



## ASX Release

Tuesday 30 January 2007

### BLACK RANGE MINERALS LIMITED

Level 2 / 675 Murray Street  
WEST PERTH

Australia

Tel: +61 8 9481 4920

Fax: +61 8 9226 2027

#### Contact:

Michael Haynes  
Managing Director

E-mail:

info@blackrangeminerals.com

Tel: +61 8 9481 4920

#### Directors / Officers:

Alan Scott  
Michael Haynes  
Matthew Wood  
Timothy Flavel

#### Issued Capital:

524.2 million shares

109.3 million options

#### Australian Stock Exchange

Symbol: **BLR & BLRO**

DECEMBER 2006

## QUARTERLY ACTIVITIES REPORT

### HIGHLIGHTS

#### URANIUM

- The Company acquired a 100% interest in the high-grade Taylor Ranch Uranium Project in Colorado, USA.
- Based on historic data, including >550 drill holes, the company has an initial exploration target estimate for the Taylor Ranch Uranium Project of **10-15 million pounds of U<sub>3</sub>O<sub>8</sub>**.
- Furthermore the Company is actively seeking historic data from 4 other areas within its Taylor Ranch Project, where considerable close-spaced drilling has been undertaken previously, but where to date no results have been located.
- Drilling at the Taylor Ranch Uranium Project is expected to commence during March 2007 and JORC-compliant resource figures will follow progressively thereafter.
- The Company completed its inaugural drilling programme at its Eagle Uranium Project in Wyoming.
- Calculation of a JORC-compliant resource for the Eagle Project is in progress.
- Negotiations to acquire several additional advanced uranium projects continue.

#### BASE METALS

- Compilation of historic data from the high-grade Ferris-Haggerty Copper Deposit in Wyoming, USA is progressing well.
- Ore grades during historic production averaged 20% copper.
- Remaining unmined ore is estimated to comprise **at least 1Mt at 5-6% copper and 3-4g/t gold**.
- No exploration drilling has ever been undertaken.
- Considerable potential remains to delineate further high-grade mineralisation.
- Exceptional near-term production opportunity.
- The airborne EM survey over the entire Koonenberry Base Metal Project in NSW, to fast-track exploration there, is now scheduled for February 2007.

#### CORPORATE

- Presentations to the investment communities in Sydney, Melbourne, Adelaide and Perth were undertaken during January 2007
- Regional office to be established in Denver, USA
- Current cash reserves of approximately \$3.7million.

## **TAYLOR RANCH URANIUM PROJECT, COLORADO, USA**

**100% rights to explore for and mine uranium on 4300 acres**

The Company finalised the acquisition of the advanced, high-grade Taylor Ranch Uranium Project in Colorado, USA during November 2006. It has secured a 100% interest in the rights to explore for and mine uranium on approximately 4300 acres of the Taylor Ranch, located approximately 30 kilometres northwest of Canon City.

**More than 550 holes drilled previously**

The Taylor Ranch Uranium Project lies immediately along strike from the large, high-grade Hansen Uranium Deposit, which contains approximately 30 million pounds of  $U_3O_8$  at an average grade of approximately 0.08%  $U_3O_8$ .

**Uranium mineralisation delineated over more than 5 kilometres**

Historic data compiled to date indicate that at least 550 holes have been drilled previously at the Taylor Ranch Uranium Project. Drilling confirms that the Project hosts an extensively mineralised system that extends for more than 5 kilometres of strike (see Figure 1).

**Exploration target of 10-15 million pounds of  $U_3O_8$**

Based on results from previous drilling, previous explorers have outlined the extent of the mineralised system by generating “grade x thickness” contours of the mineralised corridor (grade as a percentage times thickness in feet or “GT”) (refer Figure 1). Using a 0.25 GT cut-off, the Company has an **initial exploration target estimate for the Taylor Ranch Uranium Project of 10-15 million pounds of  $U_3O_8$** .

**Exceptionally high-grades in drilling, including 0.3metres at 3.767%  $U_3O_8$**

Within this mineralised corridor exceptionally high-grade results were recorded from drilling at the Northwest Taylor Uranium Deposit, including **0.3metres at 3.767%  $U_3O_8$**  (37,670ppm).

High-grade results from drilling at the Northwest Taylor Uranium Deposit include:

- **0.3m at 3.767%  $U_3O_8$**
- **0.75m at 0.934%  $U_3O_8$**
- **0.6m at 0.95%  $U_3O_8$**
- **0.6m at 0.829%  $U_3O_8$**
- **0.45m at 0.536%  $U_3O_8$**
- **0.45m at 0.519%  $U_3O_8$**
- **1.95m at 0.284%  $U_3O_8$**
- **0.75m at 0.318%  $U_3O_8$**
- **0.75m at 0.313%  $U_3O_8$**

**Exploration target of 2-3 million pounds of  $U_3O_8$  at 0.2%  $U_3O_8$  for the high-grade Northwest Taylor Deposit**

Based on calculations by previous explorers the Company’s initial exploration target estimate for the Northwest Taylor Uranium Deposit is that it **contains at least 2-3 million pounds of  $U_3O_8$  at a grade of approximately 0.2%  $U_3O_8$** .

**Drilling scheduled to commence in March 2007**

**Progressive upgrades of the JORC-resource to follow**

**No data obtained yet and no exploration target size assigned to four zones of close-spaced drilling**

**Near-term production opportunity, with licensed mill 30km away**

**32 holes drilled at the Eagle Uranium Project**

**Drilling confirms extensive uranium mineralisation**

**JORC-compliant resource calculation imminent**

The exploration target estimates have been presented as conceptual targets that may result from the completion of successful exploration and confirmation of previous work. They should not be understood as indicating the existence of reserves or resources in the sense implied by the JORC Code as it is uncertain if further exploration will result in the determination of a Mineral Resource. However they are presented because Black Range Minerals wants to inform shareholders of the basis for its assessment of the exploration potential of the Taylor Ranch Project, based on the data currently available to the Company.

The Company intends commencing an extensive drilling programme at the Taylor Ranch Uranium Project in early March to confirm historic results. It expects to progressively announce upgrades to the JORC-compliant resource for the project as the drilling programme progresses. In this regard, particular efforts will be made to assess the four zones within the project area, which are outside of the historic grade-thickness contours, and hence not included in the exploration target noted above, but for which close-spaced drilling has been undertaken previously (refer Figure 1).

The Company could conceivably be in production from the Taylor Ranch Uranium Project within the foreseeable future, with one of the USA's only four licensed uranium mills strategically located in Canon City, just 30km southeast of the Taylor Ranch Project. Suitable terms to utilise the mill would need to be negotiated.

## **EAGLE AND CYCLONE RIM URANIUM PROJECTS, WYOMING, USA**

The Company successfully completed its inaugural drilling programme at the Eagle Uranium Project in Wyoming, USA, with 32 drill holes completed during October and November 2006 for more than 3800 metres. Numerous targets were evaluated over the entire 2260 acre project.

Drilling has confirmed that the Eagle Uranium Project hosts extensive shallow uranium mineralisation, with grades greater than 300ppm eU<sub>3</sub>O<sub>8</sub> recorded in more than 60% of the holes drilled. Better results from drilling include:

- 1.1m at 0.073% eU<sub>3</sub>O<sub>8</sub> from 10m
- 0.9m at 0.057% eU<sub>3</sub>O<sub>8</sub> from 16m
- 0.6m at 0.057% eU<sub>3</sub>O<sub>8</sub> from 66m
- 0.5m at 0.051% eU<sub>3</sub>O<sub>8</sub> from 30m
- 0.8m at 0.044% eU<sub>3</sub>O<sub>8</sub> from 40m
- 0.6m at 0.044% eU<sub>3</sub>O<sub>8</sub> from 16m

The Company has commenced calculation of an inaugural JORC-compliant resource for the Eagle Uranium Project.

**Exploration target estimate of 5 million pounds of U<sub>3</sub>O<sub>8</sub>**

**Both deposits shallow and amenable to in-situ leaching and/or open pit mining**

**Compilation of historic data is progressing well**

**Average grade of mined ore was 20% copper**

**Initial exploration target estimate of 1 million tonnes at 5-6% copper and 3-4g/t gold**

**Drilling to commence second quarter 2007, followed by JORC resource**

Adverse weather conditions precluded the Company from gaining drill access to its Cyclone Rim Uranium Project in Wyoming, situated at considerably higher altitude than the Eagle Project. Drilling at the Cyclone Rim Project will take place in 2007.

Approximately 110 holes have now been drilled at the Eagle Project and a further 115 holes have been drilled previously at the Cyclone Rim Project. Based on results from these drill holes the Company's **exploration target estimates are that approximately 2 million pounds of U<sub>3</sub>O<sub>8</sub> have been delineated at the Eagle Project and a further 3 million pounds of U<sub>3</sub>O<sub>8</sub> at the Cyclone Rim Project.** Considerable potential remains to extend these resources along strike and at depth.

Both deposits are shallow and amenable to in-situ leaching and/or open-pit mining. These deposits provide the Company with a near-term production opportunity.

### **FERRIS-HAGGERTY COPPER DEPOSIT, WYOMING, USA**

The compilation of data from the historic high-grade Ferris-Haggerty Copper Deposit in southern Wyoming, USA is progressing well.

The Ferris-Haggerty Copper Deposit was discovered in 1897 and was brought into production the following year. Mining operations continued until 1908, when fire destroyed the mines' processing facilities and a drastic decline in copper prices precluded the viability of rebuilding the facilities. Records indicate that approximately 50,000 tonnes of ore were mined prior to the closure, at grades of approximately 20% copper.

No mining or modern exploration has been undertaken at the project subsequently.

Based on results of previous workers, the Company estimates that there are **at least 1 million tonnes of unmined ore remaining within the lower, explored but undeveloped portions of the Ferris-Haggerty Copper Deposit, at grades of 5% to 6% copper and 3g/t to 4g/t gold.** No exploration drilling has ever been undertaken. There is considerable potential to discover additional mineralisation both at depth and along strike from the known deposit.

The Company intends commencing an underground drilling programme when weather permits in the second quarter of 2007. The objective will be to confirm the presence of the unmined ore and to commence testing the surrounding exploration potential. The Company anticipates releasing a JORC-compliant resource calculation on completion of this drilling programme.

## **KOONENBERRY BASE METAL PROJECT, NEW SOUTH WALES**

During the past 18 months successful exploration at the Company's 100%-owned Koonenberry Base Metal Project has resulted in the discovery of the Peveril Copper Deposit, the successful extension of the Grasmere Copper Deposit, and the 1000% increase in the resource base to **5.75Mt at 1.03% copper, 0.35% zinc, 2.30g/t silver and 0.05g/t gold for 60,000 tonnes of contained copper.**

**Exploration conducted over just 4km to date**

**Over 50km of prospective mineralised horizon remains untested**

**Airborne EM survey to fast-track regional exploration**

To date only 4 kilometres of the stratigraphic horizon that hosts the mineralisation at the Koonenberry Project has been explored. While considerable potential remains to extend the mineralisation at the Grasmere and Peveril Deposits with further exploration, more than 50 kilometres of the prospective mineralised horizon located within the Company's exploration licences remains untested.

The Company will fast-track exploration of this 50 kilometre long highly prospective strike extension by conducting an airborne EM survey over the entire project. This survey will allow the rapid identification and direct detection of additional deposits similar to the Grasmere and Peveril Deposits. The airborne EM survey is now expected to be conducted during February 2007.

Follow-up ground geophysical surveying and further drilling is planned to follow immediately the airborne EM data have been interpreted.

## **NEW PROJECTS**

Negotiations to acquire several additional advanced uranium projects in the USA, all of which are located in jurisdictions that are highly amenable to exploration and development, continue to progress well.

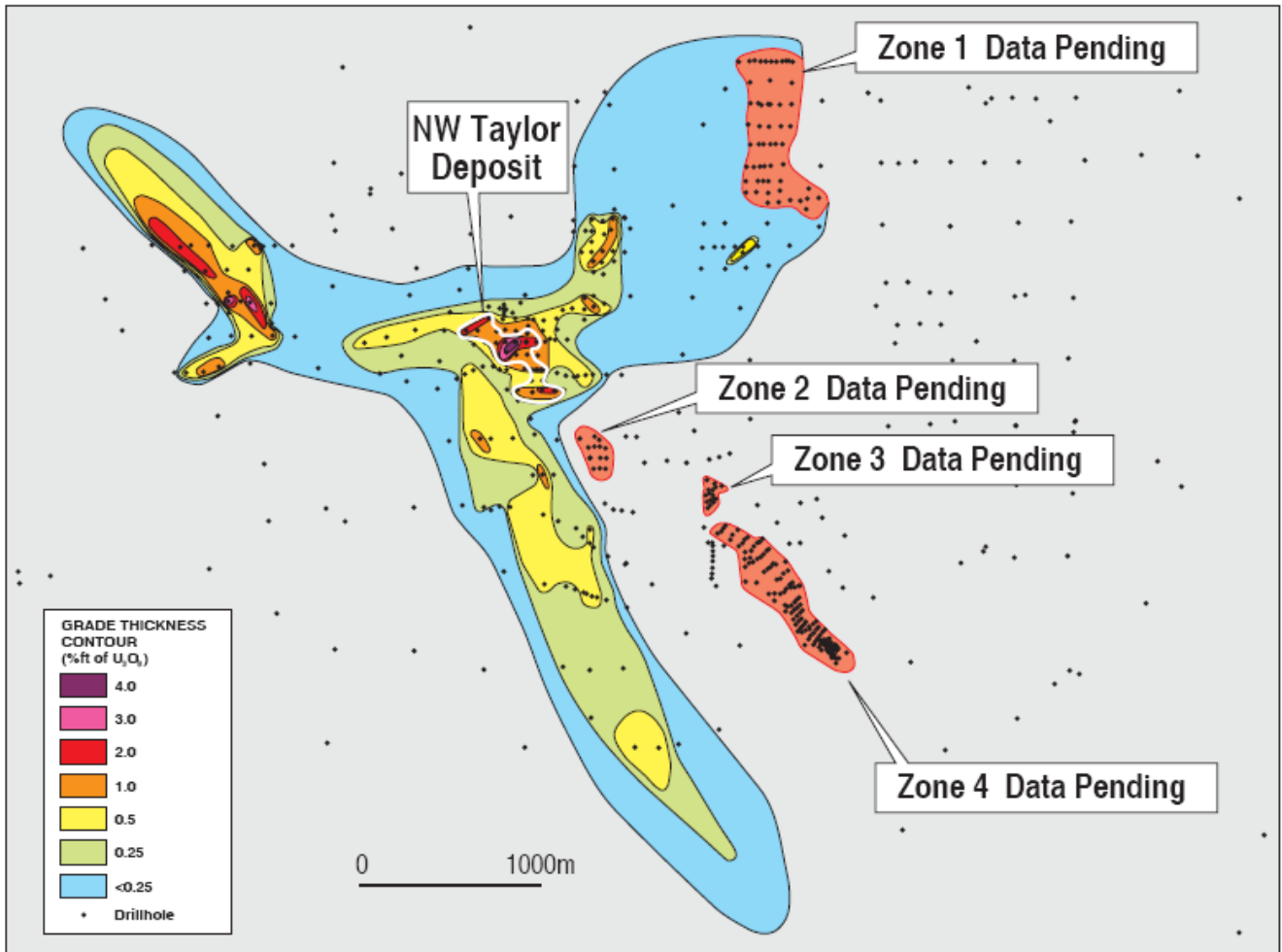
## **CORPORATE**

Presentations on the Company's assets and growth prospects were made to the investment communities in Sydney, Melbourne Adelaide and Perth during January 2007.

The Company will establish a regional office in Denver, Colorado in the USA during the first quarter of 2007 to facilitate the efficient advancement and development of its USA-based projects.

Cash reserves are currently \$3.526 million.

**Mike Haynes**  
**Managing Director**



**Figure 1.** Historic “grade x thickness” contours for mineralisation at the Taylor Ranch Uranium Project in Colorado, USA prepared by previous explorers. Note the presence of four zones of close-spaced drilling that have not been assigned a grade times thickness rating and for which the Company is yet to obtain historic data.

*The information in this report that relates to Mineral Resources is based on information compiled by Mr. Peter Ball, who is a member of The Australian Institute of Mining and Metallurgy. Mr. Peter Ball is the Manager of Data Geo. Mr. Peter Ball has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the “Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves”. Mr. Peter Ball consents to the inclusion in the report if the matters based on his information in the form and context in which it appears.*

*The information in this report that relates to Exploration Results is based on information compiled by Mr. Ben Vallerine, who is a member of The Australian Institute of Mining and Metallurgy. Mr Vallerine is a Senior Geologist of MQB Ventures Pty Ltd. Mr. Vallerine has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the “Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves”. Mr. Vallerine consents to the inclusion in the report if the matters based on his information in the form and context in which it appears.*