

# **MOUNT BURGESS MINING N.L.**

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## **HIGHLIGHTS - ASX RELEASE 20 JANUARY 2010**

### **KIHABE ZINC/LEAD/SILVER PROJECT UPDATE**

- Scoping Study testwork and current metal prices show that the Kihabe zinc/lead/silver project is likely to be economically attractive.
- Resource upgrade at Nxuu Deposit

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## ASX RELEASE

20 January 2010

### **KIHABE ZINC / LEAD / SILVER PROJECT, WESTERN NGAMILAND, BOTSWANA - UPDATE**

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In a revision to the Project Scoping Study completed in September 2009, ProMet concluded:

"subject to the achievement of satisfactory results from the future testwork program, continued improvement in base metal prices and the selection of optimum processing steps, the Kihabe base metals project has the potential to form the basis for an economically attractive business venture".

At the project update meeting held on 13 January 2010, ProMet advised the Company as follows:

"With the work done in the intervening period, we have made significant positive progress in that regard. In accordance with your advice to the market on 16 December 2009, we further confirm that:

- Lead and zinc recoveries of greater than 90% have been achieved in recent testwork, a significant improvement over the previous recoveries of 67% and 64% respectively, used in our Scoping Study of May 2009.
- Process steps have been identified to enable the production of metal cathode which will eliminate fees paid to external smelters and boost the project margins.
- Metal prices have more than doubled over those used in our Scoping Study of May 2009 and these will have a major positive impact on the project revenues and returns.

**As a consequence, it is now clear that under current conditions it is likely that the project will be economically attractive.**

However, the technical concepts for the ore processing, recovery of the metals and production of saleable products, while demonstrated in principle, require additional work in the laboratory to substantiate the indicative results obtained to date. Also, the Scoping Study requires a major revision not only to incorporate these concepts, but also to acknowledge the recent positive resource estimates of the Nxuu deposit and the current metals prices."

The above section of this report has been approved for release by ProMet Engineers.

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## KIHABE PROJECT ZINC/LEAD/SILVER RESOURCES

### NXUU RESOURCE UPGRADE

The inferred resource for the Nxuu deposit has now been upgraded from the previously estimated 5.4 million tonnes @ 2.81% Zn/Pb applying a 0.5% external cut.

Results from recent RC drilling have produced revised inferred open cut resource estimates as follows:

Cut off external %	Tonnes	Zn/Pb grade
0.3%	10.9 million	3.2%
0.5%	7.9 million	3.8%
0.8%	4.2 million	4.1%
1.0 %	2.3 million	4.4%

Note: The above Zn/Pb grade assumes a par value for both Zinc and Lead.

See Attachment for Estimation Procedure.

Assaying methods used for the assay results incorporated into the resource revision were AX/MS and AX/OES.

The information in the above section of this report that relates to Exploration Results, Mineral Resources or Ore Reserve is based on information compiled by Mr Ben Mosigi, M. Sc (Leicester University – UK), B.Sc (University of New Brunswick – Canada), Diploma Mining Tech (Haileybury School of Mines – Canada), a member of the Geological Society of South Africa, a Recognised Overseas Professional Organisation ('ROPO') included in a list promulgated by the ASX from time to time.

Mr Mosigi is a Technical Director of the Company and has 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 of Reporting of Mineral Resources an Ore Reserves". Mr Mosigi consents to the inclusion in the report and attachments of the matters based on this information in the form and context in which it appears.

### COMBINED OPEN CUT RESOURCES FOR THE KIHABE AND NXUU DEPOSITS

The combined open cut resources at both the Kihabe and the Nxuu deposits applying a 0.5% external cut now stand at **29.9 million tonnes @ 2.62% Zn equivalent grade**, as follows:

Resource Category	Total Tonnes	Kihabe Resource	Nxuu Resource
Indicated	16.4 million	16.4 million	
Inferred	13.5 million	5.6 million	7.9 million
	<b>29.9 million</b>	<b>22.0 million</b>	<b>7.9 million</b>

Note: The resource relevant to Kihabe, in the above resource statement, was calculated by Ravensgate Pty Ltd, geological consultants on the 17<sup>th</sup> July 2008, on which date zinc and lead were trading at US\$ 1810/t and US\$1,955, respectively.

## COMBINATION OF VARYING EXTERNAL % CUT OFFS

Based on the premise of a revised Scoping Study covering a proposed 10 year mine life at a potential mining rate of 2.5 million tonnes p.a., a selection of external % cuts can be used for both the Kihabe and Nxuu resources to best suit such a regime. For example:

Resource	Cut off External %	Tonnes	Grade Zn/Pb	Contained metal (Tonnes)
Kihabe	1.4%	14.185 million	2.77%	392,624
Nxuu	0.3%	10.900 million	3.20%	348,800
<b>Total</b>		<b><u>25.085 million</u></b>	<b><u>2.98%</u></b>	<b><u>741,424</u></b>

Other variations can be applied depending on the prevailing zinc and lead prices as the project progresses.

The information in the above section of this report and attachments is based on information approved for release, in the form and context in which it appears, by Mr Giles Rodney Dale of GR Dale and Associates. 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".

## NOTES ON THE NXUU DEPOSIT RESOURCE ESTIMATE

### 1. Estimation Procedure

The following procedure was used to arrive at the tonnage and grade estimation for the Nxuu deposit:

- The volume and grade of Pb-Zn mineralization was calculated using the Inverse distance weighted averaging algorithm in Rockworks14 software.
- Intersection thickness was controlled by a 0.3% Zn, isopach. This isopach was used as a horizontal interpolation polygon filter. Blank holes do not fit into the calculation.
- A fault line was also used to control the interpolation from going across assumed fault cut offs. Holes in dolomite NW of the fault were excluded by a fault polyline.
- The bottom and the top of the isosurfaces were controlled by the dolomite and sand contacts respectively.
- Holes with no grade were therefore excluded by the polygon and the fault.
- The Billiton holes AP001 to AP009 were included in the stratigraphy and grade Estimation
- The specific gravity of each drill intersection used in the resource estimate was averaged from these regular density measurements.
- The volume of the resource calculated by inverse distance weighting was multiplied by the averaged specific gravity of the intersections to get a tonnage.
- Average grade was calculated as:

$$\text{Average Assay} = \frac{\sum(SG*W*A)}{\sum(SG*W)}$$

### 2. GENERAL

#### 2.1 Geology/Stratigraphic Controls

The Zn/Pb mineralisation is in a Quartz wacke overlain by Kalahari sand and a small layer of calcrete in places. The mineralisation is cut off to the North West by a SW-NE trending fault. There is a possibility of another fault cutting through in the area of drill hole AP009 which makes it likely that the mineralisation is controlled by step faults.

The contact on the fault is steep sided. The dolomite contact was used as a bottom filter.

#### 2.2 Specific gravity data

Specific gravity values used in the resource estimate are based on specific gravity measurements taken at 1 m intervals in all the core holes. No measurements were available for the ten recently drilled RC holes. The average specific gravity of 2.57 in mineralised zones was used.

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### **2.3 Survey Data**

All the core boreholes were surveyed using a high precision GPS. No Survey has been done yet for the ten recently drilled infill RC holes.

### **2.4 Drilling Data**

The resource was calculated from all the assay results from core drilling and reverse circulation drilling.

### **2.5 Geochemistry**

The shape of the mineralised zone delineated from holes drilled by Billiton and Mount Burgess is identical to the shape of the geochemical soil anomaly generated by both the Department of Geological Survey, Botswana and Billiton.

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