

**APPENDIX P: PALAEOLOGICAL IMPACT ASSESSMENT REPORT**

**PALAEONTOLOGICAL DESKTOP ASSESSMENT FOR THE  
MINING ACTIVITIES ON THE FARM JENKINS, SOUTH  
OF KATHU, TSANTSABANE LOCAL MUNICIPALITY IN  
THE SIYANDA DISTRICT MUNICIPALITY OF THE  
NORTHERN CAPE PROVINCE**

**For:**

**HIA CONSULTANTS**



**DATE: 03 November 2015**

**By**

**Gideon Groenewald  
078 713 6377**

## EXECUTIVE SUMMARY

Gideon Groenewald was appointed by PGS Heritage to undertake a desktop survey, assessing the potential palaeontological impact of the proposed mining activities on the farm Jenkins 562, south of Kathu, Tsantsabane Local Municipality in the Siyanda District Municipality of the Northern Cape Province.

This report forms part of the Environmental Impact Assessment and complies with the requirements of the South African National Heritage Resource Act No 25 of 1999. In accordance with Section 38 (Heritage Resources Management), a Heritage Impact Assessment (HIA) is required to assess any potential impacts to palaeontological heritage within the development footprint of the development.

The mining Development Area on the farm Jenkins 562 is mainly underlain by Vaalian aged rocks of the Gamagara and Ongeluk Formations, Olifantshoek Group, Griqualand West Supergroup and Tertiary aged Calcretes and surface deposits.

Although significant fossils are associated with the Vaalian aged rocks of these geological units the fossils are not visible to the naked eye and are therefore of academic interest only. Significant larger scale fossils are associated with surface calcretes, but these units fall outside the mining area.

Recommendations:

1. The EAP as well as the ECO for this project must be made aware of the fact that sediments of the Gamagara and Ongeluk Formations, Olifantshoek Group, contain significant fossil remains, albeit mostly stromatolite structures and micro-fossils. The calcrete deposits can contain significant remains of Tertiary aged animals.
2. A High Palaeontological sensitivity is allocated to surface limestones and a Moderate Sensitivity to the rest of the area. If any fossils, most notably stromatolite structures, are recorded during investigations of the ore bodies the ECO must be notified and a qualified palaeontologist must be appointed to report these finds to SAHRA by conducting a Phase 1 PIA investigation.
3. No further mitigation for Palaeontological Heritage is recommended for this development.

As indicated in the table below, this Desktop Palaeontological Impact Assessment report was compiled in accordance with the NEMA Appendix 6 requirements for specialist reports.

NEMA REGS (2014) - APPENDIX 6	RELEVANT PAGES AND SECTIONS
Details of the specialist who prepared the report.	Pages i & 8
The expertise of that person to compile a specialist report including a curriculum vitae.	Page 8 & Page 13, Appendix A
A declaration that the person is independent in a form as may be specified by the competent authority.	Page 8 & Page 15, Appendix B
An indication of the scope of, and the purpose for which, the report was prepared.	Page 1 (Section 2.1 & Page 7 Section 2.3)
The date and season of the site investigation and the relevance of the season to the outcome of the assessment.	Page 1. The study is a desktop assessment.
A description of the methodology adopted in preparing the report or carrying out the specialised process.	Page 5 (Section 2.2)
The specific identified sensitivity of the site related to the activity and its associated structures and infrastructure.	Page 10, Section 6
An identification of any areas to be avoided, including buffers.	Section 6
A map superimposing the activity including the associated structures and infrastructure on the environmental sensitivities of the site including areas to be avoided, including buffers.	Section 6 Figure 6.1 & Figure 2.1
A description of any assumptions made and any uncertainties or gaps in knowledge.	Page 5 (Section 2.2) & Page 7 (Section 2.3)
A description of the findings and potential implications of such findings on the impact of the proposed activity, including identified alternatives, on the environment.	Sections 5,6&7. Please note that no development alternatives were assessed.
Any mitigation measures for inclusion in the EMPr.	Section 7
Any conditions for inclusion in the environmental authorization.	Section 7
Any monitoring requirements for inclusion in the EMPr or environmental authorisation	Section 7
A reasoned opinion as to whether the proposed activity or portions thereof should be authorised and	Executive Summary and Section 7
If the opinion is that the proposed activity or portions thereof should be authorised, any avoidance, management and mitigation measures that should be included in the EMPr, and where applicable, the closure plan	
A description of any consultation process that was undertaken during the course of carrying out the study	Not applicable. A public consultation process was handled as part of the EIA and EMP process.
A summary and copies if any comments that were received during any consultation process	Not applicable. To date no comments regarding heritage resources that require input from a specialist have been raised.
Any other information requested by the competent authority.	Not applicable.

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## 2. INTRODUCTION

### 2.1. Background

Gideon Groenewald was appointed by PGS Heritage to undertake a desktop survey, assessing the potential palaeontological impact of the proposed mining activities on the farm Jenkins 562, south of Kathu, Tsantsabane Local Municipality in the Siyanda District Municipality of the Northern Cape Province.

This report forms part of the Environmental Impact Assessment and complies with the requirements of the South African National Heritage Resource Act No 25 of 1999. In accordance with Section 38 (Heritage Resources Management), a Heritage Impact Assessment (HIA) is required to assess any potential impacts to palaeontological heritage within the development footprint of the development.

Categories of heritage resources recognised as part of the National Estate in Section 3 of the Heritage Resources Act, and which therefore fall under its protection, include:

- geological sites of scientific or cultural importance;
- objects recovered from the soil or waters of South Africa, including archaeological and palaeontological objects and material, meteorites and rare geological specimens;
- objects with the potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage.

### 2.2. Aims and Methodology

Following the *"SAHRA APM Guidelines: Minimum Standards for the Archaeological & Palaeontological Components of Impact Assessment Reports"* the aims of the palaeontological impact assessment are:

- to identify exposed and subsurface rock formations that are considered to be palaeontologically significant;
- to assess the level of palaeontological significance of these formations;
- to comment on the impact of the development on these exposed and/or potential fossil resources and
- to make recommendations as to how the developer should conserve or mitigate damage to these resources.

In preparing a palaeontological desktop study the potential fossiliferous rock units (groups, formations etc.) represented within the study area are determined from geological maps (2722 Kuruman). The known fossil heritage within each rock unit is inventoried from the published scientific literature and previous palaeontological impact studies in the same region.

The likely impact of the proposed development on local fossil heritage is determined on the basis of the palaeontological sensitivity of the rock units concerned and the nature and scale of the development itself, most notably the extent of fresh bedrock excavation envisaged. The different sensitivity classes used are explained in Table 1 below.

**Table 1** Palaeontological Sensitivity Analysis Outcome Classification

<b>PALAEONTOLOGICAL SIGNIFICANCE/VULNERABILITY OF ROCK UNITS</b>	
The following colour scheme is proposed for the indication of palaeontological sensitivity classes. This classification of sensitivity is adapted from that of Almond et al (2008) and Groenewald et al., (2014)	
<b>RED</b>	Very High Palaeontological sensitivity/vulnerability. Development will most likely have a very significant impact on the Palaeontological Heritage of the region. Very high possibility that significant fossil assemblages will be present in all outcrops of the unit. Appointment of professional palaeontologist, desktop survey, phase I Palaeontological Impact Assessment (PIA) (field survey and recording of fossils) and phase II PIA (rescue of fossils during construction ) as well as application for collection and destruction permit compulsory.
<b>ORANGE</b>	High Palaeontological sensitivity/vulnerability. High possibility that significant fossil assemblages will be present in most of the outcrop areas of the unit. Fossils most likely to occur in associated sediments or underlying units, for example in the areas underlain by Transvaal Supergroup dolomite where Cenozoic cave deposits are likely to occur. Appointment of professional palaeontologist, desktop survey and phase I Palaeontological Impact Assessment (field survey and collection of fossils) compulsory. Early application for collection permit recommended. Highly likely that a Phase II PIA will be applicable during the construction phase of projects.
<b>GREEN</b>	Moderate Palaeontological sensitivity/vulnerability. High possibility that fossils will be present in the outcrop areas of the unit or in associated sediments that underlie the unit. For example areas underlain by the Gordonia Formation or undifferentiated soils and alluvium. Fossils described in the literature are visible with the naked eye and development can have a significant impact on the Palaeontological Heritage of the area. Recording of fossils will contribute significantly to the present knowledge of the development of life in the geological record of the region. Appointment of a professional palaeontologist, desktop survey and phase I PIA (ground proofing of desktop survey) recommended.
<b>BLUE</b>	Low Palaeontological sensitivity/vulnerability. Low possibility that fossils that are described in the literature will be visible to the naked eye or be recognized as fossils by untrained persons. Fossils of for example small domal Stromatolites as well as micro-bacteria are associated with these rock units. Fossils of micro-bacteria are extremely important for our understanding of the development of Life, but are only visible under large magnification. Recording of the fossils will contribute significantly to the present knowledge and understanding of the development of Life in the region. Where geological units are allocated a blue colour of significance, and the geological unit is surrounded by highly significant geological units (red or orange coloured units), a palaeontologist must be appointed to do a desktop survey and to make professional recommendations on the impact of development on significant palaeontological finds that might occur in the unit that is allocated a blue colour. An example of this scenario will be where the scale of mapping on the 1:250 000 scale maps excludes small outcrops of highly significant sedimentary rock units occurring in dolerite sill outcrops. Collection of a representative sample of potential fossiliferous material recommended.

<b>GREY</b>	<p>Very Low Palaeontological sensitivity/vulnerability. Very low possibility that significant fossils will be present in the bedrock of these geological units. The rock units are associated with intrusive igneous activities and no life would have been possible during emplacement of the rocks. It is however essential to note that the geological units mapped out on the geological maps are invariably overlain by Cenozoic aged sediments that might contain significant fossil assemblages and archaeological material. Examples of significant finds occur in areas underlain by granite, just to the west of Hoedspruit in the Limpopo Province, where significant assemblages of fossils and clay-pot fragments are associated with large termite mounds. Where geological units are allocated a grey colour of significance, and the geological unit is surrounded by very high and highly significant geological units (red or orange coloured units), a palaeontologist must be appointed to do a desktop survey and to make professional recommendations on the impact of development on significant palaeontological finds that might occur in the unit that is allocated a grey colour. An example of this scenario will be where the scale of mapping on the 1:250 000 scale maps excludes small outcrops of highly significant sedimentary rock units occurring in dolerite sill outcrops. It is important that the report should also refer to archaeological reports and possible descriptions of palaeontological finds in Cenozoic aged surface deposits.</p>
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### 2.3. Scope and Limitations of the Desktop Study

The study will include: i) an analysis of the area's stratigraphy, age and depositional setting of fossil-bearing units; ii) a review of all relevant palaeontological and geological literature, including geological maps, and previous palaeontological impact reports; iii) data on the proposed development provided by the developer (e.g. location of footprint, depth and volume of bedrock excavation envisaged) and iv) where feasible, location and examination of any fossil collections from the study area (e.g. museums).

The key assumption for this desktop study is that the existing geological maps and datasets used to assess site sensitivity are correct and reliable. However, the geological maps used were not intended for fine scale planning work and are largely based on aerial photographs alone, without ground-truthing. There is also an inadequate database for fossil heritage for much of the RSA, due to the small number of professional palaeontologists carrying out fieldwork in RSA. Most development study areas have never been surveyed by a palaeontologist.

These factors may have a major influence on the assessment of the fossil heritage significance of a given development and without supporting field assessments may lead to either:

- an underestimation of the palaeontological significance of a given study area due to ignorance of significant recorded or unrecorded fossils preserved there, or
- an overestimation of the palaeontological sensitivity of a study area, for example when originally rich fossil assemblages inferred from geological maps have in fact been destroyed by weathering, or are buried beneath a thick mantle of unfossiliferous "drift" (soil, alluvium etc.).

### 3. DESCRIPTION OF THE PROPOSED DEVELOPMENT

The proposed development is for an open cast mine on the farm Jenkins 562 in the Northern Cape Province

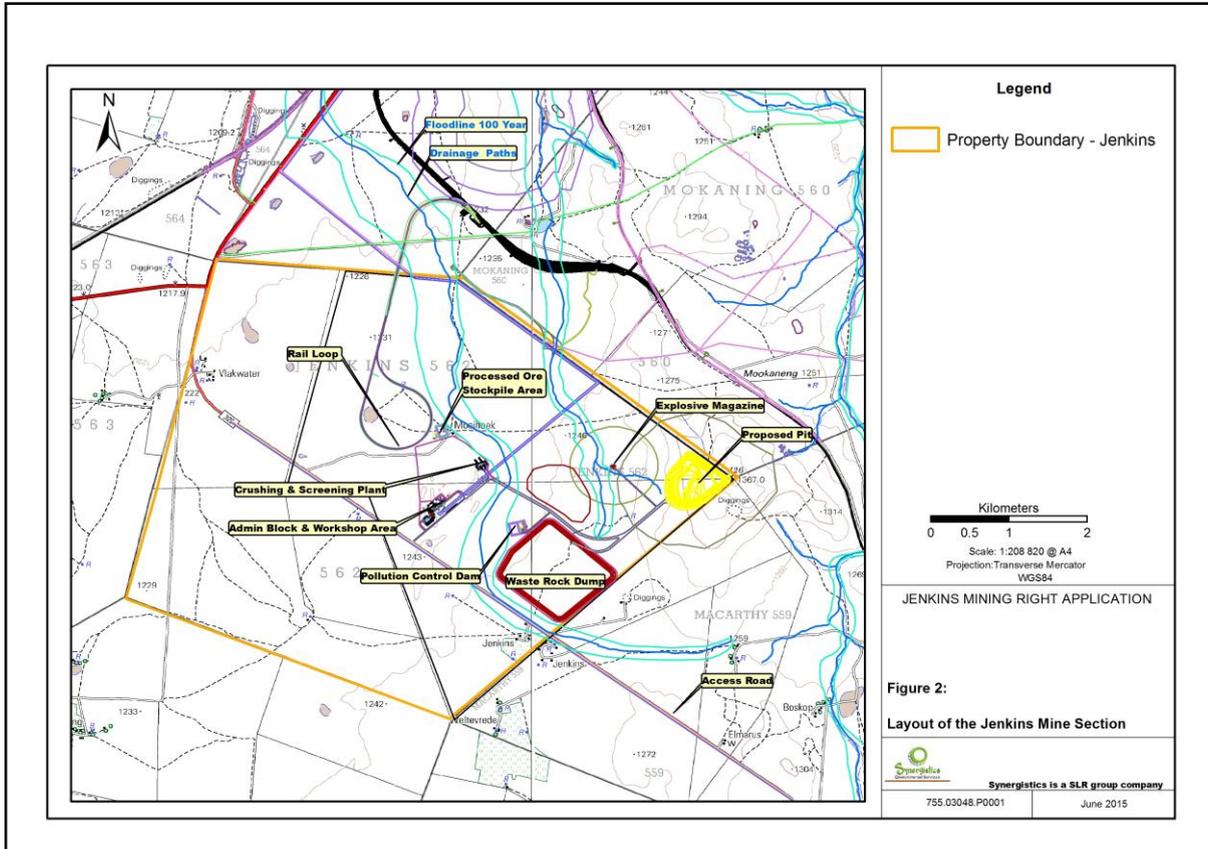


Figure 3.1 Locality of Study Area

### 4. GEOLOGY

The study area is underlain by Vaalian aged Gamagara and Ongeluk Formations of the Olifantshoek Group, Griqualand west Supergroup and Tertiary aged surface limestone or calcretes. (Figure 3.1).

#### 4.1. Griqualand West Supergroup

##### 4.1.1. Olifantshoek Group

Predominantly continental “red beds” (fluvial sediments), subordinate shallow marine siliciclastic metasediments (low grade), lavas and carbonates (Johnson et al 2009).

##### *Gamagara Formation*

The Vaalian aged Gamagara Formation consists primarily of Quartzite, conglomerate, flagstone and shale, with manganese enriched layers of conglomerate and shale.

##### *Ongeluk Formation*

The Vaalian aged Ongeluk Formation consists primarily of volcanic rocks.

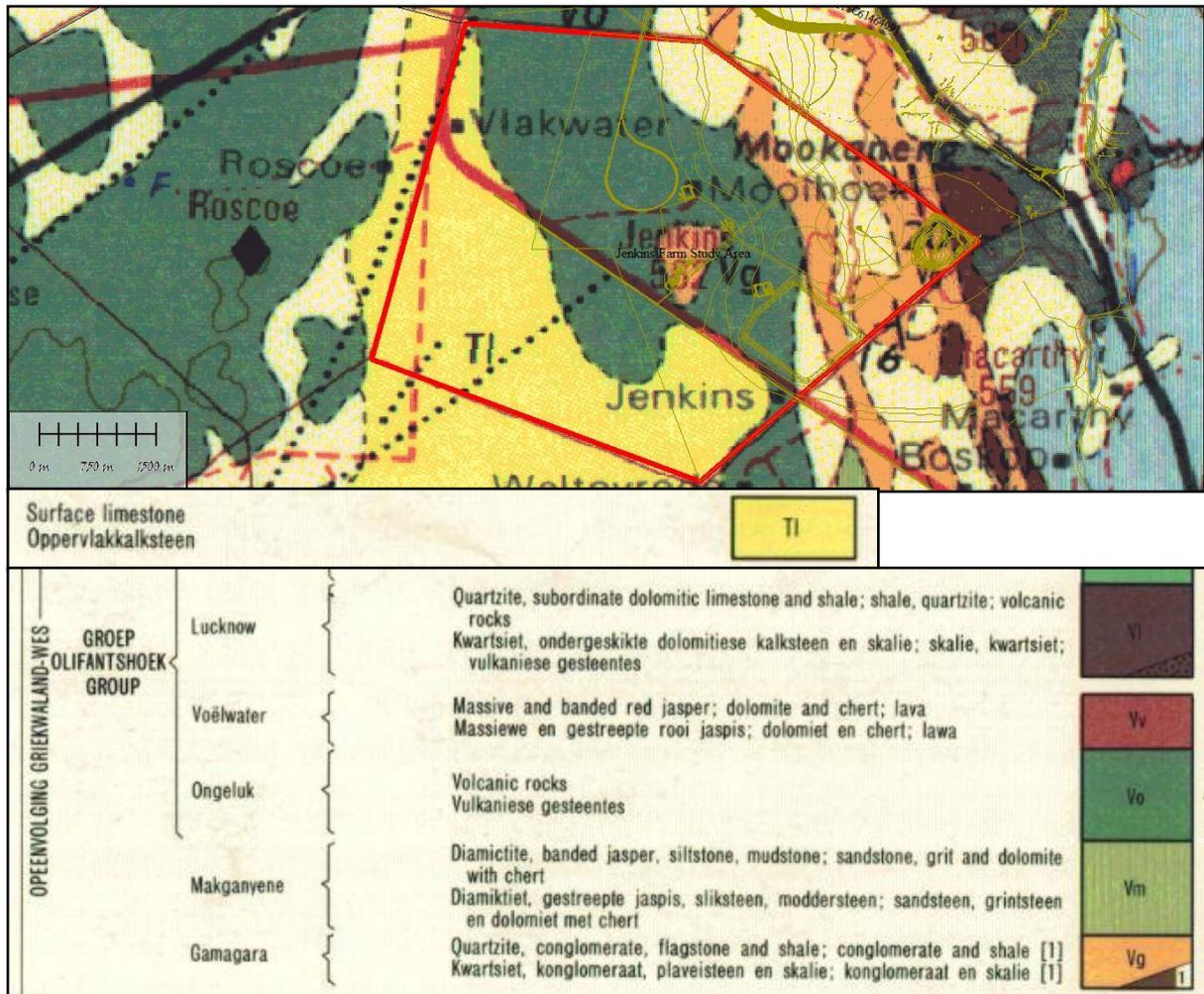


Figure 4.1 Geology of Study Area

## 4.2. Calcrete

The Tertiary aged surface limestone and calcrete underlies the lower lying areas in the western part of the study area.

## 5. PALAEOLOGY OF THE AREA

### 5.1. Griqualand West Supergroup

#### 5.1.1. Olifantshoek Group

Possible stromatolites and microfossils in marine units of the sequence. Continental “red beds” record development of early oxygen-rich atmosphere (MacRae, 1999).

#### *Gamagara Formation*

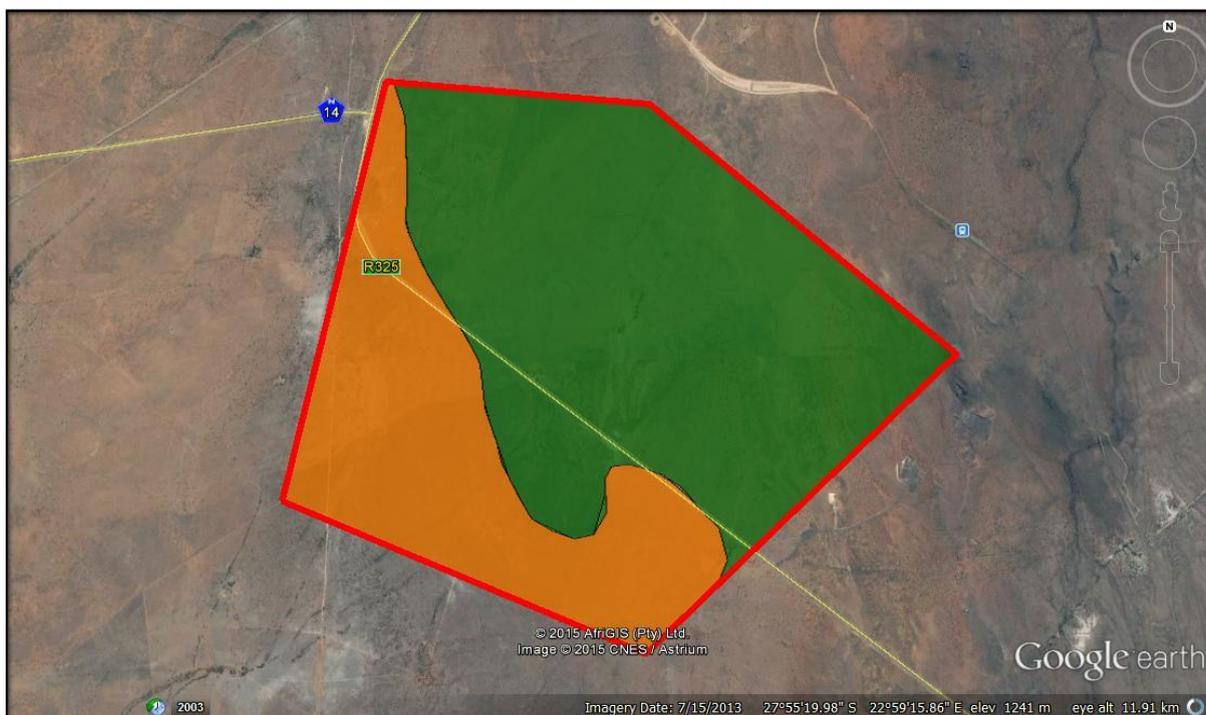
Laterites suggest possible earliest biological activity on land. Stromatolites might be associated with some of the dolomitic layers. Although very significant for the understanding of these palaeoenvironments the fossils are of microscopic size and not visible to the naked eye. If recorded in any detailed studies of the ore body the presence of the fossils must be reported to SAHRA as part of the recording of our National Palaeontological Heritage.

## 5.2. Calcrete

Wide range of fossils can be present in these surface deposits, including mammalian bones and teeth, tortoise remains and ostrich egg shells. The mining activity might uncover some calcrete beds and the recording of fossils will be significant.

## 6. PALAEOLOGICAL SENSITIVITY

The likely impact of the proposed development on local fossil heritage is determined on the basis of the palaeontological sensitivity of the rock units concerned and the nature and scale of the development itself, most notably the extent of fresh bedrock excavation envisaged (Figure 5.1). The different sensitivity classes used are explained in Table 1 above.



**Figure 6.1 Palaeontological Sensitivity of the study site is moderate to highly significant. All the active mining excavation however falls within the zone of Moderate Palaeontological sensitivity. For colour coding see Table 1.**

The Vaalian aged Gamagara and Ongeluk Formations are allocated a Moderate Palaeontological sensitivity and the recording of micro-fossils during detailed analyses of ore samples must be reported to SAHRA. This requirement however does not fall within the scope of the EMP of the project and is of academic interest only. A High sensitivity rating for Palaeontological Heritage is allocated to the area of the farm underlain by surface limestone. Mining activity in this area is however restricted to surface infrastructure and no significant fossil finds are expected.

## 7. CONCLUSION AND RECOMMENDATIONS

The mining Development Area on the farm Jenkins 562 is mainly underlain by Vaalian aged rocks of the Gamagara and Ongeluk Formations, Olifantshoek Group, Griqualand West Supergroup and Tertiary aged Calcretes and surface deposits.

Although significant fossils are associated with the Vaalian aged rocks of these geological units the fossils are not visible to the naked eye and are therefore only of academic interest. Significant larger scale fossils are associated with surface calcretes, but these units fall outside the mining area.

Recommendations:

1. The EAP as well as the ECO for this project must be made aware of the fact that sediments of the Gamagara and Ongeluk Formations, Olifantshoek Group, contain significant fossil remains, albeit mostly stromatolite structures and micro-fossils. The calcrete deposits can contain significant remains of Tertiary aged animals.
2. A High Palaeontological sensitivity is allocated to surface limestones and a Moderate Sensitivity to the rest of the area. If any fossils, most notably stromatolite structures, are recorded during investigations of the ore bodies the ECO must be notified and a qualified palaeontologist must be appointed to report these finds to SAHRA by conducting a Phase 1 PIA investigation.
3. No further mitigation for Palaeontological Heritage is recommended for this development.

## 8. REFERENCES

**Almond J.E. and Pether J. 2008.** *Palaeontological Heritage of the Western Cape*. Internal Report Heritage Western Cape.

**Groenewald G.H., Groenewald D.P. and Groenewald S.M., 2014.** *Palaeontological Heritage of the Free State, Gauteng, Limpopo, Mpumalanga and North West Provinces*. Internal Palaeotechnical Reports, SAHRA.

**Johnson MR, Anhausser CR and Thomas RJ. 2009.** *The Geology of South Africa*. Geological Society of South Africa.

**MacRae C. 1999.** *Life Etched in Stone*. Geological Society of South Africa.

## 9. QUALIFICATIONS AND EXPERIENCE OF THE AUTHOR

Dr Gideon Groenewald has a PhD in Geology from the University of Port Elizabeth (Nelson Mandela Metropolitan University) (1996) and the National Diploma in Nature Conservation from Technicon RSA (the University of South Africa) (1989). He specialises in research on South African Permian and Triassic sedimentology and macrofossils with an interest in biostratigraphy, and palaeoecological aspects. He has extensive experience in the locating of fossil material in the Karoo Supergroup and has more than 20 years of experience in locating, collecting and curating fossils, including exploration field trips in search of new localities in the southern, western, eastern and north-eastern parts of the country. His publication record includes multiple articles in internationally recognized journals. Dr Groenewald is accredited by the Palaeontological Society of Southern Africa (society member for 25 years).

## 10. DECLARATION OF INDEPENDENCE

I, Gideon Groenewald, declare that I am an independent specialist consultant and have no financial, personal or other interest in the proposed development, nor the developers or any of their subsidiaries, apart from fair remuneration for work performed in the delivery of palaeontological heritage assessment services. There are no circumstances that compromise the objectivity of my performing such work.



**Dr Gideon Groenewald**  
**Geologist**

## 11. Appendix A : *Curriculum vitae* of Author

### CV - Dr Gideon Groenewald

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Cell 078 713 6377

#### **a. Personal:**

Gideon Hendrik Groenewald (ID 195509305020088): Age: 60

#### **b. Education:**

BSc plus BSc Hons (UPE, 1978), MSc (RAU, 1985), Nat Dip Nature Conservation (Tech SA, 1990), PhD Geology (UPE, 1996), Pr Sci Nat (Reg. no. 401946/83).

*Member :*

- Registered with SACNASP – Reg no 401946/83.
- Geological Society of South Africa
- Palaeontological Association of Southern Africa
- Borehole Water Association of South Africa

*Publications:*

- 16 Scientific and large number of popular articles on geology, ecology and groundwater.
- 12 TV 50/50 programs on nature conservation and geology, mainly with Jan Horn and Johan Botha as producers.
- Several children programs on SATV, several productions.
- M-Net programs, several producers.
- BBC TV Series: "Earth Story" (1998), producer Cynthia Page.
- 10 Papers read at International Symposiums.
- Regular speaker at public meetings and schools.
- Courses in Eco-tourism, Free State University, Qwaqwa branch

#### **c. Geological, Environmental and Tourism Development Experience:**

37 years experience in geological mapping, groundwater related projects and environmental education in the rural and farming regions of Southern Africa in capacity as:

- 1978-1986 Geologist - Geological Survey SA - regional mapping division
- 1986-1993 Ranger, Snr Research Officer, Geologist - National Parks Board SA, geological and groundwater studies in Southern and Inland Parks
- 1993-present. Geoconsultant - consultant to farmers and larger companies, Maseru Pumps and Plastics (Lesotho), Peace Parks Foundation, SA National Parks, Local Town Councils, DLA, Dept of Agriculture, DEAT, Imperial Truck and Car, Caltex, Shell and Anglo American on ground water related projects, locating and mapping of quarries in dolerite and sandstone terrain for road building, locating and mapping of sand deposits for construction work, electronic database programs, classification and mapping of geological formations in terms of structural stability for engineering projects, classification and mapping of soils for engineering projects. Environmental Impact Assessments. Risk assessment at sites of petroleum spills. Very good knowledge of geology of the Upper Karoo Supergroup (PhD) and dolerite formations (groundwater related projects), monitoring of drilling and logging of boreholes (mainly chips, but also core-drilling), full time since 1993.
- 2001-2010: Contractual appointment: Peace Parks Foundation: Lesotho Transfrontier Facilitator for the Maloti-Drakensberg Transfrontier Conservation Development and other related Transfrontier projects in Lesotho. Mainly involved in development of Responsible Tourism in Lesotho and border regions of South Africa.

- 2005-2006: Consultant to Maluti-A-Phofung Municipality to develop Tourism Sector Plan (DBSA Project)
- 2005-present: Ad hoc appointment as environmental consultant (geology, geohydrology and soils) to assess environmental impacts at road accidents where tanker trucks are involved in large scale spillages of dangerous goods
- 2008 – 2011: Appointed Palaeontologist on the Ingula Pumped Storage Scheme of Eskom
- 2009 – 2012: Appointed Palaeontologist for the new Petroleum Pipeline installation from Heidelberg (Gauteng) to Durban
- 2010 – 2012: Appointed Geohydrologist to supply groundwater to the town of Senekal/Matwabeng
- 2012 – present: Ad hoc contractual appointments as Palaeontologist for Palaeontological Impact Assessments
- 2012: Appointed palaeontologist by AMAFA to compile a palaeontological sensitivity map and palaeontological technical report for Kwa-Zulu Natal Province
- 2014: Appointed palaeontologist by SAHRA to compile a palaeontological sensitivity map and palaeontological technical report for Free State, Gauteng, Limpopo, Mpumalanga and North West Provinces for integration into the SAHRIS online map
- 2012 – present: Ad hoc contractual appointments as Geologist for geological and geophysical surveys and geohydrological studies

**d. Educational Experience:**

- *Wildlife Management* - 1986-1993: ranger and research officer, National Parks Board, South Africa.
- *Environmental Education* - 1986-present : take school children on field trips, assist in filming of educational TV programs on interpretative geology, palaeontology and ecology, including grassveld ecology and the ecology of lichens . University of the Free State (Qwaqwa branch) short course in Eco- tourism at Hons level.
- *Palaeontology* - 1978-present: Environmental Impact Assessments and Fossil hunting expeditions for international and local tourist market. Co-leader of International Geological Conference Field Trip in the Karoo, 1997.
- *Eco-tourism* - 2000 – 2003: Appointed as Senior Lecturer Eco-tourism, University of the North, Qwaqwa branch.
- 2005-2010: Contractual employment to present short training courses in tourism – South Africa and Lesotho.

**e. Native Language:**

Afrikaans. Able to speak, read and write English fluently.

12. Appendix B: Declaration of Independence – GH Groenewald



**environmental affairs**

Department:  
Environmental Affairs  
REPUBLIC OF SOUTH AFRICA


**DETAILS OF SPECIALIST AND DECLARATION OF INTEREST**

	(For official use only)
File Reference Number:	
NEAS Reference Number:	DEA/EIA
Date Received:	

Application for integrated environmental authorisation and waste management licence in terms of the-

- (1) National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended and the Environmental Impact Assessment Regulations, 2014; and
- (2) National Environmental Management Act: Waste Act, 2008 (Act No. 59 of 2008) and Government Notice 921, 2013

**PROJECT TITLE**

**MINING ACTIVITIES ON THE FARM JENKINS, SOUTH OF KATHU, TSANTSABANE LOCAL MUNICIPALITY IN THE SIYANDA DISTRICT MUNICIPALITY OF THE NORTHERN CAPE PROVINCE**

Specialist:	Dr Gideon Groenewald		
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E-mail:	gideonhgroenewald@gmail.com		
Professional affiliation(s) (if any)	GSSA, PSSA, Pr Sci Nat Earth Scientist (Reg no 401946/83)		

Project Consultant:			
Contact person:			
Postal address:			
Postal code:		Cell:	
Telephone:		Fax:	
E-mail:			

4.2 The specialist appointed in terms of the Regulations\_

I, Gideon Groenewald \_\_\_\_\_, declare that --

General declaration:

I act as the independent specialist in this application;  
I will perform the work relating to the application in an objective manner, even if this results in views and findings that are not favourable to the applicant;  
I declare that there are no circumstances that may compromise my objectivity in performing such work;  
I have expertise in conducting the specialist report relevant to this application, including knowledge of the Act, Regulations and any guidelines that have relevance to the proposed activity;  
I will comply with the Act, Regulations and all other applicable legislation;  
I have no, and will not engage in, conflicting interests in the undertaking of the activity;  
I undertake to disclose to the applicant and the competent authority all material information in my possession that reasonably has or may have the potential of influencing - any decision to be taken with respect to the application by the competent authority; and - the objectivity of any report, plan or document to be prepared by myself for submission to the competent authority;  
all the particulars furnished by me in this form are true and correct; and  
I realise that a false declaration is an offence in terms of regulation 48 and is punishable in terms of section 24F of the Act.



\_\_\_\_\_  
Signature of the specialist:

\_\_\_\_\_  
Name of company (if applicable):

3 November 2015

\_\_\_\_\_  
Date: