

# MOUNT BURGESS MINING N.L.

ACN: 009 067 47

## REPORT FOR THE QUARTER ENDED 30 JUNE 2009

### WESTERN NGAMILAND DIAMOND PROJECT, BOTSWANA

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#### ***Ground Magnetics***

Within the recently granted eight Prospecting Licences, covering an area of some 7,000 square kms, in Western Ngamiland, Botswana, the Company has now conducted close spaced ground magnetic surveys over 30 magnetic targets, generated from an original 1998 aero-magnetic survey of the area. The ground magnetic surveys were conducted at 100m line spacing with station readings taken every 10m, along each line.

The purpose of conducting these ground magnetic surveys is to more precisely delineate possible kimberlite targets, which the Company believes have high potential to exist in this area, for the following reasons:

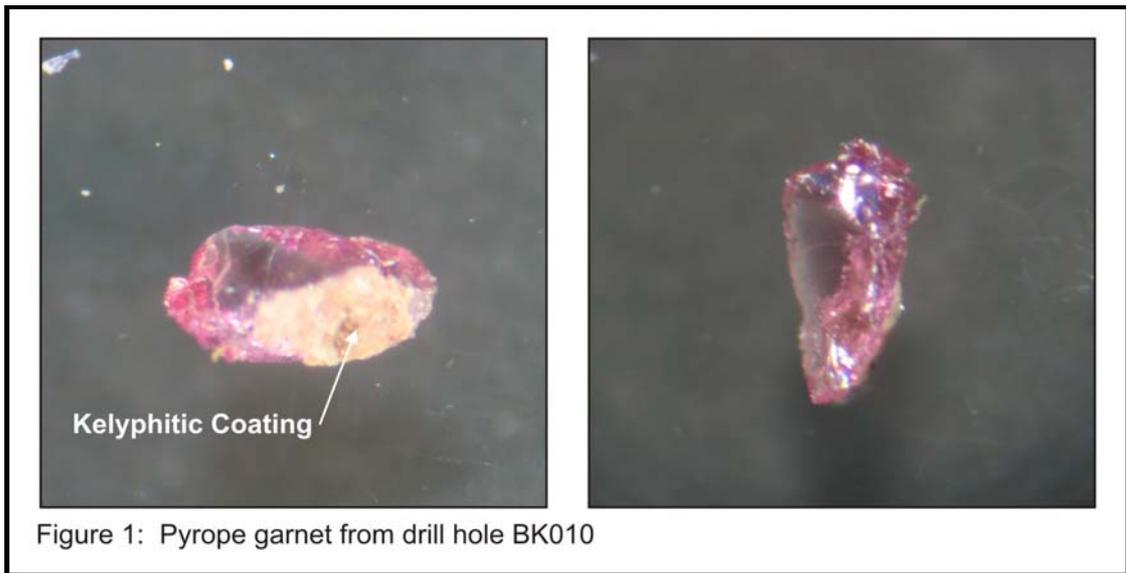
- The area is part of or proximal to the south eastern margins of the Angolan Craton, prospective for the discovery of kimberlites.
- Part of the area is some 30km south of the recently discovered Nxau Nxau kimberlite field.
- The area falls within the Limpopo dolerite dyke swarm, conducive to the occurrence of kimberlite intrusives.
- The area adjoins the Company's Tsumkwe diamond project in Namibia, immediately to the east, where to date a number of G10 pyrope garnet anomalies and macro diamonds have been found in both drilling and loam sampling. It is possible that some of these anomalies have been sourced from kimberlites within the area the Company now has under licence on the Botswana side of the border.

Of the 30 ground magnetic targets so far generated, 25 have been cleared for drill access.

#### ***Drilling***

During the quarter, attempts were made to test six of these targets with open hole percussion drilling. A number of holes had to be abandoned due to caving within the Kalahari sands which overlay basement rocks. Consequently, this drilling programme was abandoned with the result that five of these six targets will need to be re-drilled.

Drill hole BK010, drilled into one of these targets, had to be abandoned right at the base of the Kalahari sands. **Initial microscopic examination of 120grams of drill chips from this hole, recovered from the base of the Kalahari sands, has produced a very fresh pyrope garnet with a partial coating of kelyphite (Refer Figure 1) indicating the possibility of a kimberlite source at greater depth or within very close proximity.** Geochemical analysis of this garnet has confirmed that it is a type G9 pyrope garnet, of kimberlitic origin. **Petrographic analysis of these drill chips from which this pyrope garnet was recovered has confirmed the presence of chromiferous "rutile" which could also be anomalous, as rutile in kimberlites is present normally as intergrowths with ilmenite.** Further deeper drilling to acquire more sample will be required to confirm the geological genus of this target.



Tenders from other drillers are currently being reviewed, with the expectation that drilling should re-commence in early August.

## **TSUMKWE DIAMOND PROJECT, NAMIBIA**

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### ***Review***

During the quarter a review of all previous work conducted on this project and results generated therefrom, was carried out by Mr Manfred Marx. This review concluded that it is possible for there to be two local kimberlite occurrences, yet to be discovered on the Namibian side of the border, accounting for two of the G10 pyrope garnet and macro diamond anomalies generated through surface loam sampling and sampling drill chips from basement. Follow up work will be conducted during the current quarter.

The information contained in this report relative to the West Ngamiland and Tsumkwe diamond projects is based on information approved for release by Mr Manfred Marx of Manfred Marx and Associates Pty Ltd, Bsc., Dip Env. Sc., Aus.I.M M., GSSA. Mr Manfred Marx is a consulting geologist to the Company. He has sufficient experience which is relevant to the style of mineralisation under consideration and to the activity which he is undertaking to qualify as a competent person as defined in the 2004 edition of the Australasian Code for Reporting of exploration results, mineral resources and ore reserves. Mr Marx consents to the inclusion in the report of the matters based on this information in the form and context in which it appears.

## **KIHABE ZINC, LEAD, SILVER PROJECT, WESTERN NGAMILAND, BOTSWANA**

### **Resources**

The Company has potential open cut resources at both the Kihabe and Nxuu deposits, situated seven kilometers apart, in north western Botswana, amounting to 27.4 million tonnes @ 2.32% zinc equivalent grade (see note), applying a 0.5% zinc equivalent low grade cut, as follows:

<b>Resource Category</b>	<b>Total Tonnes</b>	<b>Kihabe Resource</b>	<b>Nxuu Resource</b>
Indicated	16.4 million	16.4 million	-
Inferred	11.0 million	5.6 million	5.4 million
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Total	27.4 million	22.0 million	5.4 million
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(Note: The zinc equivalent grade was calculated applying the refined metal prices as of 17<sup>th</sup> July 2008, the date Ravensgate Pty Ltd, geological consultants compiled the Kihabe resource model. On this date zinc was trading @ US\$1,810/t and lead was trading @ US\$1,955/t.)

### **Scoping Study**

The above combined resources have been the subject of a revised scoping study conducted by ProMet Engineers.

This study ran a financial model, based on a mining rate of 2.5 Mtpa of ore over a 10 year mine life, at metal prices prevailing in March 2009 of US\$1228/t for zinc and US\$1,176/t for lead. The study concluded that at these "industry shake-out" metal prices, the project was sub-economic. However with double the above metal prices, the project is considered fairly robust, yielding an ungeared IRR of 15.4% or 26.6% geared at 30% equity.

Zinc and lead prices bottomed in the first quarter of 2009 and have since risen to around US\$1,650/t and US\$1,700/t, some 35% and 45% higher, respectively, to those prices used in the scoping study (See Figure 2 for 10 year zinc and lead price charts)

The economics of this combined resource have the potential to be further improved upon, post this scoping study level, with the following applications:

1. Additional resource drilling.
2. Further in-fill drilling at the Nxuu resource (less than 1,000m) in order for a pit design to be applied to this resource.
3. Undertaking additional metallurgical test work to determine:
  - (a) The viability of producing an economic grade, bulk zinc and lead concentrate.
  - (b) The establishment of flotation kinetics for producing a zinc concentrate and a lead concentrate (differential flotation).
4. Investigating the possibility of using South African or Zambian based smelters to reduce concentrate transport costs and possibly smelter charges.

With regard to:

1. Above - The Company intends in this next quarter, to test the Tswee Tswee copper anomaly, 15kms to the SE of the Kihabe resource. This is a geochemical anomaly of elevated copper values, coincident with a circular magnetic low anomaly of some 600m diameter.
2. Above - It is planned to complete this drilling, possibly this quarter.
3. Above - Further metallurgical test work has now been conducted on one sample composited from seven different drill holes, selected from the span of the 2.4km length of the Kihabe resource and believed to be representative of the zinc and lead grades of the resource. An initial bulk flotation test was carried out resulting in sulphur recovery of 97.5% within the order of 60% zinc and lead yields. However the remaining 40% zinc and lead was contained within the tails sample. The tails sample was in turn the subject of further metallurgical test work, indicating that it contained 38.1% zinc and 32.8% lead.

The bulk of the 38.1% zinc detected in the tails was in the form of zinc oxide, not able to be recovered by sulphide flotation, as designed in the scoping study flow sheet. Consequently, sulphidisation of the feed, prior to flotation, now needs to be considered for recovering this tails portion. This is known as Controlled Potential Sulphidisation (CPS), a proven technology used in recovering zinc from oxidized ores.

The bulk of the 32.8% lead detected in the tails was in the form of finely disseminated galena, able to be recovered by sulphide flotation as designed in the scoping study flow sheet. A grind of mill feed, finer than that designed in the scoping study will however need to be applied to recover this tails portion.

4. Above - These alternatives will be investigated.

A further possible alternative to improving the economics of the project is on-site smelting using an Ausmelt furnace. This may however require additional mine life to justify additional capital cost.

Mr Giles (Rodney) Dale of GR Dale and Associates, consents to the inclusion, in this section of the report, of the matters based on this information in the form and context in which it appears. Mr Dale is a Fellow of the Australasian Institute of Mining and Metallurgy, with sufficient experience relevant to the style of mineralisation under consideration and to the activity which he has undertaken to qualify as a Competent Person as defined in the 2004 Edition of the "Australasian Code for Reporting of Mineral Resources and Ore Reserves".

## **TELFER GOLD AND BASE METALS, WESTERN AUSTRALIA**

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In November 2008 the Company received \$2,350,000 from Newcrest Operations Limited for the withdrawal of Exploration Licence Application 45/1946 – one of the licences that formed part of the Company's Telfer Gold and Base Metals Project.

Under the current economic climate the Company has not been successful in attracting further joint venture partners for the remaining licences that formed part of this Project. The high cost of expenditure commitments, rent and rates required to maintain these mining leases for exploration, amounting to close on A\$1 million per annum, forced the Company to withdraw from this project during the quarter. In so doing, the Company has recouped around A\$100,000 in rental pre-payments.

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**FIGURE 2: Zinc/Lead Price Charts**

**Kihabe Zinc/Lead Project, Botswana**

