

Quarterly Activities Report December 2012

ASX ANNOUNCEMENT

31 January 2013

Highlights

- Recoveries approaching 99% consistently returned from test samples from the Company's 90.9 million pound Hansen/Taylor Ranch Uranium Project when incorporating the secondary upgrade circuit into the Ablation process.
- Ablation secondary upgrade circuit further enhances the economics of developing the Hansen/Taylor Ranch Uranium Project.
- Ablation Joint Venture documentation finalised and JV now fully operational.
- Construction of an initial semi-commercial scale Ablation processing plant advancing well and scheduled for completion in April 2013.
- Rights Issue closed oversubscribed, raising \$2.3 million.
- Agreement reached for Azarga Resources Limited to become a strategic cornerstone investor in the Company via a \$2.3 million placement which is subject to shareholder approval.
- Advanced the assessment of opportunities to acquire additional uranium assets that provide low-cost, near-term production potential.

Hansen/Taylor Ranch Uranium Project

Black Range Minerals Limited (ASX:BLR; "BLR" and the "Company") controls 100% of the Hansen/Taylor Ranch Uranium Project in Colorado, USA ("Project"), which hosts Indicated and Inferred Mineral Resources of 90.1Mlbs of U_3O_8 at a robust grade of 600ppm (0.06%) U_3O_8 .

A scoping study, completed in the first half of 2012, indicated that an initial mining operation can potentially be developed at the Hansen Uranium Deposit at a capital cost of less than \$80million to produce circa 2 million pounds of U_3O_8 per annum at an operating cost of approximately \$30/lb U_3O_8 .

The Company is now advancing the Project to production; targeting receipt of all mining permits by 2016 and commencement of production shortly thereafter.

During the quarter testwork was undertaken on numerous samples of mineralisation from the Company's Hansen Uranium Deposit utilising a recently developed secondary upgrade circuit in conjunction with the previously designed Ablation processing circuit (see further information on Ablation below). Recoveries in excess of 99% of the uranium into a concentrate were returned.



This provides the Company further confidence that it will, from a purely physical separation process, be able to produce a high-value concentrate from the Project. It is anticipated that this will eliminate the need to construct a conventional processing facility at or near the Project. This should have a significant positive effect on the capital cost of developing the Project. Higher recoveries from Ablation are also expected to have a positive effect on the Project's operating costs. Furthermore it is also expected that, without the need for an on-site conventional processing facility, the timeline to obtain permits to commence production will be minimised.

During the quarter the Company continued to advance its activities to prepare permit applications to conduct on-site trials of underground borehole mining at the Hansen/Taylor Ranch Project. The Company continues to target receipt of all permits required to conduct these trials in the second half of 2013.

Acquisition of baseline environmental data at the Project, in preparation for mine permit applications, continued throughout the quarter.

Ablation Joint Venture

The Ablation process was patented by Ablation Technologies LLC. ("ABT"), a company based in Wyoming, USA. It is a low cost method of concentrating uranium mineralisation by applying a physical, grain-size separation process, to ore slurries. No chemicals are added in the process, yet very high mineral recoveries can be achieved with considerable mass reduction, separating a high-grade, high-value mineral concentrate from a barren waste product. Application of Ablation is expected to have a very positive effect on the development of many uranium deposits, globally, because it is expected to significantly reduce both the capital and operating costs for many projects; while timelines to obtain mine permits may also be reduced.

Extensive testwork has shown that, from amenable sandstone-hosted uranium ore types, typically more than 90% of the uranium mineralisation can be recovered into $\sim 10\%$ of the initial sample mass. Recent development work on a secondary upgrade circuit has seen recoveries in test work exceed 99%.

Ablation is an extremely effective yet environmentally sensitive uranium concentration method that can be applied to sandstone-hosted uranium deposits, globally.

In April 2012 BLR determined that the best way to develop its 90.9 million pound Hansen/Taylor Ranch Uranium Project is to utilise underground borehole mining and Ablation.



Figure 1 − Pilot Scale (0.5tph) Ablation Processing Unit. A ~5tph unit is now under construction.



Shortly thereafter, in light of the substantial benefits of utilising Ablation at the Project, while also recognising the potential to apply this process elsewhere, the Company reached agreement with ABT to jointly commercialise the Ablation process. BLR and ABT agreed to establish a 50:50 joint venture ("JV"), with BLR agreeing to fund commercialisation. The JV holds the rights to utilise Ablation at all uranium deposits, globally.

In January 2013 the Company finalised and executed an operating agreement for the JV. As such the JV is now fully operational. Importantly the JV holds rights to apply Ablation at all mineral deposits, globally, not just uranium deposits (as initially agreed). Applications of Ablation other than for uranium are yet to be assessed, but it is anticipated that additional opportunities could arise.

During the past months, development of Ablation has continued to progress well. A secondary upgrade circuit is being developed (with test results indicating that recoveries exceeding 99% are possible) and incorporated into the commercial process design. Engineering design and drawings are nearing completion. A semi-commercial scale processing unit is now under construction. This unit will have a nominal 5 ton per hour capacity – designed deliberately to utilise "off-the shelf" parts and equipment, while also being small enough to fit on the back of a single semi-trailer. This initial unit will be readily mobile, hence easily relocatable from project to project to facilitate advanced on-site testing prior to full-scale operations.

Construction of this 5tph unit is expected to be completed in April 2013. It is anticipated that, on completion, this unit will be tested at ABT's manufacturing facility for several weeks before it is deployed for initial field trials.

Abundant testwork, on samples from numerous sandstone-hosted uranium deposits across the US, has confirmed that Ablation will have widespread applications. The JV is advancing negotiations with numerous parties that have successfully commissioned first-pass test work on samples from their deposits, whom are now interested in undertaking more extensive field trials. These opportunities provide the JV potential for near-term revenue streams.

Applications for Ablation

Within the USA and around the world, there are a large number of "stranded" sandstone hosted uranium deposits which (i) do not have, on their own, the critical mass to warrant the capital cost of constructing an on-site uranium mill; and/or (ii) are located too far from an existing mill facility to economically transport run of mine ore long distances for conventional processing.

Ablation provides an opportunity to unlock value from these stranded deposits, because a high-grade, high-value concentrate can be produced that can be economically transported longer distances. Furthermore, if that concentrate is processed in a conventional mill, operational costs (particularly processing and tailings disposal costs) can be reduced significantly because a substantially reduced mass needs to be processed to recover the same quantity of mineralisation.

The Company has identified numerous opportunities where Ablation could potentially be applied cost effectively. Such projects present the Company the opportunity to achieve production and cash-flow in the near term. As such it is pursuing the acquisition of several strategic opportunities.



Corporate

During the quarter the Company raised \$2,102,337 from a one for two non-renounceable rights issue at an issue price of \$0.005 per share. The Company also raised an additional \$226,170 by accepting oversubscriptions for Shortfall Shares under its 15% placement capacity. All shares were allotted during December 2012.

Subsequent to the end of the quarter, in January 2013 the Company announced that it had executed an agreement whereby Azarga Resources Limited ("Azarga") will become a strategic cornerstone investor in BLR. Azarga has agreed to subscribe for 327,995,000 shares in BLR at a price of \$0.007 per share, for total consideration of \$2,295,965 (the "Placement"). Subject to receipt of the requisite shareholder approval at a general meeting on 25 February 2013, on completion of the Placement Azarga will hold approximately 19.9% of the total shares on issue in the Company. Azarga intends providing ongoing marketing and financial support to the Company. It has agreed to introduce BLR to its extensive global network of institutional and private investors to help realise the considerable value of the Company's assets.

During December, following the resignation of Mr Nicholas Day, Mr Ian Cunningham was appointed Company Secretary. Mr Cunningham has over 8 years experience in the resources industry in executive and senior management roles, including most recently as Company Secretary of Adamus Resources Limited, during which time Adamus developed the Nzema Gold Mine in Ghana and subsequently merged with Endeavour Mining Corporation. Mr Cunningham brings considerable additional experience to the Company.

During the quarter the Company continued to advance its review of opportunities to acquire additional uranium assets that provide low-cost, near-term production potential that complement the Company's other assets.

Available cash as at 31 December 2012 was approximately \$1.95 million.

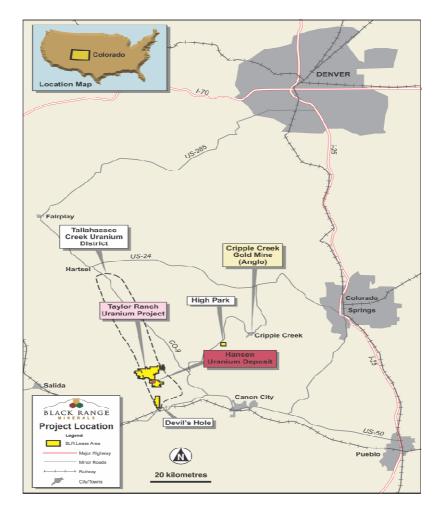
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Competent Person's Statement

The information in this announcement that relates to Mineral Resources at the Hansen/Taylor Ranch Uranium Project is based on information compiled by Mr Rex Bryan who is a member of the American Institute of Professional Geologists. The American Institute of Professional Geologists is a "Recognised Overseas Professional Organisation". Mr Rex Bryan compiled this information in his capacity as a Principal Geologist of Tetra Tech. Mr Rex Bryan has sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration and to the activity that 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 Rex Bryan consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.





Location of Black Range Minerals Limited's Hansen/Taylor Ranch Uranium Project in Colorado, USA

Black Range Minerals Limited's resources at the Hansen/Taylor Ranch Uranium Project comprises:

JORC Classification – Mineral Resources	Million Tonnes	Grade (ppm)	Million Pounds U ₃ 0 ₈
At 250ppm U ₃ 0 ₈ (0.025%) cut-off			
Indicated	28.93	620	39.75
Inferred	40.06	580	51.18
Total	68.99	600	90.92
At 750ppm U ₃ 0 ₈ (0.075%) cut-off			
Indicated	7.71	1210	20.52
Inferred	8.86	1190	23.33
Total	15.58	1200	43.85

Further information on Black Range can be sourced from www.blackrangeminerals.com