



## **mineral resources**

Department:  
Mineral Resources  
**REPUBLIC OF SOUTH AFRICA**

**NAME OF APPLICANT:** UTHANDO LWETHU INVESTMENTS (PTY) LTD

**REFERENCE NUMBER:**

### **PROSPECTING WORK PROGRAMME**

**SUBMITTED FOR A PROSPECTING RIGHT APPLICATION  
WITHOUT BULK SAMPLING**

AS REQUIRED IN TERMS OF SECTION 16 READ TOGETHER WITH REGULATION 7(1)  
OF THE MINERAL AND PETROLEUM RESOURCES DEVELOPMENT ACT (ACT 28 of  
2002)

### **STANDARD DIRECTIVE**

All applicants for mining rights are herewith, in terms of the provisions of Section 16 and in terms of Regulation 7(1) of the Mineral and Petroleum Resources Development Act, directed to submit a Prospecting Work Programme, strictly under the following headings and in the following format together with the application for a prospecting right.

1. **REGULATION 7.1.(a): FULL PARTICULARS OF THE APPLICANT**

**Table 1: Applicant's Contact Details**

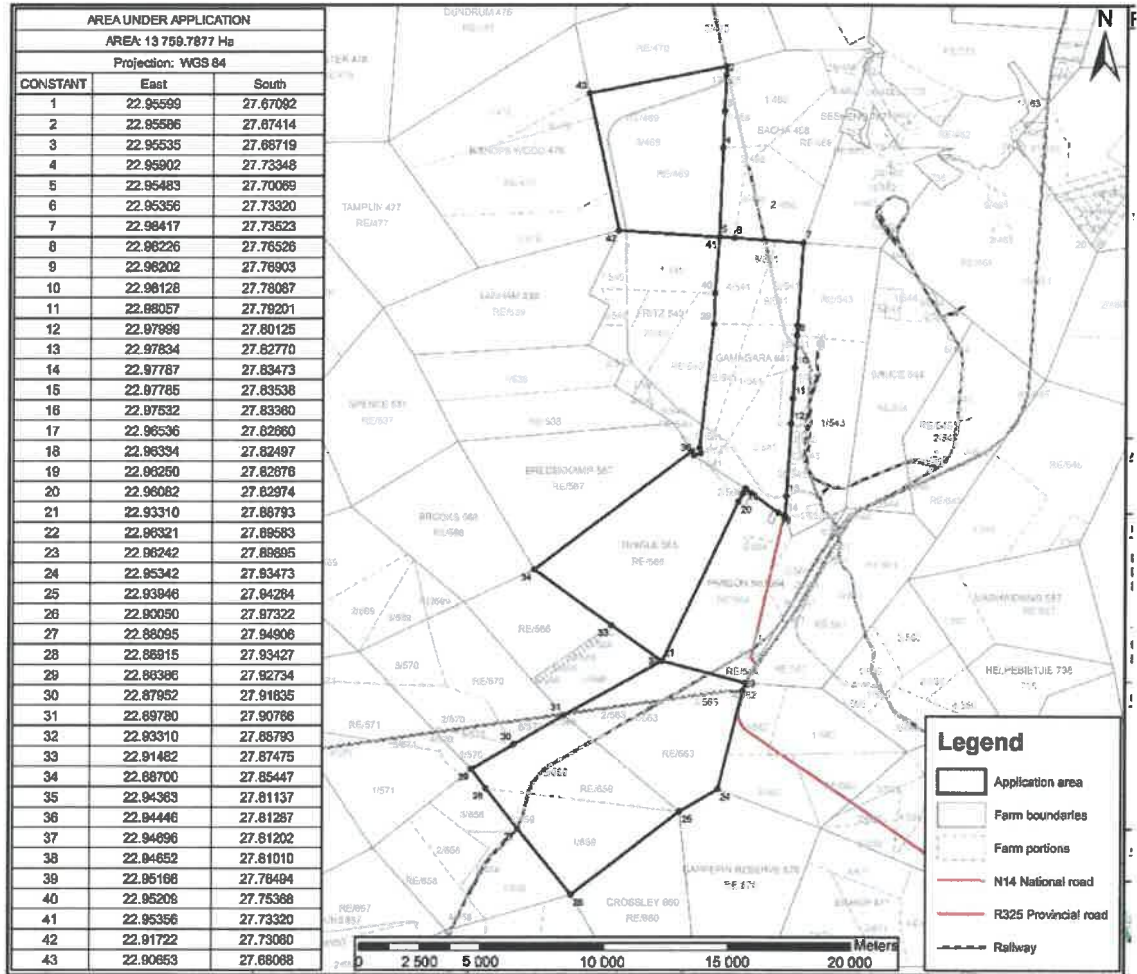
<b>ITEM</b>	<b>COMPANY CONTACT DETAILS</b>
Name	<b>UTHANDO LWETHU INVESTMENTS (PTY) LTD</b>
Tel no	
Fax no:	086 606 6315
Cellular no	072 017 9973
E-mail address	komanisi.knowledge@gmail.com
Postal address	PO Box 1539 Kimberley, 8300

**Table 2: Consultant's Details**

<b>ITEM</b>	<b>CONSULTANT CONTACT DETAILS (If applicable)</b>
Name	<b>LW CONSULTANTS (PTY) LTD</b>
Tel no	053 831 7634
Fax no:	086 606 6315
Cellular no	072 141 4164
E-mail address	lindie@liwico.co.za
Postal address	PO Box 3226 Kimberley, 8300

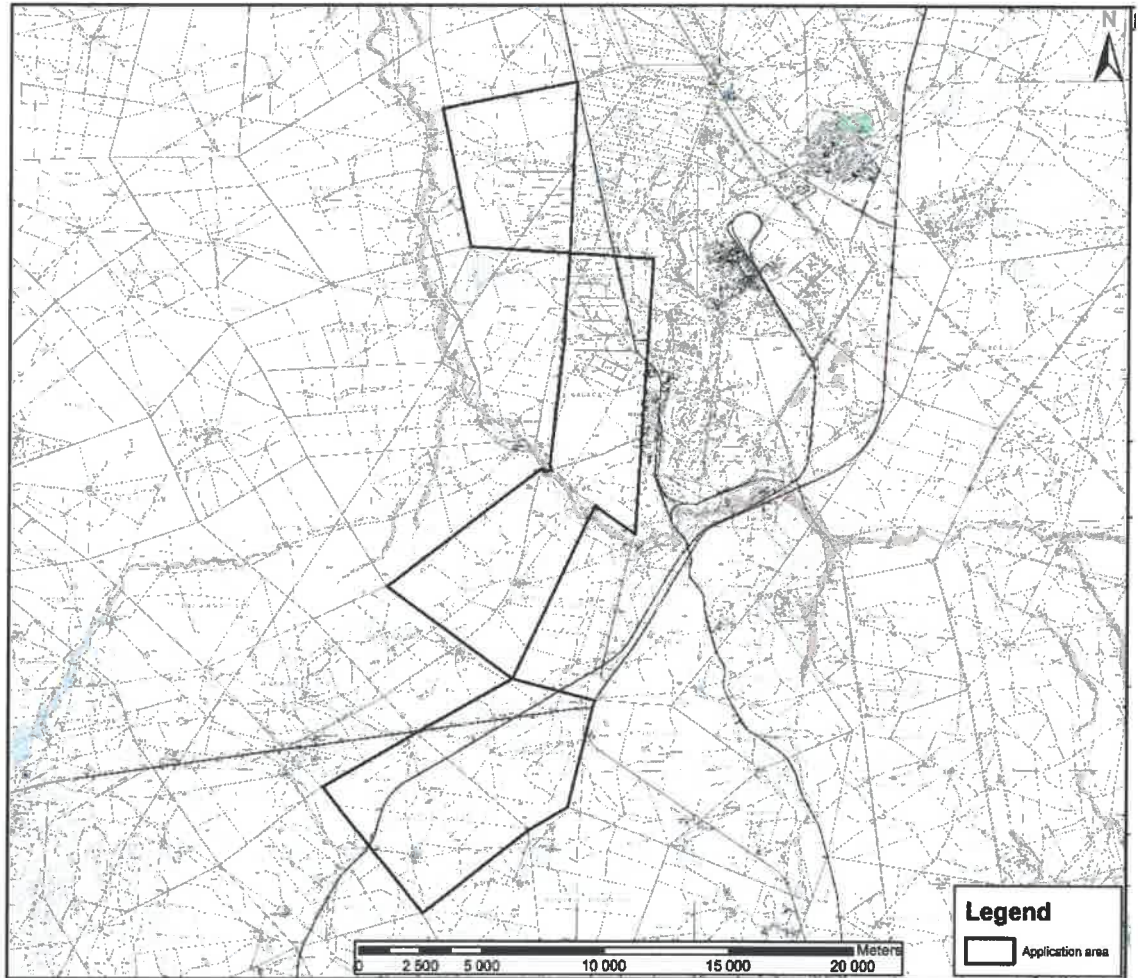
## 2. REGULATION 7(1)(b): PLAN CONTEMPLATED IN REGULATION 2(2) SHOWING THE LAND TO WHICH THE APPLICATION RELATES

- Survey



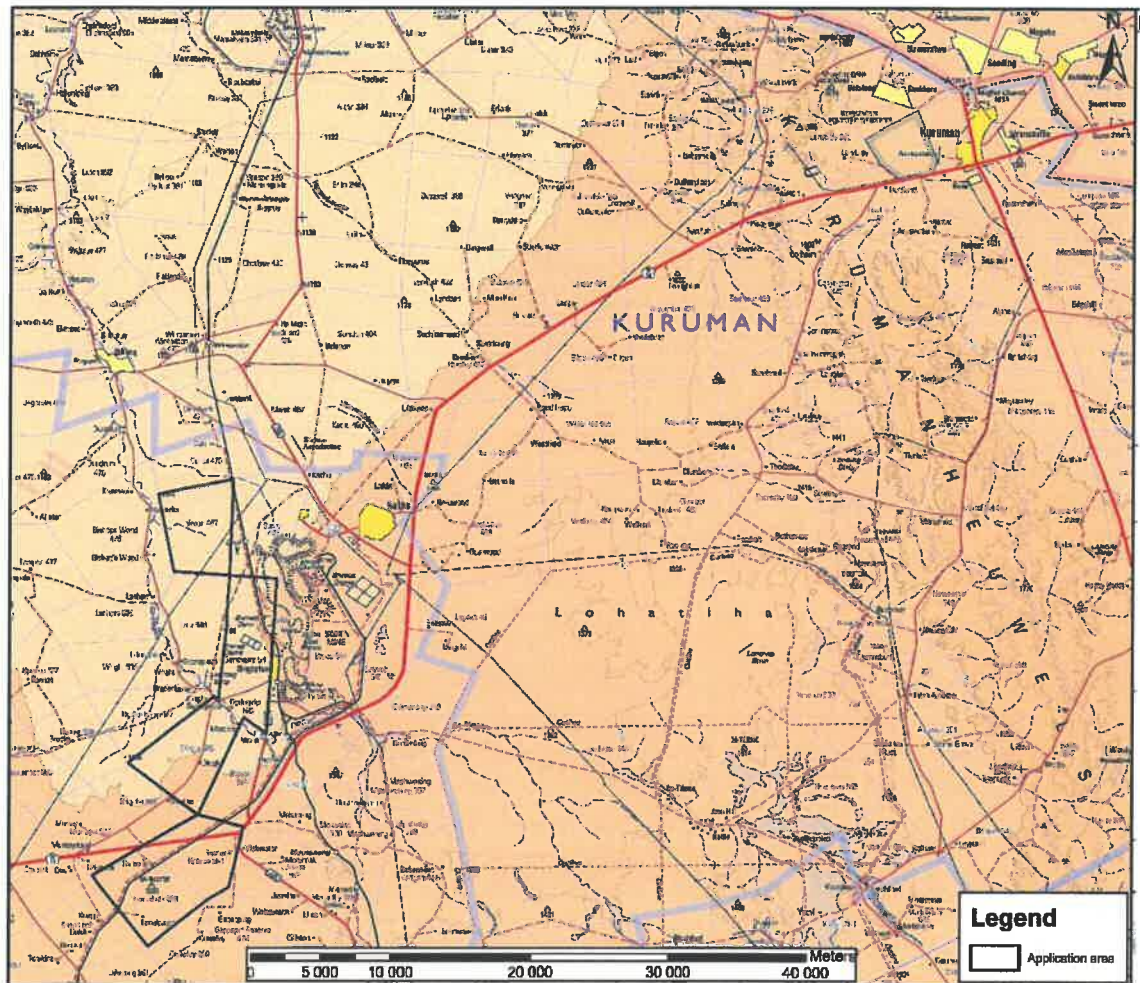
- **Topographic**

The proposed project area is a relative flat and featureless landscape bordering Kumba Iron ore mine in the west. The most prominent environmental feature on the area is the Ga-Mogara (non-perennial) River.



- **Locality**

The application area is situated next to Kumba Iron ore mine near the town Kathu (36.4 km north north-east), with the two nearest major towns being Postmasburg (60.3 km south south-east) and Kuruman (81.4 km east north-east)



### **3. REGULATION 7(1)(c): THE REGISTERED DESCRIPTION OF THE LAND TO WHICH THE APPLICATION RELATES**

- Farm number: 469  
Farm name: Woon  
Portion number: Portion 2  
Magisterial district: Postmasburg  
Title Deed:
  
- Farm number: 469  
Farm name: Woon  
Portion number: Portion 3  
Magisterial district: Postmasburg  
Title Deed:
  
- Farm number: 469  
Farm name: Woon  
Portion number: Remainder  
Magisterial district: Postmasburg  
Title Deed:
  
- Farm number: 541  
Farm name: Gamagara  
Portion number: Portion 1  
Magisterial district: Postmasburg  
Title Deed:
  
- Farm number: 541  
Farm name: Gamagara  
Portion number: Portion 2  
Magisterial district: Postmasburg  
Title Deed:
  
- Farm number: 541  
Farm name: Gamagara  
Portion number: Portion 3  
Magisterial district: Postmasburg  
Title Deed:

- Farm number: 541  
Farm name: Gamagara  
Portion number: Portion 4  
Magisterial district: Postmasburg  
Title Deed:
- Farm number: 541  
Farm name: Gamagara  
Portion number: Portion 7  
Magisterial district: Postmasburg  
Title Deed:
- Farm number: 541  
Farm name: Gamagara  
Portion number: Portion 8  
Magisterial district: Postmasburg  
Title Deed:
- Farm number: 541  
Farm name: Gamagara  
Portion number: Portion 9  
Magisterial district: Postmasburg  
Title Deed:
- Farm number: 541  
Farm name: Gamagara  
Portion number: Portion 10  
Magisterial district: Postmasburg  
Title Deed:
- Farm number: 541  
Farm name: Gamagara  
Portion number: Portion 11  
Magisterial district: Postmasburg  
Title Deed:

- Farm number: 541  
Farm name: Gamagara  
Portion number: Portion 12  
Magisterial district: Postmasburg  
Title Deed:
- Farm number: 541  
Farm name: Gamagara  
Portion number: Portion 13  
Magisterial district: Postmasburg  
Title Deed:
- Farm number: 541  
Farm name: Gamagara  
Portion number: Portion 14  
Magisterial district: Postmasburg  
Title Deed:
- Farm number: 541  
Farm name: Gamagara  
Portion number: Portion 15  
Magisterial district: Postmasburg  
Title Deed:
- Farm number: 541  
Farm name: Gamagara  
Portion number: Portion 16  
Magisterial district: Postmasburg  
Title Deed:
- Farm number: 541  
Farm name: Gamagara  
Portion number: Remainder  
Magisterial district: Postmasburg  
Title Deed:

- Farm number: 565  
Farm name: Dingle  
Portion number: Portion 1  
Magisterial district: Postmasburg  
Title Deed:
- Farm number: 565  
Farm name: Dingle  
Portion number: Portion 2  
Magisterial district: Postmasburg  
Title Deed:
- Farm number: 565  
Farm name: Dingle  
Portion number: Portion 3  
Magisterial district: Postmasburg  
Title Deed:
- Farm number: 565  
Farm name: Dingle  
Portion number: Remainder  
Magisterial district: Postmasburg  
Title Deed:
- Farm number: 563  
Farm name: Roscoe  
Portion number: Portion 2  
Magisterial district: Postmasburg  
Title Deed:
- Farm number: 563  
Farm name: Roscoe  
Portion number: Portion 3  
Magisterial district: Postmasburg  
Title Deed:

- Farm number: 563  
Farm name: Roscoe  
Portion number: Remainder  
Magisterial district: Postmasburg  
Title Deed:
- Farm number: 659  
Farm name: Gamaliets  
Portion number: Portion 1  
Magisterial district: Postmasburg  
Title Deed:
- Farm number: 659  
Farm name: Gamaliets  
Portion number: Portion 2  
Magisterial district: Postmasburg  
Title Deed:
- Farm number: 659  
Farm name: Gamaliets  
Portion number: Portion 3  
Magisterial district: Postmasburg  
Title Deed:
- Farm number: 659  
Farm name: Gamaliets  
Portion number: Remainder  
Magisterial district: Postmasburg  
Title Deed:

#### 4. REGULATION 7(1)(d) and (e): THE MINERAL OR MINERALS TO BE PROSPECTED FOR

**Table 4.1: Minerals to be prospected for**

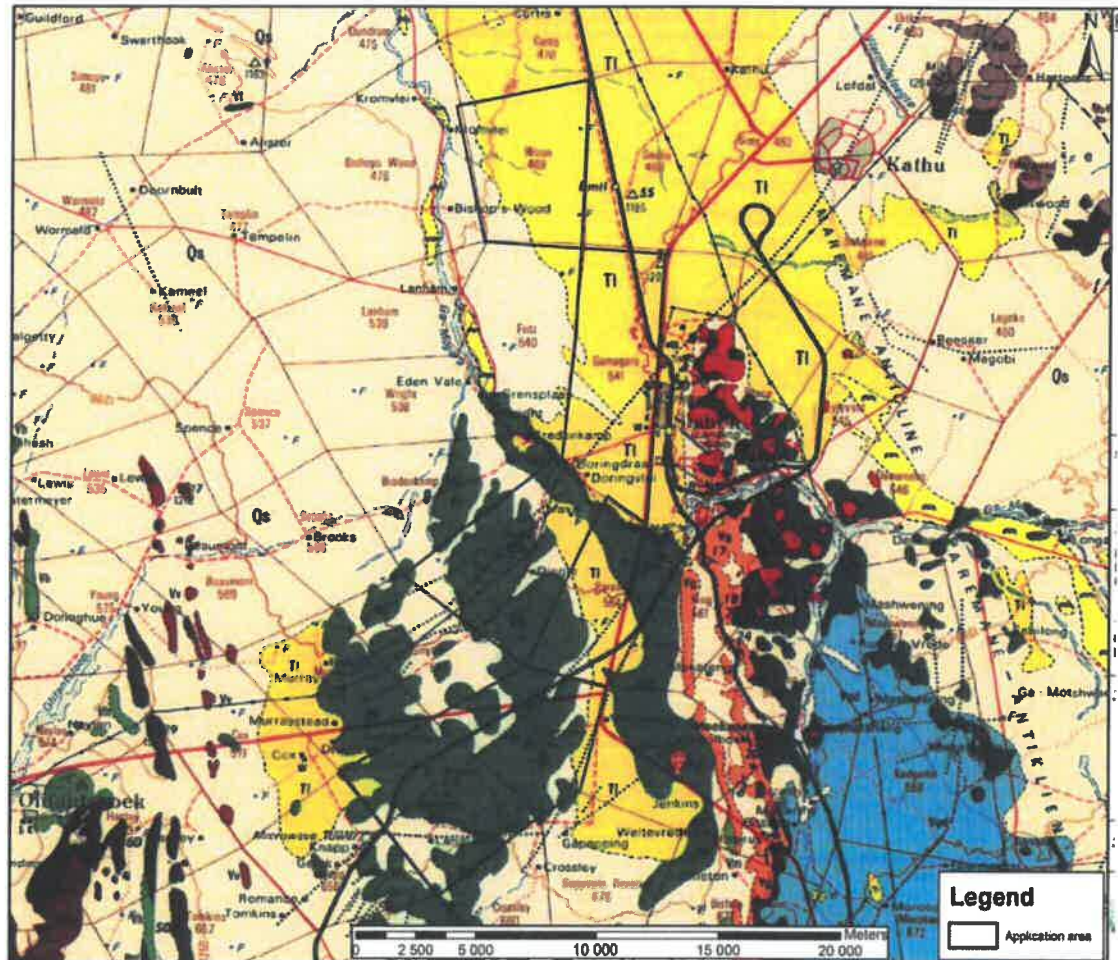
ITEM	DETAIL
Type of mineral(s)	Iron (Fe)
Type of minerals continued	Manganese (Mn)
Type of minerals continued	
Locality (Direction and distance from nearest town)	The application area is situated next to Kumba Iron ore mine near the town Kathu (36.4 km north north-east), with the two nearest major towns being Postmasburg (60.3 km south south-east) and Kuruman (81.4 km east north-east)
Extent of the area required for prospecting	13 759.7877 ha (Thirteen thousand seven hundred and fifty nine comma seven eight seven seven hectares)
Geological formation	Superior-Type Banded Iron Formations of the Transvaal Supergroup

#### 4.2 Description why the Geological formation substantiates the minerals to be prospected for (provide a justification as to why the geological formation supports the possibility that the minerals applied for could be found therein)

The application area is located on the southern border of the Maremane dome and Manganore Iron Formation and partially includes the Koegas Subgroup and Mapedi Formation. The Gamagara Formation has been correlated with the Mapedi Formation of the Olifants Supergroup as opposed to being included in the Transvaal Supergroup.

The application area has a high possibility of containing Iron deposits but, very little site specific geology can be found and creates the need for prospecting of the area to generate more geological information and have a better understanding of the possible Iron deposits on the area.

- 4.3 Attach a geological map that justifies the description why there is a possibility that the minerals applied for could occur on the land concerned.**



- 5. REGULATION 7(1)(f): A DESCRIPTION OF HOW THE MINERAL RESOURCE AND MINERAL DISTRIBUTION OF THE PROSPECTING AREA WILL BE DETERMINED**

**AND**

**REGULATION 7(1)(h): ALL PLANNED PROSPECTING ACTIVITIES MUST BE CONDUCTED IN PHASES AND WITHIN SPECIFIC TIMEFRAMES**

**AND**

**REGULATION 7(1)(i): TECHNICAL DATA DETAILING THE PROSPECTING METHOD OR METHODS TO BE IMPLEMENTED AND THE TIME REQUIRED FOR EACH PHASE OF THE PROPOSED PROSPECTING OPERATION**

PHASE	ACTIVITY (what are the activities that are planned to achieve optimal prospecting)	SKILL(S) REQUIRED (refers to the competent personnel that will be employed to achieve the required results)	PLANNED TIMEFRAME (in months) for the activity	OUTCOME (what is the expected deliverable)	OUTCOME TIMEFRAME (deadline for the expected outcome to be delivered)	QUALIFIED SIGNATORY  What technical expert will sign off on the outcome?(eg. geologists, mining engineers, surveyors, etc)
e.g.1	<b>Non-Invasive Prospecting</b> Geophysical Survey	Geologist / Mineral economist	Month 1 – 6	Flight Plans, Flight Line and Traverse Lines Digital Data gathered	Month 6	Geophysicist
	<b>Non-Invasive Prospecting</b> Literature Survey	Geologist	Month 1 – 6	Maps or Plans and detailed report on results	Month 6	Geologist
	<b>Invasive prospecting</b> Boreholes,	Geologist	Month 6-24	Borehole core data	Month 24	Geologist
e.g.2	Trenches and/	Geologist	Month 7- 24	Detailed report on sidewall profiles, volumes, average grades, locality	Month 24	Geologist
e.g.3	Excavations	Works Foreman/Habourers / drilling con.	Month 7- 24	sidewall mapping, lithological profiles	Month 24	Geologist
e.g.4	<b>Non-Invasive prospecting</b> <b>Analytical Desktop Studies</b>	Mine Economist / Geologist	Month 24-36	Geological or pre-feasibility Reports Resource Statements, Geological Maps/Plans	Month 36	Geologist / Mineral Economist (professionally Qualified Persons)

The table below incorporates the information required in respect of Regulations 7(1)(f), 7(1)(h) and 7(1)(i):  
Table 5.1

Phase	Activity (what are the activities that are planned to achieve optimal prospecting)	Skill(s) required (refers to the competent personnel that will be employed to achieve the required results)	Timeframe (in months) for the activity)	Outcome (What is the expected deliverable, e.g. Geological report, analytical results, feasibility study, etc.)	Timeframe for outcome (deadline for the expected outcome to be delivered)	What technical expert will sign off on the outcome?
Phase 1	Geological investigations	Geologist	Months 1 to 4	Detailed information Geological maps	4 <sup>th</sup> month	(e.g. geologist, mining engineer, surveyor, economist, etc) Project Geologist
	Geological overview	Project Geologist	Month 5 to 6	Geological overview Target generation Final drill positions	6 <sup>th</sup> month	Chief Geologist
Phase 2	RC drilling	Geologist	Months 7 to 11	Commodity depth Target body locality	11 <sup>th</sup> month	Project Geologist
	Logging and sampling	Geologist	Months 7 to 11	Ground lithology Target body occurrence	11 <sup>th</sup> month	Project Geologist
	Rehabilitation	Geologist	Months 7 to 11	Rehabilitation	11 <sup>th</sup> month	Project Geologist
	Sample analyses	Laboratory	Months 8 to 12	Ore grade	12 <sup>th</sup> months	Laboratory
	Data capturing and mapping	Geologist	Months 8 to 12	Geological models Detailed information	12 <sup>th</sup> month	Project Geologist
	Geological overview	Project Geologist	Months 13 to 14	Geological information Infill drill positions	14 <sup>th</sup> month	Chief Geologist

Phase 3	Infill drilling	Geologist	Months 15 to 24	Target body depth Ore grade Grade distribution	24 <sup>th</sup> month	Project geologist
	Logging and sampling	Geologist	Months 15 to 24	Geological data	24 <sup>th</sup> months	Project geologist
	Rehabilitation	Geologist	Months 15 to 24	Rehabilitation	24 <sup>th</sup> months	Project geologist Environmental
	Sample analyses	Laboratory	Months 15 to 25	Ore grade	25 <sup>th</sup> months	Laboratory
	Data capturing and mapping	Geologist	Months 16 to 26	Geological information Geological models	26 <sup>th</sup> month	Project geologist
	Geological Report	Project geologist	Months 27 to 31	Geological report Mineral economics Mine feasibility	31 <sup>st</sup> month	Chief geologist

## 6. REGULATION 7(1)(g): A DESCRIPTION OF THE PROSPECTING METHOD OR METHODS TO BE IMPLEMENTED

### (i) DESCRIPTION OF PLANNED NON-INVASIVE ACTIVITIES:

(These activities do not disturb the land where prospecting will take place e.g. aerial photography, desktop studies, aeromagnetic surveys, etc)

- Phase 1 – Geological investigations (6 months)
  - Geological investigations (months 1 to 4)
 

Initial geological investigations will be in the form of desktop studies using existing literature, available data of the area and satellite imagery. From these information obtained the current geological maps is updated to be more area specific.

Field visits will also be conducted for the purpose of geological surveys for determining the existence of specific trace minerals as well as outcrop evaluation. All findings will be digitally captured and geological models drafted.

- Geological overview (month 5 to 6)
 

All results obtained during the first phase activities are communicated and explained within the geological overview. Within this report all data is summarized and final drilling positions determined and recommended.

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- Phase 2 – RC Drilling (8 months)
  - Logging and sampling (months 7 to 11)
 

All drill holes will be logged every meter containing information such as hole location, hole depth, ore depth and other geological structures encountered within the hole. The dust samples will be taken, stored within sealed chop trays and safeguarded for future referencing.

Portions of the drill chips representing the ore will be taken and placed in bags for sample analyses. Each sample will be marked with the hole number and the sample number. The sample number will also appear on the hole's log sheet for accuracy purposes of the programme and results to be obtained.

- Sample analyses (months 8 to 12)
 

All samples obtained from the drilling programme will be sent to an independent accredited, laboratory for analyses and ore grade. The certificates obtained will be safe kept together with the log sheets for future referencing.

- Data input and mapping (months 8 to 12)  
All data obtained during the proposed activities will be digitally captured and already existing maps updated to give more detailed and accurate models of the study area.
- Report writing (months 13 to 14)  
All findings and results will be drafted and explained within a geological report. The geological models created will be used for the purpose and also be included within the report. The report will further include recommendations as well as a refined drilling programme for the following phase of the proposed prospecting activities.

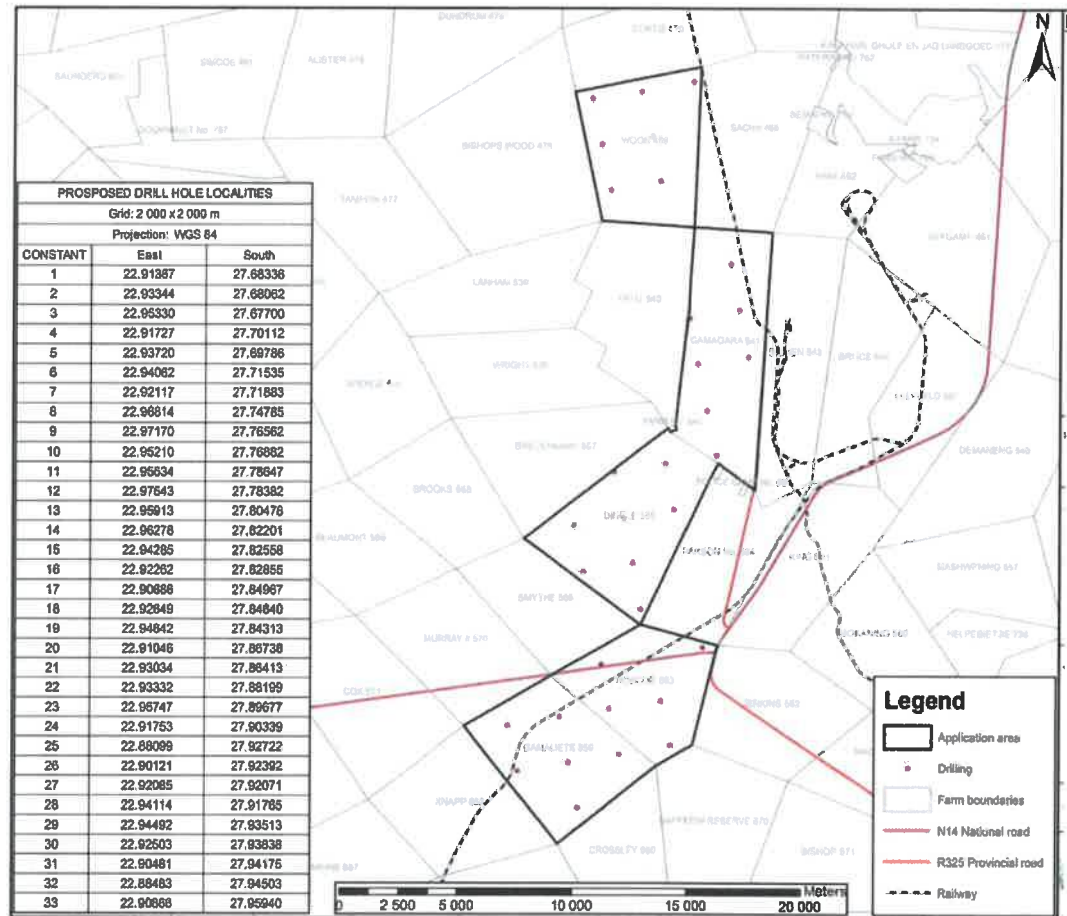
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- Phase 3 – Infill drilling (17 months)
  - Logging and sampling (months 15 to 24)  
All drill holes will be logged every meter containing information such as hole location, hole depth, ore depth and other geological structures encountered within the hole. The dust samples will be taken, stored within sealed chop trays and safeguarded for future referencing.  
  
Portions of the drill chips representing the ore will be taken and placed in bags for sample analyses. Each sample will be marked with the hole number and the sample number. The sample number will also appear on the hole's log sheet for accuracy purposes of the programme and results to be obtained.
  - Sample analyses (months 15 to 25)  
All samples obtained from the drilling programme will be sent to an independent accredited, laboratory for analyses and ore grade. The certificates obtained will be safe kept together with the log sheets for future referencing.
  - Data input and mapping (months 16 to 26)  
All data obtained during the proposed activities will be digitally captured and already existing maps updated to give more detailed and accurate models of the study area.
  - Report writing (months 27 to 31)  
All findings and results will be drafted and explained within a geological report. The geological models created will be used for the purpose and also be included within the report. The report will further include proven resources, reserve estimations, mineral economy as well as recommendations for future work to be done.

(ii) **DESCRIPTION OF PLANNED INVASIVE ACTIVITIES:**

(These activities result in land disturbances e.g. sampling, drilling, bulk sampling, etc)

- Phase 2 – RC Drilling (8 months)



- RC Drilling (months 7 to 11)

The initial drilling proposed is done to demarcate the ore body with its boundaries. 33 Holes is proposed to a maximum depth of 50 meters.

Drilling will be conducted by means of Reverse Circulation Percussion drilling and the sample material obtained captured within plastic tubes for logging and sampling.

- Rehabilitation (months 7 to 11)

When each hole is completely drilled and does not show any ore occurrence, it will be fully rehabilitated before moving to the next drill hole locations. Rehabilitation will be done by the backfilling of the material in their respective manner.

When ore is encountered during the drilling of the hole and proves the necessity for core drilling it will be cased, sealed and marked till further drilling can commence within that specific hole.

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- Phase 3 – Infill drilling (17 months)

- Infill drilling (months 15 to 24)

Phase 3 is strongly dependent on the previous phases for the location of these holes as well as the grid on which these holes will be drilled. The drilling programme for this phase will include percussion and core drilling. Updated plans and programmes will be submitted to the Department of Mineral Resources before the commencement of this phase.

The Reverse Circulation Percussion drilling is the main method of drilling as it prove sufficient for obtaining accurate results. The core drilling is used as a complementary method of drilling of holes that prove the necessity for further drilling and is only done to obtain deeper seated ore and the grade thereof as well as possible ore bottom. These holes will be drilled for a further approximate depth of 50 meters.

This is done to determine the grade distribution throughout the ore body and the exact extent of the ore body.

- Rehabilitation (months 15 to 24)

Rehabilitation will be done as suited for both percussion and core drilling. Sample material will be backfilled and where core drilling occurred the hole will be cased and sealed. Each hole will be fully rehabilitated before commencing to the next drill location. In this way rehabilitation is time and cost effective.

### **Commitment to provide addendums in respect of additional prospecting activities**

I herewith commit to provide the Department of Mineral Resources with an addendum in respect of both the EM Plan and Prospecting Work Programme regarding any future in-fill prospecting required but not described above, prior to undertaking such activities. The addendum will cover all the Regulations as per the Prospecting Work Programme.

I agree that the addendums will provide for similar activities only and if the scope changes I would be required to apply in terms of Section 102 of the MPRDA for an amendment of the Prospecting Work Programme

Mark with X

<b>ACCEPT</b>	<b>X</b>
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**7. REGULATION 7(1)(j)(i):DETAILS WITH DOCUMENTARY PROOF OF THE APPLICANT'S TECHNICAL ABILITY OR ACCESS THERETO TO CONDUCT THE PROPOSED PROSPECTING OPERATION**

**7.1 Competencies to be employed in terms of the Mine Health and Safety Act**

**COMPETENCIES TO BE EMPLOYED** (List the legal appointments that will be made in terms of the Mine Health and Safety Act, appropriate for the type of operation)

No competencies in regard to the Mine Health and Safety Act will be employed as the entire proposed operations will be handled and conducted by contractors.

**I herewith confirm that I, in Table 9.1 have budgeted and financially provided for the required skills listed above.**

**CONFIRMED** (Mark with an X)

**X**

**7.2 List of Appropriate equipment at your disposal (If Applicable)**

**Table D: Appropriate Equipment Available**

All equipment will be supplied by the contracting companies in the regard to their specific task To be conducted.

**8. REGULATION 7(1)(j)(ii):DETAILS WITH DOCUMENTARY PROOF OF A BUDGET AND DOCUMENTARY PROOF OF THE APPLICANT'S FINANCIAL ABILITY OR ACCESS THERETO**

**AND**

**9. REGULATION 7(1)(k) A COST ESTIMATE OF THE EXPENDITURE TO BE INCURRED FOR EACH PHASE OF THE PROPOSED PROSPECTING OPERATION (remember to also include prospecting fees)**

**Table 9.1**

ACTIVITY	YEAR 1 Expenditure (R')	YEAR 2 Expenditure (R')	YEAR 3 Expenditure (R')	YEAR 4 Expenditure (R')	YEAR 5 Expenditure (R')
<b>Phase 1 (6 months)</b>					
Geological investigations	80 000				
Geological overview	60 000				
<b>Phase 2 (8 months)</b>					
RC Drilling	1 237 500				
Logging	100 000				
Rehabilitation	-				
Sample analyses	?				
Data capturing and mapping	20 000				
Geological overview		60 000			
<b>Phase 3 (17 months)</b>					
Infill drilling		?			
Logging and sampling		200 000			
Rehabilitation		?			
Sample analyses		?	?		
Data capturing and mapping			40 000		
Geological Report			180 000		
<b>Annual Total</b>	<b>1 497 500</b>	<b>260 000</b>	<b>220 000</b>		
				<b>Total Budget</b>	<b>1 977 500</b>

**NOTE!** If any person (including the applicant) provides services in any job or skills category at a reduced rate or free of charge, then such person's Curriculum Vitae (CV) must be attached as documentary proof of the technical ability available to the applicant.

## 10. FINANCIAL ABILITY TO GIVE EFFECT TO THE WORK PROGRAMME

### 10.1 The amount required to finance the Work Programme.

(State the amount required to complete the work)

Certain amounts regarding the work programme could not be calculated due to the reason that they solely depend on the outcome of the previous phase. However an approximate amount has been calculated and the applicant should have **R 1 977 500** available for the upcoming project when the right be issued.

### 10.2 Detail regarding the financing arrangements

(Elaborate on the financing arrangements, in terms of where the finance will be sourced, extent to which the financing has been finalized and on the level of certainty that such financing can be secured.)

The applicant has the financial resources to successfully undergo and complete the prospecting activities applied for.

### 10.3 Confirmation of supporting evidence appended

(Attach evidence of available funding and or financing arrangements such as balance sheets, agreements with financial institutions, underwriting agreements, etc. and **specifically confirm** in this regard what documentation has been attached as appendices).

The supporting evidence in regard to the financial arrangements are appended in the form of bank statements and financial undertakings.

## 11 Confirmation of the availability of funds to implement the proposed project.

The applicant has the financial resources to successfully undergo and complete the prospecting activities applied for.

**I herewith confirm that I have budgeted and financially provided for the total budget as identified in Regulation 7(1)(k).**

<b>Confirmed</b> (Mark with an X)	<b>X</b>
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**12 REGULATION 7(1) (m): UNDERTAKING, SIGNED BY THE APPLICANT, TO ADHERE TO THE PROPOSALS AS SET OUT IN THE PROSPECTING WORK PROGRAMME**

**Table: 13.1**

<p>Herewith I, the person whose name and identity number is stated below, confirm that I am the Applicant or the person authorised to act as representative of the Applicant in terms of the resolution submitted with the application, and undertake to implement this prospecting work programme and adhere to the proposals set out herein.</p>	
Full Names and Surname	KHOLISILE KOMATIISI
Identity Number	720824 5581 08 9

**END**