

# BASIC ASSESSMENT REPORT And

(Review)

SUBMITTED FOR ENVIRONMENTAL AUTHORIZATIONS IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 AND THE NATIONAL ENVIRONMENTAL MANAGEMENT WASTE ACT, 2008 IN RESPECT OF LISTED ACTIVITIES THAT HAVE BEEN TRIGGERED BY APPLICATIONS IN TERMS OF THE MINERAL AND PETROLEUM RESOURCES DEVELOPMENT ACT, 2002 (MPRDA) (AS AMENDED).

ENVIRONMENTAL MANAGEMENT PROGRAMME REPORT

NAME OF APPLICANT: MASHAU CAPITAL (PTY) LTD

**TEL NO**: 011 447 4895 **FAX NO**: 086 689 5745

POSTAL ADDRESS: P.O BOX 1835, SAXONWORLD

PHYSICAL ADDRESS: OFFICE 2003 BLOCK C, REGENT PLACE, THE ZONE, ROSEBANK 2132

FILE REFERENCE NUMBER SAMRAD: FS 30/5/1/1/2/10477 PR



### 1. IMPORTANT NOTICE

In terms of the Mineral and Petroleum Resources Development Act (Act 28 of 2002 as amended), the Minister must grant a prospecting or mining right if among others the mining "will not result in unacceptable pollution, ecological degradation or damage to the environment".

Unless an Environmental Authorisation can be granted following the evaluation of an Environmental Impact Assessment and an Environmental Management Programme report in terms of the National Environmental Management Act (Act 107 of 1998) (NEMA), it cannot be concluded that the said activities will not result in unacceptable pollution, ecological degradation or damage to the environment.

In terms of section 16(3)(b) of the EIA Regulations, 2014, any report submitted as part of an application must be prepared in a format that may be determined by the Competent Authority and in terms of section 17 (1) (c) the competent Authority must check whether the application has taken into account any minimum requirements applicable or instructions or guidance provided by the competent authority to the submission of applications.

It is therefore an instruction that the prescribed reports required in respect of applications for an environmental authorisation for listed activities triggered by an application for a right or a permit are submitted in the exact format of, and provide all the information required in terms of, this template. Furthermore please be advised that failure to submit the information required in the format provided in this template will be regarded as a failure to meet the requirements of the Regulation and will lead to the Environmental Authorisation being refused.

It is furthermore an instruction that the Environmental Assessment Practitioner must process and interpret his/her research and analysis and use the findings thereof to compile the information required herein. (Unprocessed supporting information may be attached as appendices). The EAP must ensure that the information required is placed correctly in the relevant sections of the Report, in the order, and under the provided headings as set out below, and ensure that the report is not cluttered with uninterpreted information and that it unambiguously represents the interpretation of the applicant.

### 2. Objective of the basic assessment process

The objective of the basic assessment process is to, through a consultative process—

(a) determine the policy and legislative context within which the proposed activity is located and how the activity complies with and responds to the policy and legislative context;



- (b) identify the alternatives considered, including the activity, location, and technology alternatives;
- (c) describe the need and desirability of the proposed alternatives,
- (d) through the undertaking of an impact and risk assessment process inclusive of cumulative impacts which focused on determining the geographical, physical, biological, social, economic, heritage, and cultural sensitivity of the sites and locations within sites and the risk of impact of the proposed activity and technology alternatives on the these aspects to determine:
  - (i) the nature, significance, consequence, extent, duration, and probability of the impacts occurring to; and
  - (ii) the degree to which these impacts—
    - (aa) can be reversed;
    - (bb) may cause irreplaceable loss of resources; and
    - (cc) can be managed, avoided or mitigated;
- (e) through a ranking of the site sensitivities and possible impacts the activity and technology alternatives will impose on the sites and location identified through the life of the activity to—
  - (i) identify and motivate a preferred site, activity and technology alternative;
  - (ii) identify suitable measures to manage, avoid or mitigate identified impacts; and
  - (iii) identify residual risks that need to be managed and monitored.



### PART A

### SCOPE OF ASSSSMENT AND BASIC ASSESSMENT REPORT

### 3. Contact Person and correspondence address

### a) Details of

### Details of the EAP

Name of The Practitioner: Ms Lufuno Nemakhavhani

Tel No.: 072 718 9952 Fax No.: 086 565 5359

e-mail address: lufunonemakh@gmail.com

### ii) Expertise of the EAP.

### (1) The qualifications of the EAP

(with evidence).

Honours in Environmental Management

Bsc life and environmental science

### (2) Summary of the EAP's past experience.

(In carrying out the Environmental Impact Assessment Procedure)
Lufuno Nemakhavhani is an Environmental Practitioner with 4 years' experience in the environmental
field. She holds a BSc Honours degree in environmental management and is a registered Candidate
Natural Scientist with the South African Council of Natural Scientific Professionals (SACNASP).
Lufuno has worked and completed a few Basic Assessment project and Water Use Licenses.

### b) Location of the overall Activity.

Farm Name:	Weltevreden 130, Boshoek 466, Welverdiend 216, Sterkfontein 474,
	Jonkerskraal 475 and Klein Jonkerskraal 551
Application area (Ha)	Approximately 3813
Magisterial district:	Bothaville District Municipality
Distance and direction from	14 km north-west of Vierfontein in Freestate
nearest town	
21 digit Surveyor General Code	F0360000000013000000, F0360000000046600000,
for each farm portion	F0360000000021600000, F0360000000047400000,
	F0050000000047500000, F0050000000055100000



Table 1: Farm names and SG code

FARM NAME	PORTION	21 Digit Surveyor General Code
Weltevreden 130	ALL	F0360000000013000000
Boshoek 466	ALL	F03600000000046600000
Welverdiend 216	ALL	F03600000000021600000
Sterkfontein 474	ALL	F03600000000047400000
Jonkerskraal 475	ALL	F00500000000047500000
Klein Jonkerskraal 551	ALL	F00500000000055100000

### c) Locality map

(show nearest town, scale not smaller than 1:250000).

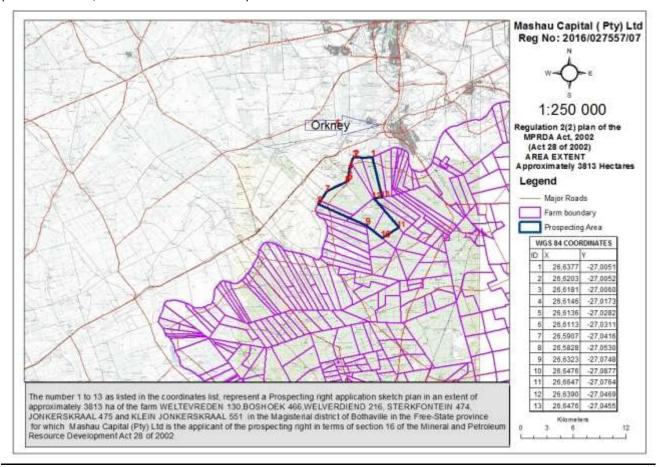


Figure 1: Locality Map

### d) Description of the scope of the proposed overall activity.

Provide a plan drawn to a scale acceptable to the competent authority but not less than 1: 10 000 that shows the location, and area (hectares) of all the aforesaid main and listed activities, and infrastructure to be placed on site

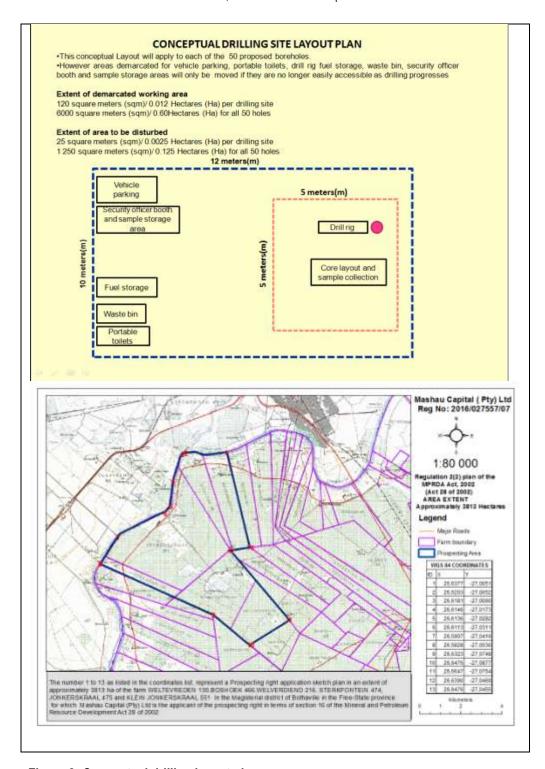


Figure 2: Conceptual drilling layout plan

Prospecting for kimberlite is a dynamic and result-driven operation which proceeds in phases, the outcome of which cannot be predicted or predetermined. The programme could be stopped at any stage during the prospecting operation if the results are negative or non-economical. Prospecting activities to be undertaken include non-invasive (i.e. desktop studies and ground geophysical surveys) and invasive (i.e. drilling) techniques.

The environmental footprint for drilling is limited to less than 0.012 Ha per drilling site, with twenty (50) drill sites anticipated to be carried forward to drilling. During site setup shrubs and grass will be cleared to make space for the rig. Consequently the site is expected to rapidly recover following completion of exploration activities.

Water is only required when drilling activities commence. Drilling water requirements fall within the "small industrial user" where the use of water is less than twenty cubic metres per day for prospecting. The water that will be used for the prospecting activities will be sourced on agreement from an existing authorized water user which could be either the land owner or local municipality. The department responsible for water resources shall be consulted with regards to any water related agreement with either the land owner or local municipality prior to drilling. No water will be abstracted in terms of section 21(a) of National Water Act, 1998 (Act no. 36 of 1998). Drilling may take a few days to months to complete depending on the geology of the area, technical challenges and other factors.

### (i) Listed and specified activities

NAME OF ACTIVITY	Aerial extent	LISTED	APPLICABLE	WASTE
	of the	ACTIVITY	LISTING	MANAGEM
	Activity		NOTICE	ENT
(E.g. For prospecting - drill site, site camp, ablution facility, accommodation, equipment storage, sample storage, site	Ha or m²	(Mark with an X	(GNR 544, GNR 545	AUTHORIS
office, access route etcetc  E.g. for mining,- excavations, blasting, stockpiles, discard		where applicable	or GNR 546)	ATION
dumps or dams, Loading, hauling and transport, Water supply dams and boreholes, accommodation, offices, ablution, stores, workshops, processing plant, storm water control, berms, roads, pipelines, power lines, conveyors, etcetc)		or affected).		(Indicate whether an authorisation is required in terms of the Waste Management Act).
				(Mark with an X
Establishment of fifty (50) drilling sites. The	1250 m <sup>2</sup>	Х	GNR 983,	,
drilling programme will be of diamond core	(0.125 Ha)		Listing Notice	
drilling.			1, Activity 20	
The demarcated working area per site is 120				
m <sup>2</sup> (= 6 000 m2 or 0.6 Ha for all drill sites)				
The total area to be disturbed per site is				
25m2 (= 1 250m <sup>2</sup> or 0.125 Ha for all drill				
sites)				
Desktop Study	3813 Ha		Not Listed	
Geological mapping and Geophysical	3813 Ha		Not Listed	

surveying				
Establishment of fifty (50) drilling sites. The	1250 m <sup>2</sup>	Х	GNR 983,	
drilling programme will be of diamond core	(0.125 Ha)		Listing Notice	
drilling.			1, Activity 20	
The demarcated working area per site is 120				
m <sup>2</sup> (= 6 000 m <sup>2</sup> or 0.6 Ha for all drill sites)				
The total area to be disturbed per site is				
25m2 (= 1 250m <sup>2</sup> or 0.125 Ha for all drill				
sites)				

### (ii) Description of the activities to be undertaken

(Describe Methodology or technology to be employed, including the type of commodity to be prospected/mined and for a linear activity, a description of the route of the activity)

#### Overview

Mashau Capital (Pty) Ltd (herein known as Mashau) has lodged an application for a prospecting right over the farm properties described above. Mashau proposes to conduct prospecting activities in terms of listing 20 Regulation No. 983 of the Environmental Impact Regulation Listing Notice 1 of 2014. If this environmental authorisation is successfully granted the following activities will be undertaken in a phased approach, whereby the results of each phase determines whether the subsequent phases will be undertaken.

### Phase 1: Desktop Studies and Ground Geophysical Surveys

### **Desktop Studies**

Desktop study entails extensive research and investigation of the proposed study area and activities. Desktop study further entails the compilation of all relevant information pertaining to the prospection for diamonds in kimberlites geological areas. In gathering all relevant information the public and previous studies are consultant. Information received will then be assessed and analysed by all appointed qualified specialist involved in the study in order to determine the best prospecting techniques to be used in order to discover and subsequently test any kimberlites on the property, furthermore this information will be required in order to perform best environmentally friendly methods available in order to sustain the environment and rehabilitate that which may be lost upon drilling activities. Note that this activity is repeated at the end of each phase of prospecting, by the interpretation and integration of new prospecting information with the existing information set, in order to inform a decision on whether further work is warranted and if so, the specific scope of this additional work.

### **Ground Geophysical Surveys**

Ground geophysical surveys involve the systematic measurement of magnetic, gravitational and electromagnetic fields over target areas of interest within the property, using appropriate instruments. The individual survey areas vary between  $500 \times 500$  m to  $2 \times 2$  km depending on the inferred size of any target. Magnetic survey lines are



spaced at a maximum of 50 m apart and readings will be taken at a minimum of 5 m intervals along the lines. Electromagnetic and gravity survey lines are spaced at a maximum of 100 m apart with readings taken at a maximum of 50 m along the lines. After data collection has been completed, data processing and visualization is carried out to allow the interpretation of the survey.

Phase 2 & 3: Geology and Resources: Phase 2 will include drilling, geochemical sample analysis, data verification and Mineral Resource Estimation according to international Reporting codes such as South African Code for Reporting of Exploration Results, Mineral Resources and Mineral Reserves (SAMREC), and to confirm the processing route and flowsheet. Data acquisition and test work in the form of either large diameter drilling, Reverse Circulation (RC) or Air Percussion drilling (for geochemical assay as well as metallurgical test work) is required to support the study. Once the geochemical analytical results are obtained, the generation of a geological and resource model and resulting SAMREC -compliant (or similar) mineral resource estimate may be completed.

### **Drilling**

Core drilling will be carried out on geophysical anomalies to test for the presence of kimberlite. If kimberlite is discovered, the primary objective for core drilling is for geological logging. The exploration drilling holes may be vertical or inclined, usually at a maximum angle of 60 degrees (from the horizontal). The borehole depth will be determined by the geologist and will depend on the type of anomaly and the geological conditions, including overburden (the thickness of material that overlies the target kimberlite). Fifty (50) boreholes are anticipated to be drilled per target.

The size of core drilled will be determined by such factors as cost, proposed core sampling, the degree of logging required and proposed geotechnical investigations. Sizes commonly used are HQ (63.5 mm diameter core) and NQ (47.6 mm diameter core) or variations on these. The orientation and depth of core holes will vary depending on the drilling objective. In the case of delineation drilling, angled core holes will be drilled to establish accurate kimberlite / country rock boundaries at depth (in other words, where the edge of the kimberlite is at depth). Vertical holes will be drilled for geological modelling and / or sampling of the core. Core holes are also used as pilot holes for large diameter holes. The geological information provided by the core holes greatly reduces the risk of selecting inappropriate Reverse Circulation Large Diameter Drilling (RC LDD) hole locations. Core holes allow for maximum control on information such as overburden thickness, density, country rock dilution and likely kimberlite intersections, and therefore allow more accurate determinations of the position of likely RC LDD holes for diamond recoveries.

Material derived from i.e. core will be examined on site for logging purposes and sampled for a variety of analyses. RC LDD currently up to 610 mm diameter provides good geological and especially grade data. RC LDD will be conducted when grade assessment is one of the primary objectives of the exercise. The sizes of the boreholes drilled will be determined by such factors as proposed sampling, availability of drilling equipment, cost

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and the volume of sample required. RC LDD will take place after pilot core drilling. The pilot hole will also be used as a guide for geological control and sample planning.

**Phase 4:** Environmental Impact Assessment, Socio-Economic Impacts Assessment, Geological Modeling, mineral reserve and resource estimation and compilation of competence persons report (CPR).

Phase 5: Feasibility Study, Financial Studies, Market Research, Mine Planning and Market susceptibility study.

### **Ancillary Activities**

### **Access Roads**

Once the prospecting right has been granted, the applicant will negotiate access with the land owner in order to do a detailed technical evaluation of the prospecting area. In addition to negotiating of access the applicant will reach an agreement with the land owners on location of access roads. Condition and its status (if access roads will be created for temporary or permanent use). A contract will be drawn up and negotiated with the land owner regarding access and the suitability and time of year that is preferred for prospect drilling.

### **Water Supply**

The water that will be used for the prospecting activities will be sourced on agreement from an existing authorized water user which could be either the land owner or local municipality. However, large quantity of water is not envisaged for these activities.

### **Ablution facilities**

Ablution facilities at the drill site will involve the installation of portable toilets.

### **Temporary Office Area**

A temporary site office shaded area will be erected at the drill sites. On-site electricity generation will be through the use of generators.

### Accommodation

The current study will not require any overnight work, and therefore no accommodation of staff shall be provided, furthermore, employment of staff will be sourced from local residents who will not require extra accommodation. Night security staff will be employed once equipment has been established on site and it will be discussed with the land owner.

### **Blasting**

As the Prospecting Works Programme does not allow for bulk sampling, no blasting will take place.



### **Storage of Dangerous Goods**

During the drilling activities limited quantities of diesel fuel, oil and lubricants will be stored on site. The only dangerous good that will be stored in any significant quantity is diesel fuel. Less than 30m³ will be stored in above ground diesel storage tanks.

### e) Policy and Legislative Context

APPLICABLE LEGISLATION AND GUIDELINES	REFERENCE	HOW DOES THIS
USED TO COMPILE THE REPORT	WHERE APPLIED	DEVELOPMENT COMPLIY WITH
(a description of the policy and legislative context within which the development		AND RESPOND TO THE
is proposed including an identification of all legislation, policies, plans, guidelines, spatial tools, municipal development planning frameworks and		LEGISLATION AND POLICY
instruments that are applicable to this activity and are to be considered in the		CONTEXT.
assessment process		(E.g. In terms of the National Water Act a Water Use License has/ has not been applied for)
Legislation		
Constitution of South Africa, specifies that everyone	Prospecting	The prospecting activities shall
has a right;	activities	be conducted in such a
a. to an environment that is not harmful to their health		manner that significant
or wellbeing; and		environmental impacts are
<b>b</b> . to have the environment protected, for the		avoided, where significant
benefit of present and future generations,		impacts cannot all together
through reasonable legislative and other		avoided be minimised and
measures that:		mitigated in order to protect
i. prevent pollution and ecological degradation;		the environmental right of
ii. promote conservation; and		South Africans.
iii. Secure ecologically sustainable development and		
use of natural resources while promoting justifiable		
economic and social development.		
Minerals and Petroleum Development Resources Act,	Prospecting	The conditions and requirements
Act 28 of 2002 (MPRDA) section 16 ( as amended)	activities	attached to the granting of the
		prospecting right will apply to the
		prospecting activities.
National Environmental Management Act, No 107 of	Prospecting	The appropriate environmental
1998 (as amended) (NEMA) Listing Activity 20 of	activities	authorisation will be obtained
Listing Notice 1 in terms of Regulation 983 of 2014		before proceeding with any
		prospecting activities.
		Measures will be implemented to
		prevent any pollution occurring
		during the drilling activities.



		The disturbed area shall be
		rehabilitated in such a way that is
		stable, non-polluting, non-eroded,
		free from alien invasive species and
		suitable for agreed post closure
		land use.
National Water Act, Act 36 of 1998 (NWA):	N/A	No water use license is required
		for this application.
		Any water required for drilling
		activities will be obtained from a
		legal source within the area or
		brought in via a mobile water
		tanker.
National Environmental Management: Waste Act,	Management	The generation of potential waste
Act 59 of 2008 (NEMWA)NEM: WA (as amended)	measures	will be minimised through ensuring
	environmental	employees of the drilling contractor
	awareness plan	are subjected to the appropriate
		environmental awareness
		campaign before commencement of
		drilling. All waste generated during
		the drilling activities will be
		disposed of in a responsible legal
		manner. Proof of legal disposal will
		be maintained on site.
National Heritage Resources Act, 25 of 1999 ("NHRA")	Management	Phase 1 Heritage Impact
	measures	Assessment shall be conducted
		prior to drilling to ensure that
		significant impacts on heritage
		artefacts, heritage site and graves.
		No drilling activities will take place
		with 50m of any identified heritage
		resource such as a grave.
Municipal Plans and Policies		
Standards, Guidance and Spatial Tools		
South African National Biodiversity Institute (SANBI)	Baseline	Used during desktop research to
Biodiversity GIS (bgis.sanbi.org)	environmental	identify sensitive environments
	description	within the prospecting rights area.
Seri Ed ESRI 2011. ArcGIS Desktop: Version 9.3.1.	Baseline	Used during desktop research for
Redlands, CA: Environmental Systems Research	Environmental	mapping the locality and sensitive
Institute	description and	environments within the prospecting

	mapping.	rights area.
Google earth	Baseline	Used during desktop research for
	Environmental	mapping the locality and sensitive
	description and	environments within the prospecting
	mapping.	rights area.

### f) Need and desirability of the proposed activities.

(Motivate the need and desirability of the proposed development including the need and desirability of the activity in the context of the preferred location).

The need and desirability of the prospecting activities is to locate and explore diamond mineral within the proposed farms. If the prospecting activities prove that there are feasible minerals to allow for mining, a new mine may be developed which would generate extensive employment opportunities in an area where employment is needed and contribute to economic growth of our country. Furthermore the prospecting right site is located within an area where there has already been diamond drilling and mining activities operating in close proximity. The presence of a running dyke within some of the properties extending from Tau Lekoa gold mine improves the chances of finding diamond as some dykes are known to be diamond bearing.

### g) Motivation for the overall preferred site, activities and technology alternative.

The proposed site was selected based on extensive research and also following on information from previous prospecting activities in the area. There are known diamond deposits in the area which were discovered during mining activities within the area and the discovery of alluvial diamond which is within the vicinity of the area. The presence of a running dyke within some of the properties extending from Tau Lekoa gold mine improves the chances of finding diamond as some dykes are known to be diamond bearing. In terms of the technologies proposed, the proposed prospecting methods (diamond drilling and geophysical survey) have been chosen based on the known success of prospecting using them. The prospecting activities proposed in the Prospecting Works Programme (PWP) is dependent on the preceding phase as previously discussed, therefore no alternatives are indicated, but rather a phased approach of trusted prospecting techniques.

### h) Full description of the process followed to reach the proposed preferred alternatives within the site.

NB!! – This section is about the determination of the specific site layout and the location of infrastructure and activities on site, having taken into consideration the issues raised by interested and affected parties, and the consideration of alternatives to the initially proposed site layout.

### i) Details of the development footprint alternatives considered.

With reference to the site plan provided as Appendix 4 and the location of the individual activities on site, provide details of the alternatives considered with respect to:



### (a) the property on which or location where it is proposed to undertake the activity;

The drilling activities will take place in the farms aforementioned, the exact location of the Fifty (50) holes to be drilled will be known as soon as the non-invasive activities have been completed, however in identifying this exact drilling location the following will be considered;

- No drilling activities in sensitive area,
- No drilling activities within 500m of human settlement (residential stands).
- No drill site will be positioned within 50m of a structure
- Existing access roads will be utilised to access the drill sites

### (b) the type of activity to be undertaken;

The choice of the preferred activity to be undertaken was based on historic knowledge of diamond available on site and the type of geologic rock in the area that have been intruded by dykes. No other activity alternative was considered based on the above. In terms of the technologies proposed, these have been chosen based on the known long term success of the selected drilling method and prospecting process used in the past. The prospecting activities proposed in the Prospecting Works Programme are dependent on the preceding phase; therefore no alternatives are indicated, but rather a phased approach of trusted prospecting techniques.

### (c) the design or layout of the activity;

The design or layout of the activity was selected based on its feasibility. The activity layout is designed in a way that it will be easily accessible for staff and for all heavy machinery during the drilling phase. Furthermore access roads will be agreed upon with the land owners. The preferred site layout is designed to ensure that break areas and ablution facilities are located away from the drilling activities to minimise the noise impacts. Site establishment are done with closure in mind to ensure that only the required size is disturbed.

### (d) the technology to be used in the activity;

The method and techniques employed for the investigation of potential targets and deposits are suitable for the proposed prospecting activities. They have been selected based on their minimal invasiveness which is envisaged to have minimal impact on the receiving environment.

### (e) the operational aspects of the activity; and

The drilling will be done over a period of 5 days a week, where drilling activities will be conducted during daylight hours to minimize exposure to the risks. If necessary the drilling can be timed to occur during school terms or holidays as may be required in certain instances by stakeholders. The time of implementing drilling activities during the course of the day may also be reconsidered in consultation with landowners. Ideally drill activities will occur continuously until such time that a hole is completed. If necessary certain holes can be drilled for a 12 hour day, with no drilling occurring

during the night. Preferably drilling should be conducted during none cultivation period as the livelihood around depends on the income from the crop farming.

### (f) the option of not implementing the activity

Drilling is required in order to investigate the potential and feasibility of a resource as well as being used to generate a DMR compliant mineral resource statement. There is no potential for any future investment in a mine without the confirmation of the mineral resources which can only be obtained from drilling activities. Should the prospecting right be refused, effectively a potential diamond resource will be sterilised. The socio-economic benefit and most notably the future employment potential of mine development will also be lost if the prospecting activities are not implemented in order to determine the feasibility of any diamond deposit that may occur within the area.

### ii) Details of the Public Participation Process Followed

Describe the process undertaken to consult interested and affected parties including public meetings and one on one consultation. NB the affected parties must be specifically consulted regardless of whether or not they attended public meetings. (Information to be provided to affected parties must include sufficient detail of the intended operation to enable them to assess what impact the activities will have on them or on the use of their land.

The following steps were undertaken as part of the public participation process in order to notify interested and affected parties:

- a. Potential I&APs were identified through the use of an existing I&AP databases. The existing databases include landowners, community members and State departments.
- b. Potential I&APs were notified about the project by means of:
  - i. Letters of notification to directly affected landowners;
  - ii. Media advertisement and site notices; and
  - iii. Written notifications to other stakeholders including Local and District Municipalities (including tribal authorities where applicable).
- c. Newspaper advertisements were placed in the relevant regional newspapers to inform stakeholders of commencement of the BA process and invite the registration as stakeholders.
- d. I&APs were given the opportunity to review and comment on the Draft Basic Assessment Report. Focus group and individual meetings were held with key stakeholders in the local area.
- e. I&APs will be notified of the environmental authorisation, once received and the appeal process to be followed.

### iii)

Summary of issues raised by I&Aps (Complete the table summarising comments and issues raised, and reaction to those responses)

Interested and Affected Parties		Date	Issues raised	EAPs response to issues as mandated by the	Section and
		Comments		applicant	paragraph
List the names of persons consulte	d in this	Received			reference in this
column, and					report where
Mark with an X where those who	must be				the issues and
consulted were in fact consulted.					or response
					were
					incorporated.
AFFECTED PARTIES					
Landowner/s	Х				
		05/07/2017	•On behalf of our client we hereby request You to	•A copy of the draft BAR was sent to all stakeholders	Refer to
			favour us with all relevant records including but not	on the 2 <sup>nd</sup> of August 2017with all information	Appendix 3
Allem brothers (Pty) Ltd represented			limited to environmental reports and studies.	pertaining the proposed prospecting right application.	
by Podbielski incorporated attoneys-					
(H.S.L du Plessis Attorney)			•We hereby request that you list our client Allem	•Noted. Thanks.	
			Brothers (Pty) Ltd, as an interested and affected		
			party.		
			•Please formally register me as an interested and	Same as above	Refer to
			affected party (I&AP) and provide me with further	Your concerns and reservations are noted.	Appendix 3
			information and notifications during the BAR		



			process		
			. The owner appears the prospecting application		
			The owner opposes the prospecting application		
			and reserves all of its rights		
Claassens Van Niekerk Attorneys		30/06/2017	Please formally register me as an interested and	•Noted. Thanks.	Refer to
			affected party (I&AP) and provide me with further		Appendix 3
			information and notifications during the BAR	•31 July	
			process		
			•Kindly indicate for which date and time a meeting		
			can be arranged to discuss the matter		
Village Main Reef	Х	30/06/2017	•We request that you register Buffelsfontein Fold	•Noted. Thanks.	Refer to
			Mines (Pty)Ltd as an interested and affected Party		Appendix 3
			and provide us with further information and		
			notifications during the BAR process. Please use		
			the following details in submitting the registration		
			(refer to appendix C)		
			•We are willing to constructively engage with	• A copy of the BAR, PWP and DMR correspondence	
			Mashau Capital and yourself on this matter, but in	was shared with all interested and affected party on	
			order to do so we need to first review the PWP	the 02 <sup>nd</sup> of August 2017.	
			and EMP for the project. If these could be supplied		
			to us wed be in a positon to provide comments		
Mr Louwrens Vermeulen	Х	04/07/2017	Please formally register me as an interested and	Noted. Thanks	Refer to



			affected party (I&AP) and provide me with further			Appendix 3
			information and notifications during the BAR			
			process			
Mr Leon Cloete	Х	11/07/2017	Please supply us forthwith with a copy of	•	The Draft Basic Assessment (BAR) Will be	Refer to
			the EIA Report		furnished	Appendix 3
			Please also supply us with the credentials	•	The information will be supplied in the BAR	
			of the person/s doing the EIA as these			
			will have to be checked.	•	The prospecting activities will commence	
			We also need a time table and specific		after the Department of Mineral Resources	
			places where this prospecting will take		(DMR) has granted the application. All I&APs	
			place. The farm in question is mostly a		will be informed of the decision taken by	
			cultivated farm and the preparation of the		DMR. After the granting the applicant will	
			lands will start on 1 September and the		notify and furnish all I&APs with the time	
			planting of the crops will commence from		frame and locations of the areas to be	
			1 November.		affected.	
			As our livelihood depends on the income			
			from the crop produced, it is imperative	•	After prospecting the applicant will	
			that you also spell out the compensation		rehabilitate the land to its original state. Any	
			for damaged cultivated land and crops as		access agreements and compensation will	
			well as your plans for rehabilitating the		be negotiated between the I&APs and the	
			land to its former state. Certificates from		applicant before the activities commence.	
			an agriculturist will be needed to certify			

			the future suitability of the land for crop production  I have a serious problem with your credibility, as you cannot even get the magisterial district for the farms correct.  When DMR accepted the application it states the district as Bothaville but we are aware that the properties applied for fall within the magisterial district of Bothavil and Viljoenskroon	
Emmarentia Coetzee	X	16/11/2017	I represent the farm Welverdiend 216 Thank you	Refer to
				Appendix 3
Gert Swanepoel / Claassens Van		31/01/2018	It is impossible to drill anywhere on     We have propose that before any work	Refer to
Niekerk Attorneys	X		Sterkfontein 474 without influencing the commences the client must have extens	ive Appendix 3
			drinking water. discussions with yourself and other	
			As confirmed in a previous meeting by      Iandowners affected to come to an amic	able
			YOUR LAWYER, you will not drill within agreement with regards to access and	
			100m of a water source. Then 90% of the compensation for damages (e.g crops e	c),
			farm you will not be able to drill. further more DMR requests the client to	put
			All of the farms mentioned in the area has up a financial guarantee to insure	
			previously been drilled on, all of the drill rehabilitation of the affected areas.	
			samples is still available at Anglo.  • The condition of 100m away from the way	iter
			Every time a contractor sets foot on my     source will stand and not exceptions will	be
			property, there is environmental damage, warranted.	
			and personal property damage. It is +-10  • Thank you for the information on historic	al
			years since eskom built the new line and drilling. The client will conduct a desktop	

			<ul> <li>the grass has still not recovered.</li> <li>There is another owner of Sterkfontein that has not been notified about the prospecting, Mr Leon Cloete.</li> <li>Crops are currently planted on 85% of Sterkfontein.</li> </ul>	assessment which will include collecting historical data from all the companies that carried out work on the affected farms to minimise the invasive activities required.  • We have been in contact with Mr Leon Cloete as well as the person leasing his property.	
Land owners meeting		18/11/2017	Land owners requested the meeting be postponed because they still wanted to review the Documents sent to them.	Agreed to postpone the meeting to February 2018.	Refer to Appendix 3
Land owners meeting		03/02/2018		None of the land owners came to the meeting.	Refer to Appendix 3
Municipality	Х				
lejweleputswa district municipality		July 2017	<ul> <li>Register me as a I&amp;AP</li> <li>Send me the BAR for comment</li> </ul>	We will email everything to you	Refer to Appendix 3
Organs of state (Responsible for					
infrastructure that may be					
affected Roads Department,					
Eskom, Telkom, DWA e					
South African Heritage Resources	X	27/06/2017	Please note that as official commenting authorities	South African Heritage Resources Agency (SAHRA)	Refer to



Agency (SAHRA)			both the Free State Provincial Heritage Resources	will be notified of any development and they have	Appendix 3
			Authority (Heritage Free State) and the South	been added as part of stakeholders to the project.	
			African Heritage Resources Agency (SAHRA)	•the heritage and paleontological impact assessment	
			should by default be informed of any development	studies will be undertaken as part of the EIA process	
			of this kind and, accordingly, do not have to	during the mining application process should the	
			register as interested and affected party. Please	prospection application be successful.	
			refer to the excerpt of Section 38(8) of the National		
			Heritage Resources Act, no 25 of 1999 below;		
			Heritage Free State take note of your application		
			for a prospecting right and requests both a		
			Heritage Impact Assessment and a		
			Palaeontological Impact Assessment to be		
			submitted for commenting. Please note that		
			SAHRA should be informed of this application via		
			their online system, SAHRIS		
			(http://www.sahra.org.za/sahris/).		
			•specialist studies pending		
Commission on Death tion of Land	V	02/07/0047	W/s confirm on the data (02/07/47) of this latter to	Natard Through for the invest	Defente
Commission on Restitution of Land	X	03/07/2017	•We confirm as the date (03/07/17)of this letter no	Noted. Thanks for the input.	Refer to
Rights / Department of rural and			land claims appear on our database in respect of		Appendix 3
Land Development			the property. This includes database for claims		
			lodged by 31 December 1998, and those lodged		
			between 1 July 2014 and 27 July 2016 in terms of		
			the Restitution of Land Amendment Act, 2014.		



Whilst the commission takes reasonable care to ensure the accuracy of the information it provides, there are various factors that are beyond the commission's control, particularly relating to claims that have been lodged but not yet gazetted such as; -Some claimants referred to properties they claim dispossession of rights in the land against using historical property descriptions which may not match the current property description; and - Some claimants provided the geographic descriptions of the land they claim without the particular actual property description they claim dispossession of right in land against. The commission therefore does not accept any liability whatsoever if through the process of further investigation of claims it is found that there is in fact a land claim in respect of the above property. If you are aware of any change in the description

			of the above property after 19 June 1913 kindly	
			supply us with such description so as to enable us	
			to do further search.	
Dept. agriculture, forestry and	Х		No response	
fisheries				
OTHER AFFECTED PARTIES		N/A		

iv) The Environmental attributes associated with the alternatives.(The environmental attributed described must include socio-economic, social, heritage, cultural, geographical, physical and biological aspects)

### (1) Baseline Environment

### (a) Type of environment affected by the proposed activity.

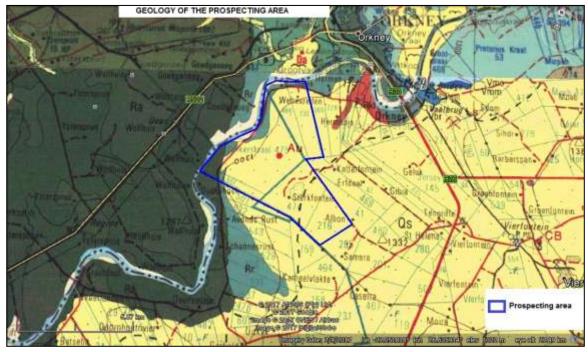
(its current geographical, physical, biological, socio- economic, and cultural character).

The study area is located closest to a town known as Orkney, a gold mining town situated in Klerksdorp district of the North West. It lies on the banks of the Vaal River approximately 180km from Johannesburg.

### Geology

The Ventersdorp is divided into 3 groups i.e. the Klipriviersbeg Group at the base, the Platberg Group and the Pniel Group. All groups are separated by erosional unconformities (Van Der Westhuizen, 1991). The Klipriviersberg group exclusively consists of mafic volcanic rocks and has been subdivided into 6 formations (Winter, 1976), the Platberg Group includes various sedimentary rocks and mafic intermediate lava flows and is divided into Kameeldoorns formation, Makwassie formation and Rietgat formation. The Pniel group consists of the sedimentary Bothaville formation and the volcanic Allanridge formation that constitudes the youngest part of the Ventersdorp Supergroup.

There exists a strong correlation between alluvial deposits and Ventersdorp lava bedrock in the Vaal-Hart River Basin.



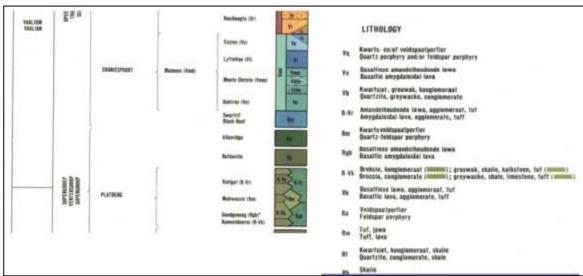


Figure 2: Geology of the Prospecting area

### Climate:

Climate plays a vital role in determining the availability of water resources in an area, the nature of natural landscape and vegetation types. The study area is located in the district municipality of Bothaville and Viljoenskroon. The closest town to the study area is Orkney in North-West and therefore the climate assessed is that of Orkney. The prevailing climate in Orkney is known as a local steppe climate. During the year, there is little rainfall in Orkney. The temperature here averages 16.9 °C the average annual rainfall is 601 mm. the driest month is July. There is 5mm of precipitation in July. Most precipitation falls in January, with an average of 101 mm. with an average of 22 °C, January is the warmest month. In July the average temperature is 8.4 °C. it is the

lowest average temperature of the whole year. Precipitation varies 96mm between the driest month and the wettest month. The average temperature varies during the year by 14.1 °C.

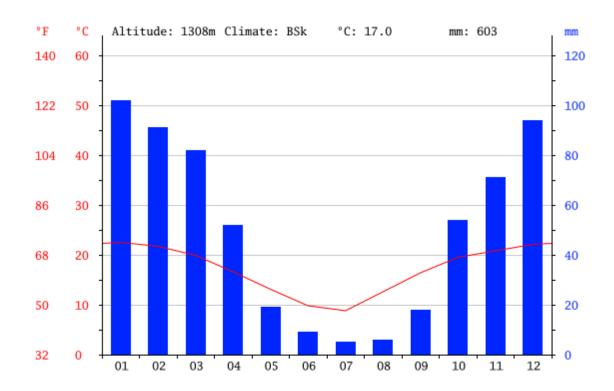


Figure 4: Orkney climate graph

### Topography:

The prospecting right area is relatively flat, with a gentle slope to the south-east and with a maximum elevation of 2 200m. The topography of the area peaks in the western section at 1 651 masl and is at its lowest in the eastern section of the site at 1 560 masl. The drop in topography of 91m takes place over approximately 7km.

### **Water Management Area**

The proposed study area falls within the Middle Vaal Water Management Area (WMA), with major rivers in this catchment including; Schoonspruit; Rhenoster; Vals; Vet and the Vaal rivers. The site area furthermore falls within the C60J Quaternary catchment (Refer to Appendix 2 for the rivers and wetland Map)

### **Baseline Socio-economic information**

The drilling will not have any significant impact on the socio-economic structure of the area in which prospecting is taking place. In addition the prospecting activities are not expected to result in any additional jobs. Should the prospecting results be positive and

future mining is deemed a possibility a detailed socio-economic investigation will be required which will be used to assist in the generation of a social and labour plan required for a mining right application.

### Cultural & Heritage

The proposed prospecting activities will not change the character of the site or result in significant impacts on heritage resources. The boreholes will be sited on existing farm tracks or previously disturbed farm land, so the potential impact on archaeological resources will be very low.

There is a possibility that the boreholes may intersect fossilised material. Access to the borehole samples will be provided to the relevant department. The potential impact on paleontological resources may be positive if new subsurface finds can be documented.

There are no known cultural or heritage features in the application area. However, if any heritage resources, including graves or human remains, are encountered, these must be reported to Heritage Free State.

In compliance with heritage legislation, a Notification of Intent to Develop has been submitted to Heritage Free State.

### Vegetation and biodiversity

The study area is dominantly covered by the Vaal-vet sandy grassland which is hardly protected (refer to Vegetation map in appendix 2) and the is no threat to the biodiversity as the area is not of critical biodiversity (refer to Biodiversity Critical Area map in appendix 2).

### (b) Description of the current land uses.

The current land uses are mainly agricultural uses, the proposed activity is located in 5 main farms that are used mainly for maize commercial farming.

### (c) Description of specific environmental features and infrastructure on the site.

The Vaal River flows on the boundaries of the proposed prospecting rights areas and a water pan has been identified within the boundaries of the proposed prospecting rights areas. This should be avoided and where avoidance is not possible, impacts must be appropriately managed and remedied. Based on the outcomes of the initial prospecting phases (non-invasive activities), the location of any invasive activities such as drilling will be determined and the impacts on the identified water courses will subsequently be determined. The area also contains a number of trees and thicket stands, which should



also be avoided as far as possible. It is expected that for the invasive activities (drilling), that only localized clearing of grass and shrubs are required in order to prepare a drill pad.

A number of farmstead dwellings, outbuildings and other farm infrastructure occur in the area and these will be avoided as far as possible. The area also has a number of roads that traverse the sites, from the R30 (regional road) to various roads as well as farm tracks. The invasive activities will seek to use existing roads in order to access properties where needed and it is not expected that any new access roads will be opened up. The map below (refer to section (d) gives an overview of the sites and the main watercourses, settlements and roads that traverse the site.

### (d) Environmental and current land use map.

(Show all environmental and current land use features)

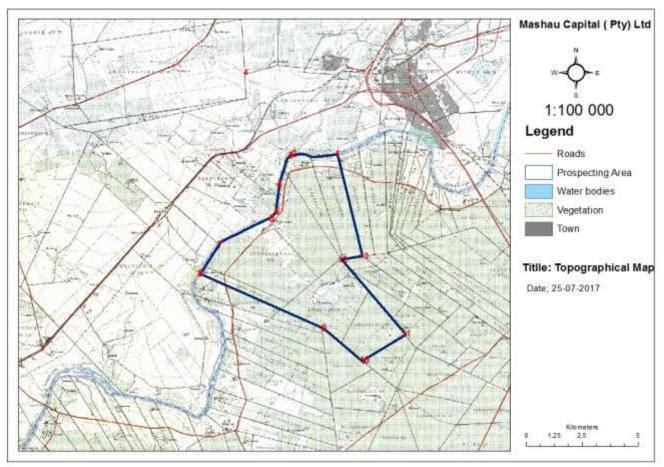


Figure 5: Current land use Map

v) Impacts and risks identified including the nature, significance, consequence, extent, duration and probability of the impacts, including the degree to which these impacts (Provide a list of the potential impacts identified of the activities described in the initial site layout that will be undertaken, as informed by both the typical known impacts of such activities, and as informed by the consultations with affected parties together with the significance, probability, and duration of the impacts. Please indicate the extent to which they can be reversed, the extent to which they may cause irreplaceable loss of resources, and can be avoided, managed or mitigated).



The following are potential impacts associated with the prospecting activity are listed in table 2 below.

**Table 2: Potential Impacts** 

Potential Impacts	Phase	Reversible	Irreplaceable	Can impact be	
			Damage	avoided	
Disturbance to heritage/cultural features on	Construction/ Set-	No	Yes	Yes	
site	up;				
	Operational				
Noise caused by the drilling rig travelling to	Construction/ Set-	Yes	No	No	
and being established on each site, the	up;				
diesel engine driving the drill, vehicles going	Operational				
to and from the drilling site and the voices of					
the drilling crew.					
Visual disturbance caused by the drilling rig	Construction/ Set-	Yes	No	No	
and other equipment, soil stockpiles,	up;				
signage and demarcations around site, etc.	Operational				
Traffic disturbances caused by increase of	Construction/ Set-	Yes	No	Yes	
vehicle movement around the drilling site.	up;				
	Operational				
Dust generated by the drilling operation and	Construction/ Set-	Yes	No	No	
vehicles travelling over unpaved areas	up; Operational				
Disturbance soil and	Construction/	Yes	No	No	
vegetation in the project area	Set-up;				
	Operational				
Disturbance to animal life in the vicinity	Construction/ Set-	Yes	No	Yes	
	up;				
	Operational				
Friction between local residents/landowners	Construction/ Set-	Yes	No	Yes	
and prospecting personnel;	up;				
	Operational				

vi) Methodology used in determining and ranking the nature, significance, consequences, extent, duration and probability of potential environmental impacts and risks;

(Describe how the significance, probability, and duration of the aforesaid identified impacts that were identified through the consultation process was determined in order to decide the extent to which the initial site layout needs revision).

Refer to section i) below.



## vii) The positive and negative impacts that the proposed activity (in terms of the initial site layout) and alternatives will have on the environment and the community that may be affected.

(Provide a discussion in terms of advantages and disadvantages of the initial site layout compared to alternative layout options to accommodate concerns raised by affected parties)

The activities footprint is fairly small and therefore will not have much impact on the receiving environment. However negligence from the drilling activities can cause immediate adverse impacts on groundwater, surface water, soil capability and loss of species. Soil pollution from domestic waste and use of hydrocarbons spillages may occur. Thus, the activities will result in a potential increase in soil contamination and reduce the potentially arable land. The cumulative impacts on soil will be insignificant on the regional scale as impacts on soils are contained on drill site. Soils have already been impacted on by regional agriculture activities. Agriculture and mining activities increase potential for soil erosion and therefore soil loss.

Based on the location of this activity, no significant social impacts are envisioned, except from the inevitable conflict of the community.

It should also be noted that the prospecting activity will drill 50 holes which will only cause disruption to a total area of 0.125 Ha on a total area of 3813 Ha. After drilling activities have been completed and the drill pads rehabilitated to pre-drilling status, the impacts will cease to exist.

### viii) The possible mitigation measures that could be applied and the level of risk.

(With regard to the issues and concerns raised by affected parties provide a list of the issues raised and an assessment/ discussion of the mitigations or site layout alternatives available to accommodate or address their concerns, together with an assessment of the impacts or risks associated with the mitigation or alternatives considered).

The land owners are concerned with the degradation of the land/soil capability to yield crops and the contamination of surface and ground water after the proposed prospecting activities. However the is a moderate to low potential of the land /soil capability to be reduced and water quality to deteriorate due to contamination from hydrocarbons being used during drilling. The extent of contamination will be minimal as these invasive activities will cover a small area. The ability for the land to have remained arable within the vicinity of an operational gold mine might be used as a reference to support that the prospecting activities will have on minimal impact on the land/ soil capabilities and water quality.

### ix) Motivation where no alternative sites were considered.

The proposed prospecting right area is targeted as historically, several kimberlite and dykes occurrences in the areas are known as well as historic diamond mining activities. The proposed prospecting license area is therefore regarded as the preferred site and alternative site have not been considered.



x) Statement motivating the alternative development location within the overall site. (Provide a statement motivating the final site layout that is proposed)

The development location within the overall site is considered based on the areas of less vegetation cover and bare soil. Furthermore the location and layout of the drill sites will be determined based on information derived from desktop and geophysical surveys (non-invasive activities). Proposed drill sites will be selected so as to avoid known heritage sites, water courses and infrastructure where practicable.

i) Full description of the process undertaken to identify, assess and rank the impacts and risks the activity will impose on the preferred site (In respect of the final site layout plan) through the life of the activity. (Including (i) a description of all environmental issues and risks that erer identified during the environmental impact assessment process and (ii) an assessment of the significance of each issue and risk and an indication of the extent to which the issue and risk could be avoided or addressed by the adoption of mitigation measures.)

### **Environmental Impact Assessment (EIA) Methodology:**

#### 5x5 Risk Matrices

5x5 Risk Matrix is a systematic methodology that has been adopted to evaluate the risk of each respective impacts/unwanted event. The risk of each impacts/unwanted events is determined for Safety, health and Environment.

The fundamental principle of Risk Matrices is to recognise that it is simply a tool to prioritise risks and the actions required to manage the risk to an acceptable level. It is a risk-ranking tool that provides a qualitative means to determine the significance of risks and the required effort to address priorities in addressing the risk

A minimum of two factors are considered for each risk identified:

x **Likelihood**: chance/probability that the risk will occur within a time period

The definition of likelihood provides time based frequency guideline for evaluating risks associated with (repeat) events on a 5 point scale.

x **Consequence**: The impact the risk will have, should it materialise

Given the types of headline risks that the Family of Companies encounters, the consequences/ impact of these risks are categorised across the following areas:

- Environmental
- Legal
- Social /community
- Reputational



Note: The risk are categorised into low, medium, significance and high. Mashau Capital has adopted a ranking approach from 1 to 25, meaning there are unique Risk Numbers for each risk rated:

• Low: 1 -5:

Medium: 6 to 12:

Significant: 12 to 20; and

High: 21 to 25

Note: When rating significance of environmental aspects the duration and extent of impact must be taken into consideration as follows:

- For Pollution impacts Toxicity, Volume and nature of the substance in question.
- For habitat disturbance sensitivity of the habitat, the size of the area affected and the ability of the environment to rehabilitate (Assimilative capacity).
- For biodiversity impact red data rating of the species and the range of the species.
- For resource use amount of resource used, resource availability and whether it is renewable or not.



Table 3 Impact Assessment Methodology

Impact				Insignificant	Minor	Moderate	Significant	High
Environme	ental			Lasting days or less; affecting small area (metres); receiving environmental highly altered with no sensitive habitats and no bio diversity value (e.g. urban/ industrial areas)	Lasting weeks; affecting limited area (hundreds of meters); receiving environment altered with little natural habitat and lo w diversity value	Lasting months; affected extended area (kilometers); receiving environment comprising largely natural	Lasting years; affecting area on sub- basin scale; receiving environment classified as having sensitive natural habitat with high bio diversity value	Permanent impact; affecting area o n a whole basin or regional scale; receiving environment classified as highly sensitive natural habitat with very high bio diversity value
Legal and	regulatory			Technical no compliance. No warning received; no regulatory reporting required	Breach of regulatory requirements. Report/ involvement of authority. Attracts administrative fine	Mino r breach of law; report / Investigation by authority. Attracts compensation/penalties/ enforcement action	Breach of the law, may attract criminal Prosecution, penalties/ enforcement action. Individual licence temporary revoked.	Significant breach of the law. Individual or company law suits; permit to operate substantially modified or withdrawn
Social/ cor	mmunities			Mino r disturbance of culture/ social structures	Some impact s o n local population, mostly repairable. Single stakeholder complaint in reporting period	Ongoing social issues. Isolated complaints from community/ members/ stakeholders	Significant social impacts. Organized community protests threatening continuity of operations	Major widespread social impacts. Community reaction affecting business continuity. "License to operate" under jeopardy
Reputation	n			Mino r impact – public awareness may exist but no public concern	Limited impact – concern/ complaints from certain groups/ organizations (e.g. NGO's)	Local impact, public concern/ adverse publicity localised within neighbouring communities	Suspected reputational damage; lo call/ regional public concern and reactions	Noticeable reputational damage – national/ international public attention and repercussions
					Risk Rating			
드=	5 Almost Certain	99%	The unwanted event has occurred frequently;	11 (M)	16 (S)	20 (S)	23(H)	25 (H)

		occurs in order of 1 or more x per year & is likely to reoccur within 1 year					
4 Likely	60%	The unwanted event has occurred infrequently; occurs in order of less than 1 x per year & is likely to reoccur within 3 years	7 (M)	12 (M)	17 (S)	21(H)	24 (H)
3 Possible	30%	The unwanted event has happened in the business at some time; or could happen within 10 years	4 (L)	8 (M)	13 (S)	18(S)	22(H)
2 Unlikely	15%	The unwanted event has happened in the business at some time; or could happen in 30 years	2 (L)	5 (L)	9 (M)	14(S)	19(S)
1 Rare	7.5&	The unwanted event has never been known to occur in the business; or it is highly unlikely that it will occur within 30 years	1 (L)	3 (L)	6 (M)	10(M)	15(S)

#### **Environmental Impact Assessment (EIA):**

As described earlier in this report, the prospecting activities will comprise of desktop and geophysical activities (non-invasive) and dependent on the outcome of these phases, targets will be established for drilling activities (invasive). The impact assessment therefore focuses only on the invasive aspects (drilling and associated activities) as these will have the potential to impact on the biophysical and social environment.

The impact assessment is furthermore separated into three distinct phases, namely:

- Site establishment;
- Operational phase; and
- Decommissioning.

#### Site Establishment

# Cultural and Heritage Resources

This stage entails clearing a maximum of 0.125 ha to cater for the drill rig setup including associated equipment. This activity has the potential to impact on heritage artefacts, heritage sites and grave yards. The impacts could potentially be **significant (13(S))**. The following mitigation measures will be implemented to reduce the potential impact to *low (5(L)*:

Heritage Impact Assessment shall be conducted by an independent competent specialist prior the drilling site establishment. This will ensure that all impacts on artefacts, heritage sites and graveyards in order to establish and implement mitigation measure to avoid significant impacts, where such significant impact cannot be avoided be minimised and mitigated.

All Mashau and contractor personnel involved in the construction activities will be made aware of the locations of all identified heritage resources, the necessity of avoiding impacts on such resources and the penalties for damaging them (once drill sites have been identified, these sites will be screened by a qualified archaeologist/cultural heritage specialist);

Personnel will be informed about the consequences of unlawful removal of cultural and historical remains and artefacts associated with heritage sites. It will be emphasised that archaeological artefacts such as potsherds, stone tools, grinding stones, etc. must be left in situ and undisturbed;

A safe distance of at least 50 metres will be maintained between the identified heritage resource and the construction activities. The heritage feature should be cordoned off with stakes and Chevron tape; and



If any heritage resources are discovered as a result of the construction/set-up activities, such activities will cease with immediate effect and a qualified archaeologist will be commissioned to assess their significance and determine appropriate mitigation measures. This may include obtaining authorisation (permits) from SAHRA to conduct mitigation measures if any heritage resources have been affected. Authorisation must be obtained from SAHRA before any mitigation measures are implemented.

#### Noise

Typical noise levels generated by various types of construction equipment are listed in Table below. Conservative attenuation conditions, related to intervening ground conditions and screening, have been applied.

Table 4 Typical noise levels generated by construction equipment

Plant/Equipment	Typical Operational Noise Level at Given Offset (dBA)							
	5m	10m	25m	50m	100m	250m	500m	1000m
Air Compressor	91	85	77	71	65	57	51	46
Crane (Mobile)	93	87	79	73	67	59	53	47
Dozer	95	89	81	75	69	61	55	49
Pump	86	80	72	66	60	52	46	40
Rock Drill	108	102	94	88	82	74	68	62
Trucks	87	81	73	67	64	60	57	54

In South Africa, the noise impact on human receptors is evaluated in terms of the SANS 10103 guidelines for sound pressure levels as listed in 7.

Table 5: Noise level standards for various districts

	Equivalent c	Equivalent continuous rating level L <sub>Req.T</sub> for ambient noise - dBA							
Type of District		Outdoors			Indoors with windows open				
	Day-night	Daytime	Night-	Day-	Daytime	Night-			
Rural districts	45	45	35	35	35	25			
Suburban districts with	50	50	40	40	40	30			
Urban traffic	55	55	45	45	45	35			
Urban districts with some	60	60	50	50	50	40			
Central business districts	65	65	55	55	55	45			
Industrial districts	70	70	60	60	60	50			

Daytime and night-time refer to the hours from 06h00 am to 22h00 pm and 22h00 pm to 06h00 am respectively.



Taking into account the existing background noise levels of the general area which is rural in nature, the significance of the noise caused by the drilling rig travelling to and being established on each site, vehicles going to and from each drilling site and the voices of the construction crew, the impact is assessed as being **Low (4(I))** significance before mitigation. Although mitigation measure are put in place the significance rating remains the same at low **(4I))** significance by limiting the site establishment activities to daylight hours (06h00 to 18h00) and not undertaking such activities at all on Sundays and public holidays, as well as by applying a separation distance of a minimum 500m, but preferably 1000m between drill sites and any dwellings. The vehicles on site are limited to three LDVs and one water truck. It must be noted that the speed limit for driving within a community and prospecting right shall be limited to 60Km/h.

#### Visual

The visual impact of the construction / setup activities is assessed as being of **Significant** (16(S)) significance before mitigation. The impact can be reduced to one of **medium** (12M) significance by taking into account available vegetation screening, the locations of visual receptors on the prospecting areas and adjacent properties and locating the drilling rig in a way that it is screened from points of visual reception wherever possible.

#### Dust fall

Acceptable dust fall rates In terms of the National Dust Control Regulations (GN R. 827 of 1 November 2013) are presented in Table 8. In terms of these regulations, the local air quality officer may prescribe a dust fall monitoring programme, the implementation of dust control measures and continuous ambient air quality monitoring for PM<sub>10</sub>.

Table 6: Acceptable dust fall rates

Restriction Areas	Dust fall rate (D) (mg/m²/Day, 30- day average)	Permitted frequency of exceeding dust fall rate
Residential area	D < 600	Two within a year, not sequential months
Non-residential Area	600 < D < 1 200	Two within a year, not sequential months

The method to be used for measuring dust fall rate and the guideline for locating sampling points shall be ASTM D1739: 1970, or equivalent method.

It is important to note that people experience dust deposition as a nuisance effect, and that there are no direct human health implications because the dust is not inhaled. Heavy dust deposition can have detrimental effects on plants if the leaves are smothered to the extent where transpiration and photosynthesis are affected.

The proposed operation falls within the boundaries of the Bothaville/Viljoenskroon District Municipality's and Mashau may be required to operate within the air quality requirements of the Municipality's Air Quality Management Plan.

The impact of dust generation by vehicles travelling over unpaved areas is assessed as being of **medium** (8(M)) significance before mitigation. The impact can be reduced to one of **low** (2(I)) significance by wet suppression and enforcement of low vehicle speeds.

# · Soil and vegetation disturbance

The impact in areas where drilling (drill pad clearing and compaction) is to be done is assessed as being of medium (8M) significance before mitigation. The impact can be reduced to one of low (5(L)) significance by limiting the activities and clearance to the smallest area that is necessary and rehabilitating the disturbed area as soon as possible. Furthermore, that no clear scraping (dozing) be carried out unless absolutely necessary to establish a level drill pad. Rather that surface vegetation be cleared to make way for the drilling rig leaving the roots intact so that vegetation can coppice and re-grow.

#### • Soil, surface water and groundwater contamination

The impact of contamination with hydrocarbons is assessed as being of **medium** (12(M)) significance before mitigation. The impact can be reduced to one of **low** (5(L)) significance by keeping a spill kit on site, ensuring proper maintenance of vehicles, taking appropriate care during refuelling and immediate clean-up of any spillages.

#### • Friction between local residents/landowners and construction personnel

The prospecting sites are located in a rural farming area with farm dwellings and some tourist accommodation such as game lodges. Some landowners cherish the peaceful and quiet lifestyle of the area and friction between local residents and a crew of strangers is very possible. The potential for conflict is assessed as being of *high* (22(H)) significance, but it can be reduced to one of significant (18(S)) significance by taking appropriate social management measures as set out further below in this section.



#### Operational phase

### Cultural and Heritage Resources

Drilling shall only be conducted on the target in which the heritage impact assessment was conducted and measure to mitigate implemented and therefore the impact could be of low(4(L)) significance. The significant rating will remain the same after mitigation measures at low(4(L)).

- Drilling equipment moving on site will, where ever possible, be confined to established roads and tracks. Where
  this is not possible, access routes will be walked prior to entry of equipment to ensure that there are no graves
  present. Should graves be identified, the access route will be realigned to avoid such heritage resources, which
  will then be clearly marked with stakes and Chevron tape to minimise risk of accidental damage.
- Efforts to achieve satisfactory prospecting results will employ appropriate methodologies aimed at the protection and conservation of heritage resources;
- All Mashau and contractor personnel involved in the prospecting activities will be made aware of the locations of all identified heritage resources, the necessity of avoiding impacts on such resources and the penalties for damaging them;
- Personnel will be informed about the consequences of unlawful removal of cultural and historical remains and
  artefacts associated with heritage sites. It will be emphasised that archaeological artefacts such as potsherds,
  stone tools, grinding stones, etc. must be left in situ and undisturbed.
- A safe distance of at least 50 metres will be maintained between the identified heritage resource and drilling rig or any other infrastructure associated with the prospecting activities; and,
- Where necessary, directional drilling will be practised to assess ore reserves situated below identified heritage resources, without affecting such resources;
- If any heritage resources are discovered as a result of the prospecting activities, such activities will cease with
  immediate effect and a qualified archaeologist will be commissioned to assess their significance and determine
  appropriate mitigation measures. This may include obtaining authorisation from SAHRA to conduct mitigation
  measures if any heritage resources have been affected. Authorisation must be obtained from SAHRA before any
  mitigation measures are implemented.

#### Noise

The noise impact caused by the operation of the drilling rig, vehicles travelling to and from each drilling site and the voices of the drilling crew is assessed as being of **medium** (8(M)) significance. The impact can be reduced to one of **low** (4(L)) significance by limiting the prospecting activities to daylight hours (07h00 to 18h00) and not undertaking such activities at all on Sundays and public holidays. Furthermore, a separation distance of minimum 500m, but preferably 1000m should be maintained between drill sites and dwellings as far as possible.



#### Visual

The visual impact of the prospecting activities is assessed as being of **Significant** (16(S)) significance. It can be reduced to one of **medium** (12(M)) significance by appropriate location of the drilling rig as described above for the construction/setup phase.

#### Dust fall

The impact of dust generated by the drilling operation and vehicles travelling over unpaved areas is assessed as being of *Medium* (8(M)) significance, but it can be readily mitigated to one of *Iow* (2(L)) significance by wet suppression and enforcement of low vehicle speeds, as well as by applying a separation distance of a minimum 500m, but preferably 1000m between drill sites and any dwellings.

## Disturbance of soil and vegetation

Disturbance of soil and vegetation in areas where trenching is done is rated as being of **Low** (5(L)) significance. The impact can be reduced to one of **low** (2(L)) significance by prior delineation of the drill site area via geophysical characterisation and drilling in order to minimise the area that needs to be cleared. Furthermore, that no clear scraping (dozing) be carried out unless absolutely necessary to establish a level drill pad. Rather that surface vegetation be cleared to make way for the drilling rig leaving the roots intact so that vegetation can coppice and regrow.

#### Soil, surface water and groundwater contamination

The potential contamination of soil, surface water and groundwater with hydrocarbons is assessed as an impact of **Medium** (8(M)) significance. The impact can be reduced to one of **Iow** (5(L)) significance by implementing the measures recommended for the construction phase. Drilling mud will contained in lined drill sumps and this material will be removed from site and disposed in a licensed disposal facility.

# • Friction between local residents/landowners and construction personnel

The potential for conflict between local residents/landowners and prospecting personnel is assessed as being of *High* (22(H)) significance, but it can be reduced to one of *High* (18(S)) significance by taking appropriate social management measures



# Decommissioning phase:

Decommissioning of borehole sites will take place immediately after each borehole has been completed and the drilling rig is moved to the next site.

# Assessment of potential cumulative impacts

The cumulative impact assessment considers a scenario where more than one drilling rig and drill site is in operation at any point in time throughout the duration of the prospecting programme.

- The cumulative noise impact of the proposed prospecting operations on the above sensitive receptors is
  assessed as being of significant (17(S) significance before mitigation. The impact can be reduced to one of
  Medium (8(M) significance by limiting the construction / setup activities to daylight hours (06h00 to 18h00) and
  not undertaking such activities at all on Sundays and public holidays;
- The cumulative visual impact on the above sensitive receptors is assessed as being of Significant (16(S)) significance prior to mitigation;
- Without mitigation, the potential cumulative impact of dust generation on the above sensitive receptors is assessed as being of *Medium (8(M))* significance;
- A total of 50 boreholes will be drilled within the proposed exploration areas. This combined footprint area would total a maximum of 0.85 hectares at the end of the prospecting programme once all holes have been drilled and then rehabilitated, this needs to be considered in the context of the entire proposed prospecting right area of more than 3813 hectares. The potential cumulative impact of soil and vegetation disturbance on the sensitive receptors is assessed as being of medium (8(M)) significance prior to mitigation;
- Without mitigation, the potential cumulative impact of soil, surface water and groundwater contamination, as experienced by the sensitive receptors, is assessed as being of **medium (8(M))** significance.

# Proposed mitigation measures to minimise adverse impacts

# List of actions, activities, or processes that have sufficiently significant impacts to require mitigation

Although none of the unmitigated impacts have been assessed as being of **high** (above 21(H) significance, the following potential impacts do require mitigation:

- Once drill sites have been identified, these sites will be screened by a qualified archaeologist/cultural heritage specialist in order to identify any cultural/heritage features;
- Generation of noise near residential areas, lodges and guest houses must be avoided to ensure a lack of intrusive noise levels and compliance with the standards for rural areas as indicated in noise table above.



- Establishment of the drill sites or exploration camp in areas that are visually exposed when near residential areas, lodges and guest houses;
- Dust fall, particularly near residential areas, lodges, guest houses and growing crops;
- Disturbance of soil and vegetation at all the prospecting drill sites (once drill sites have been identified, then an ecology screening survey will need to be undertaken in order to identify any red data/species of concern that need to be avoided);
- Contamination of soil, surface water and groundwater at all the prospecting drill sites; and
- Friction between local residents and prospecting / drilling contractor personnel.

#### Concomitant list of appropriate technical or management options

The following mitigation measures will be implemented:

# **Cultural and heritage**

- Once drill sites have been identified, these sites will be screened by a qualified archaeologist/cultural heritage specialist in order to identify any cultural/heritage features;
- Efforts to achieve satisfactory prospecting results will employ appropriate methodologies aimed at the protection and conservation of heritage resources;
- All Mashau and contractor personnel involved in the prospecting activities will be made aware of the locations of all identified heritage resources, the necessity of avoiding impacts on such resources and the penalties for damaging them;
- Personnel will be informed about the consequences of unlawful removal of cultural and historical remains and artefacts associated with heritage sites. It will be emphasised that archaeological artefacts such as potsherds, stone tools, grinding stones, etc. must be left in situ and undisturbed;
- A safe distance of at least 50 metres will be maintained between the identified heritage resource and drilling rig or any other infrastructure associated with the prospecting activities;
- Where necessary, directional drilling will be practised to assess ore reserves situated below identified heritage resources, without affecting such resources;
- If any heritage resources are discovered as a result of the prospecting activities, such activities will cease with immediate effect and a qualified archaeologist will be commissioned to assess their significance and determine appropriate mitigation measures. This may include obtaining authorisation (permits) from SAHRA to conduct mitigation measures if any heritage resources have been affected. Authorisation must be obtained from SAHRA before any mitigation measures are implemented.

Diligent implementation of the above measures is expected to reduce the potential impacts from a **significant (13** (S)) significance to a **low (5(L))** significance.



#### Noise

- Construction/setup, operational and decommissioning activities will be limited to daylight hours (07h00 to 18h00)
  on Mondays to Saturdays and will not be undertaken at all on Sundays and public holidays;
- A separation distance of a minimum 500m, but preferably 1000m should be maintained between drill sites and dwellings as far as possible;
- Noise abatement equipment, such as mufflers on diesel engines, will be maintained in good condition; and
- If intrusive noise levels are experienced by any person at any point, the source of the noise will be moved if
  practical, or it will be placed in an acoustic enclosure, or an acoustic barrier will be erected between the source
  and the recipient.

The above measures should reduce the significance of the potential noise impacts from **Medium** (8(M)) to **low** (2(L)).

#### Visual

- The drilling rig and other visually prominent items on the site will be located in consultation with the landowner;
- Make use of existing vegetation as far as possible to screen the prospecting operations from view; and
- If necessary, the operations can be screened from view by erecting a shade cloth barrier.

The above measures should reduce the significance of the potential visual impacts from **Significant** (16(S)) to **Medium** (12(M)).

#### **Dust fall**

- Low vehicle speeds will be enforced on unpaved surfaces;
- A separation distance of a minimum 500m, but preferably 1000m should be maintained between drill sites and dwellings as far as possible; and
- Wet suppression will be applied to ensure that no visible dust is raised by any of the prospecting operations.

The above measures should reduce the significance of the potential dust fall impacts from **Medium (8(M))** to **low** (2(L)).

### Disturbance of soil and vegetation

- The soil disturbance and clearance of vegetation at drill pad areas will be limited to the absolute minimum required; and
- Disturbed areas will be re-vegetated with locally indigenous species as soon as possible.
- No clear scraping (dozing) be carried out unless absolutely necessary to establish a level drill pad. Rather that surface vegetation be cleared to make way for the drilling rig leaving the roots intact so that vegetation can coppice and re-grow.



The above measures are expected to reduce the significance of the potential impact from **medium** (8(M)) to **Low** (5(L)).

# Contamination of soil, surface water and groundwater

- Proper vehicle maintenance;
- Refuelling will be done with care to minimise the chance of spillages;
- Drilling mud will contain in lined drill sumps and this material will be removed from site
   a licensed disposal facility
- A spill kit will be available on each site where prospecting activities are in progress; and
- Any spillages will be cleaned up immediately.

The above measures should reduce the significance of the potential impacts from medium(8(M)) to low (5(L)).

# Friction between local residents/landowners and construction/operations personnel.

- All operations will be carried out under the guidance of a strong, experienced manager with proven skills in public consultation and conflict resolution;
- All prospecting personnel will be made aware of the local conditions and sensitivities in the prospecting area and
  the fact that some of the local residents may not welcome the prospecting activities in the area;
- There will be a strict requirement to treat local residents with respect and courtesy at all times.

The above measures should reduce the potential for conflict between prospecting personnel and local residents from *high* (22(H)) to *low*.



Assessment of each identified potentially significant impact and risk
(This section of the report must consider all the known typical impacts of each of the activities (including those that could or should have been identified by knowledgeable persons) and not only those that were raised by registered interested and affected parties).

NAME OF ACTIVITY	POTENTIAL	ASPECTS	PHASE	SIGNIFICANCE if	MITIGATION TYPE	SIGNIFICANCE
	IMPACT (Including	AFFECTED	In which impact is	not mitigated		if mitigated
(E.g. For prospecting - drill site, site	the potential impacts for		anticipated			
camp, ablution facility,	cumulative impacts)					
accommodation, equipment storage,						
sample storage, site office, access					(and if a second a sector)	
route etcetc					(modify, remedy, control, or stop) through	
E.g. For mining,- excavations, blasting, stockpiles, discard dumps or dams, Loading, hauling and transport, Water supply dams and boreholes, accommodation, offices, ablution, stores, workshops, processing plant, storm water control, berms, roads, pipelines, power lines, conveyors, etcetc)	(e.g. dust, noise, drainage surface disturbance, fly rock, surface water contamination, groundwater contamination, air pollution etcetc)		(e.g. Construction, commissioning, operational Decommissioning, closure, post-closure)		(e.g. noise control measures, storm-water control, dust control, rehabilitation, design measures, blasting controls, avoidance, relocation, alternative activity etc. etc)  E.g.  Modify through alternative method.  Control through noise control  Control through management and monitoring through rehabilitation	
Site	Cultural and	Destruction or	Construction /	13(S)	Prospecting activities;	5(L)
<u>Establishment</u>	Heritage	loss of Cultural and	Set-up		Where necessary, directional	
activities:		Heritage			drilling	
-Vegetation		Resources			will be practised to assess ore	
clearance					reserves situated below	



-Topsoil					identified heritage resources.	
stripping &					A heritage survey by qualified	
stockpiling					archaeologist is required prior	
-Drill pad					to any	
compaction					site activities on undisturbed	
-Erection of office, toilets,					land or	
fuel storage (if not by road					access routes. If any heritage	
tanker), water tanker, core					resources are discovered as a	
storage.					result	
-Vehicle movements					of the prospecting activities,	
-Waste management					such	
					activities will cease with	
					immediate effect and a	
					qualified archaeologist will be	
					commissioned to assess their	
					significance and determine	
					appropriate mitigation	
					measures.	
	Noise	Noise generation	Construction /	4L	Construction/setup,	4L
			Set-up		operational and	
					decommissioning activities will	
					be	
					limited to daylight hours on	



		Mondays to Saturdays and no	
		activities on Sundays and	
		public	
		holidays;	
		Separation of distance of	
		minimum	
		500m, but preferably 1000m	
		to be	
		maintained between drill sites	
		and	
		dwellings; Noise abatement	
		equipment, such	
		as mufflers on diesel engines,	
		will be	
		maintained in good condition;	
		and	
		If intrusive noise levels are	
		experienced by any person at	
		any	
		point, the source of the noise	
		will be	
		moved if practical, or it will be	
		placed in an acoustic	

				enclosure, or an acoustic barrier will be erected between the source and the recipient.	
Visual	Visual intrusion	Construction / Set-up	16(S)	The drilling rig and other visually prominent items on the site will be located in consultation with the landowner; Make use of existing vegetation as far as possible to screen the prospecting operations from view; and If necessary, the operations can be screened from view by	12(M)

				erecting a	
				shade cloth barrier.	
Dust fall	Dust fall &	Construction /	8(M)		2(L)
	nuisance from	Set-up		Wet suppression will be	
	activities			applied to Ensure that no	
				visible dust is raised by any of	
				the prospecting operations	
				Separation of distance of	
				minimum	
				500m, but preferably 1000m	
				to be	
				maintained between drill sites	
				and	
				dwellings; and	
				Low vehicle speeds will be	
				enforced	
				on unpaved surfaces.	
Soil and	Soil and	Construction / Set-	8(M)	The soil disturbance and	5(L)
vegetation	vegetation	ир		clearance	
				of vegetation at drill pad areas	
				will	
				be limited to the absolute	
				minimum	

		required;	
		An ecology screening survey	
		will be	
		required on undisturbed land	
		and	
		access routes in order to	
		identify any	
		red data / species of concern	
		prior to	
		any site activities being	
		undertaken;	
		No clear scraping (dozing) be	
		carried out unless absolutely	
		necessary to establish a level	
		drill pad. Rather that surface	
		vegetation be cleared to make	
		way for the drilling rig leaving	
		the roots intact so that	
		vegetation can coppice and	
		regrow; and Disturbed areas	
		will be re-vegetated with	
		locally indigenous species as	
		soon as possible.	

Soil, surface	Soil, surface water	Construction / Set-	12(M)	Proper vehicle maintenance;	5(L)
water and	and groundwater	up		Refueling will be done with care	
groundwater	contamination			to minimise the chance of	
	from			spillages; A spill kit will be	
	hydrocarbons			available on each site where	
				prospecting activities are in	
				progress; Any spillages will be	
				cleaned up immediately; and	
				Drilling muds will contain in	
				lined drill sumps and this	
				material will be removed from	
				site and disposed in a Licensed	
				disposal facility.	
Social	Friction between	Construction / Set-	22(H)	All operations will be carried	18(S)
	local	up		out under the guidance of a	
	residents/land			strong, experienced manager	
	owners and			with proven skills in public	
	Construction			consultation and conflict	
	personnel			resolution; All prospecting	
				personnel will be made aware	
				of the local conditions and	
				sensitivities in the prospecting	
				area and the fact that some of	

					the local residents may not	
					welcome the prospecting	
					activities in the area; There will	
					be a strict requirement to	
Exploration drilling:	Cultural and	Destruction or loss	Operations	4(L)	All Mashau Capital and	4(L)
- Drilling	Heritage	of Cultural and			contractor personnel will be	
- Drill maintenance &		Heritage			made aware of the locations	
refuelling		Resources			of all identified heritage	
- Core sample					resources, the necessity of	
collection & storage					avoiding them Personnel will	
<ul> <li>Vehicle movement</li> </ul>					be informed about the	
- Waste generation &					consequences of unlawful	
management					removal of cultural and	
					historical remains and	
					artefacts associated with	
					heritage sites. A safe distance	
					of at least 50 metres will be	
					maintained between the	
					identified heritage resources	
					and prospecting activities;	
					Where necessary, directional	
					drilling will be practised to	
					assess ore reserves situated	



				below identified heritage	
				resources. A heritage survey	
				by qualified archaeologist is	
				required prior to any site	
				activities on undisturbed land	
				or access routes. If any	
				heritage resources are	
				discovered as a result of the	
				prospecting activities, such	
				activities will cease with	
				immediate effect and a	
				qualified archaeologist will be	
				commissioned to assess their	
				significance and determine	
				appropriate mitigation	
				measures.	
Noise	Noise Generation	Operations	8(M)	Construction/setup,	4(L)
110100	110100 001101411011	o porationo	O()	operational and Generation	.(=)
				decommissioning activities	
				will be limited to daylight	
				hours on Mondays to	
				Saturdays and no activities on	

				Sundays and public	
				holidays;	
				Separation of distance of	
				minimum	
				500m, but preferably 1000m	
				to be	
				maintained between drill sites	
				and	
				dwellings;	
				Noise abatement equipment,	
				such	
				as mufflers on diesel engines,	
				will be	
				maintained in good condition;	
				and levels are experienced by	
				any person at any point, the	
				source of the noise will be	
				moved if practical, or it will be	
				placed in an acoustic	
				enclosure, or an acoustic	
				barrier will be erected between	
				the source and the recipient.	
Visual	Visual intrusion	Operations	16(S)	The drill rig and other visually	12(M)

				prominent items on the site will be located in consultation with the landowner;	
				Make use of existing vegetation as far as possible to screen the prospecting operations from view; and If necessary, the operations can be screened from view by erecting a shade cloth barrier.	
Dust fall	Dust fall & nuisance from activities	Operations	8(M)	Wet suppression will be applied to ensure that no visible dust is raised by any of the prospecting operations; Separation of distance of minimum 500m, but preferably 1000m to be maintained between drill sites and dwellings; and Low vehicle speeds will be enforced	2(L)
Soil and	Soil and	Operations	5(L)	The soil disturbance and	2(L)

vegetation	vegetation			clearance of vegetation at drill	
	disturbance from			pad areas will be limited to the	
	drill pad			absolute minimum required;	
	preparation			Conduct an ecology screening	
				survey of sites and access for	
				undisturbed land in order to	
				identify any red data / species	
				of concern, prior to site	
				activities being undertaken; No	
				clear scraping (dozing) be	
				carried out unless absolutely	
				necessary to establish a level	
				drill pad. Rather that surface	
				vegetation be cleared to make	
				way for the drilling rig leaving	
				the roots intact so that	
				vegetation can coppice and	
				regrow; and Disturbed areas	
				will be re-vegetated with locally	
				indigenous species as soon as	
				possible.	
Soil, surface	Soil, surface water	Operations	8(M)	Proper vehicle maintenance;	5(L)
water and	and groundwater			Refueling will be done with care	

groundwater	Contamination			to minimise the chance of	
	from			spillages; A spill kit will be	
	hydrocarbons			available on each site where	
				prospecting activities are in	
				progress; Any spillages will be	
				cleaned up immediately; and	
				Drilling muds will contained in	
				lined drill sumps and this	
				material will be removed from	
				site and disposed in a licensed	
				disposal facility.	
Social	Friction between	Operations	22(H)	All operations will be carried	18(S)
	local			out under the guidance of a	
	residents/land			strong, experienced manager	
	owners and			with proven skills in public	
	construction			consultation and conflict	
	personnel			resolution; All prospecting	
				personnel will be made aware	
				of the local conditions and	
				sensitivities in the prospecting	
				area and the fact that some of	
				the local residents may not	
				welcome the prospecting	

					activities in the area; There will	
					be a strict requirement to treat	
					local residents with respect and	
					courtesy at all times.	
Fau	na / flora Clea	aring of land	Operations	8(M)	Avoid ecological impacts by:	5(L)
	rem	oving the flora			-Only clear land required to	
	and	for fauna			facilitate the drilling activities.	
	habi	itat			-Avoid termite mounds;	
					-Avoid trees	
Assessment of Potential Cumul	ative Impacts	I.				
Nois	se Nois	se generation	Construction /	17(S)	As above	8(M)
			set-up and			
			Operation			
Visu	ual Visu	ual intrusion	Construction /	16(S)	As above	4(L)
			set-up and			
			Operation			
Dus	t fall Dus	t fall &	Construction /	8(M)	As above	2(L)
	nuis	sance from	set-up and			
	activ	vities	Operation			
Soil	and Soil	and	Construction /	8(M)	As above	5(L)
veg	etation vege	etation	set-up and			
	distu	urbance from	Operation			
	drill	pad				

	preparation				
Soil, surface	Soil, surface water	Construction /	8(M)	As above	5(L)
water and	and groundwater	set-up and			
groundwater	contamination	Operation			
	From				
	hydrocarbons				

Dust fall  Dust fall & Operations  3(M)  Wet suppression will be applied to ensure that no visible dust is raised by any of the prospecting operations;  Separation of distance of minimum 500m, but preferably 1000m to be maintained between drill sites and dwellings; and  Low vehicle speeds will be enforced on unpaved surfaces.	D	•	nuisance from	Operations	8(M)	ensure that no visible dust is raised by any of the prospecting operations;  Separation of distance of minimum 500m, but preferably 1000m to be maintained between drill sites and dwellings; and  Low vehicle speeds will be enforced	2(L)
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Soil and	Soil and	Operations	5(L)	The soil disturbance and clearance 2(L)
vegetation	n vegetation			of vegetation at drill pad areas will
	disturbance			be limited to the absolute minimum
	from drill pad			required;
	preparation			
				Conduct an ecology screening
				survey
				of sites and access for undisturbed
				and in order to identify any red data
				species of concern, prior to site
				activities being undertaken;
				No clear scraping (dozing) be carried
				out unless absolutely necessary to
				establish a level drill pad. Rather
				that surface vegetation be cleared to
				make way for the drilling rig leaving
				the roots intact so that vegetation
				can coppice and regrow; and
				Disturbed areas will be re-vegetated
				with locally indigenous species as
				soon as possible.

Soil, surface	Soil, surface	Operations	8(M)	Proper vehicle maintenance; 5(L)
water and	water and			
groundwater	groundwater			Refueling will be done with care to
	contamination			minimise the chance of spillages;
	from			
	hydrocarbons			A spill kit will be available on each
				site where prospecting activities are
				in progress;
				Any spillages will be cleaned up
				immediately; and
				Drilling muds will contained in lined
				drill sumps and this material will be
				removed from site and disposed in a
				licensed disposal facility.
Social	Friction	Operations	22(H)	All operations will be carried out 18(S)
	between			under the guidance of a strong,
	local			experienced manager with proven
	residents/land			skills in public consultation and
	owners and			
	construction			conflict resolution;
	personnel			

Fauna / flora of land Operations 8(M) Avoid ecological impacts by: 5(L) removing		Classics		All prospecting personnel will be made aware of the local conditions and sensitivities in the prospecting area and the fact that some of the local residents may not welcome the prospecting activities in the area;  There will be a strict requirement to treat local residents with respect and courtesy at all times.	
the x Only clear land required to	Fauna / flora	of land removing	Operations		5(L)

		habitat for fauna			x Avoid termite mounds x Avoid trees	
Assessment of	Noise	Noise	Construction /	17(S)	As above	8(M)
		generation	set-up and Operation			
	Visual	Visual intrusion	Construction / set-up and Operation	16(S)	As above	4(L)
	Dust fall	Dust fall & nuisance from activities	Construction / set-up and Operation	8(M)	As above	2(L)
	Soil and vegetation	Soil and vegetation disturbance from drill pad preparation	Construction / set-up and Operation	8(M)	As above	5(L)
	Soil, surface water and groundwater	Soil, surface water and groundwater contamination from hydrocarbons	Construction / set-up and Operation	8(M)	As above	5(L)

The supporting impact assessment conducted by the EAP must be attached as an appendix, marked **Appendix** Mashau Capital (Pty) Ltd | FS 30/5/1/1/2/10477 PR

k) Summary of specialist reports.

(This summary must be completed if any specialist reports informed the impact assessment and final site layout process and must be in the following tabular form):-

LIST OF STUDIES UNDERTAKEN	RECOMMENDATIONS OF SPECIALIST REPORTS	SPECIALIST RECOMMENDATIONS THAT HAVE BEEN INCLUDED IN THE EIA REPORT (Mark with an X where applicable)	REFERENCE TO APPLICABLE SECTION OF REPORT WHERE SPECIALIST RECOMMENDATIONS HAVE BEEN INCLUDED.
A special study exemption report has been conducted.  The EMP does however include the commitment that an independent professional shall be appointed to conduct a heritage and wetland delineation assessment. This will only be undertaken once non-invasive early exploration activities have been completed and, should the findings of those investigations determine that there is a need to progress to exploration drilling. It is only at that stage that the potential areas of drilling interest will be known.	A 500 meter buffer zone must be exercised away from water sources	X	3

Attach copies of Specialist Reports as appendices



# I) Environmental impact statement

# (i) Summary of the key findings of the environmental impact assessment;

Key environmental impact assessment findings for the prospecting right are not adverse. The scope of the project entails, drilling approximately 50 holes within the aforementioned farms and therefore the impacts to the environment will be limited to the activity footprint. Identified impacts will include;

- vegetation removal,
- soil top removal,
- noise pollution,
- cultural impacts
- visual impacts
- air pollution and
- Habitat loss to some extent.

However it is imperative to note that these impacts will be at a minimal and will only be experienced during the drilling phase. After drilling activities have been completed and the drill pads rehabilitated to pre- drilling status, the impacts will cease to exist.

The study area covers an area of 3813 ha, and covers five farms and an individual drilled site will cover an area of 0.012 Ha with vegetation removal covering an area of 0.0025 Ha thereafter.

The assessed impact ratings after implementation of the mitigation measures described above are as follows:

- Cultural and heritage low (5(L)) significance;
- Noise low (2(L)) significance;
- Visual impact *medium (12(M))* significance;
- Dust fall low (2(L)) significance;
- Disturbance of soil and vegetation medium (8(M)), reducing to low (5(L) during the decommissioning phase;
- Contamination of soil, surface water and groundwater low (5(L)); and
- Friction between local residents and prospecting personnel medium (8(M)).

All of the identified impacts will occur for a limited and the extent of the impacts will be localised. All of the identified impacts can be suitably mitigated with the residual impact ratings being of *low* significance.

After drilling activities have been completed and the drill pads rehabilitated to pre- drilling status, the impacts will cease to exist.



# (ii) Final Site Map

Provide a map at an appropriate scale which superimposes the proposed overall activity and its associated structures and infrastructure on the environmental sensitivities of the preferred site indicating any areas that should be avoided, including buffers .Attach as **Appendix** 

Please refer to **Appendix B** for the Biodiversity Critical Area Map.

# (iii) Summary of the positive and negative impacts and risks of the proposed activity and identified alternatives;

#### **Positive**

- The proposed activity will create jobs/employment for the local communities, which will
  in turn contribute to the country's economy
- Contribution to research innovation

# **Negative**

- Noise pollution for local residence or farm owners from drilling activities and movement of heavy vehicles
- Habitat loss caused by soil and vegetation removal
- Destruction to fauna that exist in the area or surrounding areas from drilling activities and human interference;
- Disturbance to any farming activities in the surrounds;
- Destruction or loss of Cultural and Heritage Resources during the construction/set-up phase as well as during the operational phase as drilling commencing;
- Visual intrusion caused by the drilling activities in the largely rural setting;
- Dust fall & nuisance from construction / set-up and drilling activities;
- Soil, surface water and groundwater contamination from hydrocarbons during the construction / set-up and operational activities which include drill rig operation and use of vehicles on site.

# m) Proposed impact management objectives and the impact management outcomes for inclusion in the EMPr;

Based on the assessment and where applicable the recommendations from specialist reports, the recording of proposed impact management objectives, and the impact management outcomes for the development for inclusion in the EMPr as well as for inclusion as conditions of authorisation.

The Environmental Management Plan report (EMPR) is a report that summarizes all identified impacts, mitigation measures and recommendations that were detailed during the environmental impact assessment and the specialist report. The EMPr's objective in this activity is to;

The objectives of the EMPr will be to:



- Summarise key findings of the environmental impacts and its mitigation measures;
- Acts as a guide on the execution of daily activities;
- Ensures that the best practicable environmental sustainability methods are implemented;
- Minimises the ecological footprint of the project on the local environment;
- Gives clear guidance on every personnel on site and responsibility; and
- Provide a management plan that is effective and practical for implementation.

## An EMPr is should be implemented to mitigate and/or manage environmental impacts. Through the implementation of the EMPr, the objectives will be met and there will be outcomes;

- Removal of unnecessary vegetation and topsoil can be avoided;
- Use of Dip-trays to control oil spills from heavy machinery on soil can be avoided;
- Rehabilitation measures will be followed;
- Noise pollution will be kept to only working hour
- Cultural/religious/traditional places will be identified and demarcated for avoidance of any disturbance
- Animal life is protected and preserved at all times and the prospecting activities has minimal disturbance to the surrounding habitat;
- Social friction with landowners can be managed by employing strong, experienced personnel with proven skills in public consultation and conflict resolution during stakeholder consultation phases. All prospecting personnel will be made aware of the local conditions and sensitivities in the prospecting area and that they treat local residents with respect and courtesy at all times.

### n) Aspects for inclusion as conditions of Authorisation.

Any aspects which must be made conditions of the Environmental Authorisation

### Aspects for inclusion as conditions of the Environmental Authorization:

- Demarcation of sensitive areas and no go area
- Maintain a buffer of 500m from any watercourse where possible
- No drilling activities within 20m of any observed grave; and
- Appointment of local residence for non-skills jobs
- Landowners and land occupiers should be engaged (re-consulted) at least 1 month prior to any site
  activities being undertaken once drill sites are known; and
- A map detailing the drilling locations should be provided to the landowners as well as the DMR prior to commencement of prospecting activities.

### o) Description of any assumptions, uncertainties and gaps in knowledge.

(Which relate to the assessment and mitigation measures proposed)



The knowledge of the exact drill holes is not known at this moment. This will be established during the setting up phase and therefore information provided in this report is baseline study and based on desktop assessment.

Archaeological studies will be undertaken before the commencement of drilling and any other requested specialist study.

It is assumed that the description of the proposed project, provided by the applicant is sufficient for providing the authorities with the right information for understanding the proposed project.

It is assumed that the public consultation process to be undertaken as part of the Environmental Impact Assessment (EIA) will suffice and that the application will be soldiered objectively based on stakeholders' response to the proposed activities.

### p) Reasoned opinion as to whether the proposed activity should or should not be authorised

### i) Reasons why the activity should be authorized or not.

- The proposed activities area taking place in farm dwellings, which will have a minimal impact on local residence;
- The activities are located in a mining area/ mining right area;
- The environmental impacts envisioned are minimal;
- With implementing the appropriate rehabilitation activities, the impacts associated with the drilling activities can be reversed
- The activities will generate employment; and
- Without implementation of prospecting activities the knowledge concerning the potential mineral resource within the prospecting right area will not be confirmed.

### ii) Conditions that must be included in the authorisation

Refer to section (n) above

### q) Period for which the Environmental Authorisation is required.

The authorisation is required for the duration of the prospecting right which is an initial 5 years plus a potential to extend the right by an additional 3 years. Therefore a total period of 8 years is required.

### r) Undertaking

Confirm that the undertaking required to meet the requirements of this section is provided at the end of the EMPr and is applicable to both the Basic assessment report and the Environmental Management Programme report.

An undertaking has been provided at the end of the report.

### s) Financial Provision

State the amount that is required to both manage and rehabilitate the environment in respect of rehabilitation.



rision of approxima cludes rehabilitation			
	5/1/1/2/10477 P		

### **CALCULATION OF THE QUANTUM - Current or Life of Mine**

Applicant:	Mashau Capital (Pty) Ltd				Location:	Free state Pro	ate Province	
			Α	В	C	D	E=A*B*C*D	
No.	No. Description		Quantity	Master Rate	Multiplication factor	Weighting factor 1	Amount (Rands)	
1	Dismantling of processing plant and related structures (including overland conveyors and powerlines)	m3	0	11,58	1	1	-	
2 (A)	Demolition of steel buildings and structures	m2	0	161,24	1	1	-	
2(B)	Demolition of reinforced concrete buildings and structures	m2	0	237,62	1	1	-	
3	Rehabilitation of access roads	m2	0	28,85	1	1	-	
4 (A)	Demolition and rehabilitation of electrified railway lines	m	0	280,05	1	1	-	
4 (B)	Demolition and rehabilitation of non-electrified railway lines	m	0	152,75	1	1	-	
5	Demolition of housing and/or administration facilities	m2	0	322,48	1	1	-	
6	Opencast rehabilitation including final voids and ramps	ha	0	169 047,76	0,52	1	-	
7	Sealing of shafts adits and inclines	m3	0	86,56	1	1	-	
8 (A)	Rehabilitation of overburden and spoils	ha	0	112 698,51	1	1	-	
8 (B)	Rehabilitation of processing waste deposits and evaporation ponds (non-polluting potential)	ha	0	140 363,95	1	1	•	
8 ( C )	Rehabilitation of processing waste deposits and evaporation ponds (polluting potential)	ha	0	407 683,45	0,76	1	-	
9	Rehabilitation of subsided areas	ha	0	94 368,03	1	1	-	
10 (A)	General surface rehabilitation (with undesireable objects)	ha	0,85	89 276,23	1	1	53 565,74	
10 (B)	General surface rehabilitation (no undesireable onjects)	ha	0	36 890,00	1	1	-	
11	River diversions	ha	0	89 276,23	1	1	-	
12	Fencing	m	0	101,84	1	1	-	
13	Water management	ha	0	33 945,33	0,6	1	-	
14	2 to 3 years of maintenance and aftercare	ha	0	11 880,87	1	1	-	
15 (A)	Specialist study	Sum	0			1	-	
15 (B)	Specialist study	Sum	0			1	-	
					Sub Total 1		53 565,74	

. 1	Preliminary and General	3213,94	weighting factor 2	3213,94
2	Contingencies	5 356,57	Į į	5 356,57
			Subtotal 2	62 136.25

VAT (14	2%)	8 699,08	

Grand Total	70 835,33	

### i) Explain how the aforesaid amount was derived.

The drilling contractor will be responsible for rehabilitating the drill pad once the drilling activities have been completed at each exploration hole. This is typically a contractual arrangement between Mashau and the drilling contractor employed to implement drilling activities which include construction / set-up of drill pad, operational drilling activities and the rehabilitation of the drill site after drilling has ceased.

The financial guarantee was calculated using the DMR official financial quantum calculator.

**ii)** Confirm that this amount can be provided for from operating expenditure. (Confirm that the amount, is anticipated to be an operating cost and is provided for as such in the Mining work programme, Financial and Technical Competence Report or Prospecting Work Programme as the case may be).

Funding for prospecting up to and including phase 5 of the work programme of approximately R 4 million is to be obtained internally and is allocated on an annual basis as part of the working cost budget of Mashau Capital. Work is approved on a phase by phase basis, dependent on the results obtained i.e. although prospecting work may be provided for financially in the budget for a specific year, it will only take place if justified. Funding for work beyond phase 5 will be allocated on a project by project basis if investment criteria are met. The amount is also reflected in the Prospecting Work Programme submitted to the DMR.

	Year 1	Year 2	Year 3	Year 3	Year 5
Activity	Expenditure	Expenditure	Expenditure	Expenditure	Expenditure
Phase 1(11 months)					
Prospecting Fee	R 1 504 .00				
collecting and	R 50 000 .00				
compilation of data					
Geophysical survey	R 260 000 .00				
Boreholes target	R 35 000 .00				
selection					
Phase 2 (14 months)					
Prospecting Fee		R 2 256 .00			
Diamond core driling		R 640 000 .00			
Sample results		R 24 000 .00			
Data interpretation		R 100 000 .00			
and modelling					
Pre-feasibility study		R 100 000 .00			
Phase 3: (15					
months)					
Prospecting Fee			R 3 008 .00		
Details Diamond	_		R 640 000 .00		

Core Drilling					
Sample results			R 24 000 .00		
available					
Data interpretation			R 100 000 .00		
modeling					
Pre-feasibility study			R 100 000 .00		
Phase 4 (10 months)					
Prospecting Fee				R 3 760 .00	
Diamond core				R 640 000 .00	
drilling details					
Sampling work				R 24 000 .00	
Geological modeling				R 100 000 .00	
Socio-Economic				R 10 000 .00	
Impact assessment					
Environmental				R 40 000 .00	
Impact Assessment/					
Rehabilitation					
Phase 5 (10 months)					
Prospecting fee					R 4 512 .00
Feasibility study					R 200 000 .00
Financial studies					R 28 000 .00
Marketing research					R20 000 .00
Mine planning					R 50 000.00
Financial studies					R10 000 .00
and market					
susceptibility study					
Annual Total	R 346 504 .00	R 866 256 .00	R 867 008 .00	R 817 760 .00	R 312 512 .00
	1		·	Total	R3 210 040 .00

### t) Specific Information required by the competent Authority

- i) Compliance with the provisions of sections 24(4)(a) and (b) read with section 24 (3) (a) and (7) of the National Environmental Management Act (Act 107 of 1998). the EIA report must include the:-
  - (1) Impact on the socio-economic conditions of any directly affected person. (Provide the results of Investigation, assessment, and evaluation of the impact of the mining, bulk sampling or alluvial diamond prospecting on any directly affected person including the landowner, lawful occupier, or, where applicable, potential beneficiaries of any land restitution claim, attach the investigation report as an Appendix.

A full consultation process has been implemented during the environmental authorisation process. The purpose of the consultation is to provide affected persons the opportunity to raise any potential



concerns. As part of the consultation process the land claims commissioner will be contacted to identify if there are any claims on land covered by this application.

The land owners raised concern on the presence of a high water table that sustains there crop yields and if the proposed activities won't affect the water and land capabilities. Soil, surface water and ground water pollution from domestic waste and use of hydrocarbons spillages may occur. Thus, the activities will result in a potential increase in soil and water contamination. The cumulative impact on regional land capability, land use and water quality is low due to the impacts being limited to the site resulting in a low significance.

The final positioning of the drill sites cannot be confirmed without completion of phase 1 of the prospecting programme, a recommendation has been made to ensure that the directly affected landowners are re-consulted a minimum of 1 month prior to implementing invasive activities (drilling). The purpose of the re-consultation is to ensure that socio-economic impacts on directly affected persons can be raised and where possible addressed.

(2) Impact on any national estate referred to in section 3(2) of the National Heritage Resources Act. (Provide the results of Investigation, assessment, and evaluation of the impact of the mining, bulk sampling or alluvial diamond prospecting on any national estate referred to in section 3(2) of the National Heritage Resources Act, 1999 (Act No. 25 of 1999) with the exception of the national estate contemplated in section 3(2)(i)(vi) and (vii) of that Act, attach the investigation report as Appendix 2.19.2 and confirm that the applicable mitigation is reflected in 2.5.3; 2.11.6.and 2.12.herein).

During the desktop study of the area and public consultation with land owners, no heritage site were identified nor mentioned. However should there be a required stringent need for a heritage study to be conducted to confirm the absence or presence of any heritage sites, a specialist will be appointed.

### u) Other matters required in terms of sections 24(4)(a) and (b) of the Act.

(the EAP managing the application must provide the competent authority with detailed, written proof of an investigation as required by section 24(4)(b)(i) of the Act and motivation if no reasonable or feasible alternatives, as contemplated in sub-regulation 22(2)(h), exist. The EAP must attach such motivation as **Appendix 4**).

The proposed prospecting activities (including the drilling) requested as part of this authorisation is the only current viable manner in which a mineral resource can be identified and used to generate a SAMREC compliant resource, which is a minimum requirement to determine whether it is viable to invest in a future mine.



### PART B

### ENVIRONMENTAL MANAGEMENT PROGRAMME REPORT

- 1) Draft environmental management programme.
  - a) **Details of the EAP**, (Confirm that the requirement for the provision of the details and expertise of the EAP are already included in PART A, section 1(a) herein as required).

The details and expertise of the EAP are already included in PART A, section 1(a) as required

b) **Description of the Aspects of the Activity** (Confirm that the requirement to describe the aspects of the activity that are covered by the draft environmental management programme is already included in PART A, section (1)(h) herein as required).

The aspects of the activity that are covered by the environmental management programme is already included in PART A, section 1(h)

### c) Composite Map

(Provide a map (Attached as an Appendix) at an appropriate scale which superimposes the proposed activity, its associated structures, and infrastructure on the environmental sensitivities of the preferred site, indicating any areas that any areas that should be avoided, including buffers)

Refer to **Appendix B** for the site map

- d) Description of Impact management objectives including management statements
  - Determination of closure objectives. (ensure that the closure objectives are informed by the type of environment described)
    - To leave site in a safe state for humans and animals.
    - To ensure that the water resources (surface and ground) are not affected by the proposed activities including both mining and rehabilitation activities.
    - To promote indigenous vegetation growth suitable for animals that graze over the disturbed areas on the site.
    - Backfilling of all excavated areas with waste rocks, overburden and topsoil material to adopt a shape similar to its initial state.
    - To eliminate any safety risks associated with drilled holes and any mining activities
    - To re-vegetate any disturbed land with indigenous native species and implement an alien invasive species management plan to ensure the establishment of indigenous species
    - To return the project site to its natural state to promote ecosystem and aesthetic benefits
    - A Waste management plan containing waste on site as well as any spills that may occur should be implemented to ensure no waste occur during the closure phase and post closure phase
  - ii) Volumes and rate of water use required for the operation.



### iii) Has a water use licence has been applied for?

A water use licence has not been applied for; and due to the nature of the proposed prospecting activities, that entails the drilling of approximately 50 boreholes, no listed water activities will be triggered by these activities. Water used in the proposed drilling activities will be brought to site through the drilling machines that will be used during the drilling process.

## iv) Impacts to be mitigated in their respective phases Measures to rehabilitate the environment affected by the undertaking of any listed activity

ACTIVITIES	PHASE	SIZE AND	MITIGATION MEASURES	COMPLIANCE WITH STANDARDS	TIME PERIOD FOR
		SCALE of			IMPLEMENTATION
(E.g. For prospecting - drill site, site		disturbance			
camp, ablution facility, accommodation, equipment storage, sample storage, site office, access route etcetc  E.g. For mining,- excavations, blasting, stockpiles, discard dumps or dams, Loading, hauling and transport, Water supply dams and boreholes, accommodation, offices, ablution, stores, workshops, processing plant, storm water control, berms, roads, pipelines, power lines, conveyors, etcetc)	(of operation in which activity will take place.  State; Planning and design, Pre-Construction' Construction, Operational, Rehabilitation, Closure, Post closure).	(volumes, tonnages and hectares or m²)	(describe how each of the recommendations in herein will remedy the cause of pollution or degradation and migration of pollutants)	(A description of how each of the recommendations herein will comply with any prescribed environmental management standards or practices that have been identified by Competent Authorities)	Describe the time period when the measures in the environmental management programme must be implemented Measures must be implemented when required.  With regard to Rehabilitation specifically this must take place at the earliest opportunity.  With regard to Rehabilitation, therefore state either:  Upon cessation of the individual activity or.  Upon the cessation of mining, bulk sampling or alluvial diamond prospecting as the case may be.
PHASE 1-SITE	Construction	1250m <sup>2</sup>	Appointment of a terrestrial	NEMA AND NEMBA AND LOCAL	Daily during construction
ESTABLISHMENT			ecologist is recommended to give guidance regarding the collection, propagation/storage and transportation of protected	BYLAWS	and thereafter quarterly reports.
Vegetation clearance at respective boreholes			<ul><li>plants.</li><li>An ecological study/survey</li><li>should be undertaken prior to</li></ul>		



		any vegetation clearance, in
		order to identify any protected
		species within the study area
		Construction activities
		recommended to commence
		during dry season (June-
		August), during this time that
		vegetation is dry and water
		table dropped, impacts to
		vegetation removal in this
		season are limited.
		Alien invasive species to be
		removed as soon as they
		sprung, before they impact on
		indigenous growing in close
		vicinity
		Ensure that Rehabilitation
		measures are adhered to in
		order to return the soil and
		vegetation to its
		original/natural state
Topsoil stripping &	1250m <sup>2</sup>	A soil scientist study should be

stockpiling	undertaken prior to any	under taken in line with the
	drillings or removal of soil, to	approved Prospecting Works
	identify what soil type exist in	Programme.
	the proposed prospecting	
	activities area.	
	Removed topsoil should be	
	stockpiled as per the	
	implemented site plan	
	A management and	
	monitoring of stockpiles plan	
	should be implemented.	
	Solid must be stored properly	
	and revegetated to prevent	
	erosion and to enable re-use	
	during rehabilitation	
	Commence (and preferably	
	complete) construction during	
	winter, when the risk of	
	disturbing active (including	
	breeding and migratory)	
	animals, should be least	
	The soil disturbance and	
	clearance of vegetation at drill	

			pad areas will be limited to the		
			absolute minimum required		
			and will not be dozed or		
			scraped		
		•	with vegetation roots left intact		
			for later re-growth ;		
		•			
Waste management		•	A waste management plan	NEMWA, Municipal waste	Concurrently as the activities are
Tracto management			should be implemented from	management policies	progress
			the start of the activities to	Thanagoment policios	progress
			ensure that any waste		
			·		
			generated during site		
			establishment is kept to a		
			minimum and were it cannot		
			be avoided it is mitigated and		
			or disposed of in accordance		
			with the waste management		
			Act		
		•	ensure that a cradle to grave		
			approach is followed in terms		
			of waste management and		
			that all activities are under		
	1	1		1	1

		taken with a precautionary		
		approach		
Phase 2 Exploration	1250m <sup>2</sup>	Use of best practicable	MPRDA, NEMA	
drilling:		environmentally friendly		
		drilling equipment is advised		
		<ul> <li>Appointment of suitably</li> </ul>		
- Drilling		qualified personnel to handle		
- Drill maintenance		the drilling activities is		
& refuelling		encouraged		
- Core sample collection &		A noise and dust study should		
storage		be undertaken prior to drilling		
- Vehicle movements		activities commencing		
- Waste generation		<ul> <li>Equipment's to be used</li> </ul>		
& management		should be maintained at all		
		times to avoid unnecessary		
		noise and possible leakages		
		An ecological study should be		
		undertaken and		
		recommendations followed to		
		avoid loss of nearby animals		
		due to noise pollution		
		Maintain a buffer of 500m		
		between drill sites and		

dwellings.
Control dust emission by
ensuring drill rig employs dust
suppression system.
Low vehicle speeds will be
enforced on
Use of dip trays will be
implemented and placed
under any heavy machinery
with potential of oil spill to
avoid contamination of soil
and water
Refuelling of machines will be
done outside any protected
area or watercourses and
should be done with care to
minimise the chance of
spillages
A spill kit will be available on
each site where prospecting
activities are in progress;
Any spillages will be cleaned
up immediately.

 <u> </u>
Drill muds to be contained in
lined sump and disposed of
off-site at licensed facility.
A hazardous waste
management should be in
place, and separation of
hazardous waste from
domestic (general) waste
should be enforced and
practised at source
An environmental control
officer should be appointed
and should be full time on site
during the construction phase
to combat any environmentally
related impacts and implement
the EMP

e) Impact Management Outcomes
(A description of impact management outcomes, identifying the standard of impact management required for the aspects contemplated in paragraph ();

ACTIVITY	POTENTIAL	ASPECTS	PHASE	MITIGATION	STANDARD TO BE ACHIEVED
(whether listed or not listed).	IMPACT	AFFECTED	In which impact is	TYPE	
(E.g. Excavations, blasting, stockpiles, discard dumps or dams, Loading, hauling and transport, Water supply dams and boreholes, accommodation, offices, ablution, stores, workshops, processing plant, storm water control, berms, roads, pipelines, power lines, conveyors, etcetcetc.)	(e.g. dust, noise, drainage surface disturbance, fly rock, surface water contamination, groundwater contamination, air pollution etcetc)		anticipated  (e.g. Construction, commissioning, operational Decommissioning, closure, post-closure)	(modify, remedy, control, or stop) through (e.g. noise control measures, storm-water control, dust control, rehabilitation, design measures, blasting controls, avoidance, relocation, alternative activity etc. etc)  E.g.  • Modify through alternative method.  • Control through noise control  • Control through management and monitoring	(Impact avoided, noise levels, dust levels, rehabilitation standards, end use objectives) etc.
Site establishment	Cultural and	Destruction or	Construction /	Remedy through rehabilitation  Undertake heritage survey prior to site	Heritage Act
activities:	Heritage	loss of Cultural	set-up phase &	activities in order to identify	
- Vegetation clearance		and Heritage	Operational	cultural/heritage features and cordon	
- Topsoil stripping &		Resources	phase	these off with Chevron tape.	
stockpiling					
-Drill pad				Avoid cultural/heritage impacts by	
Compaction Erection of				maintaining 50m buffer from any	
office, toilets, fuel storage (if				identified heritage feature.	
not by road tanker), -water					
tanker, core storage.				Any buried artefacts that may be	
-Vehicle movements				uncovered during site activities will	
-Waste management				require such activities to stop and a	
				qualified archaeologist will be	



Exploration drilling:				commissioned to assess their	
-Drilling				significance and determine appropriate	
-Drill maintenance &				mitigation measures.	
refuelling					
-Core sample					
collection & storage					
-Vehicle movements					
-Waste generation &					
management					
	Noise	Noise Generation	Construction /	Control noise generation by	SANS 10103
			set-up phase &	maintaining equipment.	
			Operational phase		
				Limited to daylight hours on Mondays	
				to Saturdays and no activities on	
				Sundays and public holidays.	
				Maintain a buffer of 500m-1000m	
				between drill sites and dwellings.	
				If intrusive noise levels are	
				experienced by any person at any	
				point, the source of the noise will be	
				moved if practical, or it will be placed	

			in an acoustic enclosure, or an	
			acoustic barrier will be erected	
			between the source and the recipient.	
Visual	Visual	Construction /	The drilling rig and other visually	N/A
	intrusion	set• ]up phase &	prominent items on the site will be	
		Operational	located in consultation with the	
		phase	landowner;	
			x Make use of existing vegetation as	
			far as possible to screen the	
			prospecting operations from view; and	
			If necessary, the operations can be	
			screened from view by erecting a	
			shade cloth barrier.	
Dust fall	Dust fall &	Construction /	Control dust emission by ensuring drill	GN R. 827
	nuisance from	set-up phase &	rig employs dust suppression system.	(NEM:AQA)
	activities	Operational		
		phase	Low vehicle speeds will be enforced	
			on unpaved surfaces.	
			Maintain a buffer of 500m-1000m	
			between drill sites and dwellings.	
Soil and	Soil and	Construction /	x The soil disturbance and clearance	n/a



Vegetation	vegetation	set-up phase &	of vegetation at drill pad areas will be	
	disturbance from	Operational	limited to the absolute minimum	
	drill pad	phase	required and will not be dozed or	
	preparation		scraped with vegetation roots left intact	
			for later re-growth; and	
			x Disturbed areas will be re-vegetated	
			with locally indigenous species as	
			soon as possible.	
Soil, surface	Soil, surface	Construction /	Avoid hydrocarbon spills by employing	GN R. 704
water and	water and	setup phase &	proper vehicle maintenance;	(NWA
groundwater	groundwater	Operational phase	Refuelling will be done with care to	
	contamination		minimise the chance of spillages;	
	from		A spill kit will be available on each site	
	hydrocarbons		where prospecting activities are in	
			progress;	
			Any spillages will be cleaned up	
			immediately;	
			Drill muds to be contained in lined	
			sump and disposed of off• ]site at	
			licensed facility	
Social	Friction	Construction /	All operations will be carried out under	NEMA
	between local	set-up phase &	the guidance of a strong, experienced	
	residents/land	Operational	manager with proven skills in public	

owners and	phase	consultation and conflict resolution;	
construction			
personnel		All prospecting personnel will be made	
		aware of the local conditions and	
		sensitivities in the prospecting area	
		and the	
		fact that some of the local residents	
		may not welcome the prospecting	
		activities in the area;	
		There will be a strict requirement to	
		treat local residents with respect and	
		courtesy at all times.	

f) Impact Management Actions
(A description of impact management actions, identifying the manner in which the impact management objectives and outcomes contemplated in paragraphs (c) and (d) will be achieved).

ACTIVITY	POTENTIAL IMPACT	MITIGATION	TIME	PERIOD	FOR	COMPLIANCE WITH STANDARDS
whether listed or not listed.	TOTENTIAL IIII AOT	TYPE	IMPLEMEN			
(E.g. Excavations, blasting, stockpiles, discard dumps or dams, Loading, hauling and transport, Water supply dams and boreholes, accommodation, offices, ablution, stores, workshops, processing plant, storm water control, berms, roads, pipelines, power lines, conveyors, etcetcetc.).	(e.g. dust, noise, drainage surface disturbance, fly rock, surface water contamination, groundwater contamination, air pollution etcetc)	(modify, remedy, control, or stop) through (e.g. noise control measures, storm-water control, dust control, rehabilitation, design measures, blasting controls, avoidance, relocation, alternative activity etc. etc)  E.g.  • Modify through alternative method. • Control through noise control • Control through management and monitoring Remedy through rehabilitation	in the or programme m must be imple With regard to must take pla .With regard state either: Upon cessation.  Upon the sampling	nust be implemented when reconstruction of the individual	management nted Measures quired. specifically this st opportunity. ion, therefore al activity  mining, bulk al diamond	(A description of how each of the recommendations in 2.11.6 read with 2.12 and 2.15.2 herein will comply with any prescribed environmental management standards or practices that have been identified by Competent Authorities)
Please see section d (ii)	Please see section	Please see section j) of Part	Please se	ee section iv	v) above.	Please see section iv) above
of Part A for a list of	(v) and (viii) of Part A	A for mitigation type.				in terms of compliance, as
activities to be undertaken.	for the description of					well as section e) of Part A
	potential impacts					for compliance with legislation
	associated with the					and policy.
	project.					

### i) Financial Provision

- (1) Determination of the amount of Financial Provision.
  - (a) Describe the closure objectives and the extent to which they have been aligned to the baseline environment described under the Regulation.
  - To leave site in a safe state for humans and animals;
  - To ensure that the water resources (surface and ground) are not affected by the proposed activities including both mining and rehabilitation activities;
  - To promote indigenous vegetation growth suitable for animals that graze over the disturbed areas on the site;
  - Backfilling of all excavated areas with waste rocks, overburden and topsoil material to adopt a shape similar to its initial state;
  - To eliminate any safety risks associated with drilled holes and any mining activities
  - To re-vegetate any disturbed land with indigenous native species and implement an alien invasive species management plan to ensure the establishment of indigenous species;
  - To return the project site to its natural state to promote ecosystem and aesthetic benefits; and
  - A Waste management plan containing waste on site as well as any spills that may occur should be implemented to ensure no waste occur during the closure phase and post closure phase
  - (b) Confirm specifically that the environmental objectives in relation to closure have been consulted with landowner and interested and affected parties.

A public participation process (stakeholder notification) was undertaken on the 20th of June 2017 and all identified interested and affected parties were notified together with all stakeholder. Furthermore an advert was released on the Vista newspaper on the 29th of June 2017 inviting all stakeholders and Interested and affected parties to submit their comments within 30 days from advert release. The public comment period will lapse on the 31st of July 2017. A draft bar was submitted to all the interested and affected parties for comments on the 02nd August

2017 and the interested and affected parties were given 30 days to send their comments.

# (c) Provide a rehabilitation plan that describes and shows the scale and aerial extent of the main mining activities, including the anticipated mining area at the time of closure.

The prospecting right application site covers an area of approximately 3813 ha, of the farm Weltevreden 130, Boshoek 446, Welverdiend 216, Sterkfontein 474 ha, Jonkerskraal 475 and Klein Jonkerskraal 551. It is proposed that progressive approach to the rehabilitation of drilled boreholes is adopted to ensure that where practicable, areas where the prospecting activity is completed, are quickly shaped, top soiled and vegetated to provide a stable land form. Furthermore, rehabilitation activities to be deployed will involve;

- Removing all infrastructures, including the drill rig, the temporary office, the mobile diesel tank, the mobile water tank and the ablution facilities.
- Capping the boreholes as per legal requirements.
- Ensure that no foreign matter is left behind on the drill site.
- The whole drill site will be inspected for any signs of hydrocarbon pollution. Any identified soil which has been polluted as a result of the drilling activities will be removed and disposed of in a registered landfill site as hazardous waste.
- Any area compacted as a result of the drill rig will be ripped and any
  ruts created by accessing or leaving the site for the drilling activity will
  be filled in to ensure that no future erosion shall occur on site. Revegetation of disturbed site will be implemented as prescribed in the
  EMP
- Stripped topsoil will be returned to its original state; and
- Any temporary created roads will be reinstated to their original state to reduce environmental degradation. The progressive formation of the post-drilling activities landform and the establishment of a vegetative cover will reduce the amount of disturbed land at any one time and also reduce the visibility of prospecting activities from surrounding properties and roads.

## (d) Explain why it can be confirmed that the rehabilitation plan is compatible with the closure objectives.

The rehabilitation plan provides methodologies on how the closure plan will be met. The closure plan objective is to reinstate the prospecting right site its original state as practicable as possible and the rehabilitation plan points out the execution plan to achieve the objective of the closure plan.

# (e) Calculate and state the quantum of the financial provision required to manage and rehabilitate the environment in accordance with the applicable guideline.

The financial provision amount is **R 70 835, 33** of which you can refer to **section S) of part A** for calculations.

Due to the nature of the activities to be undertaken for the prospecting right, the cost of rehabilitation will be kept to a minimum as, mobile equipment's will be utilised and a number of approximately 50 holes will be drilled.

### (f) Confirm that the financial provision will be provided as determined.

Financial provisions will be provided as determined by the applicant.

Mechanisms for monitoring compliance with and performance assessment against the environmental management programme and reporting thereon, including

- g) Monitoring of Impact Management Actions
- Monitoring and reporting frequency
- Responsible persons
- Time period for implementing impact management actions Mechanism for monitoring compliance

SOURCE ACTIVITY	IMPACTS REQUIRING	FUNCTIONAL REQUIREMENTS FOR	ROLES AND RESPONSIBILITIES	MONITORING AND REPORTING
	MONITORING	MONITORING	(FOR THE EXECUTION OF THE	FREQUENCY and TIME PERIODS
	PROGRAMMES		MONITORING PROGRAMMES)	FOR IMPLEMENTING IMPACT
				MANAGEMENT ACTIONS
Site Clearance and	land degradation; habitat	Guidance from a suitably qualified	ECOLOGIST; ECO	Daily as the activities progress
removal of	loss; soil erosion; Alien	vegetation specialist or horticulturist		
Vegetation	species encroachment;	regarding the collection,		
		propagation/storage and transplantation		
		of		
		plants is advised; the spread of alien		
		invasive species must be controlled and		
		kept at a minimum ideally should be		
		removed from site as soon as		
		encountered		
Stockpiling material	Waste management	Management and monitoring of soil	ECO; contractor	Daily management of noise and
from drilled holes		stockpiles. Soils must be stored properly		dust levels
Discarding material		and revegetated to prevent erosion and		
from drilled holes		to enable re-use during rehabilitation.		



		Appropriate storage and handling of		
		topsoil		
Drilling machines and	Noise and dust	Sample environmentally acceptable	Contractor	Before and after the activities
vehicle on site		noise and dust levels within and round		
		site		
Drilling activities	Ground water quality and	Identify and determine the extent of	Contractor	After drilling of each hole
	levels	possible groundwater impacts		
		Determine ground water levels and		
		fluctuations		
drilled holes	visual impacts	Holes to be rehabilitated soon after the	contractor	On closure phase with one
		drilling process is completed		produced report at the end of the
				prospecting right activity
drilled holes	Safety impacts	Demarcation of drilled holes; induction of	contractor (Safety officer)	Daily with a weekly report
		safety measures on site to educated site		
		personnel on safety		

## I) Indicate the frequency of the submission of the performance assessment/ environmental audit report.

An environmental audit report will be submitted yearly as required in terms of Regulation 527 of MPRDR (Regulation 55) and other related regulations, or at the end of the project should the activities take less than a year.

### m) Environmental Awareness Plan

## (1) Manner in which the applicant intends to inform his or her employees of any environmental risk which may result from their work.

An environmental awareness will be conducted on a monthly basis on the first week of each month preferably. The appointed ECO will conduct an environmental awareness and also send copy of the awareness via email to staff members who won't be based on site.

## (2) Manner in which risks will be dealt with in order to avoid pollution or the degradation of the environment.

Based on baseline study for the prospecting right site, an induction will be conducted at the state of the project with all involved personnel to address all identified environmental risk and safety measures. In this induction, environmental awareness will be communicated to all staff prior to any work to avoid pollution or environmental degradation. Importance of environmental sustainability will be communicated also. Furthermore, visitors will be inducted on site upon their arrival on the importance of environmental sustainability. Lastly the induction document with environmental policy will be kept at site and provided to any one on request.

Should environmental risks do occur, they will be reported as soon as possible to the rightful person on site (ECO/SHE rep), and the matter will be handled as per the EMP and mitigation measures will be put in place to avoid future occurrence.

### n) Specific information required by the Competent Authority

(Among others, confirm that the financial provision will be reviewed annually). Not applicable at this stage.



### 2) UNDERTAKING

The EAP herewith confirms

Undertaking	Confirmation
The correctness of the information provided in the	Yes.
reports.	
The inclusion of comments and inputs from	Yes
stakeholders and I&APs.	
The inclusion of inputs and recommendations from	Specialist exemption report
the specialist reports where relevant.	
That the information provided by the EAP to	Yes.
interested and affected parties and any	
responses by the EAP to comments or inputs	
made by interested and affected parties are	
correctly reflected herein.	

E	Puno
4	

Signature of the environmental assessment practitioner:

### Nkhophele Holdings (Pty) Ltd

Name of company:

13/02/2018

Date:

-END-



### Appendix 1: CV of the EAP

#### Curriculum Vitae of Nemakhavhani Lufuno

Address : 2484 Luruli Street, Tshiawelo, Soweto, 1818

Contact : 072 718 9952/ 079 446 9319

Email: !ufunonemakhavhani@ymail.com

### PERSONAL DETAILS

Date of birth 1991-06-18
Nationality South Africa

Gender Female
Home Language Tshivenda

Other English, Isizulu, Sepedi and Tsonga

Marital status Single
Health status Excellent

Professional affiliation Candidate Natural Scientist: Registration No. 116461

Criminal Record None

Driver's License Yes (Own vehicle)

### **EDUCATIONAL BACKGROUND**

1. Institution University of South Africa

Nature of qualification BSC Honours in Environmental Management

Subjects Integrated Environmental Management, Impact Mitigation

and Management, Science Mining, Integrated Environmental management systems. Social and Ecological impact Management, Research Methodology, Environmental Remote Sensing and Modeling, Environmental Risk Assessment and Management, and Environmental Research

Project

Research Topic: An analysis of major pollutant trends from 2005 to 2014 in

Johannesburg, Gauteng province

Status Completes

2. Institution University of Johannesburg

Nature of qualification BSC Geography and Environmental Management

1 | Curriculum Vitae of Lufuno Nemakhavhani - 2017

Subjects Geography, Environmental management, Biology,

Botany, Zoology, Business Management, Information Management, Anthropology and Project Management

Research project Traditional uses of wild indigenous plant species of the

Vhembe District of Limpopo province, South Africa.

Status Completed

3. Institution Tshivhase Secondary School

Nature of qualification National Senior Certificate (Exemption)

Subjects English, Tshivenda, Life Sciences, Physical Sciences,

Mathematics, Life Orientation and Geography.

Status Matriculated

4. Institution University of South Africa

Nature of qualification Advanced short causes, certificate in Environmental

Management, Compliance and Inspection

Status Completed

### Training experience

- Project management;
- Scientific writing and presentation skills;
- Research and updating of legal register for ISO 14001 Environmental Management System.
- ARC:GIS Standard

### COMPETENCIES

### Computer Skills

- GIS IDRISI Explorer (Geographic Information Systems)
- ArcGIS: Standard 10.2
- Environmental Remote sensing (Landsat 2007&2008)
- Microsoft ( Ms Word, Ms Excel, Ms Power Point)
- Excess
- Linux (Ubuntu, LibreOffice calc, LibreOffice writer)
- Google docs
- Microsoft Project

### Developed Skills

- Hardworking.
- Excellent communication skills;
- Ability to work under pressure and adhere to project deadlines;
- Enjoy working individually and as part of a team;
- Scientific writing and presentation skills;
- 2 | Curriculum Vitae of Lufuno Nemakhavhani 2017

#### Environmental Skills

- Project Management
- Environmental Impact Assessment
- Public Participation Preparation and Facilitation
- Environmental inspection and Investigation
- Energy Auditing

#### WORK EXPERIENCE

1. Employer Sazi Environmental Consulting (SAZI)
Position Environmental Consultant

Nature of Employment Contract
Duration February 2015- till present

Duties

Water use License Application

- Environmental Practice facilitation
- Wetland assessment and delineation
- Site Visits
- Tendering
- Ecological assessments and species identification
- Integrated Water and Waste Management Plans
- Environmental Impact Assessment (Basic Assessment)
- Basic Assessment Impacts
- ARC GIS Mapping (locality maps, sensitivity areas and delineation maps)
- Public participation Process
- Waste Management License Application
- Implementing the Environmental management plan
- Environmental liaising
- Stakeholder engagement

#### Project completed:

Notice of the basic assessment and environmental management plan for the proposed construction in Vlakfontein:

Notice of the basic assessment and environmental management plan for the proposed construction of an additional 200ml rand water reservoir in Brakpan, east rand, Ekurhuleni metropolitan municipality, Gauteng province

Water use licence Application for the proposed construction of the second 400kv line from Ariadne to Venus substation

Basic assessment and Water Use Licence of the proposed reconstruction of the Transnet Collapsed bridge in Vanderbijlpark service road along Houtheuwel and Potchefstoom railway line

2. Employer Earthlife Africa-Johannesburg
Position SECCP

Nature of Employment Contract (6 Months)
Duration May 2014- October 2014
Duties

· Assist ICN in organizing regional Meeting

3 | Curriculum Vitae of Lufuno Nemakhavhani - 2017

- Research and writing
- Site Visits
- Involvement in the Medupi EMC meetings
- Environmental awareness
- Populating databases
- Environmental campaigning
- Administration work

3. Employer

Sebata Group of Companies (SHERQ Solutions)

Position

**Environmental Sciences Intern** 

Nature of Employment

Contract

Duration

July 2013 - May 2014

#### Duties

Assisting in undertaking Environmental Impact Assessments (EIAs);

- · Report/chapter writing;
- Assisted in the preparation of project proposals, cost outline, resource allocation and timeline.
- Applying environmental legislation:
- Presenting on environmental issues.
- Site visit and attendance/participation at meetings;
- Conducting Public Participation Process;
- Involvement in Eskom Projects such as Ingula Pump Storage Scheme;
- Learning and applying environmental management systems on projects;
- Assisting in ISO 14001 internal auditing;
- Applying the National Environmental Management Act (NEMA) act to environmental queries, proposals and internal discussion;

4. Employer

University of Johannesburg

Position

Energy Auditor

Duration

March 2012 till July 2012

Nature of employment

Volunteering

#### Duties

- Gathering and compiling data within the University of Johannesburg Premises
- Educating students and employees on how to save energy Use
- Report Writing

#### REFERENCES

Name of person

Ms Kagiso Mohlamme

Organization

Sebata Group of companies

Position Held

Junior Environmental consultant

4 | Curriculum Vitae of Lufuno Nemakhavhani - 2017

Contact No

Name of person Dr I.T. Rampedi

Organization University Of Johannesburg

072 591 5237

Position Held Lecture/Supervisor

Contact No. 082 717 3630

Name of person MR J.D. Brak

Organization University of Johannesburg
Position Held Audit student manager

Contact No. 082 806 7217

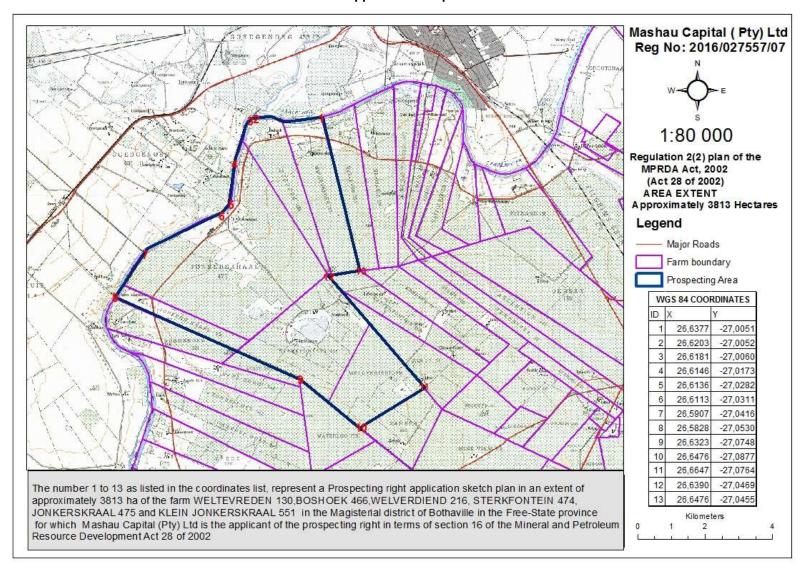
Name of person Mrs. N. Zungu

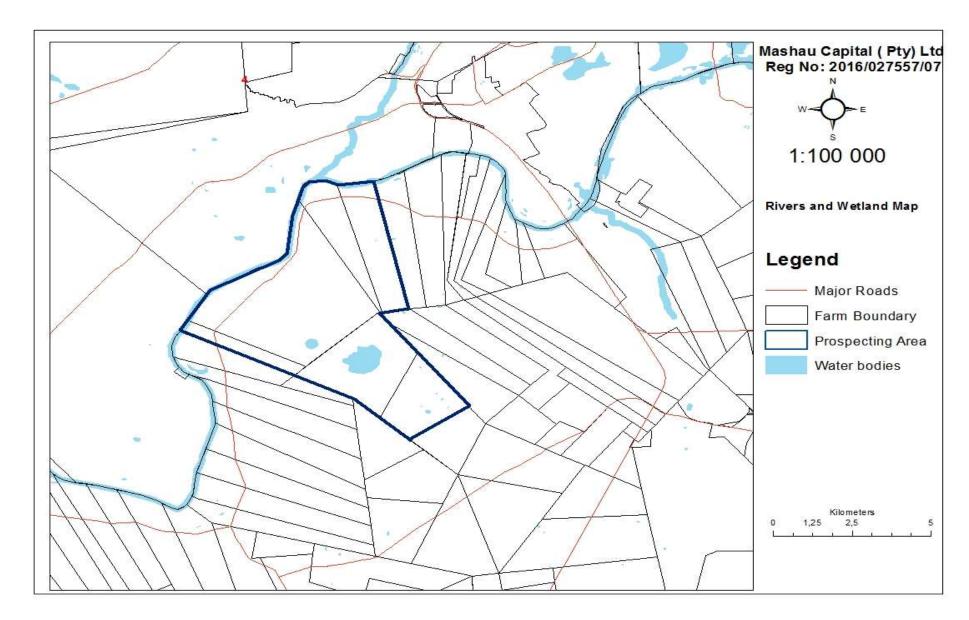
Organization Sazi Environmental Consulting

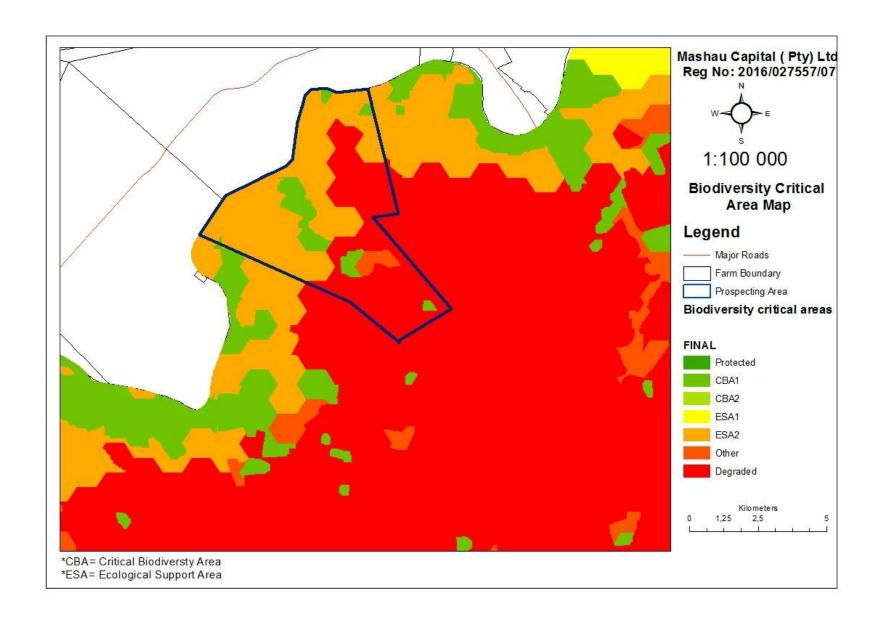
Position Held Managing director Contact No 084 8000 187

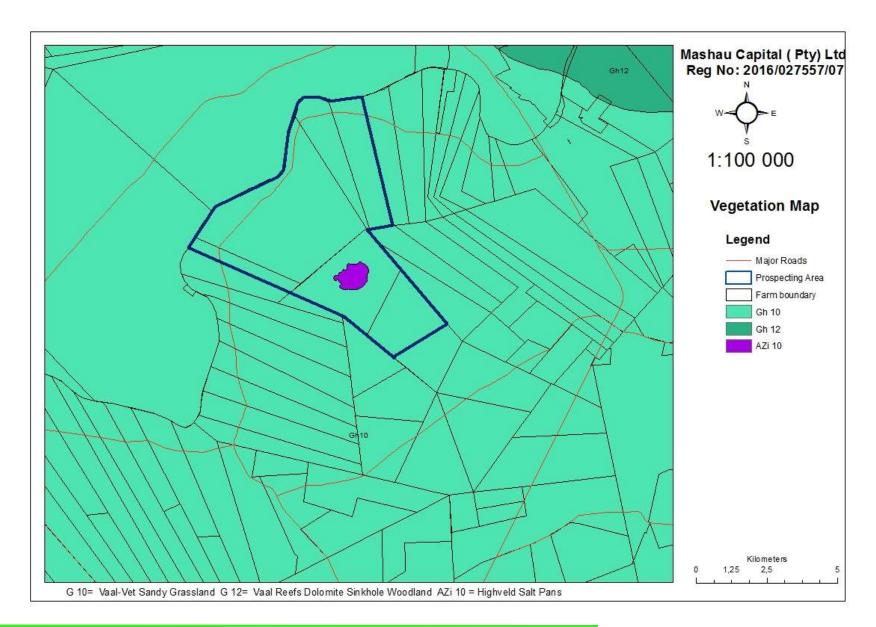
<sup>5 |</sup> Curriculum Vitae of Lufuno Nemakhavhani - 2017

## **Appendix 2: Maps**









#### **Appendix 3: Public Participation**

#### Introduction

A public participation process (stakeholder notification) was undertaken on the 20<sup>th</sup> of June 2017 and all identified interested and affected parties were notified together with all stakeholder. Furthermore an advert was released on the Vista newspaper on the 29th of June 2017 inviting all stakeholders and Interested and affected parties to submit their comments within 30 days from advert release. The public comment period lapsed on the 31st of July 2017. A draft bar was submitted to all the interested and affected parties for comments on the 02<sup>nd</sup> August. An individual meeting was arranged for on the 31<sup>st</sup> of July with Mr Claassens (Minutes attached).

A final BAR report was submitted on the 14<sup>th</sup> of September 2017. The BAR was reviewed by DMR and requested that further consultation must be done with the land owners. A consultation process was undertaken again from the 18<sup>th</sup> November 2017 to the 12 of February 2018.

A meeting was arranged with the land owners for the 18 November 2018 of which some of the land owners came. In the meeting the land owner requested that the meeting be proposed since it is approaching the festive seasons. Another meeting was then arranged for the 3<sup>rd</sup> of February 2018 of which none of the land owners came. An individual meeting was held at Parkview on the 12<sup>th</sup> of February 2018 with Christo Reeders attorneys who are representing the Allem Brothers (Minutes attached).

All the landowners were notified and consulted with regards to the proposed projects and their comments registered.

## **Site Notices**









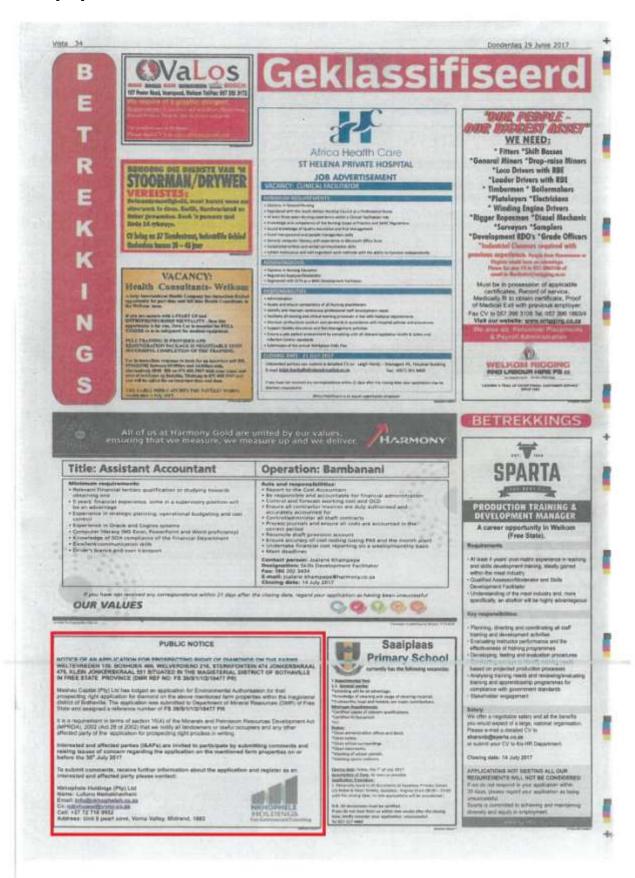


Mashau Capital (Pty) Ltd | FS 30/5/1/1/2/10477 PR



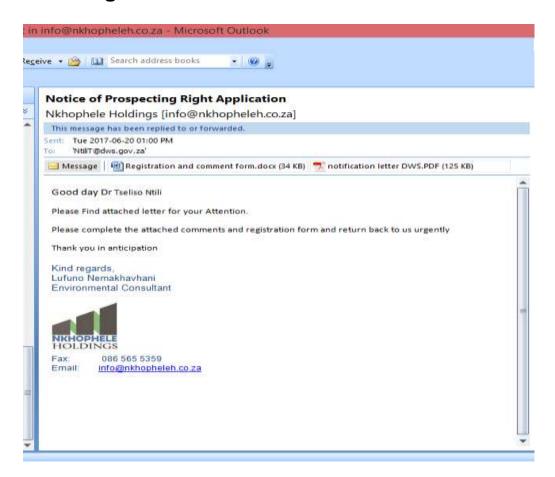


# **Newspaper Advert**



#### **Notification Emails**

# **State Organs Notifications**





The Department of Water and Sanitation PO Box 528 BLOEMFONTEIN 9300

By Email: Ntili T@dws.gov.za

NOTICE OF AN APPLICATION FOR PROSPECTING RIGHT OF DIAMONDS ON THE FARMS WELTEVREDEN 130, BOSHOEK 466, WELVERDIEND 216, STERKFONTEIN 474 JONKERSKRAAL 475, KLEIN JONKERSKRAAL 551 SITUATED IN THE MAGISTERIAL DISTRICT OF BOTHAVILLE IN FREE STATE PROVINCE

Mashau Capital (Pty) Ltd has lodged an application for Environmental Authorisation for their prospecting right application for diamond on the above mentioned farm properties within the magisterial district of Bothaville. The application was submitted to Department of Mineral Resources (DMR) of Free State and assigned a reference number of FS 30/5/1/1/2/10477 PR.

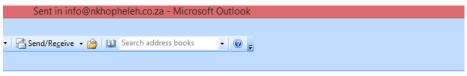
It is a requirement in terms of section 16(4) of the Minerals and Petroleum Resources Development Act (MPRDA), 2002 (Act 28 of 2002) that we notify all landowners or lawful occupiers and any other affected party of the application for prospecting right process in writing. As the organ of state on the proposed site you have been identified as the affected party.

Interested and affected parties (I&APs) are invited to provide written comments quoting the DMR reference number together with their name, contact details (preferred method of notification, e.g. email address or fax number) and indicate of any direct business, financial, personal or other interest which they have in the application to the contact person indicated below within 30 days from the date of receipt of this notice letter.

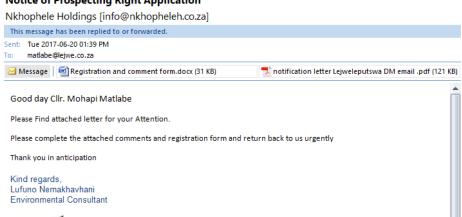
Please submit your contact information and comments to Ms. Lufuno Nemakhavhani using registration and comment sheet attached to this letter to the contacts provided below.

Yours Sincerely

Lufuno Nemakhavhani Environmental Consultant



#### **Notice of Prospecting Right Application**



HOLDINGS
Fax: 086 565 5359
Email: info@nkhopheleh.co.za



20 June 2017

Lejweleputswa District Municipality P.O. Box 2169 Welkom 9460

Delivered by email: matlabe@lejwe.co.za

RE: NOTICE OF AN APPLICATION FOR PROSPECTING RIGHT OF DIAMONDS ON THE FARMS WELTEVREDEN 130, BOSHOEK 466, WELVERDIEND 216, STERKFONTEIN 474 JONKERSKRAAL 475, KLEIN JONKERSKRAAL 551 SITUATED IN THE MAGISTERIAL DISTRICT OF BOTHAVILLE IN FREE STATE PROVINCE

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It is a requirement in terms of section 16(4) of the Minerals and Petroleum Resources Development Act (MPRDA), 2002 (Act 28 of 2002) that we notify all landowners or lawful occupiers and any other affected party of the application for prospecting right process in writing. As the District Municipality having authority on the proposed site you have been identified as the affected party.

Interested and affected parties (I&APs) are invited to provide written comments quoting the DMR reference number together with their name, contact details (preferred method of notification, e.g. email address or fax number) and indicate of any direct business, financial, personal or other interest which they have in the application to the contact person indicated below within 30 days from the date of receipt of this notice letter.

Please submit your contact information and comments to Ms. Lufuno Nemakhavhani using registration and comment sheet attached to this letter to the contacts provided below.

Yours Sincerely

Lufuno Nemakhavhani Environmental Consultant



APPLICATION FOR PROSPECTING RIGHT OF DIAMONDS ON THE FARMS WELTEVREDEN 130, BOSHOEK 466, WELVERDIEND 216, STERKFONTEIN 474 JONKERSKRAAL 475, KLEIN JONKERSKRAAL 551 SITUATED IN THE MAGISTERIAL DISTRICT OF BOTHAVILLE IN FREE STATE PROVINCE

DMR REF: FS 30/5/1/1/2/10477 PR

#### REGISTRATION AND COMMENT SHEET

2017

Please provide the comments for Mashau Capital (Pty) Ltd application for a prospecting right on the above mentioned forms within the magestrial district of Bothaville using contact details below:

Return address for registration and comment sheet:

Nkhophele Holdings (Pty) Ltd, Contact Person: Lufuno Nemakhavhani T: +27(0) 72 718 9952 F: 086 565 5359 E: info@nkhopheleh.co.za

Postal Address: Unit 8 pearl cove, Vorna Valley, Midrand, 1682

Please formally register me as an interested and affected party (I&AP) and provide me with further information and notifications during the BAR process		YES	
V	Ephpili	Post	Fax
Comments:			

Please fill in your contact details below for the project database

Title and Name	MR YOUSA KUPISO-	1
Organisation	LETWELEPUTSWA DISIRICT MUNICIPAL	10-1
Telephone	057 391 8915 (EXT 118)	-
Cell phone	063 697 7514	
Postal address	CNR TEMPEST & JAN HOFMEYER ROAD	WELKOM
Email	Yolisa Clejwe-co za	-
Fax	The Control of the Co	

Thank you for completing the form



Nala Local Municipality P.O. Box 12 Bothaville 9660

Delivered by : Hand

RE: NOTICE OF AN APPLICATION FOR PROSPECTING RIGHT OF DIAMONDS ON THE FARMS WELTEVREDEN 130, BOSHOEK 466, WELVERDIEND 216, STERKFONTEIN 474 JONKERSKRAAL 475, KLEIN JONKERSKRAAL 551 SITUATED IN THE MAGISTERIAL DISTRICT OF BOTHAVILLE IN FREE STATE PROVINCE

Mashau Capital (Pty) Ltd has lodged an application for Environmental Authorisation for their prospecting right application for diamond on the above mentioned farm properties within the magisterial district of Bothaville. The application was submitted to Department of Mineral Resources (DMR) of Free State and assigned a reference number of FS 30/5/1/1/2/10477 PR

It is a requirement in terms of section 16(4) of the Minerals and Petroleum Resources Development Act (MPRDA), 2002 (Act 28 of 2002) that we notify all landowners or lawful occupiers and any other affected party of the application for prospecting right process in writing. As the Local Municipality having authority on the proposed site you have been identified as the affected party.

Interested and affected parties (I&APs) are invited to provide written comments quoting the DMR reference number together with their name, contact details (preferred method of notification, e.g. email address or fax number) and indicate of any direct business, financial, personal or other interest which they have in the application to the contact person indicated below within 30 days from the date of receipt of this notice letter.

Please submit your contact information and comments to Ms. Lufuno Nemakhavhani using registration and comment sheet attached to this letter to the contacts provided below. Actrolectique by TA Tsibolono acquirilation

Yours Sincerely

T: +27(0) 72 718 9952 F: 086 565 5359 E: info@nkhopheleh.co.za

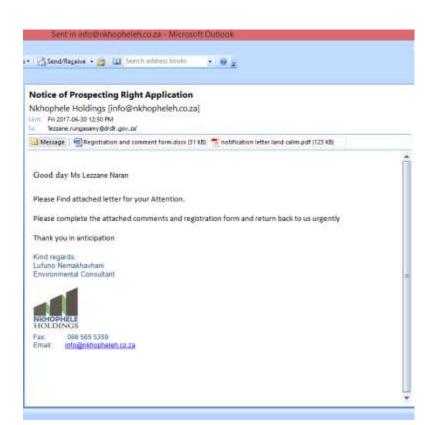
Lufuno ivernaknavnani Environmental Consultant

Company Registration: 2015/432441/07

Nala Municipality

2017 -06- 2 9 Private Bag X15 Bothaville

Address: Unit 8 pearl cove, Vorna Valley, Midrand, 1682





Land claims Commissioner (Free State) Chief Director: Land Restitution Support

By email: Ingrape remaining (biblicany as

RE: NOTICE OF AN APPLICATION FOR PROSPECTING RIGHT OF DIAMONDS ON THE FARMS WELTEVREDEN 130, BOSHOEK 468, WELVERDIEND 216, STERKFONTEIN 474 JONKERSKRAAL 475, KLEIN JONKERSKRAAL 551 SITUATED IN THE MAGISTERIAL DISTRICT OF BOTHAVILLE IN FREE STATE PROVINCE

Machau Capital (Pty) Lid has lodged an application for Environmental Authorisation for their prospecting right application for Garand on the above mentioned farm properties within the magisterial district of Bothwille. The application was submitted to Department of Mineral Resources (DMR) of Free State and assigned a reference number of FS 30/5/11/2/10477 PR.

It is a requirement in terms of section 16(4) of the Minerals and Pubruleum Resources Development Act (ABPRDA); 2002 (Act 28 of 2002) that we notify all tendowners or lawfus occupiers and any other effected party of the application for prospecting right process in writing. As an origin of state you have been identified as an interested and affected party.

Interested and effected parties (BAPs) are invited to provide written commants quoting the DMR reference number together with their name, contact details (preferred method of notification, e.g. email address or fax, number) and indicate of any direct beariness, financial, personal or other interest which they have in the application to the contact person indicated below within 30 days from the date of receipt of this notice letter.

Please submit your contact information and comments to Ms. Lature Nemahbashani using registration and comment sheet attached to this letter to the contacts provided below.

Yours Sincerely The

Lutuno Nemakhavhani Environmental Consultant

Company Registration: 2015/e3244107

1; +27(0) 72 798 9552 F: 085 595 5359 E: Info@nikopheln.co.za Address: Unit 5 past cove, Yome Valley, Midraed, 1082



# OFFICE OF THE REGIONAL LAND CLAIMS COMMISSIONER. FREE STATE

F. Bulling, the Switcomes and East Burger Studes, Blownfoombs, Bits Tel: 105 (4-43), 2473/2470

Enquiries: Vuyane Tshawane

Lufuno Nemakhavhani Environmental Consultant Unit 8 Pearl Cove Vorna Valley Midrand 1682

Dear Mr /Ms Nemakhavhani

#### LAND CLAIMS ENQUIRY:

- THE FARM WELTEVREDEN 130, MAGISTERIAL DISTRICT OF BOTHAVILLE, FREE STATE PROVINCE
- 2. THE FARM BOSHOEK 466, MAGISTERIAL DISTRICT OF BOTHAVILLE, FREE STATE PROVINCE
- 3. THE FARM WELVERDIEND 216, MAGISTERIAL DISTRICT OF BOTHAVILLE, FREE STATE PROVINCE
- 4. THE FARM STERKFONTEIN 474, MAGISTERIAL DISTRICT OF BOTHAVILLE, FREE STATE PROVINCE
- THE FARM JONKERSKRAAL 475. MAGISTERIAL DISTRICT OF BOTHAVILLE, FREE STATE PROVINCE
- 6. THE FARM KLEIN JONKERSKRAAL 551, MAGISTERIAL DISTRICT OF BOTHAVILLE, FREE STATE PROVINCE

We refer to your letter sent to our office on the 30 June 2017.

We confirm that as at the date of this letter no land claims appear on our database in respect of the Property. This includes the database for claims lodged by 31 December 1998; and those lodged between 1 July 2014 and 27 July 2016 in terms of the Restitution of Land Rights Amendment Act, 2014.

Whilst the Commission takes reasonable care to ensure the accuracy of the information it provides, there are various factors that are beyond the Commission's control, particularly relating to claims that have been lodged but not yet been gazetted such as:

 Some Claimants referred to properties they claim dispossession of rights in land against using historical property descriptions which may not match the current property description; and

Some Claimants provided the geographic descriptions of the land they claim without mentioning the particular actual property description they claim dispossession of rights in land against.

The Commission therefore does not accept any liability whatsoever if through the process of further investigation of claims it is found that there is in fact a land claim in respect of the above property.

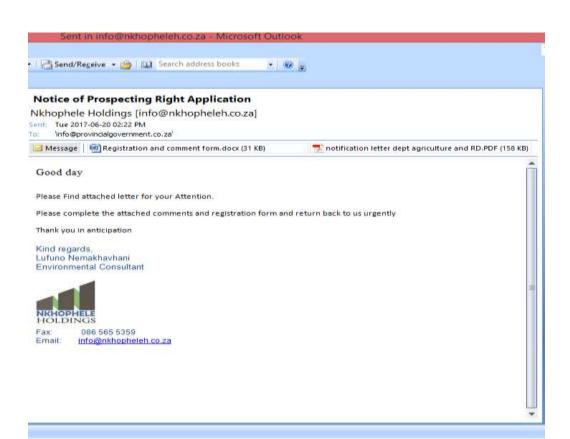
If you are aware of any change in the description of the above property after 19 June 1913 kindly supply us with such description so as to enable us to do a further search.

Yours faithfully

MR KB MAHLATJI

DEPUTY DIRECTOR: INFORMATION MANAGEMENT UNIT

LAND RESTITUTION SUPPORT: FS DATE: ...03/07/R017





Department of Agriculture and Rural Development

Private Bag X01

Glen

BLOEMFONTEIN

9360

Delivered by email: anto@provindalgovernment.co.za

RE: NOTICE OF AN APPLICATION FOR PROSPECTING RIGHT OF DIAMONDS ON THE FARMS WELTEVREDEN 130, BOSHOEK 466, WELVERDIEND 216, STERKFONTEIN 474 JONKERSKRAAL 475, KLEIN JONKERSKRAAL 551 SITUATED IN THE MAGISTERIAL DISTRICT OF BOTHAVILLE IN FREE STATE PROVINCE

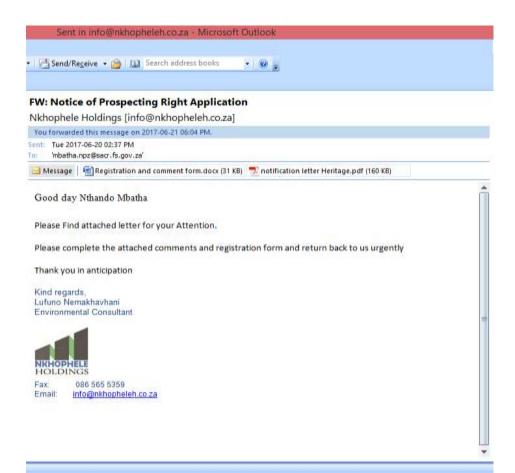
Mashau Capital (Pty) Ltd has lodged an application for Environmental Authorisation for their prospecting right application for diamond on the above mentioned farm properties within the magisterial district of Bothaville. The application was submitted to Department of Mineral Resources (DMR) of Free State and assigned a reference number of FS 30/5/11/2/10477 PR.

It is a requirement in terms of section 16(4) of the Minerals and Petroleum Resources Development Act (MPRDA), 2002 (Act 28 of 2002) that we notify all landowners or lawful occupiers and any other affected party of the application for prospecting right process in writing. As the state organ on the proposed site you have been identified as the affected party.

Interested and affected parties (I&APs) are invited to provide written comments quoting the DMR reference number together with their name, contact details (preferred method of notification, e.g. email address or fax number) and indicate of any direct business, financial, personal or other interest which they have in the application to the contact person indicated below within 30 days from the date of receipt of this notice letter.

Please submit your contact information and comments to Ms. Lufuno Nemakhavhani using registration and comment sheet attached to this letter to the contacts provided below.

Yours Sincerely





Free state Heritage Resources Authority

Private Bag X20606 Bloemfontein

Delivered by email: mbatha.npz@sacr.fs.gov.za

RE: NOTICE OF AN APPLICATION FOR PROSPECTING RIGHT OF DIAMONDS ON THE FARMS WELTEVREDEN 130, BOSHOEK 466, WELVERDIEND 216, STERKFONTEIN 474 JONKERSKRAAL 475, KLEIN JONKERSKRAAL 551 SITUATED IN THE MAGISTERIAL DISTRICT OF BOTHAVILLE IN FREE STATE PROVINCE

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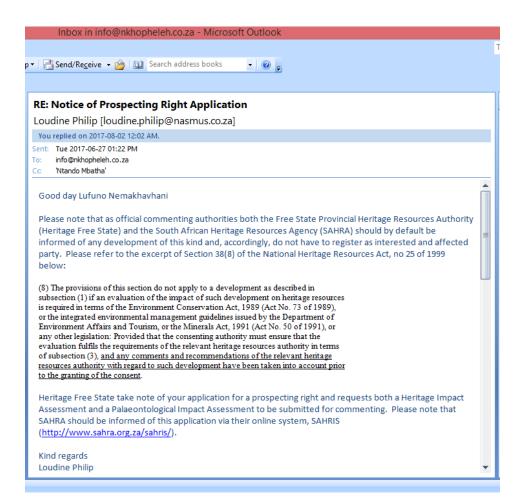
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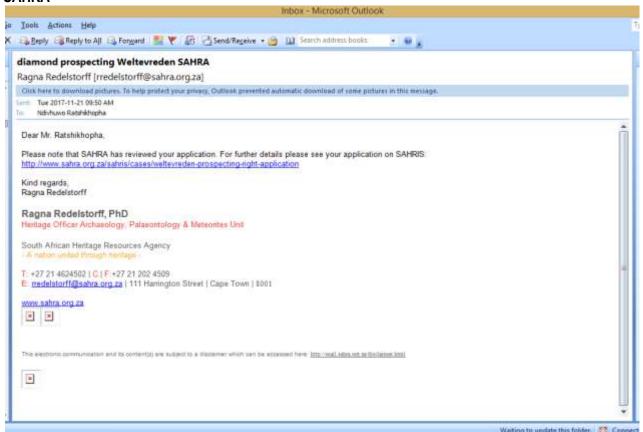
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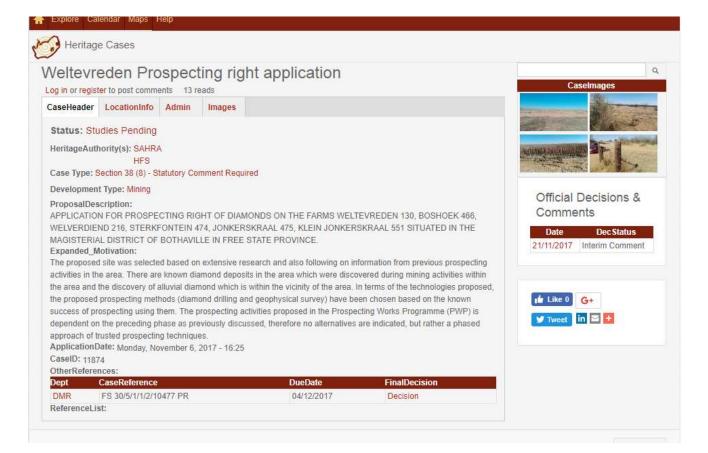
Yours Sincerely

Lufuno Nemakhavhani Environmental Consultant

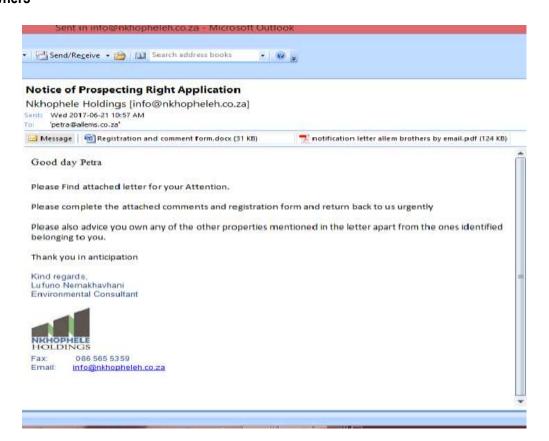


#### **SAHRA**





#### **Land Owners**





Allem Brothers (Pty) Ltd, 11 Rendezvous Street, Industrial Sites, Viljoenskroon, 9520

By email: petra@allems.co.za

NOTICE OF AN APPLICATION FOR PROSPECTING RIGHT OF DIAMONDS ON THE FARMS WELTEVREDEN 130, BOSHOEK 466, WELVERDIEND 216, STERKFONTEIN 474 JONKERSKRAAL 475, KLEIN JONKERSKRAAL 551 SITUATED IN THE MAGISTERIAL DISTRICT OF BOTHAVILLE IN FREE STATE PROVINCE

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It is a requirement in terms of section 16(4) of the Minerals and Petroleum Resources Development Act (MPRDA), 2002 (Act 28 of 2002) that we notify all landowners or lawful occupiers and any other affected party of the application for prospecting right process in writing. As a landowner of Boshoek 466 and Jonkerskraal 475 you have been identified as an interested and affected party.

Interested and affected parties (I&APs) are invited to provide written comments quoting the DMR reference number together with their name, contact details (preferred method of notification, e.g. email address or fax number) and indicate of any direct business, financial, personal or other interest which they have in the application to the contact person indicated below within 30 days from the date of receipt of this notice letter.

Please submit your contact information and comments to Ms. Lufuno Nemakhavhani using registration and comment sheet attached to this letter to the contacts provided below.

Yours Sincerely

Lufuno Nemakhavhani Environmental Consultant

Mashau Capital (Pty) Ltd | FS 30/5/1/1/2/10477 PR





#### Podbielski Incorporated

Attorneys 1974 80

Our Ref/ Ons Verw

Your Ref/U Verw

Date/Datum

AP/bn/G13255

05/07/2017

Per e-pos: info@nkhopheleh.co.za

Nkophele Holdings (Pty) Ltd Unit 8 Pearl Cove Vorna Valley MIDRAND 1682

Sir

NOTICE OF AN APPLICATION FOR PROSPECTING RIGHT OF DIAMONDS ON THE FARMS WELTEVREDEN 130, BOSHOEK 466, WELVERDIEND 216, STERKFONEIN 474, JONKERSKRAAL 475, KLEIN JONKERSKRAAL 551 SITUATED IN THE MAGISTERIAL DISTRICT OF BOTHAVILLE IN FREE STATE

The abovementioned matter refers.

We received instrutions from H.S.L. du Plessis Attorneys in Kroonstad to assist them in the absence of Mr. Du Plessis who is currently overseas. He will only be back at the office on Monday 17th July 2017.

We enclose herewih a copy of a letter of H.S.L. du Plessis Attorneys addressed to Ankone Consulting (Pty) Ltd for your attention.

We further confirm that in the absene of Mr. Du Plessis we are acting on behalf of Allem Brothers (Pty) Ltd and we list ourselves as acting for Allem Brothers (Pty) Ltd and all further correspondence must be addressed to us and H.S.L. du Plessis Attorneys. Our e-mail address: andre@pmilaw.co.za and jeanette@pmilaw.co.za. We hereby request you to list our client Allem Brothers (Pty) Ltd, as an interested and affected party.

It is our instructions that our client is opposed to the proposed project.

KNOWN FOR OUR LEGAL EXCELLENCE

PMI Law Firm Inc Reg No 1995/002295/21 T/A Podio

BLE Compliant - Empowerdex Reg No DEXQP00210

rs André Podbielski – II llum; Herman Podbielski – 118; Christine Nel – 118;

Professional Assistants Louis Johannes Roths - LLR: Patrick Lesch - LLR: B-Com (Law):

Candidate Attorneys Airi Nei – U.R. Hayword Johan Viermeulen – BA, U.E. Francisi Malan – U.E. Bestrice Jeanetta Botes, Tiaan Johan du Mong

Financial & Business Manager Tisse Gert Sacobs - Cert. Fin/Business Management,

Sales Manager 3% Com Properties Johan Botms

Office Manager Barand Kleyshams

Podbielski @ Law Building 355 Stateway

Welkom P O Box 595

WILKOM, 9460

Doces 3, Welkern Tel (057) 3528805/6/7/8

Fax (057) 352 6785 / 352 9786 Info@pmiltow.co.za WEBSITE: www.jemilaw.co.za (Also on Focebook)

On behalf of our client we hereby request you to favour us with all relevant records including but not limited to environmental reports and studies.

Please acknowledge receipt and we look forward in hearing from you.

Yours faithfully

PODBI<del>ELSKI IN</del>CORPORATED

per: ANDRÉ PODBIELSRI e-pos: litigation@pmilaw.co.ze fax: (057) 352-6785



KNOWN FOR OUR LEGAL EXCELLENCE -

PMI Law Firm Inc Reg No 1996/002295/21 T/A Podhleiski Incorporated BEE Compliant - Empowerdex Reg No DEXQP00210

Directors André Podbielski - B Iuris (MD); Herman Podbielski - LLB; Christine Nei - LLB; Casper de Mist Kruger - LLB

Candidate Attorneys Jan Venter - U.B; Beatrice Teanetta Botes.

Financial Manager Tieses Gert Iacobs - Cert, Fin/Business Management

Office Manager Gideon Pieter van Eck

Podbielski Mhlambi @ Law Building

355 Stateway Welkom P O Box 595 WELKOM, 9460

Docex J. Welkom

Tel (057) 3528805/6/7/8 Fax (057) 352 6785 / 352 9786

info@pmRaw.co.za WEBSITE: www.pmilaw.co.za (Also on Facebook)



11 January 2018

Nkhophele Holdings Geo-Environmental Consulting Unit 8 Pearl Cove Vorna Valley Midrand 1682

ATTENTION: LUFUNO NEMAKHAVHANI

By e-mail: info@nkhopheleh.co.za

Dear Sirs,

OUR CLIENT: ALLEM BROTHERS (PTY) LTD
PROPOSED I&AP MEETING IN RESPECT OF "DIAMOND APPLICATION" IN THE
NAME OF MASHAU CAPITAL (PTY) LTD

- We address you on behalf of Allem Brothers (Pty) Ltd ("our client").
- We have been placed in possession of an agenda which informed a purported Interested and Affected Party's meeting, scheduled to have occurred on 18 November 2017. You appear to have convened this meeting on behalf of Mashau Capital (Pty) Ltd in respect of an activity that is described as a "Diamond Application".
- While we understand that the meeting occurred, the preponderance of the information to which our client would be entitled was not available on the day; hence, the meeting was postponed indefinitely to a date still to be arranged during 2018.
- As a precursor to any further meetings regarding the proposed project, please let us have the following information and/or copies thereof:
  - 4.1. the Background Information Document ("BID");

Mobile: 082 882 0826, Email: hcr@crattorneys.co.za, Tel: 087 809 0406 83 Kerry Road, Parkview, Johannesburg, 2193 | PO Box 1138, Houghton, 2041 622 Olivia Street, Garsfontein, Pretoria, 0060

- a copy of the application that appears to have been submitted to the DMR as well as details of the application reference number;
- 4.3. the DMR's letter of acceptance and the date of acceptance;
- 4.4. the draft Basic Assessment Report ("BAR");
- 4.5. any work that has been effected in respect of the proposed project to date;
- 4.6. the proposed work that remains outstanding;
- 4.7. your client's further and future planning, in the event that these details are not addressed in the BAR.
- 5. The documents/details requested in terms hereof are not exhaustive of the information to which our client is entitled. Once we have received the abovementioned information and have had an opportunity of assessing its contents, we shall contact you again with regard to further information.

6. We look forward to hearing from you.

CHRISTO REEDERS ATTORNEYS

Yours faithfully.



APPLICATION FOR PROSPECTING RIGHT OF DIAMONDS ON THE FARMS WELTEVREDEN 130, BOSHOEK 466, WELVERDIEND 216, STERKFONTEIN 474 JONKERSKRAAL 475, KLEIN JONKERSKRAAL 551 SITUATED IN THE MAGISTERIAL DISTRICT OF BOTHAVILLE IN FREE STATE PROVINCE

DMR REF: FS 30/5/1/1/2/10477 PR

## REGISTRATION AND COMMENT SHEET

2017

Please provide the comments for Mashau Capital (Pty) Ltd application for a prospecting right on the above mentioned forms within the magestrial district of Bothaville using contact details below:

#### Return address for registration and comment sheet:

Nkhophele Holdings (Pty) Ltd, Contact Person: Lufuno Nemakhavhani T: +27(0) 72 718 9952 F: 086 565 5359 E: info@nkhopheleh.co.za Postal Address: Unit 8 pearl cove, Vorna Valley, Midrand, 1682

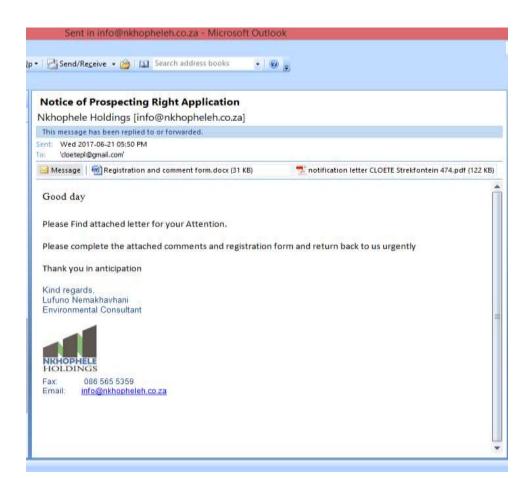
Please formally register me as an interested and affected party (I&AP) and provide me with further information and notifications during the BAR process		YES √	
ontvangs@hsiprokureurs.co.za_and_hennie@hsiprokureurs.co.za, PO Box 1868,	Email	Post	Fax
Kroonstad, 9500, Fax 086 231 7183	V	4	N

Comments:	
The owner opposes the prospecting application and reserves all of its rights	

Please fill in your contact details below for the project database.

Title and Name	MR HENDRIK STEPHANUS LODEWICUS DU PLESSIS	
Organisation	HSL DU PLESSIS ATTORNEYS	
Telephone	056 050 0068	
Cell phone	082 802 844	
Postal address	PO BOX 1868, KROONSTAD, 9500	
Email	hennie@hslprokureurs.co.za	
Fax	086 231 7183	

Thank you for completing the form





Mr Petrus Leon Cloete

By email: cloetepl@gmail.com

RE: NOTICE OF AN APPLICATION FOR PROSPECTING RIGHT OF DIAMONDS ON THE FARMS WELTEVREDEN 130, BOSHOEK 466, WELVERDIEND 216, STERKFONTEIN 474 JONKERSKRAAL 475, KLEIN JONKERSKRAAL 551 SITUATED IN THE MAGISTERIAL DISTRICT OF BOTHAVILLE IN FREE STATE PROVINCE

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Interested and affected parties (I&APs) are invited to provide written comments quoting the DMR reference number together with their name, contact details (preferred method of notification, e.g. email address or fax number) and indicate of any direct business, financial, personal or other interest which they have in the application to the contact person indicated below within 30 days from the date of receipt of this notice letter.

Please submit your contact information and comments to Ms. Lufuno Nemakhavhani using registration and comment sheet attached to this letter to the contacts provided below.

Yours Sincerely

Lufuno Nemakhavhani



APPLICATION FOR PROSPECTING RIGHT OF DIAMONDS ON THE FARMS WELTEVREDEN 130, BOSHOEK 466, WELVERDIEND 216, STERKFONTEIN 474 JONKERSKRAAL 475, KLEIN JONKERSKRAAL 551 SITUATED IN THE MAGISTERIAL DISTRICT OF BOTHAVILLE IN FREE STATE PROVINCE

DMR REF: FS 30/5/1/1/2/10477 PR

#### COMMENT SHEET

2017

Please provide the comments for Mashau Capital (Pty) Ltd application for a prospecting right on the above mentioned farms within the magestrial district of Bothaville using contact details below:

#### Return address for comments sheet:

Nkhophele Holdings (Pty) Ltd, Contact Person: Lufuno Nemakhavhani T: +27(0) 72 718 9952 F: 086 565 5359 E: info@nkhopheleh.co.za

Postal Address: Unit 8 pearl cove, Vorna Valley, Midrand, 1682

Title and Name	Mnr. P.L. Cloete
Organisation	Sterkfontein 474 Gedeelte 1
How you are affected?	Eienaar

# Comments: 1. EK het u met 'n vorige kennisgewing versoek om aan my 'n kaart te verskaf van die areas wat geaffekteer gaan word. 2. U het tot dusver gekies om my versoek te ignoreer. 3. Dit is duidelik dat u 'n onbetroubare maatskappy is wat net in u eie belang optree. 4. Ek versoek u dus weer om my van so 'n kaart te voorsien, aangesien ek in Jefrreys baai woon en nie die vergadering kan by woon nie. 5. Dit is van wesentlike belang om te weet waar en wanneer u gaan begin, aangesien dit die produksie van graan aanplantings kan beinvloed en dus direk die inkomste uit die plaas kan beinvloed. 6. Ek het u ook gevra omtrent die rehabilitasie van die versteurde grond REAGEER ASSEBLIEF OP MY BRIEF. 1. Kaarte is aangeheg aan die kopie van die BAR wat saam met ander relevante inligting aan die grondelenaars verskaf is.

- 'N Afskrif van die Basiese Evalueringsverslag is op 1 Augustus 2017 saam met alle ondersteunende dokumente gestuur.
- Ons vra om verskoning vir die ongerief. Dit is ons beste belang om al die 8 & GP-kommentaar en kwessies in ag te neem sonder om bevooroordeeld te wees as 'n onafhanklike konsuitasiemaatskappy en het dit 'n punt gemaak wat ons al die dokumente aan al die 8 & GPe gestuur het.
- Die antwoord vir u vorige kommentaar sal aan u, sowel as die aangevraagde dokumente, voldoen.
- 5. Die prospekteeraktiwiteite sal begin nadat die Departement van Minerale Hulpbronne (DMR)

die aansoek toegestaan het. Alle I&APs sal ingelig word oor die besluit van DMR. Na die toekenning sal die aansoeker alle I & APs in kennis stel en verstrek met die tydraamwerk en plekke van die gebiede wat geraak sal word.

6. DMR versoek dat die aansoeker 'n rehabilitasiefooi betaal, met die doel om te verseker dat aansoekers die geaffekteerde gebiede tydens eksplorasieaktiwiteite rehabiliteer. Die bedrag van R 70 835.22 is ter syde gestel vir rehabilitasie en word die BAR verduidelik.

Thank you for completing the form



APPLICATION FOR PROSPECTING RIGHT OF DIAMONDS ON THE FARMS WELTEVREDEN 130, BOSHOEK 466, WELVERDIEND 216, STERKFONTEIN 474 JONKERSKRAAL 475, KLEIN JONKERSKRAAL 551 SITUATED IN THE MAGISTERIAL DISTRICT OF BOTHAVILLE IN FREE STATE PROVINCE

DMR REF: FS 30/5/1/1/2/10477 PR

#### REGISTRATION AND COMMENT SHEET 2017

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Ptease formally register me as an interested and affected party (I&AP) and provide me with further information and notifications during the BAR process	YES	-=	NO
With further informeach and restrictions daining the contributed	Email	Post	Fax

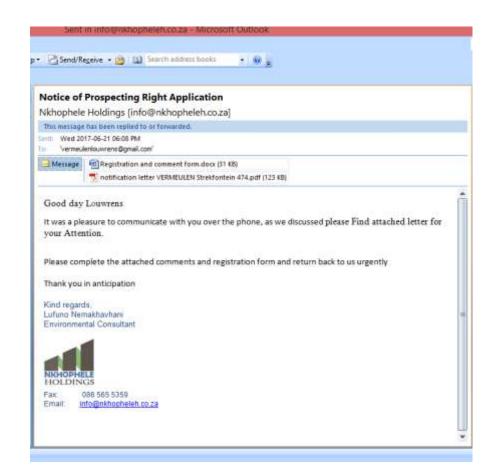
Comme	nts:	Responses
1.	Please supply us forthwith with a copy of the EIA Report	The Draft Basic Assessment (BAR) Will be furnished
2.	Please also supply us with the credentials of the person/s doing the EIA as these will have to be checked.	The information will be supplied in the BAR
3.	We also need a time table and specific places where this prospecting will take place. The farm in question is mostly a cultivated farm and the preparation of the lands will start on 1 September and the planting of the crops will commence from 1 November.	The prospecting activities will commence after the Department or Mineral Resources (DMR) has been granted. All land owners will be informed of the decision taken by DMR. After the granting the applicant will notify and furnish you with the time frame and locations of the areas to be affected.
4.	As our livelihood depends on the income from the crop produced, it is imperative that you also spell out the compensation for damaged cultivated land and crops as well as your plans for rehabilitating the land to its former state. Certificates from an agriculturist will be needed to certify the future suitability of the land for	After prospecting the applicant will rehabilitate the land to its original state. Any access agreements and compensation will be discussed before the activities commence by you and the applicant.

	crop production	
5.	I have a serious problem with your credibility, as you cannot even get the magisterial district for the farms correct.	When DMR accepted the application it states the district as Bothaville but we are aware that the properties applied for fall within the magisterial district of Bothaville and Viljoenskroon

Please fill in your contact details below for the project database

Title and Name	Mr. P.L. Cloete and Mrs. C.J. Cloete	
Organisation	Owners	
Telephone	042 293 0173	
Cell phone	082 873 8267	
Postal address	P.O. Box 910 Jeffreys Bay 6330	
Email	cloetepi@gmail.com cjcloete@gmail.com	
Fax		

Thank you for completing the form





21 June 2017

Mr Vermeulen Louwrens Erasmus

By email: vermeulenlouwrens@gmail.com

RE: NOTICE OF AN APPLICATION FOR PROSPECTING RIGHT OF DIAMONDS ON THE FARMS WELTEVREDEN 130, BOSHOEK 466, WELVERDIEND 216, STERKFONTEIN 474 JONKERSKRAAL 475, KLEIN JONKERSKRAAL 551 SITUATED IN THE MAGISTERIAL DISTRICT OF BOTHAVILLE IN FREE STATE PROVINCE

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Interested and affected parties (I&APs) are invited to provide written comments quoting the DMR reference number together with their name, contact details (preferred method of notification, e.g. email address or fax number) and indicate of any direct business, financial, personal or other interest which they have in the application to the contact person indicated below within 30 days from the date of receipt of this notice letter.

Please submit your contact information and comments to Ms. Lufuno Nemakhavhani using registration and comment sheet attached to this letter to the contacts provided below.

Yours Sincerely

Lufuno Nemakhavhani



APPLICATION FOR PROSPECTING RIGHT OF DIAMONDS ON THE FARMS WELTEVREDEN 130, BOSHOEK 466, WELVERDIEND 216, STERKFONTEIN 474 JONKERSKRAAL 475, KLEIN JONKERSKRAAL 551 SITUATED IN THE MAGISTERIAL DISTRICT OF BOTHAVILLE IN FREE STATE PROVINCE

DMR REF: FS 30/5/1/1/2/10477 PR

#### REGISTRATION AND COMMENT SHEET 2017

Please provide the comments for Mashau Capital (Pty) Ltd application for a prospecting right on the above mentioned forms within the magestrial district of Bothaville using contact details below:

#### Return address for registration and comment sheet:

Nikhophele Holdings (Pty) Ltd., Contact Person: Lufuno Nemakhavhani T: +27(0) 72 718 9952 F. 086 565 5359 E. info@nikhopheleh.co.za Postal Address: Unil 8 pearl cove, Vorna Valley, Midrand, 1682

nease formally register me as an interested and affected party (I&AP) and provide me with further information and notifications during the BAR process	YES	X	NO
	EXQII	Post	Fax
omments:			
		-	
		_	
			_

Please fill in your contact details below for the project database

Title and Name	MR LOUWRENS VERMENLEN
Organisation	FARMER
Telephone	0823474755
Cell phone	0823474755
Postal address	BOX 24 VIERFONTEIN 2015
Email	vermeulenlouwrens@qmail.com
Fax	The state of the s

Thank you for completing the form



# **CLAASSENS VAN NIEKERK**

Ingelyf/Incoporated

PROKUREURS ATTORNEYS BABUELEDI

TRANSPORTBESORGERS

CONVEYANCERS

NOTARISSE

NOTARIES

BOEDELBEREDDERAARS

ADMINISTRATORS OF ESTATES

Reg. no. 1996/002608/21

473-2522/473-2538 Faks: (018) 473-0611 Fax

Docex: 4 KLERKSDORP

Fleckerweg 36 Flecker Road

Epos: litigation@cvnprok.co.za

Tel: (018) 473-3249/473-2550

Posbus 1378 PO Box ORKNEY 2620

OOK TE KLERKSDORP

ONS VERW.: CFC/jb OUR REF.: CP0856

U VERW.: Lufuno Nemakhavhani

YOUR REF .:

DATUM: 29 June 2017

DATE:

Nkhophele Holdings MIDRAND

VIA E-MAIL: ndivhuwor@vvmr.co.za VIA E-MAIL: info@nkhopheleh.co.za

Dear Sir/Madam,

R/E: APPLICATION FOR PROSPECTING RIGHT OF DIAMONDS ON THE FARMS WELTEVREDEN 130 & OTHERS

DMR REF NO: FS 30/5/1/1/2/10477 PR

- Writer refers to the above matter and confirm that we act herein on behalf of the Executor in the estate of late Gert Stephanus Swanepoel, who is the owner of the following property:
  - 1/4 (One Quarter) Share In:

Remainder Of The Farm Sterkfontein No 474, District Viljoenskroon, Free State Provincesie;

In Extent 468,6368 (Four Six Eight Comma Six Three Six Eight) Ha Held under Deed of Transfer No T1474/1991

- 3/8 (Third Eighth) Share In:

Remaining Extent of the Farm Sterkfontein No 474, District Viljoenskroon, Free State Province:

In Extent 468,6368 (Four Six Eight Comma Six Three Six Eight) Ha Held under Deed of Transfer No T16429/1993

1/8 (One Eighth) Share In:

Remainder of the Farm Sterkfontein No 474, District Viljoenskroon, Free State Province; In Extent 468,6368 (Four Six Eight Comma Six Three Six Eight) Ha Held under Deed of Transfer No T13744/2001

Coenraad Frederick Claassens (B.Juris LLB), Tersia Claassens (B.Juris LLB), Hendrik Francois van Niekerk (B.Comm LLB)
Kantoorure: Maandag tot Donderdag – \$600-16h30 en Vrydae 07h30-16h00
BTW NOMMER 4670158791 VAT NUMBER
VERSKAFFINGS WAARDASIE VLAK 4 100% PROCUREMENT RECOGNITION LEVEL 4

REGISTRASIE NOMMER EESA/E/A/009/08 REGISTRATION NUMBER

- 1/8 (One Eighth) Share In: Remainder of the Farm Sterkfontein No 474, District Viljoenskroon, Free State Province; In Extent 468,6368 (Four Six Eight Comma Six Three Six Eight) Ha Held under Deed of Transfer No T16196/2002
- The Farm Kleinjonkerskraal No 551, District Bothaville, Free State Province In Extent 165,3477 (One Six Five comma Three Four Seven Seven) Ha
- 2. It is our request that you register the aforementioned as affected property.

Yours faithfully
CLAASSENS VAN NIEKERK INC



# CLAASSENS VAN NIEKERK

ingelyf/Incoporated

PROKUREURS ATTORNEYS BABUELEDI

TRANSPORTBESORGERS

CONVEYANCERS

NOTARISSE

NOTARIES

BOEDELBEREDDERAARS

ADMINISTRATORS OF ESTATES

Reg. no. 1996/002608/21

Fleckerweg 36 Flecker Road

Posbus 1378 PO Box

**ORKNEY 2620** 

Epos: litigation@cvnprok.co.za

Tel: (018) 473-3249/473-2550

473-2522/473-2538

Faks: (018) 473-0611 Fax Docex: 4 KLERKSDORP

OOK TE KLERKSDORP

Nkhophele Holdings

MIDRAND

VIA E-MAIL: ndivhuwor@vvmr.co.za

VIA E-MAIL: info@nkhopheleh.co.za

ONS VERW .: CFC/jb OUR REF .: CP0856

U VERW.: Lufuno Nemakhavhani

YOUR REF .:

DATUM: 10 July 2017

DATE:

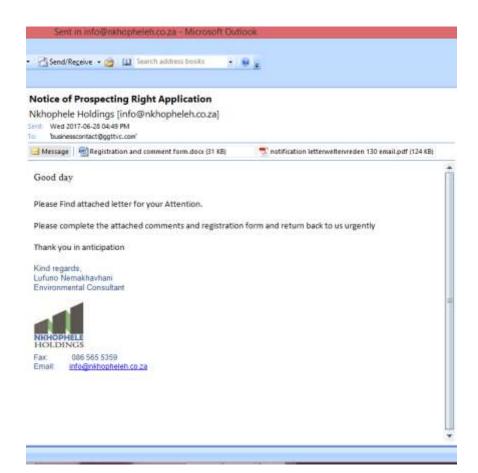
Dear Sir/Madam,

R/E: APPLICATION FOR PROSPECTING RIGHT OF DIAMONDS ON THE **FARMS WELTEVREDEN 130 & OTHERS** DMR REF NO: FS 30/5/1/1/2/10477 PR

- 1. Writer refers to the above matter as well as your e-mail dated 30 June 2017.
- 2. Kindly indicate for which date and time a meeting can be arranged to discuss this matter.
- 3. Writer urgently awaits your reply.

Yours faithfully **CLAASSENS VAN NIEKERK INC** 

Coenraad Frederick Claassens (B.Juris LLB), Tersia Claassens (B.Juris LLB), Hendrik Francois van Niekerk (B.Comm LLB) Kantoorure: Maandag tot Donderdag – 08h00-16h30 en Vrydae 07h30-16h00 BTW NOMMER 4670158791 VAT NUMBER VERSKAFFINGS WAARDASIE VLAK 4 100% PROCUREMENT RECOGNITION LEVEL 4 REGISTRASIE NOMMER EESA/E/A/009/08 REGISTRATION NUMBER







Village Main Reef Limited

Stowed Floor, Block 2 257 Oxford Rolld Ifform 21/1

30 June 2017

Ms Lufuno Nemakhavhani

Nkhophele Holdings Unit 8 Pearl Cove Vorna Valley Midrand 1682

Re: Application for Prospecting Right over Weltevreden 130

#### Ms Nemakhavhani

The correspondence received on 28 June 2017 in respect of application FS 30/5/1/1/2/10477 PR refers. I respond here in my capacity as VP Corporate Affairs of Village Main Reef (Pty) Ltd, an ultimate 100% shareholder in Buffelsfontein Gold Mines (Pty) Ltd through another subsidiary.

I would like to formally register our objection to the application by Mashau Capital for a prospecting right over Weltevreden 130.

To this end I request that you register Buffelsfontein Gold Mines (Pty) Ltd as an interested and affected party (I&AP) and provide us with further information and notifications during the BAR process. Please use the following details in submitting the registration:

Title and Name:

Dirk Kotze, VP Corporate Affairs of Village Main Reef (Pty) Ltd

Organisation:

Buffelsfontein Gold Mines (Pty) Ltd

Telephone:

+2/18 4/3 /063

Cell phone:

N/A As above

Postal address: Email:

owenob@hscsa.co.za; johanh@bfgm.co.za; dkotze@hscsa.co.za

Fax:

N/A



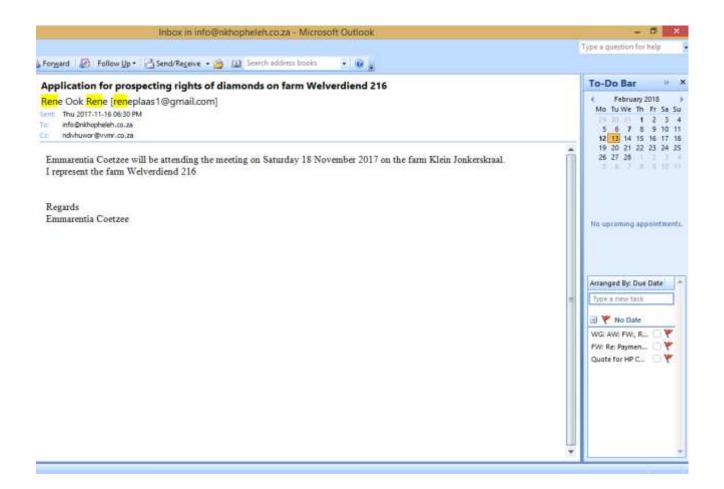


We are willing to constructively engage with Mashau Capital and yourself on this matter, but in order to do so we need to first review the PWP and EMP for the project. If these could be supplied to us, we'd be in a position to provide comments.

Yours sincerely

Dirk Kotze

VP Corporate Affairs Village Main Reef (Pty) Ltd



# **Consultation meetings**





PROSPECTING RIGHT
APPLICATION FOR DIAMOND ON
THE FARM WELTEVREDEN 130,
BOSHOEK 466, WELVERDIEND
216, STERKFONTEIN 474,
JONKERSKRAAL 475, KLEIN
JONKERSKRAAL 551 SITUATED IN
THE MAGISTERIAL DISTRICT OF
BOTHAVILLE AND
VILJOENSKROON IN FREE STATE
PROVINCE

Project: Free state Diamond Application

Prepared for:

Mashau Capital (Pty) Ltd

For any project related information contact:

Nkhophele Holdings (Pty) Ltd

Tel: +27(0) 72 718 9952 or Fax: 086 565 5359

Email: Info@nkhopheleh.co.za

DMR Ref No: FS 30/5/1/1/2/10477 PR

#### 1 PURPOSE OF DOCUMENT

Mashau Capital (Pty) Ltd has applied for a Prospecting Right on Farm Weltevreden 130, Boshoek 466, Welverdiend 216, Sterkfontein 474, Jonkerskraal 475 and Kiein Jonkerskraal 551 in the Bothaville and Viljoenskroon District Municipality in terms of Section 16 of the Mineral and Petroleum Resources Development Act, 2002(Act No. 28 of 2002) (MPRDA). This Background Information Document (BID) has been developed to:

- Share information about the proposed Project;
- Present the Prospecting Right Application process according to South African legislation; and
- Provide more detail about the Public Participation Process (PPP) which will be followed.

# 1.1 Appointed Environmental Assessment Practitioners

Mashau Capital (Pty) Ltd has appointed Nkhophele Holdings (PTY) Ltd, as independent Environmental Assessment Practitioners (EAP), to compile a Basic Assessment Report (BAR) and to undertake the PPP for the respective Prospecting Right Application.

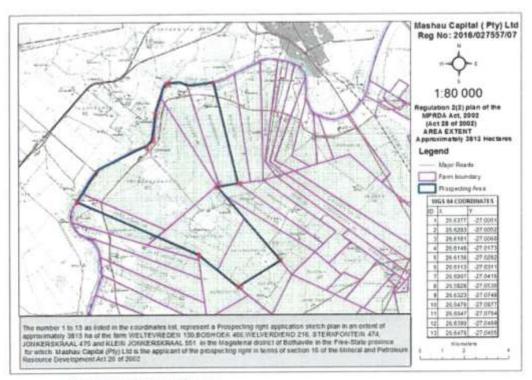
# 2 PROJECT DESCRIPTION

The Prospecting Right Application has been submitted for the prospecting of Diamond on various farms.

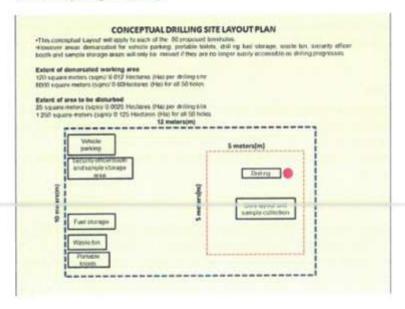
The Prospecting Right area applied for is located approximately 14 km north-west of Vierfontein in Freestate Province (see Plan 1). The proposed prospecting activities will occur on the following farms:

Application number	Farms
FS 30/5/1/1/2/10477 PR	Weltevreden 130, Boshoek 466, Welverdiend 216, Sterkfontein 474, Jonkerskraal 475 and Klein Jonkerskraal 551

Prospecting activities will be undertaken over a period of five (5 years) and the application is for both invasive and non-invasive methods. Invasive methods are activities that result in land disturbances and comprise of diamond core drilling, sampling and sampling storage. Non-invasive methods are methods that do not cause disturbances to the land and include desktop research and include detailed geophysical surveys. It is anticipated that fifty (50) borehole will be drilled. Stakeholders affected by the proposed prospecting during the prospecting period will be consulted before any activities take place.



Plan 1: Prospecting area Setting



Plan 1: Conceptual drilling plan

# PROSPECTING RIGHT APPLICATION PROCESS AND PUBLIC PARTICIPATION

#### 2.1 Legislation

In terms of the MPRDA, Mashau Capital is required to consult with Interested and Affected Parties (I&APs). Comments received from I&APs will be recorded and included in the BAR which will submitted to the Department of Mineral Resources (DMR) in Free State Province.

The BAR will be compiled and implemented to ensure that potential impacts of the proposed prospecting activities are mitigated and The Department of Mineral Resources (DMR) is the decision-making authority for the BAR Process

managed. It will contain results from desktop assessments that will be conducted by specialists for fauna and flora, heritage and wetland. According to the MPRDA, the BAR need to include the following activities but is not limited to:

- Describing the environment that is likely to be affected by the proposed prospecting.
- Identifying the potential impacts.
- Assessing the significance of the potential impacts of the proposed project on the environment, socio economic conditions and cultural heritage; and
- Evaluating the proposed mitigation measures to minimise negative impacts.

#### 2.2 Public Participation

#### Your Responsibilities as an I&AP and How to Become Involved

Your attention is drawn to your responsibilities as an I&AP

- In order to participate in this process, you must register yourself on the project database.
- You must ensure that any comments/queries regarding the proposed project are submitted within the stipulated timeframes.
- In terms of the EIA Regulations, you are required to disclose any direct business, financial, personal or other interest which that you may have in the approval or refusal of the application for the proposed project.

#### HOW TO COMMENT

- By responding by phone, fax, post or e -mail to the invitation for your involvement/ registration.
- 2. By returning the attached Comments and Registration Sheet to the relevant contact person.
- 3. By contacting the public participation consultants with queries or comments.
- By reviewing and commenting on the draft Basic Assessment Report within the stipulated 30 -day public review period.

Contributions from stakeholders will assist in informed decision-making for authorities and provides information to be considered by the project team and specialists conducting research.

All comments can be submitted using the contact details which appear on the cover page or as part of the Comment and Registration Sheet.



Minutes for meeting held on the 31st of July 2017 between Mr Claassens of the farm Klein Jonkerskraal 551 and strekfontein 474 and Ndivhuwo Ratshikhopha at the farm Klein Jonkerskraal 551 in Free State.

Purpose of Meeting: Freestate diamond application of Ref: FS 30/5/1/1/3/2/ 10447 EM

- Opening of meeting: Mr claassens opened the meeting a welcomed Ndivhuwo
- Ndivhuwo then briefed Mr Claassens on the purpose of the application and gave an update on the progress and current status of the application.
- Mr Claassens raised issues about the scarcity of water in the area and the impact the proposed activities will have on the soil because eskorn did some work on the properties and were the work was done the crops do not grow anymore.
- Ndivhuwo the explained that the proposed activities will have reversible impact on the land and a Basic Assessment Report (BAR) will be sent to all I & APs explaining all the potential impact.
- 5. Mr Claassens said he will then reserve the comments up until he has reviewed the Draft BAR.

Meeting Adjourned

Company Registration: 2015/432441/07

T: +27(0) 72 718 9952 F: 086 565 5359 E: info@nkhopheleh.co.za

Address: Unit 8 pearl cove, Vorna Valley, Midrand, 1682

# ATTENDANCE REGISTER

PUBLIC PARTICIPATION PROCESS  Informal wheefing to discuss : 31 JULY 2017	f Ge
: FARM KLEIN JONKERSKRAAL.	

TIME

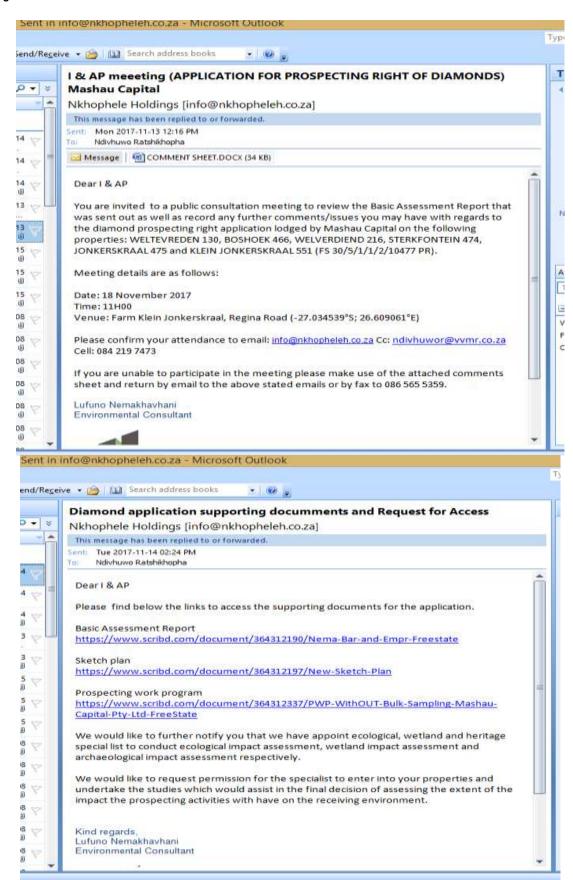
DATE

VENUE

REGINA ROAD : 12H00

REF NO. FS 30/5/1/1/2/10477 PR

Initials and Surname	Mobile Number	In Capacity of	
Loalsens	0877875365	Charles val	rel





# I & APs Meeting

Diamond Application

Date: 18 November 2017

Time: 11H00

Venue: Farm Klein Jonkerskraal, Regina Road (-27.034539°S; 26.609061°E)

#### **AGENDA**

- 1. Purpose of meeting
- 2. Mashau Capital (Pty) Ltd background information
- 3. Introduction on the project
- 4. Work done to date
- 5. Work outstanding
- 6. Review and discussion of the Basic Assessment Report
- 7. EAP Conclusion
- 8. Process going forward
- 9. Questions/Comments/concerns

Company Registration: 2015/432441/07

T: +27(0) 72 718 9952 F: 086 565 5359

E: info@nkhopheleh.co.za

Address: Unit 8 pearl cove, Vorna Valley, Midrand, 1682

ATTENDANCE REGISTER
PUBLIC PARTICIPATION PROCESS

DATE: 18 NOVEMBER 2017 VENUE: FARM KLEIN JONKERSKRAAL, REGINA ROAD TIME: 11H00
REF NO. FS 30/5/1/1/2/10477 PR

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	by The	B	1 70 2			Ü,	C824683	3/32	5632	Email
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Minutes for meeting held on the 18st of November 2017 between the land owners, Lufuno Nemakhavhani and Ndivhuwo Ratshikhopha at the farm Klein Jonkerskraal 551 in Free State.

Purpose of Meeting: Land owners consultation meeting for Freestate diamond application of Ref; FS 30/5/1/1/3/2/ 10447 EM

- Greetings where exchanged between the land owners and the applicants EAP.
- The landowners expressed that they were not given enough time to review the application documents and would like for the meeting to be postponed to February 2018 since it is approaching the festive seasons.
- The applicants EAP agreed to postpone the meeting to February 2018.

Meeting Adjourned

Company Registration: 2015/432441/07

T: +27(0) 72 718 9952 F: 086 565 5359

E: info@nkhopheleh.co.za

Address: Unit 8 pearl cove, Vorna Valley, Midrand, 1682



#### NKHOPHELE HOLDINGS PTY LTD

By email: info@nkhopheleh.co.za

Date: 20 November 2017

Our ref: EJJ Geyser

Your ref.

Dear Sir.

# RE: I & APS MEETING DIAMOND APPLICATION / OUR CLIENT MRS RENE COETZEE

- We act on behalf of Mrs. René Coetzee in this matter, the beneficial owner of the farm Welverdiend.
- Please formally register our client as an interested and affected party (I&AP) and provide us with further information and notifications during the BAR process.
- We confirm that a meeting with interested and affected parties was arranged for Saturday 18 November 2017 at the farm Klein Jonkerskraal.
- 4. We further confirm that the meeting did not take place as was adjourned by agreement. In the light of the Christmas season it was agreed that the meeting will be postponed until at least the end of February 2018 to afford our clients the opportunity to obtain expert advice in the matter. The place of the meeting was also not accurately indicated, and we suspect that not all interested parties found its location.
- Our client was only favored with the documents during the week of 13 to 17 November 2017 and has not had the opportunity to study the documents and obtain advice to enable her to make representations.
- We suggest that the next meeting be held in Viljoenskroon. We offer to make a board room available at our offices for the meeting.

Eugene Geyser BLC, LLB, LLM (UP). In assosiasie met TS du Toit BLC LLB (UP), Notaris en aktevervaardiger. Tel: 082 492 4791, Fax: 086 218 1625, E-Pos: <u>eugene,geyser@gmail.com</u>, Hansie Müller sentrum, Engelbrecht straat 40, Viljoenskroon.

Korrespondensie word slegs per epos of faks ontvang. Vir geregistreerde posstukke, Posbus 101 Viljoenskroon 9520,

Please inform us of the date of the next meeting. We await to hear from you.

Yours faithfully

EJJ Geyser

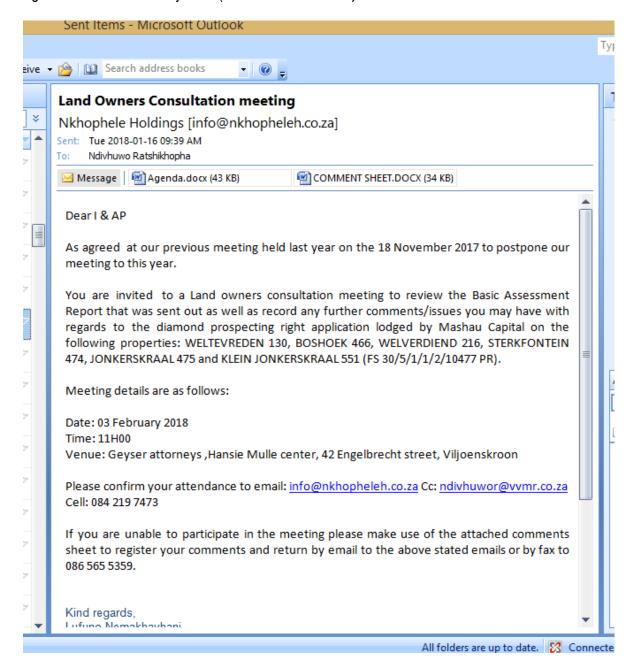
Eugene Geyser BLC, LLB, LLM (UP).

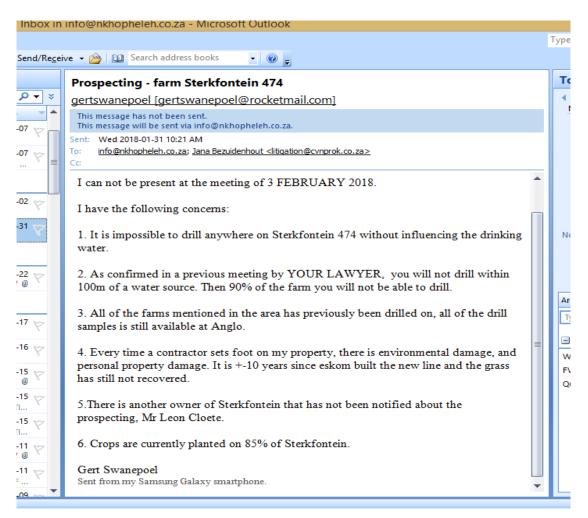
In assosiasie met TS du Toit BLC LLB (UP), Notaris en aktevervaardiger.

Tel: 082 492 4791, Fax: 086 218 1625, E-Pos: <u>rugene.gevser@gmail.enm</u>,

Hansie Müller sentrum, Engelbrecht straat 40, Viljoenskroon.

Korrespondensie word slegs per epos of faks ontvang. Vir geregistreerde posstukke, Posbus 101 Viljoenskroon 9520.









22 January 2018

Nkhophele Holdings Geo-Environmental Consulting Unit 8 Pearl Cove Vorna Valley Midrand 1682

Attention: Lufuno Nemakhavhani

By e-mail: info@nkhopheleh.co.za

Dear Sirs,

OUR CLIENT: ALLEM BROTHERS (PTY) LTD
PROPOSED I&AP MEETING IN RESPECT OF "DIAMOND APPLICATION" IN THE
NAME OF MASHAU CAPITAL (PTY) LTD

- We refer to the abovementioned matter in which we have been placed in possession of an agenda for an interested and affected party meeting scheduled to occur on Saturday, 3 February 2018 at 11h00.
- 2. We consulted briefly with our client on Friday, 19 January 2018. It has now emerged that our client is unfortunately not available on 3 February 2018 owing to pre-existing arrangements which will take our client out of the province. Our client is, however, available to meet with you on any day between 5 and 9 February 2018. Please reschedule the meeting accordingly.

3. We look forward to hearing from you.

Yours faithfully,

CHRISTO REEDERS ATTORNEYS

Mobile: 082 882 0826, Email: hcr@crattorneys.co.za, Tel: 087 809 0406 83 Kerry Road, Parkview, Johannesburg, 2193 | PO Box 1138, Houghton, 2041 622 Olivia Street, Garsfontein, Pretoria, 0060

MEETING ATTENDANCE REGISTER PUBLIC PARTICIPATION PROCESS REF. NO. FS 30/5/1/12/10477 PR  Attended Contact number Contact number  Chasto Keeden Attendary  Of 3 309 2618  Same Chastoff  Of 2 8(2082)  No Contact number  Email  Of 2 8(2082)  No Contact number  Lensier  Of 2 8(2082)  No Contact number  Lensier  Lensier  Of 2 8(2082)  No Contact number  Lensier  Lens		Initials and Surname	J. SWECT	Cheeders					
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		Email	Samo Charached	were constrained					



Minutes for meeting held on the 12 of February 2018 between the Christo Reeders Attorneys (Representing Allem Brothers) and Ndivhuwo Ratshikhopha at the Parkview in Johannesburg.

Purpose of Meeting: Land owners consultation meeting for Freestate diamond application of Ref: FS 30/5/1/1/3/2/ 10447 EM

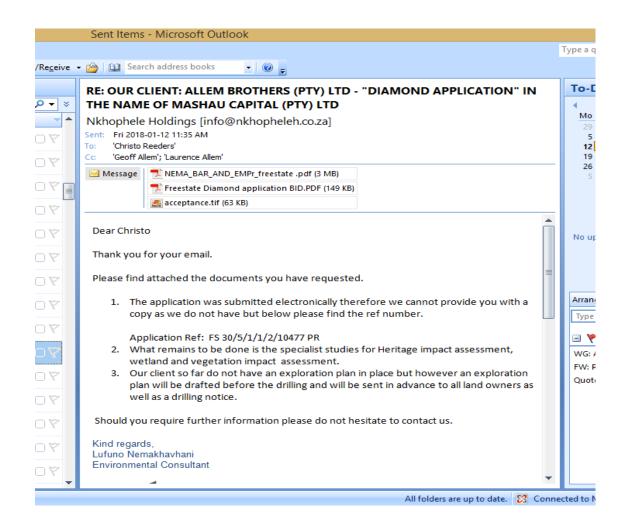
- Greetings where exchanged between the Attorneys and Ndivhuwo.
- Ndivhuwo gave a brief background on the application and the status of the application.
- · The attorneys raised the following concerns/ issues:
  - > The area is a high crop yielding agricultural area and the water table is relatively.
  - The land owners properties agricultural activities yield high profits and need not to be disturbed.
  - There is no strong evidence of the existence of diamond in the area.
  - There are no extensive specialist studies done and for an area like that a specialist study exemption is not enough, there need to be a soil, agricultural, heritage, wetland, geohydrological and vegetation impact study.
  - Mashau and its director have no proven experience in an operational mine.
- The attorneys expressed that they will object to the application.
- They further requested to be email all the correspondences received from DMR, the copy of the final BAR and specialists exemption report.
- · Ndivhuwo agreed to send them the documents.

Meeting Adjourned

Company Registration: 2015/432441/07

T: +27(0) 72 718 9952 F: 086 565 5359 E: info@nkhopheleh.co.za

Address: Unit 8 pearl cove, Vorna Valley, Midrand, 1682



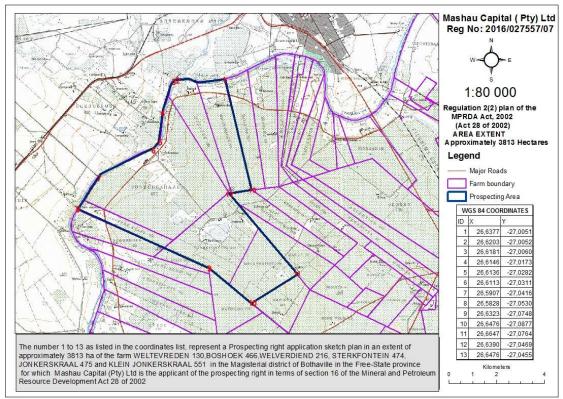
# DATA BASE FOR APPLICATION FOR PROSPECTING RIGHT OF DIAMONDS ON THE FARMS WELTEVREDEN 130, BOSHOEK 466, WELVERDIEND 216, STERKFONTEIN 474 JONKERSKRAAL 475, KLEIN JONKERSKRAAL 551 SITUATED IN THE MAGISTERIAL DISTRICT OF BOTHAVILLE IN FREE STATE PROVINCE (DMR REF NO: FS 30/5/1/1/2/10477 PR)

FARM NAME	LAND OWNER / STATE ORGAN	Organisation	Contact person	contact address	contact number	email
Boshoek 466	Allem brothers (pty) ltd	HSL DU PLESSIS ATTORNEYS	Mr Hendrik Stephanus Lodewicus Du Plessis	PO BOX 1868, KROONSTAD, 9500	(056) 050 0068	hennie@hslprokureurs.co.za
Jonkerskraal 475	Allem brothers (pty) Itd	HSL DU PLESSIS ATTORNEYS	Mr Hendrik Stephanus Lodewicus Du Plessis	PO BOX 1868, KROONSTAD, 9501	(056) 050 0068	hennie@hslprokureurs.co.za
Strekfontein 474	Mr Petrus Leon CLOETE		Mr Petrus Leon CLOETE	P.O. Box 910 Jeffreys Bay 6330	(082) 8738267	cloetepl@gmail.com
strekfontein 474	Mr Louwrens Vermeulen		Mr Louwrens Vermeulen	P.O. Box 24, Vierfontein, 2615	(082) 347 7455	vermeulenlouwrens@gmail.com
strekfontein 474	Gert Stephanus Swanepoel	Claassen Van Niekerk	Jana Bezuidenhout	P.O. Box 1378, Orkney, 2620	(018) 473 3249	litigation@cvnprok.co.za/ gertswanepoel@rocketmail.com
Klein Jonkerskraal	Gert Stephanus Swanepoel	Claassen Van Niekerk	Jana Bezuidenhout	P.O. Box 1378, Orkney, 2620	(018) 473 3249	litigation@cvnprok.co.za/ gertswanepoel@rocketmail.com
Weltevreden 130	Buffelsfontein Gold Mines (Pty) Ltd	Village main reef Limited	Dirk Kotze	Ground floor, Block 2, 257 oxford Road, illovo, 2191	(018) 473 7063	dkotze @ hscsa.co.za
Welverdiend 216	Emmarentia Coetzee	Emmarentia Coetzee	Emmarentia Coetzee		(079)4948132	reneplaas1@gmail.com
State organ	Department of Water and Sanitation		Dr Tseliso Ntili	PO Box 528,BLOEMFONTEIN,9300	(051) 405 9000	NtiliT@dws.gov.za
State organ	Nala Local Municipality			P.O. Box 12, Bothaville, 9660	(056)514 9200	
State organ	Lejweleputswa District Municipality			P.O. Box 2169 Welkom, 9460	(057) 353 3094/5/8/9	yolisa@lejwe.co.za
State organ	Heritage Free State		Loudine Philip		(078) 4489307	loudine.philip@nasmus.co.za
State organ	Department of Rural Development and Land Reform		VUYANE TSHAWANE	Old Postbank Builiding c/o East Burger and Selbourne Street, Bloemfontein, Free State Province, 9300, South Africa	(051) 430 0444	Vuyane.Tshawane@drdlr.gov.za



# Appendix 4: Site Plan

# CONCEPTUAL DRILLING SITE LAYOUT PLAN This conceptual Layout will apply to each of the 50 proposed boreholes ·However areas demarcated for vehicle parking, portable toilets, drill rig fuel storage, waste bin, security officer booth and sample storage areas will only be moved if they are no longer easily accessible as drilling progresses Extent of demarcated working area 120 square meters (sqm)/ 0.012 Hectares (Ha) per drilling site 6000 square meters (sqm)/ 0.60Hectares (Ha) for all 50 holes Extent of area to be disturbed 25 square meters (sqm)/ 0.0025 Hectares (Ha) per drilling site 1 250 square meters (sqm)/ 0.125 Hectares (Ha) for all 50 holes 12 meters(m) Vehicle 5 meters(m) parking Security officer booth and sample storage Drill rig area 10 meters(m) Core layout and sample collection Fuel storage Waste bin Portable



# Appendix 4: Motivation for specialist exemption

**Head Office:** 546 16<sup>th</sup> Road, Constantia Park, Midrand, 1685 PO Box 4077, Halfway House, Midrand 1685 Tel: +27 11 312 9765 Fax: +27 11 312 9768/ +27 86 219 8717

**Eastern Cape:** 62 Bonza Bay Road, Beacon Bay, East London, 5247

Tel: +27 43 721 0178 Fax: +27 86 558 7022

**Mpumalanga**: 40 Magagula Street, Middleburg, 1050 Tel: 013 246 0680

Tel: 013 246 0680 Email: info@kimopax.com Website: www.kimopax.com

# APPLICATION FOR EXEMPTION FROM PROVISIONS OF THE EIA REGULATIONS FOR KIMBERLITE PROSPECTING RIGHT APPLICATION FOR MASHAU CAPITAL (PTY)LTD.

FILE REFERENCE NUMBER SAMRAD: FS 30/5/1/1/2/10477 PR

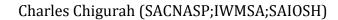


Project no	Date	Status
KIMPENV	February 2018	Final

# Conducted on behalf of:

Mashau Capital (Pty) Ltd

Compiled by:



# **CONTENTS**

1	INTRODUCTION AND BACKGROUND	7
1.1	Project Location	7
2	SCOPE OF PROPOSED PROSPECTING ACTIVITIES	8
3	MOTIVATION FOR EXEMPTION	12
4	CONCLUSION	13
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Figur	e 2: An illustration of the drill site layout plan	12
Figur	e 3: Buffer zone for prospecting activities	13



#### INTRODUCTION AND BACKGROUND

Mashau Capital (Pty) Ltd has submitted its prospecting right reports for environmental authorisation in terms of the National Environmental Act, 1998 in respect of the listed activities that have been triggered by applications in terms of the Mineral and Petroleum Resources Development Act, 2002 (MPRDA) as amended. Upon submission of the final reports, the competent authority for the submission of specialist studies. This report is a motivation for Mashau Capital (Pty) Ltd to be exempted from undertaking specialist investigations for prospecting right application.

Prospecting for kimberlite is a dynamic and result-driven operation which proceeds in phases, the outcome of which cannot be predicted or predetermined. The programme could be stopped at any stage during the prospecting operation if the results are negative or non-economical. Prospecting activities to be undertaken include non-invasive (i.e. desktop studies and ground geophysical surveys) and invasive (i.e. drilling) techniques.

The environmental footprint for drilling is limited to less than 0.012 Ha per drilling site, with twenty (50) drill sites anticipated to be carried forward to drilling. During site setup shrubs and grass will be cleared to make space for the rig. Consequently, the site is expected to rapidly recover following completion of exploration activities. Water is only required when drilling activities commence. Drilling water requirements fall within the "small industrial user" where the use of water is less than twenty cubic metres per day for prospecting. The water that will be used for the prospecting activities will be sourced on agreement from an existing authorized water user which could be either the land owner or local municipality. The department responsible for water resources shall be consulted with regards to any water related agreement with either the land owner or local municipality prior to drilling. No water will be abstracted in terms of section 21(a) of National Water Act, 1998 (Act no. 36 of 1998). Drilling may take a few days to months to complete depending on the geology of the area, technical challenges and other factors.

#### **Project Location**

The project is located in Bothaville District Municipality, 14km north-west of Vierfontein in the Free State on the following farms:

- Weltevreden 130.
- Boshoek 466,
- Welverdiend 216,
- Sterkfontein 474,



- Jonkerskraal 475 and
- Klein Jonkerskraal 551

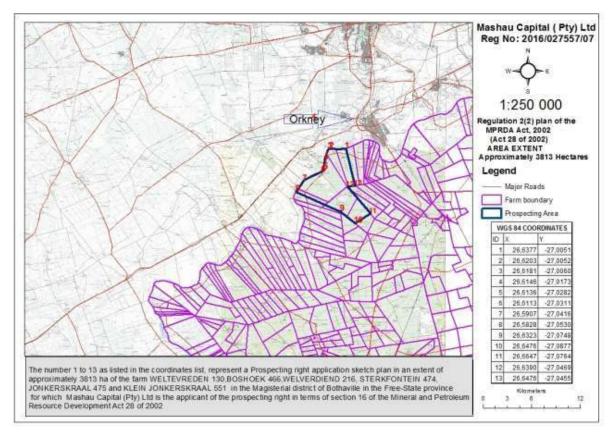


Figure 3: Project location covering 3813ha in size

#### SCOPE OF PROPOSED PROSPECTING ACTIVITIES

#### Phase 1: Desktop Studies and Ground Geophysical Surveys

# **Desktop Studies**

Desktop study entails extensive research and investigation of the proposed study area and activities. Desktop study further entails the compilation of all relevant information pertaining to the prospection for diamonds in kimberlites geological areas. In gathering all relevant information, the public and previous studies are consultant. Information received will then be assessed and analysed by all appointed qualified specialist involved in the study in order to determine the best prospecting techniques to be used in order to discover and subsequently test any kimberlites on the property, furthermore this information will be required in order to perform best environmentally friendly methods available in order to sustain the environment and rehabilitate that which may be lost upon drilling activities. Note that this activity is repeated at the end of each phase of prospecting, by the interpretation and integration of new



prospecting information with the existing information set, in order to inform a decision on whether further work is warranted and if so, the specific scope of this additional work.

# **Ground Geophysical Surveys**

Ground geophysical surveys involve the systematic measurement of magnetic, gravitational and electromagnetic fields over target areas of interest within the property, using appropriate instruments. The individual survey areas vary between  $500 \times 500 \text{ m}$  to  $2 \times 2 \text{ km}$  depending on the inferred size of any target. Magnetic survey lines are spaced at a maximum of 50 m apart and readings will be taken at a minimum of 5 m intervals along the lines. Electromagnetic and gravity survey lines are spaced at a maximum of 100 m apart with readings taken at a maximum of 50 m along the lines. After data collection has been completed, data processing and visualization is

carried out to allow the interpretation of the survey.

Phase 2 & 3: *Geology and Resources:* Phase 2 will include drilling, geochemical sample analysis, data verification and Mineral Resource Estimation according to international Reporting codes such as South African Code for Reporting of Exploration Results, Mineral Resources and Mineral Reserves (SAMREC), and to confirm the processing route and flowsheet. Data acquisition and test work in the form of either large diameter drilling, Reverse Circulation (RC) or Air Percussion drilling (for geochemical assay as well as metallurgical test work) is required to support the study. Once the geochemical analytical results are obtained, the generation of a geological and resource model and resulting SAMREC -compliant (or similar) mineral resource estimate may be completed.

# Drilling

Core drilling will be carried out on geophysical anomalies to test for the presence of kimberlite. If kimberlite is discovered, the primary objective for core drilling is for geological logging. The exploration drilling holes may be vertical or inclined, usually at a maximum angle of 60 degrees (from the horizontal). The borehole depth will be determined by the geologist and will depend on the type of anomaly and the geological conditions, including overburden (the thickness of material that overlies the target kimberlite). Fifty (50) boreholes are anticipated to be drilled per target.

The size of core drilled will be determined by such factors as cost, proposed core sampling, the degree of logging required and proposed geotechnical investigations. Sizes commonly used are HQ (63.5 mm diameter core) and NQ (47.6 mm diameter core) or variations on these. The orientation and depth of core holes will vary depending on the drilling objective. In the case of



delineation drilling, angled core holes will be drilled to establish accurate kimberlite / country rock boundaries at depth (in other words, where the edge of the kimberlite is at depth). Vertical holes will be drilled for geological modelling and / or sampling of the core. Core holes are also used as pilot holes for large diameter holes. The geological information provided by the core holes greatly reduces the risk of selecting inappropriate Reverse Circulation Large Diameter Drilling (RC LDD) hole locations. Core holes allow for maximum control on information such as overburden thickness, density, country rock dilution and likely kimberlite intersections, and therefore allow more accurate determinations of the position of likely RC LDD holes

for diamond recoveries.

Material derived from i.e. core will be examined on site for logging purposes and sampled for a variety of analyses. RC LDD currently up to 610 mm diameter provides good geological and especially grade data. RC LDD will be conducted when grade assessment is one of the primary objectives of the exercise. The sizes of the boreholes drilled will be determined by such factors as proposed sampling, availability of drilling equipment, cost and the volume of sample required. RC LDD will take place after pilot core drilling. The pilot hole will also be used as a guide for geological control and sample planning.

**Phase 4:** Environmental Impact Assessment, Socio-Economic Impacts Assessment, Geological Modeling, mineral reserve and resource estimation and compilation of competence persons report (CPR).

**Phase 5:** Feasibility Study, Financial Studies, Market Research, Mine Planning and Market susceptibility study.

# **Ancillary Activities**

# **Access Roads**

Once the prospecting right has been granted, the applicant will negotiate access with the land owner in order to do a detailed technical evaluation of the prospecting area. In addition to negotiating of access the applicant will reach an agreement with the land owners on location of access roads. Condition and its status (if access roads will be created for temporary or permanent use). A contract will be drawn up and negotiated with the land owner regarding access and the suitability and time of year that is preferred for prospect drilling.



# Water Supply

The water that will be used for the prospecting activities will be sourced on agreement from an existing authorized water user which could be either the land owner or local municipality. However, large quantity of water is not envisaged for these activities.

# **Ablution facilities**

Ablution facilities at the drill site will involve the installation of portable toilets.

# **Temporary Office Area**

A temporary site office shaded area will be erected at the drill sites. On-site electricity generation will be through the use of generators.

#### **Accommodation**

The current study will not require any overnight work, and therefore no accommodation of staff shall be provided, furthermore, employment of staff will be sourced from local residents who will not require extra accommodation. Night security staff will be employed once equipment has been established on site and it will be discussed with the land owner.

# **Blasting**

As the Prospecting Works Programme does not allow for bulk sampling, no blasting will take place.

# **Storage of Dangerous Goods**

During the drilling activities limited quantities of diesel fuel, oil and lubricants will be stored on site. The only dangerous good that will be stored in any significant quantity is diesel fuel. Less than 30litres will be stored in a jerry can.



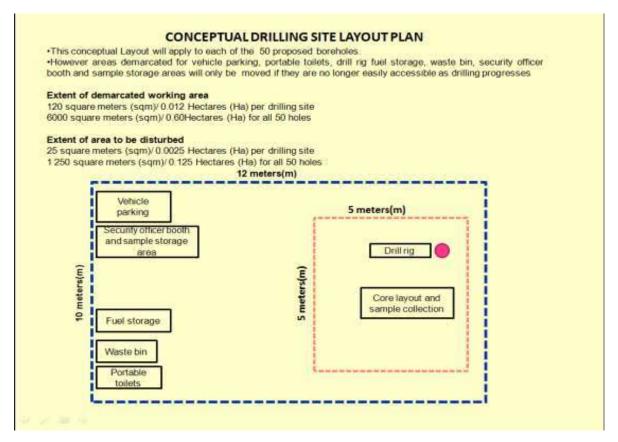


Figure 4: An illustration of the drill site layout plan

# **MOTIVATION FOR EXEMPTION**

The EIA Regulations make provision for the granting of exemption 'from any provision of the Act as it relates to environmental impact assessment or from any provision of these regulations" (Chapter 5, Section 24M). The study area is currently used as agricultural land and considered a brown field. There were no sensitive environmental issues identified except on the edges of the Vaal River and a buffer zone of more 500meters as illustrated in Figure 3 will be left undisturbed by the drilling activities. Apart from the Vaal River, there is also an inland dam within the properties. The same buffer of 500metres will exercised to protect the inland dam.



Figure 5: Buffer zone for prospecting activities

There will not be any new access roads that will be opened. The drilling team will rely on the existing access roads to avoid vegetation clearing and habitat destruction. The demarcated working area for the fifty (50) drilling sites will be 0.125ha which will be the total area that will be disturbed and rehabilitated after drilling. Specialist investigations will be undertaken during the mining right application process where all environmental aspects will be thoroughly investigated by the different specialists involved.

### **CONCLUSION**

Mashau Capital hereby request the DMR to grant exemption from undertaking specialist studies for prospecting right application based on the motivations in this report and the Basic Assessment and Environmental Management Programme Report that was submitted for review. Mashau Capital is willing to conduct a site visit with officials from the DMR before the final decision on the exemption is finalised.

# **Appendix 5: Agricultural Impact Assessment**

# AGRICULTURAL IMPACT ASSESSMENT

OF

DIAMOND PROSPECTING ON THE FARM WELTEVREDEN 130, BOSHOEK 466, WELVERDIEND 216, STERKFONTEIN 474, JONKERSKRAAL 475, KLEIN JONKERSKRAAL 551 SITUATED IN THE MAGISTERIAL DISTRICT OF BOTHAVILLE AND VILJOENSKROON IN FREE STATE PROVINCE

Prepared for: Mashau Capital (Pty) Ltd



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#### INTRODUCTION

Mashau Capital has applied for a prospecting right for diamond on the farm Weltevreden 130, Boshoek 466, Welverdiend 216, Sterkfontein 474, Jonkerskraal 475 and Klein Jonkerskraal 551 within the magisterial district of Bothavile and Viljoenskroon in Free State (Figure 1). The Prosposed application covers approximately 3813 Ha of land.

The purpose of this Agricultural impact assessment is to consider the potential impacts on the agricultural potential of various properties under the application of ref: FS 10477PR.

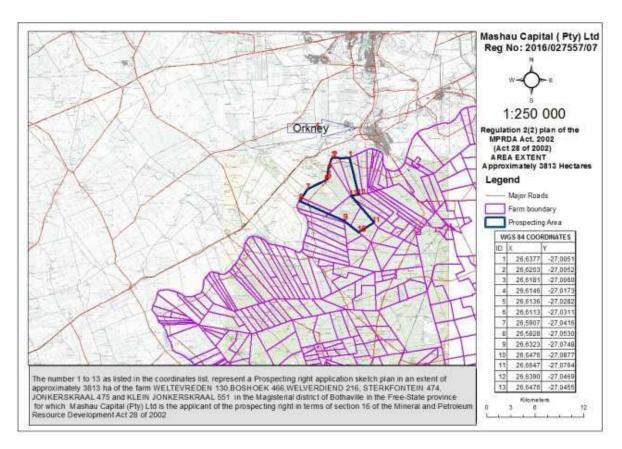


Figure 6: Project location covering 3813ha in size

# STUDY OBJECTIVES

The objectives of this assessment are to:

- Provide agricultural, soil and land use input for the total Basic Assessment report.
- > Study the soils, land capability, and current agricultural practice.
- ➤ Identify major soil impacts and agricultural impacts related to the proposed development; Compile an impact assessment



#### SCOPE OF PROPOSED PROSPECTING ACTIVITIES

## Phase 1: Desktop Studies and Ground Geophysical Surveys

#### **Desktop Studies**

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#### AGRICULTURAL POTENTIAL ASSESSMENT

In terms of this study, agricultural potential is described as an area's suitability and capacity to accommodate sustainable agricultural land use. Thus the objective of this study is to broadly assess the agricultural potential of the affected land by investigating relevant topography, land use and soil.

By combining these relevant data sets, one is able to broadly assess the agricultural potential of the affected land

#### LAND USE AND SOIL CAPABILITY

The present land use on the farms is arable crop production due to the presence of high potential soil. The proposed development area consists of cultivated maize fields and a wetland area. This soil potential on the cultivated soil of site has been improved with sophisticated fertilising methods, which is applied every season.

The area has a high water table due to a clay layer that prevents rapid water percolation and it receives an average rainfall of about 600mm per year.

#### **AREA CAPABILITY**

The area capability of the farm Weltevreden 130, Boshoek 466, Welverdiend 216, Sterkfontein 474, Jonkerskraal 475 and Klein Jonkerskraal 551 is classified as high potential farm land. The agricultural potential is high due to an ideal climate, topography and high potential soil. The levels of sophistication in agricultural methods practiced on the farms are high. The soil is well cultivated and well fertilised.

#### POTENTIAL IMPACTS

SOIL DEGRADATION	
Nature of Impact	Disturbance of the natural balance of the soil's physical and chemical
	characteristics. Soil compaction and topsoil loss leading to reduced fertility.



Stage	Construction and Operation and Decommissioning
Extent of Impact	Drilling site
Duration of Impact	Long-term
Intensity	Potentially Moderate
Probability of occurrence	Highly probable
Status of impact	Negative
Accumulative impact	High
Level of significance	Moderate
Mitigation measures	Stick pilling of soil
	Uses of existing roads
	Avoiding hydrocarbon spillage of uses of spill kits to contain spillages.
Level of significance	Low
EMP Requirements	Control measures and a monitoring programme should be put in place to
	manage the soil quality from the start of earthworks right through to
	decommissioning.
Discussion	Stockpiles degrade during long-term stockpiling. It loses organic content and
	fertility. The pH and fertility levels need to be optimal for crop production. So the
	drill site should immediately be rehabilitated and re-vegetated using a creeping
	indigenous grass seeding to ensure stability as well as possible material
	accumulation.

SOIL EROSION	
Nature of Impact	Intensity of erosion is increase by rainfall and winds
Stage	Construction and Operation and Decommissioning
Extent of Impact	Drilling site and roads
Duration of Impact	Long-term
Intensity	Potentially Moderate
Probability of occurrence	Probable
Status of impact	Negative
Accumulative impact	Moderate
Level of significance	Moderate
Mitigation measures	Plan site clearance and alteration activities for the dry season
	Minimise the period of exposure of soil surfaces through dedicated planning.
	All sloped areas must be terraced, to avoid intensified run-off.
	Stripping operations should be done when soil moisture content is low,

	during dry seasons to minimise the risk of compaction;
	Aim to minimise working on windy days
Level of significance	Low
EMP Requirements	Soil erosion addressed in Basic Assessment Report.

Surface and Underground Water	
Nature of Impact	Hydrocarbon spillages
Stage	Construction and Operation and Decommissioning
Extent of Impact	Drilling site
Duration of Impact	Long-term
Intensity	Potentially high
Probability of occurrence	Highly Probable
Status of impact	Negative
Accumulative impact	Moderate
Level of significance	High
Mitigation measures	No drilling should take place within 500 metres of any open water source.
	Drip trays should be used on oil leaking vehicles.
	Oil spillages should be avoided
	Drilling must be limited to proposed location
Level of significance	Moderate
EMP Requirements	Water pollution addressed in Basic Assessment Report.

Fire	
Nature of Impact	Uncontrolled fires may cause significant damage to agricultural areas and
	infrastructure.
Stage	Construction Operation and Decommission
Extent of Impact	Local / Regional
Duration of Impact	Short term
Intensity	High
Probability of occurrence	Unlikely
Status of impact	Negative
Accumulative impact	Moderate
Level of significance	Low
Mitigation measures	Ensure proper fire control measures on site and during hot periods.
	Ensure that staff is trained in fire drills.

Level of significance	Low
EMP Requirements	Training for fire management

Waste	
Nature of Impact	Uncontrolled dumping of hazardous waste will cause permanent soil damage
	and contaminate ground water.
Stage	Construction Operation and Decommission
Extent of Impact	Local
Duration of Impact	Long term
Intensity	Medium
Probability of occurrence	likely
Status of impact	Negative
Accumulative impact	Moderate
Level of significance	Medium
Mitigation measures	Ensure that there is proper removal, re-use, recycling and recovery of waste.
Level of significance	Low
EMP Requirements	Training for waste management
Discussion	During the construction, operational and decommissioning phase it must be
	ensured that the requirements of the National Environmental Management Waste
	Act of 2008 are met to ensure prevention of pollution to the site and other areas.
	Provided that the requirements of the Act are followed, the impact will be of lower
	significance.

# CONCLUSION

The Project site is located within prime agricultural land. The land use is dominated by agriculture and has been cultivated for generations and is producing higher than average maize yields.

The potential impacts of erosion, soil degradation, water pollution will have significant risk for agriculture. The rehabilitation of the soil during operation and decommissioning is important. By following mitigation steps, one can minimise the predicted impacts on the receiving environment. Existing land use can continue after the prospecting activities.

Rehabilitation of the site must ensure long-term stability and not compromise post-prospecting land objectives of sustainable agriculture.



It can be concluded that the proposed prospecting activities will have low impact on the agricultural potential of the farms.

Prepared By

Lufuno Nemakhavhani

Environmental consultant

# **Appendix 6: Presentation and Newspaper advert**