

ASX ANNOUNCEMENT ASX Code BRD

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### 8<sup>th</sup> April 2010

## INITIAL EXPLORATION TARGET OF 180 - 200 MILLION TONNES FOR THE UNALY HILL MAGNETITE VANADIUM PROJECT

### Highlights:

- Initial Exploration Target\* of 180 to 200 million tonnes @ 30% 44% Fe , 0.6% 0.9%  $V_2O_5,\,9\%$  -13% TiO\_2 For the Unaly Hill Project
- Exploration Target based on a 3km portion of strike length out of an identified 11km magnetic anomaly
- RC drilling program planned to commence in May 2010

Black Ridge Mining NL ("**Black Ridge**") is pleased to report an initial Exploration Target\* at its 100% owned Unaly Hill magnetite-vanadium project, which is located 30 km south of Sandstone in WA's Mid-West region.

Recent exploration programs have been successful in delineating a series of magnetite lenses within a layered metagabbro intrusive (Figure 1). This style of layered intrusive is an important host for vanadium- and titanium-bearing magnetite iron deposits such as those at the Speewah Project (NiPlats Australia Ltd) or the Balla-Balla titanomagnetite deposit (Aurox Resources Ltd).

Independent consultants CSA Global Pty Ltd ("CSA") were commissioned to assess the exploration potential of the project based on the exploration programs completed to date. The main data used were an aeromagnetic interpretation completed by Southern Geoscience Consultants ("SGC"), a three hole RC percussion drilling program and a two hole diamond core drilling program both completed by **Black Ridge**. Based on these data, CSA has derived an Exploration Target of 180–200Mt of magnetite-bearing material may be present with grades ranging from 30%-44% Fe, 0.6%-0.9% V<sub>2</sub>O<sub>5</sub>, 9%-13% TiO<sub>2</sub> for the Unaly Hill Project

The Exploration Target as determined by CSA covers a 3km portion of an 11km long magnetic anomaly. The remaining strike extent is prospective for additional magnetite mineralisation but requires additional exploration to assess the magnetite content and continuity of the deposits.

\* The term "Exploration Target" should not be misunderstood or misconstrued as an estimate of Mineral Resources and Reserves as defined by the JORC Code (2004), and therefore those terms have not been used in this context. Exploration Targets are conceptual in nature, and it is uncertain if further exploration will result in the determination of a Mineral Resource.



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### **Exploration Target Potential**

Drilling was completed on three sections; 6859800mN, 6856475mN and 6854450mN (see Figure 1) and indicates that as many as five vanadiferous-titaniferous magnetite-rich lenses are present at Unaly Hill. The best mineralisation occurs on section 6856475mN (see Figure 2) with five lenses intersected ranging in true thickness from 4m to 50m. The lenses dip subvertically or slightly to the west and the combined thickness of the five lenses is 75m.

The mineralisation intersected on section 6856475mN is centrally located on the relatively undisturbed area at the northern end of the aeromagnetic anomaly. SGC's interpretation indicates the magnetic unit is continuous in the areas north and south of 6856475mN with a reasonably consistent magnetic response. As such the mineralised lenses are interpreted to extend 2km to the north and 1km south, which is midway to the adjacent sections. It is unlikely that that the thinner units are completely continuous over this distance, but due to the consistency of the magnetic response it is felt that the magnetite content may be reasonably constant along the 3km strike length.

Mineralisation on the northern section 6859800mN, intersected three thin magnetite-bearing zones ranging in true thickness from 3m-5m. These also appear to dip steeply to the west, however it was felt the mineralisation was too thin and not continuous with the main lenses intersected on section 6856475mN. The possibility remains that drilling on this section has been sited too far west to intersect the main magnetite bearing unit.

On the southernmost section the drill hole was collared too far to the east and failed to intersect any mineralisation. The hole was sited based on the assumption that the magnetite host rocks dipped to the east, which does not appear to be the case. Due to the uncertainty over whether further magnetite-bearing lenses exist to the west, the exploration target has not been extended to this section.

The size of the Exploration Target was assessed by modelling the five lenses in three dimensions using Micromine software to estimate a potential volume. Each lens was initially modelled on section 6856475mN, based on a 20% Fe cut-off and a minimum downhole intersection width of 5m. Up to 3m of internal waste was allowed as long as the resulting intersection was not less than 20% Fe. The modelled lenses were extrapolated to the north and south half of the way to the adjacent drilled sections and aligned with the magnetic trend (see Figure 4). The lenses were modelled to a depth of 280m below surface reflecting the depth of the deepest intersection to date in hole UH4. A density of 3.2t/m<sup>3</sup> was assumed based on similar projects.

The results indicate an Exploration Target tonnage range of 180-200Mt within the modelled magnetite body. Grades could range from 30%-44% Fe, 0.6%-0.9%  $V_2O_5$ , 9%-13% TiO<sub>2</sub>, 0.01-0.02% P, 9%-22% SiO<sub>2</sub> and 7%-12% Al<sub>2</sub>O<sub>3</sub> based on the average minimum and maximum grade



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for each element in the lenses intersected in drill hole UH4. Analytical results for each lens highlight the variable nature of the mineralisation that is likely within the target zone. The potential quantities discussed are conceptual in nature and there has been insufficient exploration to define a Mineral Resource and it is uncertain if further exploration will result in the determination of a Mineral Resource.

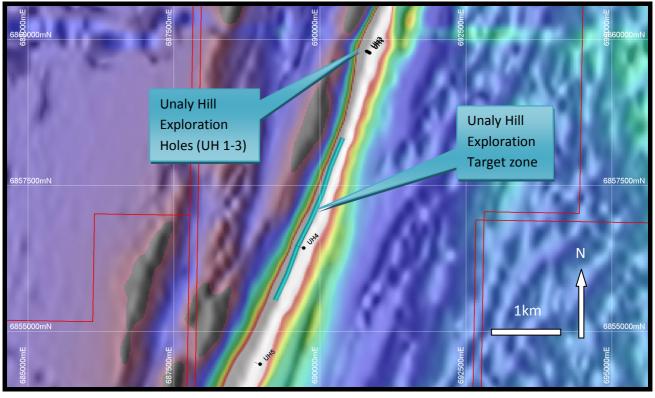


Figure 1. Drill hole Location Plan and Exploration Target Model over aeromagnetic Image (TMI reduced to the pole with Automatic Gain Control)



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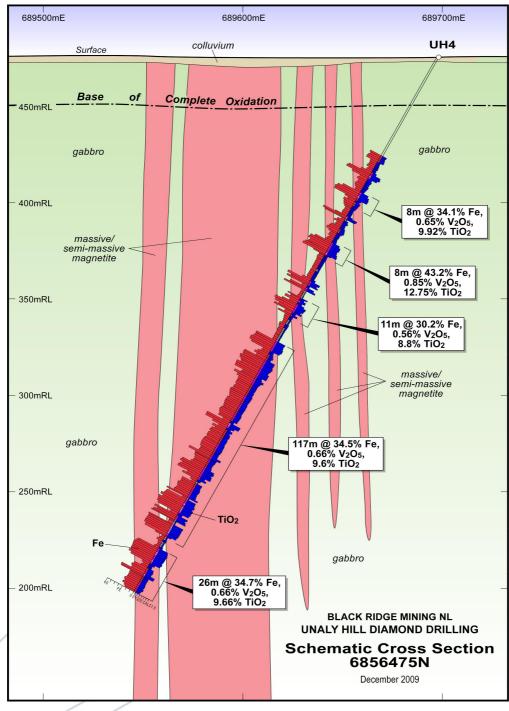


Figure 2. Schematic cross-section of 6856475



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#### **Project Development**

A series of exploration programs are planned to commence during the second quarter of 2010. The programs will include additional geophysical interpretation, and a program of RC percussion drilling to better understand the distribution of magnetite mineralisation within the target areas, which if successful, will allow the estimation of an initial Mineral Resource for the project.

Davis Tube Recovery (DTR) testwork and metallurgical studies are being undertaken and it is also planned to commence a scoping study, which will assist in identifying development options and opportunities at the project.

Reade

#### Gordon S. Hatch

#### **Managing Director**

Information in this report that relates to exploration targets reflects information compiled by Mr Daniel Wholley, who is a Director of CSA Global Pty Ltd, a member of the Australian Institute of Geoscientists and an independent consultant to the Company. Mr Wholley has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity upon which he is reporting on 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 Wholley consents to the inclusion in this report of the matters based on the information compiled by him, in the form and context in which it appears.