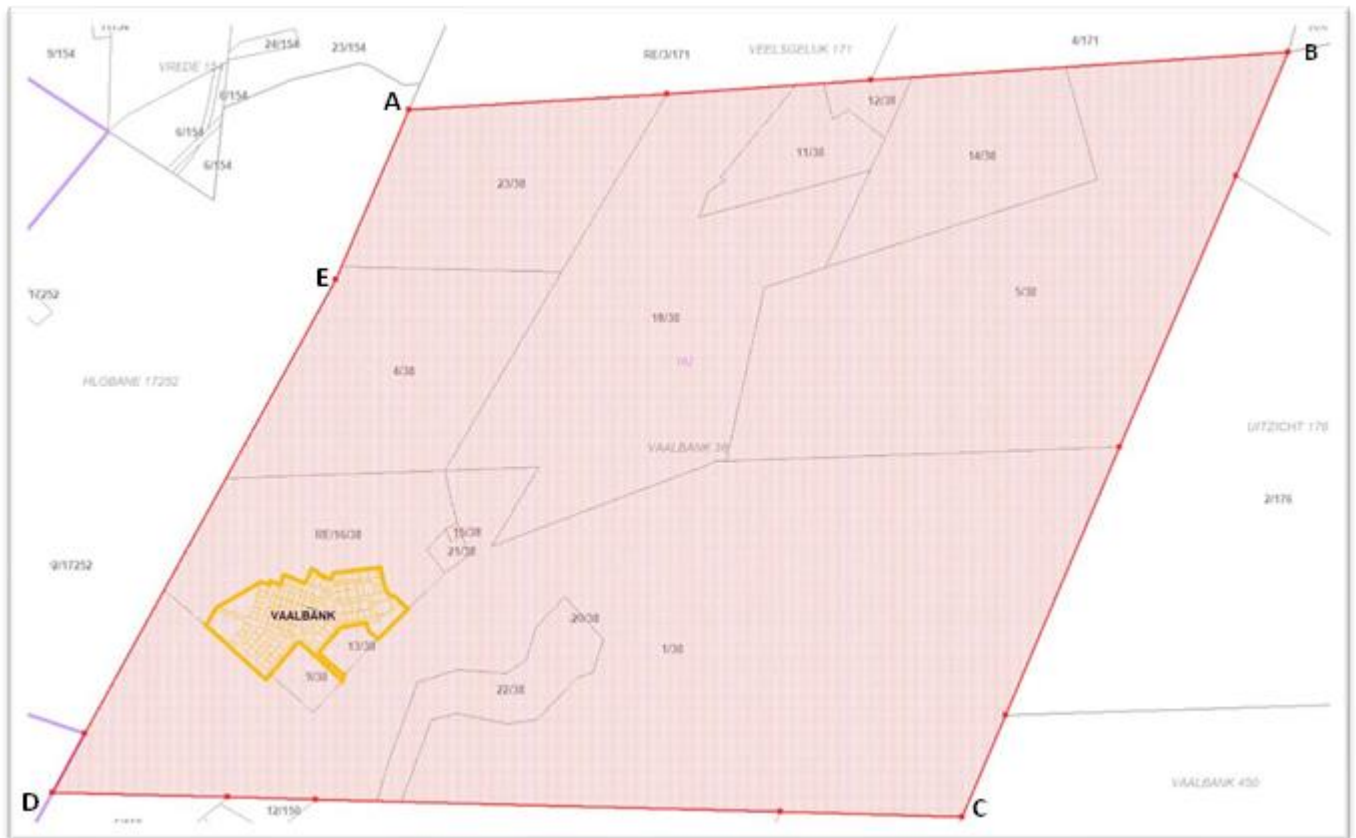


Figure 5: Vaalbank 38HU Prospecting Right Plan (courtesy Licebo via Zee Minerals (Pty) Ltd).

6. DISCUSSION

The Stone Age is the period in human history when lithic (stone) material was mainly used to produce tools. In South Africa the Stone Age can be divided in basically into three periods. It is however important to note that dates are relative and only provide a broad framework for interpretation. A basic sequence for the South African Stone Age (Lombard et.al 2012) is as follows:

Earlier Stone Age (ESA) up to 2 million – more than 200 000 years ago

Middle Stone Age (MSA) less than 300 000 – 20 000 years ago

Later Stone Age (LSA) 40 000 years ago – 2000 years ago

It should also be noted that these dates are not a neat fit because of variability and overlapping ages between sites (Lombard et.al 2012: 125).

The Iron Age is the name given to the period of human history when metal was mainly used to produce metal artifacts. In South Africa it can be divided in two separate phases (Bergh 1999: 96-98), namely:

Early Iron Age (EIA) 200 – 1000 A.D

Late Iron Age (LIA) 1000 – 1850 A.D.

Huffman (2007: xiii) however indicates that a Middle Iron Age should be included. His dates, which now seem to be widely accepted in archaeological circles, are:

Early Iron Age (EIA) 250 – 900 A.D.

Middle Iron Age (MIA) 900 – 1300 A.D.

Late Iron Age (LIA) 1300 – 1840 A.D.

The historical age started with the first recorded oral histories in the area. It includes the moving into the area of people that were able to read and write.

“Archaeological evidence from KwaZulu-Natal shows that, similar to elsewhere in southern Africa, the region was occupied exclusively by Stone Age hunter-gatherers until the early centuries of the first millennium AD. The Later Stone Age (LSA) is associated with KhoeSan people. In KwaZulu-Natal the earliest evidence of agriculturist communities appears in the early centuries of the first millennium AD. Calibrated dates of c. 400 AD identify Mzonjani as the earliest known farming settlement in KwaZulu-Natal. Although evidence from the first phase of the Iron Age in KwaZulu-Natal is still relatively sparse, it is already apparent from southern Africa in general that the significant aspects of what has been called the Early Iron Age ‘package’ - including crop cultivation, livestock herding, iron production, settled village life and distinctive styles of ceramics - were already established. In KwaZulu-Natal the first, or Mzonjani, phase appears to be restricted to coastal areas, extending from the Mozambique border to the area south of Durban. People chose living sites in positions favorable for a range of economic activities, including slash-and-burn agriculture, small stock herding and iron smelting, while shellfish collecting seems to have contributed a significant part of the diet.

In the second half of the first millennium AD, Iron Age settlement extended further south along the coast, as well as inland up the valleys of major rivers such as the Thukela system, reaching altitudes of around 1000 m but remaining in wooded, savanna environments. The first interactions between hunter-gatherers and agriculturists in KwaZulu-Natal took place in coastal or near-coastal settings, but became more widespread during the latter part of the first millennium AD. On Iron Age settlements many shell disc beads, a large proportion of ostrich-egg shell, which must have been introduced from grassland regions, well inland of the area settled by Iron Age people at that time, have been found. Later Stone Age-style bone arrowpoints and link-shafts, and on some sites, LSA stone artefacts, have also been found, possible evidence for hunter-gatherer presence at some of these sites. Likewise, in LSA deposits in rock shelters, pottery fragments of typical Early Iron Age style occur, sometimes far inland of Early Iron Age settlement.

Early in the second millennium AD, Late Iron Age settlement had extended into some grasslands of the KwaZulu-Natal interior. Some of these sites are in naturally defensible positions and have surrounding walls, while the associated material culture no longer includes LSA elements. This may reflect a period of greater competition or conflict. Later in the second millennium, Iron Age settlements become quite dense in these lower-altitude grassland areas, yet even with the arrival of white colonists in the nineteenth century,

KhoeSan groups still living a hunter-gatherer lifestyle survived in the interior at higher altitude, where the environment was unfavorable for Iron Age farming.

During the second millennium AD we begin to see archaeological evidence for the material culture associated with ethnic/linguistic groups known today as Nguni-speaking people in KwaZulu-Natal. These patterns can be traced back to the beginning of the second millennium AD. The evidence becomes compelling in the second half of the millennium when ceramics, settlement pattern and historical sources confirm continuity into recent times”

The above section comes from Ribot et.al., 2010:90-91.

“Most of the Stone Age sites in the near vicinity of the study area occur in shelters and in open air contexts as exposed by donga and sheet erosion. Some Middle Stone Age flakes, probably dating back to ca. 40 000 – 200 000 years ago, occur in disturbed context in dongas and road cuttings. The majority of Later Stone Age sites as well as rock art sites occur further west in the foothills of the Drakensberg.

The areas of Muden and Weenen have been well surveyed for archaeological sites. These low altitude and densely wooded areas have been intensely occupied by Iron Age farmers since the Early Iron Age around 500 AD. Some of these sites have also been excavated by Dr. Tim Maggs of the Natal Museum in the 1980’s. The study area is centrally located between the Drakensberg with its abundance of Later Stone Age rock art sites to the east and the low altitude river valleys that were favored by Iron Age farmers, to the west.

The available evidence, as captured in the KwaZulu-Natal Museum heritage site inventories, indicates that the general geographical area in which the study area falls contains a wide range of archaeological sites covering different time-periods and cultural traditions. These include Early Stone Age site, Middle Stone Age, Later Stone Age sites, Later Iron Age sites and numerous historical sites dating back to the colonial period. Some of the farms in the area contain graves and structures relating to early Voortrekker settlement. However, the majority of older buildings on farmsteads were erected by British colonists after 1850 who occupied farms previously inhabited by Voortrekker pioneers.

The San were the owners of the land for almost 30 000 years but the local demography started to change soon after 2000 years ago when the first Bantu-speaking farmers crossed the Limpopo River and arrived in South Africa. European settlement of the area started soon after 1838 when the first Voortrekker settlers marked out large farms in the area. However, most of these farms were abandoned in the 1840’s when Natal became a British colony only to be reoccupied again by British immigrants”.

The above section taken from Prins 2013: 6-9.

There are no known Stone Age, Iron Age or recent Historical Age sites, features or material in the study and proposed application area. If any are to be found it will most likely be in the form of individual stone tools or smaller scatters of stone tools on the surface of the area, as

well as scatters of Iron Age material (pottery, etc.). These would be without any archaeological or historical context, and not present in any stratigraphical deposits.

The closest historical site is the Hlobane Battlefield Memorial. The Battle of Hlobane (28 March 1879) took place at Hlobane, near the town of Vryheid during the Anglo-Zulu War. Hlobane is a town 27 km east of Vryheid and 31 km south-west of Louwsburg. The locality was known as such in the 19th century and the name applied to the town in 1924. Of Zulu origin, it is said by some to mean 'beautiful place', and by others 'place of dispute' (www.wikipedia.org).

With no physical field assessments conducted in the study and Prospecting Rights Application Area it is difficult to determine without a doubt if any sites, features or material of cultural heritage origin or significance are located here and if there will be any impacts on such sites as a result of future prospecting and any resultant future mining should the Application be granted.

Based on the aerial images of the farm portions that make up the application area it is clear that there have been some fairly extensive impacts through both formal and informal settlement (and related activities) on parts of the area, while extensive forestry had also severely altered the original historical and natural landscape over recent years. As a result, if any sites, features or material of archaeological and/or historical origin and significance did exist in these areas in the past they would have been substantially disturbed or destroyed as a result. However, there are also sections that have been less substantially impacted in the recent past, and it there is always the potential of sites, features and material being present here. The potential of historically significant buildings and structures being present in Hlobane/Vaalbank also exists, and this aspect needs to be taken into consideration during any future development activities related to the planned mining in the area. With such extensive formal & informal settlement taking place in the application area there is also bound to be both informal and more formal cemeteries (as well as unmarked graves and burials) located here. With graves & grave site always carrying a High Significance Rating from a Cultural Heritage Perspective, care should be taken to avoid any impacts or damage through any development activities.

Although some sites are shown in the larger geographical region around the application area, the Screening Report for Environmental Authorisation for the Application indicates a Low Sensitivity for Archaeological and Cultural Heritage in the study area as well, and it is therefore deemed very unlikely that any significant cultural heritage sites would be located here.

It is evident from the study that archaeological/historical sites and finds do occur in the larger geographical landscape within which the specific study and application area is located, and this aspect needs to be considered during possible future mining activities in the area. With the potential of previously unknown cultural heritage sites, features and material being present in the Application Area it is however recommended that a more detailed Phase 1 HIA be conducted in the area once the exact locations of drilling/boreholes, water management structures, offices, ablution facilities, access and haul roads; additional

unpaved access roads, the site office and laydown area that will be used by the construction team are known.

The stripping of topsoil in all areas where prospecting activities will be done, and the fencing-off of the prospecting right study area will also impact further, and this enhances the recommendation of a detailed Phase 1 HIA study.

It is furthermore recommended that a Chance Find Protocol for future mining activities in the area be drafted and implemented. This will ensure that if any previously unknown cultural heritage (archaeological and/or historical) sites, features or material are exposed in future, that these could be investigated by a Heritage Specialist, who will then provide recommendation on the way forward in terms of the best suitable mitigation measures required.

7. CONCLUSIONS AND RECOMMENDATIONS

APelser Archaeological Consulting (APAC) was appointed by Licebo Environmental and Mining (Pty) Ltd, on behalf of the Applicant (Zee Minerals (Pty) Ltd), to conduct Heritage Impact Assessment for their Prospecting Rights Application. This forms part of their Basic Assessment for Environmental Authorization. The study and proposed Application Area fall in the Zululand District Municipality, Abaqulisi Local Municipality in the Province of KwaZulu-Natal, near Hlobane/Vaalbank. Various Portions of the original farm Vaalbank 38HU forms part of the application area.

Background research indicates that there are several cultural heritage (archaeological & historical) sites and features in the larger geographical area within which the study area falls, but no known ones in the study area and specific farm portion.

With no physical field assessments conducted in the study and Prospecting Rights Application Area it is difficult to determine without a doubt if any sites, features or material of cultural heritage origin or significance are located here and if there will be any impacts on such sites as a result of future prospecting and any resultant future mining should the Application be granted. There have been some fairly extensive impacts through both formal and informal settlement on parts of the area, while extensive forestry had also severely altered the original historical and natural landscape over recent years. If any sites, features or material of cultural heritage origin or significance did exist here in the past they would have been substantially disturbed or destroyed as a result. There are also sections that have been less substantially impacted in the recent past, and it there is always the potential of sites, features and material being present. The potential of historically significant buildings and structures being present in Hlobane/Vaalbank also exists, while the presence of both informal and more formal cemeteries and unmarked graves and burials should also be taken into consideration.

It is evident from the study that archaeological/historical sites and finds do occur in the larger geographical landscape within which the specific study and application area is located, and this aspect needs to be considered during any future mining activities in the

area. It is recommended that a more detailed Phase 1 HIA be conducted in the area once the exact locations of drilling/boreholes, water management structures, offices, ablution facilities, access and haul roads; additional unpaved access roads, the site office and laydown area that will be used by the construction team are known. The stripping of topsoil in all areas where prospecting activities will be done, and the fencing-off of the prospecting right study area also necessitates a detailed Phase 1 HIA study. Chance Find Protocol for future mining activities in the area should also then be drafted and implemented.

Finally, it is concluded that the Zee Minerals (Pty) Ltd Prospecting Rights Application on Portions of the farm Vaalbank 38HU, from a Cultural Heritage point of view, should be granted to the applicants, taking into consideration the recommendations provided above.

8. REFERENCES

General and Closer views of the Study & Application Area location and footprint: Google Earth 2024.

Prospecting Application Area Map: Provided by Licebo Environmental and Zee Minerals (Pty) Ltd.

Bergh, J.S. (red.). 1999. **Geskiedenisatlas van Suid-Afrika. Die vier noordelike provinsies**. Pretoria: J.L. van Schaik.

Huffman, T.N. 2007. Handbook to the Iron Age: **The Archaeology of Pre-Colonial Farming Societies in Southern Africa**. Scottsville: University of KwaZulu-Natal Press.

Knudson, S.J. 1978. **Culture in retrospect**. Chicago: Rand McNally College Publishing Company.

Lombard, M., L. Wadley, J. Deacon, S. Wurz, I. Parsons, M. Mohapi, J. Swart & P. Mitchell. 2012. **South African and Lesotho Stone Age Sequence Updated (I)**. South African Archaeological Bulletin 67 (195): 120–144, 2012.

Prins, F. 2013. **Cultural Heritage Impact Assessment of the Proposed construction of the New 88KV Spring Grove Tee Powerline, Nottingham Road, KwaZulu-Natal. Unpublished Report**. For: Kerry Seppings Environmental Management Specialists. May 2013.

Republic of South Africa. 1999. **National Heritage Resources Act (No 25 of 1999)**. Pretoria: The Government Printer.

Republic of South Africa. 1998. **National Environmental Management Act (no 107 of 1998)**. Pretoria: The Government Printer.

Ribot, I., Morris, Allan G., Sealy, J & Maggs, T. 2010. **Population history and economic change in the last 2000 years in KwaZulu-Natal, RSA**. South African Humanities Vol.22,

Issue 1. September 2010 (pp.89-110).

www.wikipedia.org.za

APPENDIX A: DEFINITION OF TERMS:

Site: A large place with extensive structures and related cultural objects. It can also be a large assemblage of cultural artifacts, found on a single location.

Structure: A permanent building found in isolation or which forms a site in conjunction with other structures.

Feature: A coincidental find of movable cultural objects.

Object: Artifact (cultural object).

(Also see Knudson 1978: 20).

APPENDIX B: DEFINITION/ STATEMENT OF HERITAGE SIGNIFICANCE

Historic value: Important in the community or pattern of history or has an association with the life or work of a person, group or organization of importance in history.

Aesthetic value: Important in exhibiting particular aesthetic characteristics valued by a community or cultural group.

Scientific value: Potential to yield information that will contribute to an understanding of natural or cultural history or is important in demonstrating a high degree of creative or technical achievement of a particular period

Social value: Have a strong or special association with a particular community or cultural group for social, cultural or spiritual reasons.

Rarity: Does it possess uncommon, rare or endangered aspects of natural or cultural heritage.

Representivity: Important in demonstrating the principal characteristics of a particular class of natural or cultural places or object or a range of landscapes or environments characteristic of its class or of human activities (including way of life, philosophy, custom, process, land-use, function, design or technique) in the environment of the nation, province region or locality.

APPENDIX C: SIGNIFICANCE AND FIELD RATING:

Cultural significance:

- Low: A cultural object being found out of context, not being part of a site or without any related feature/structure in its surroundings.
- Medium: Any site, structure or feature being regarded less important due to a number of factors, such as date and frequency. Also any important object found out of context.
- High: Any site, structure or feature regarded as important because of its age or uniqueness. Graves are always categorized as of a high importance. Also any important object found within a specific context.

Heritage significance:

- Grade I: Heritage resources with exceptional qualities to the extent that they are of national significance
- Grade II: Heritage resources with qualities giving it provincial or regional importance although it may form part of the national estate
- Grade III: Other heritage resources of local importance and therefore worthy of conservation

Field ratings:

- i. National Grade I significance: should be managed as part of the national estate
- ii. Provincial Grade II significance: should be managed as part of the provincial estate
- iii. Local Grade IIIA: should be included in the heritage register and not be mitigated (high significance)
- iv. Local Grade IIIB: should be included in the heritage register and may be mitigated (high/medium significance)
- v. General protection A (IV A): site should be mitigated before destruction (high/medium significance)
- vi. General protection B (IV B): site should be recorded before destruction (medium significance)
- vii. General protection C (IV C): phase 1 is seen as sufficient recording and it may be demolished (low significance)

APPENDIX D: PROTECTION OF HERITAGE RESOURCES:

Formal protection:

National heritage sites and Provincial heritage sites – Grade I and II

Protected areas - An area surrounding a heritage site

Provisional protection – For a maximum period of two years

Heritage registers – Listing Grades II and III

Heritage areas – Areas with more than one heritage site included

Heritage objects – e.g. Archaeological, palaeontological, meteorites, geological specimens, visual art, military, numismatic, books, etc.

General protection:

Objects protected by the laws of foreign states

Structures – Older than 60 years

Archaeology, palaeontology and meteorites

Burial grounds and graves

Public monuments and memorials

APPENDIX E: HERITAGE IMPACT ASSESSMENT PHASES

1. Pre-assessment or Scoping Phase – Establishment of the scope of the project and terms of reference.
2. Baseline Assessment – Establishment of a broad framework of the potential heritage of an area.
3. Phase I Impact Assessment – Identifying sites, assess their significance, make comments on the impact of the development and makes recommendations for mitigation or conservation.
4. Letter of recommendation for exemption – If there is no likelihood that any sites will be impacted.
5. Phase II Mitigation or Rescue – Planning for the protection of significant sites or sampling through excavation or collection (after receiving a permit) of sites that may be lost.
6. Phase III Management Plan – For rare cases where sites are so important that development cannot be allowed.