

PROSPECTING WORK PROGRAMME

SUBMITTED FOR A PROSPECTING RIGHT APPLICATION WITH
BULK SAMPLING



mineral resources

Department:
Mineral Resources
REPUBLIC OF SOUTH AFRICA

Name of Applicant:

PGL BOERDERY (PTY) LTD

Grootpoort 83 H.O

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)

1. REGULATION 7.1 (a)

FULL PARTICULARS OF THE APPLICANT

Table 1: Applicant's Contact Details

ITEM	COMPANY CONTACT DETAILS
Name	PGL Boerdery (Pty) Ltd Company Documents ("A")
Tel no	053 963 1997
Fax no	053 963 2009
Cellular no	082 496 9644
Email address	pieter@pglb.co.za
Postal address	P.O. Box 583 Schweizer-Reneke 2630

Table 2: Consultant's Details

ITEM	CONSULTANT CONTACT DETAILS (If applicable)
Name	Japie van Zyl Attorneys
Tel no	053 963 2008
Fax no	053 963 2009
Cellular no	082 924 6687
Email address	japie@japievzylprok.co.za
Postal address	P.O. Box 960 Schweizer-Reneke 2780

2. REGULATION 7(1)(b)

PLAN CONTEMPLATED IN REGULATION 2(2) SHOWING THE LAND TO WHICH THE APPLICATION RELATES

See annexure "B"

3. REGULATION 7(1)(c)

THE REGISTERED DESCRIPTION OF THE LAND TO WHICH THE APPLICATION RELATES

1. The remaining extent of the farm Grootpoort 83, excluding the mining permit application of 5 hectares

Registration Division: H.O

Extent: 685.0926 hectares – 5 hectares = 680.0926 hectares

Title Deed: T101085/1992

2. Portion 10 of the farm Grootpoort 83

Registration Division: H.O

Extent: 256.9596 hectares

Title Deed:T96480/2008

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)	Diamonds Alluvial (DA) Diamonds General (D)
Type of mineral continued	n/a
Locality (Direction and distance from nearest town)	The property is located approximately 10km South of Schweizer – Reneke on the R34 on route to Bloemhof.

Extent of the area required for prospecting	937.0522 hectares
Geological formation	<p data-bbox="850 248 1401 320">Ra: Tholeiitic and calc-alkaline basalt and andesite; tuff and pyroclastic breccia</p> <p data-bbox="850 365 1027 398"><u>Classification</u></p> <p data-bbox="850 443 1401 629">The allanridge formation underlies the Bothaville Formation conformably but where the latter pinches out the Allanridge verstemps onto diverse older lithologies.</p> <p data-bbox="850 674 1401 824">The formation consists mainly of two types of lava, i.e. a dark-green amygdaloidal lava and light green-grey porphyritic lava.</p> <p data-bbox="850 869 1007 902"><u>Mineralogy</u></p> <p data-bbox="850 947 1401 1518">The dark-green lava, which is by far the most prominent unit in the Allanridge formation, also constitutes the greater part of the Ventersdorp supergroup in the area. The lava is fine to medium grained in texture and the plagioclase and augite in it have been replaced by secondary minerals, such as chlorite, epidote, calcite sericite and uraltite. The amygdales in the lava consist of quartz, chalcedony, calcite, chlorite or epidote, or any combination of these minerals. Where more than one mineral makes up an amygdale, the minerals commonly form concentric zones.</p> <p data-bbox="850 1570 1107 1603"><u>Sedimentary Rocks</u></p> <p data-bbox="850 1648 1401 1818">The sedimentary rocks of the Allanridge formation consist of a mixture of tuff, agglomerate and volcanic breccia occur interbedded with the lava towards the top of the formation.</p>

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)

There are various operational alluvial diamond mines adjacent to these properties on which applications for prospecting rights have been lodged. In house information exist which substantiate the reasons for this application.

The farms are found in an area where diamond alluvial gravel may be found.

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.

See annexure "C"

5. REGULATION 7(1)(f)

A DESCRIPTION OF HOW THE MINERAL RESOURCE AND MINERAL DISTRIBUTION OF THE PROSPECTING AREA WILL BE DETERMINED

2.1 SITE VISIT

A formal site visit will be done within 90 days after the prospecting right was executed.

5.2 DESKTOP STUDIES

Desktop studies will be undertaken after the site investigation was done to determine the target areas including the identification of any infrastructure to be build and any potential problems that may need to be addressed.

5.3 PITTING

Pits will be digged by an excavator to look for gravel. If gravel is found, the applicant will determine the composition and quality of the gravel.

5.4 TRENCHES

The applicant will proceed with this way of prospecting by means of the open cast / trenching method, simultaneously or after pitting depending on the

information obtained from the earlier work done. The trenches will be dugged to remove and to wash the gravel. It will be washed by a 16 feet washing pan to determine diamond proceeds per 100 ton of gravel.

5.5 CONSOLIDATION AND INTERPRETATION OF RESULTS DATA

All data will be consolidated and processed to determine the diamond bearing resource on the property. This will be a continuous process throughout the prospecting work program.

5.6 GENERAL

The prospecting activities will be conducted in conjunction with the farming activities conducted on the properties. The surface area is very good agricultural land used for cultivation of maize, groundnuts and sunflower. Pits and trenches will only be digged after harvest and before planting activities for the new season consumes. The rest of the areas under application are part of a game farm. Game farming activities is conducted on this property. The prospecting will thus be done in conjunction with the game farming activities. It is envisaged that prospecting will not be conducted during the hunting season.

REGULATION 7(1)(h)

ALL PLANNED PROSPECTING ACTIVITIES MUST BE CONDUCTED IN PHASES AND WITHIN SPECIFIC TIMEFRAMES

PHASE	PROSPECTING METHOD	0 - 3	4 - 6	7 - 31	7 -48	49-60
1	Site Visit	x				
2	Desktop Studies		X			
3	Pitting			X		
4	Trenches				X	
5	Consolidation and interpretation of results					X

	data; Preparation of mining right application or renewal of the prospecting right.					
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REGULATION 7(1)(i)

TECHNICAL DATA DETAILING THE PROSPECTING METHOD OR METHODS TO BE IMPLEMENTED AND THE MINE REQUIRED FOR EACH PHASE OF THE PROPOSED PROSPECTING OPERATION

PHASE 1 – SITE VISIT

GENERAL	A site visit will be conducted within 3 months after execution of the Prospecting Right. It is envisaged that the information will be obtained from the site visit to do the desktop studies and other prospecting activities.
TIMEFRAME	0-3 months
COSTS	R5000
TECHNICAL SUPPORT	Environmental Consultant – Milnex 189 CC Geologist – Pierre de Jager

PHASE 2– DESKTOP STUDIES

1.	GENERAL	Desktop studies will be undertaken after site investigation has been done to determine the target areas including the identification of any infrastructure to be build and any potential problems that may need to be addressed.
2.	TIMEFRAME	3 months (4 -6)
3.	COSTS	R10 000
4.	TECHNICAL SUPPORT	Environmental Consultant – Milnex 189 CC Geologist – Pierre de Jager

PHASE 3 – PITTING

1.	GENERAL	<p>The information obtained from the desktop studies will be used to draw up a pitting map. The location and GPS coordinates of where pits will be dug, will be indicated on this map (pitting location map). Pits will then be dug by an excavator on these mapped coordinated points. If gravel is found the applicant will determine the composition and quality of the gravel. It is envisaged that the pits will determine the location and intersection of mineralization.</p> <p>It is envisaged that 100 pits will be dug . It may be less depending on results.</p>
2.	TIMEFRAME	24 months
3.	NUMBER OF PITS	100
4.	EXTENT	3m x 2m x 2m
5.	CALCULATION	Area: 937.0522 hectares Pit every \pm 15 hectares
6.	COSTS	R1500 x 100 = R150 000.00
7.	TECHNICAL SUPPORT	Environmental Consultant – Milnex 189 CC

PHASE 4 – TRENCHES

1.	GENERAL	<p>The applicant will proceed with this way of prospecting by means of the open cast / trenching method, during and or after pitting and depending on the results. The location where the trenches will be dug, will be determined after the gravel has been located by conducting the desktop studies and the digging of pits. The trenches will be dug on the parts of the property where the gravel is located. Trenches will be sited on the resource map according to</p>
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		<p>the coordinate of each of the trenches made. The trenches will be digged to remove and wash the gravel. It will be washed by a 16 feet washing pan to determine diamond proceeds per 100 ton of gravel. The trenches will be sited to determine the geological representivity. Overburden will be stripped and placed next to the trench as determined in the EMP. Gravel will be removed and transported to the plant to be washed. Tailings will be returned to the excavation to fill it up. Hereafter overburden will be dumped in the excavation where after topsoil will be placed in the excavation.</p>
2.	TIMEFRAME	42 months
3.	NUMBER OF TRENCHES	40
4.	EXTENT	20m x 10m x 3m
5.	CALCULATION	<p>Area: 937.0522 hectares Trench every 38 hectares</p>
6.	COSTS	R5 500.00 x 40 = R220 000.00
7.	TECHNICAL SUPPORT	<p>1 x Excavator – Komatso PC220 1 x Front-end Loader - JCB 36CX 1 x Dumper – BELL B25 1 x Sortex 1 x 16 feet washing pan 1 x Power plant</p>
8.	TONS TO BE WASHED	20m x 10m x 3m x 2 x 40 = 48 000 tons

PHASE 5– CONSOLIDATION AND INTERPRETATION

1.	GENERAL	<p>All data will be consolidated and processed to determine the diamond bearing resource on the property. This will be a continuous process throughout the prospecting work. Each phase of prospecting will be followed by desktop studies involving interpretation and modeling of all data</p>
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		gathered and how the applicant will proceed with the work program in terms of activity, quantity, resources expenditures and duration. A pre-feasibility study will be done to determine the preliminary economic assessment of the resource and to determine whether additional evaluation of the deposit will be warranted to increase confidence in the resource estimation. Prospecting work will be conducted by a multi-disciplinary team to determine whether the resource can be viable exploited and if the results can support an application for a mining right.
2.	TIMEFRAME	12 months
3.	COSTS	R10 000
4.	TECHNICAL SUPPORT	Environmental Consultants, Geologist – P de Jager

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

Phase	Activity	Skill(s) required	Timeframe	Outcome	Timeframe for outcome	What technical expert will sign off on the outcome?
One	Non-Invasive Prospecting Site Visit	Environmental Consultant, geologist	Month 0 – 3	Finalization of the prospecting work to be done	Month 3	Environmental Consultants – Milnex Geologist – Pierre de Jager
Two	Non-Invasive Prospecting Desktop Studies	Environmental Consultant, geologist	Month 1 - 6	The finalization of the map for pitting	Month 6	Milnex – Environmental Consultants
Three	Invasive Prospecting Pitting	Environmental Consultant, geologist	Month 7 – 31	Obtaining information about location of the gravel and where bulk samples will be made	Month 31	Milnex - Environmental Consultants Geologist - Pierre de Jager
Four	Invasive Prospecting Trenches	Environmental Consultant, Machine Operators, Pan Operators, Mine Health and Safety, Environmental	Month 17 - 48	The determination of the diamond resource bearing resource, the extent of the resource, the life of mine, diamond proceeds per 100 tons of gravel washed (cpht) and average price per carat for the diamonds	Month 48	Milnex - Environmental Consultants Geologist – Pierre de Jager
Five	Non-Invasive Prospecting Consolidation and interpretation of results	Environmental Consultant,geologist	Month 49 – 60	The extent of the resource, The life of mine	Month 60	Milnex - Environmental Consultants Geologist - Pierre de Jager

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)

1. Site Visit

A formal site visit will be done within 90 days after the prospecting right was executed.

2. Desktop Studies

Desktop studies will be undertaken after the site investigation has been done to determine the target areas including the identification of any infrastructure to be build and any potential problems that may need to be addressed.

3. Consolidation and interpretation of results data

All data will be consolidated and processed to determine the diamond bearing resource on the property. This will be a continuous process throughout the prospecting work program.

(ii) DESCRIPTION OF PLANNED INVASIVE ACTIVITIES:

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

1. Pitting

After the desktop studies, the applicant will use the info to draw a pitting map. The location and GPS coordinates of where the first pits will be digged, will be indicated on the map also referred to as a pitting location map. Pits will then be digged by an excavator at these mapped coordinated points. If gravel is found, the applicant will determine the composition and quality of the gravel. For proper evaluation of the composition and the quality of the gravel it is necessary for the applicant

to dig these prospecting pits. It is envisaged that the pits will determine the location and intersection of mineralization. The location of the further pits to be digged will be determined as pits are digged and results are obtained. Depending on the results, less pits than those envisaged maybe digged.

2. Trenches

The applicant will proceed with this way of prospecting by means of the open cast / trenching method, during and or after pitting. The location of the trenches will be determined after the gravel has been located by conducting the desktop studies and the digging of pits. The trenches will be digged on the parts of the property where the gravel is located. Trenches will be sited on the resource map according to the coordinate of each of the trenches made. The trenches will be digged to remove and wash the gravel. It will be washed by a 16 feet washing pan to determine diamond proceeds per 100 ton of gravel. The trenches will be sited to determine the geological representivity. Overburden will be stripped and placed next to the trench as determined in the EMP. Gravel will be removed and transported to the plant to be washed. Tailings will be returned to the excavation to fill it up. Hereafter overburden will be dumped in the excavation where after topsoil will be placed in the excavation.

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 Program 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 Program.

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 Program.

ACCEPT	X
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(iii) DESCRIPTION OF PRE-FEASIBILITY STUDIES

(Activities in this section includes but are not limited to: initial, geological modeling, resource determination, possible future funding models, etc)

All data will be consolidated and processed to determine the diamond bearing resource on the property. This will be a continuous process throughout the prospecting work program.

(iv) DESCRIPTION OF BULK SAMPLING ACTIVITIES

This activity requires that an application in terms of Section 20 of the Act is specifically included in your application for a prospecting right and cannot be proceeded with if such permission is not specifically granted.

See annexure “D” for an application in terms of Section 20 of the Act

Table 6.1: Bulk Sampling Activities

ACTIVITY		DETAILS		
Number of pits/trenches planned		100 Pits ; 40 Trenches		
Dimensions of pits/trenches, per pit/trench	Number of pits/trenches	Length	Width	Depth
	100 pits	3m	x 2m	x 3m
	40 trenches	20m	x 10m	x 3m
Locality		The locality of the trenches will only be determined after the field mapping has been done and the pits have been dug.		
Volume Overburden (Waste)		20m x 10m x 3m x 40 = 24 000m ³		
Volume Ore		20m x 10m x 3m x 40 = 24 000m ³		
Density Overburden		1.8		
Density Ore		2.2		

Phase(s) when bulk sampling will be required	Phase 3
Timeframe(s)	Pitting: 24 months Trenches: 42 months

Commitment to provide for an addendum in respect of additional bulk sampling activities

I herewith commit to provide the Department of Mineral Resources with an addendum to the Prospecting Work Program, and an Environmental Management Plan for approval prior to undertaking any future bulk sampling activities not described above.

ACCEPT	X
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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
Mine Manager
Equipment Manager
Safety Officer
Electricians
Operators
Environmental Consultants

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

CONFIRMED	X
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7.2 List of Appropriate equipment at your disposal (If applicable)

Table D: Appropriate Equipment available

1 x Excavator – Komatso PC220
1 x Front-end Loader - JCB 36CX
1 x Dumper – BELL B25
1 x Sortex
1 x 16 feet washing pan
1 x Power plant

7.3 Technical skills provided Free of Charge

7.3.1 Information (CV's) in respect of skills already acquired

- Environmental Consultants – see annexure “E”
- CV'S of workers – “F”
- Geologist – Pierre de Jager “G”

7.3.2 Copy of the relevant contractual agreements between the service provider and the applicant relative to the duration of the planned prospecting period, where applicable

- Environmental Consultants – see annexure “E”
- CV'S of workers – “F”
- Geologist – Pierre de Jager “G”

7.3.3 All other evidence of Technical Ability

List of Equipment and Employees – see annexure “K”

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

As proof of the applicant's financial ability or access thereto, the following documents are annexed:

- Letter of undertaking – annexure “I”
- Financial statements – annexure “J”

9 REGULATION 7 (1)(k)

A COST ESTIMATE OF THE EXPENDITURE TO BE INCURRED FOR EACH PHASE OF THE PROPOSED PROSPECTING OPERATION

Table 9.1

ACTIVITY	YEAR 1 Expenditure	YEAR 2 Expenditure	YEAR 3 Expenditure	YEAR 4+5 Expenditure
PHASE 1				
Site Visit	R5000	-	-	-
PHASE 2				
Desktop Studies	R10 000	-	-	-
PHASE 3				
Pitting	R75 000	R75 000		
PHASE 4				
Trenches	R31 429	R62 858	R62 858	R62 858
PHASE 5				
Pre-Feasibility				R10 000
Labour	R35 000	R70 000	R70 000	R70 000
Rehabilitation	R20 000	R40 000	R40 000	R40 000
Diesel & Maintenance	R25 000	R50 000	R50 000	R50 000
Annual Total	R201 429	R297 858	R222 858	R232 858
			Total Budget	R955 003

10 **FINANCIAL ABILITY TO GIVE EFFECT TO THE WORK PROGRAMME**

10.1 **The amount required to finance the Work Program**

From the proposed budget it can be assumed that the amount of R955, 003.00 would be required to finance the Work Program.

10.2 Detail regarding the financing arrangements

- Letter of undertaking – “I”
- Financial Statements – “J”

10.3 Confirmation of supporting evidence appended

- Financial Statements – “J”

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

- Financial Statements – “J”

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

CONFIRMED	X
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13 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

Herewith I, the person whose name and identity number is stated below, confirm that I am the Applicant or the person authorized to act as representative of the Applicant in terms of the resolution submitted with the application, and undertake to implement this prospecting work program and adhere to the proposals set out herein.	
Full Names and Surname	Pieter Gideon van Zyl
Identity Number	620624 5054 009
Date	18 June 2015

ANNEXURE D

APPLICATION IN TERMS OF SECTION 20 (2) PERMISSION TO REMOVE AND DISPOSE OF MINERALS

Name of applicant: PGL BOERDERY (PTY) LTD
Reg number: 1997/11045/07
Postal address: P.O. Box 538
Schweizer-Reneke
2780
Telephone number: 082 496 3644
Fax number: 053 963 2009

Description of area applied for:

1. The remaining extent of the farm Grootpoort 83, excluding the mining permit application of 5 hectares
Registration Division: H.O
Extent: 685.0926 hectares – 5 hectares = 680.0926 hectares
Title Deed: T101085/1992
2. Portion 10 of the farm Grootpoort 83
Registration Division: H.O
Extent: 256.9596 hectares
Title Deed: T96480/2008

The applicant hereby applies for permission to remove and dispose for own account of bulk samples of alluvial diamonds and diamonds general found on the above-mentioned area.

Signed at Schweizer-Reneke on 18 June 2015.

APPLICANT

ANNEXURE G: UNDERTAKING

UNDERTAKING OF PGL BOERDERY (PTY) LTD ON 18 JUNE 2015

PGL Boerdery (Pty) Ltd hereby undertake to fund the application to apply for a prospecting right and the prospecting activities in terms of sections 16 and 17 of the Mineral and Petroleum Resources Development Act and to prospect for diamonds on:

1. The remaining extent of the farm Grootpoort 83, excluding the mining permit application of 5 hectares
Registration Division: H.O
Extent: 685.0926 hectares – 5 hectares = 680.0926 hectares
Title Deed: T101085/1992
2. Portion 10 of the farm Grootpoort 83
Registration Division: H.O
Extent: 256.9596 hectares
Title Deed: T96480/2008

It is confirmed that there is money available for the conducting of the prospecting activities. This money will be made solely available for the conducting of the prospecting activities.

Signed at Schweizer-Reneke on 18 June 2015

APPLICANT