BLACK RANGE MINERALS

# ASX Release

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**Issued Capital:**
602.5 million shares
101.0 million options

**Australian Stock Exchange**
Symbol: **BLR & BLRO**

# NEW JORC RESOURCES TOTALLING 46 MILLION POUNDS OF $U_3O_8$

## HIGHLIGHTS

- **Total JORC-compliant resources of 46 million pounds of $U_3O_8$ defined for the 100% owned Taylor Ranch and Picnic Tree Uranium Projects**
- **Total JORC-compliant resources more than double the Company's previously stated best case "exploration targets"**
- **An inaugural JORC-compliant resource of 42 million pounds of $U_3O_8$ calculated for the Taylor Ranch Uranium Project in Colorado, USA**
- **An inaugural JORC-compliant resource of 4 million pounds of $U_3O_8$ calculated for the Picnic Tree Uranium Project in Colorado, USA**
- **With the inclusion of attributable resources from the Eagle Uranium Project in Wyoming, the Company's JORC-compliant uranium resource base now stands at more than 48 million pounds of $U_3O_8$**
- **In addition the to the above 48 million pounds, the Company also has exploration targets* of:**
  - **5-7 million pounds of $U_3O_8$ for its 100% owned North Hansen Uranium Project, USA**
  - **1-1.5 million pounds of $U_3O_8$ for its 100% owned High Park Uranium Project, USA**
  - **3 million pounds of $U_3O_8$ for the Cyclone Rim Uranium Project, USA, where the Company is earning a 50% interest**
- **The Company is now targeting confirmation of more than 60 million pounds of $U_3O_8$ by December 2007**
- **Scoping study to commence immediately to evaluate bringing the Company's uranium assets into production**

The Company is exceptionally pleased to advise that independent consultants have finalised inaugural JORC-compliant resource calculations for the Company's 100% owned Taylor Ranch and Picnic Tree Uranium Projects, located in Colorado, USA. **42.1 million pounds of $U_3O_8$ have been delineated at the Taylor Ranch Uranium Project and a further 4 million pounds of $U_3O_8$ delineated at the Picnic Tree Uranium Project, for a total of 46.1 million pounds of $U_3O_8$.** The inaugural JORC-compliant inferred resources for these two projects, applying a 0.01% cut-off grade are:

**New JORC-compliant resources totalling 46.1 million pounds of $U_3O_8$**

| PROJECT | TONNES[1] | GRADE $U_3O_8$[1] | POUNDS OF $U_3O_8$[1] |
|---|---|---|---|
| Taylor Ranch | 69,800,000 | 0.027% | 42,100,000 |
| Picnic Tree | 5,000,000 | 0.036% | 4,000,000 |

[1]A cut-off grade of 0.01% $U_3O_8$ has been applied.

Applying a 0.025% cut-off grade the inferred resources for these two projects are:

| PROJECT | TONNES[2] | GRADE $U_3O_8$[2] | POUNDS OF $U_3O_8$[2] |
|---|---|---|---|
| Taylor Ranch | 21,700,000 | 0.054% | 26,000,000 |
| Picnic Tree | 2,700,000 | 0.053% | 3,200,000 |

[2]A cut-off grade of 0.025% $U_3O_8$ has been applied.

**Project area now encompasses more than 9,500 acres**

This is an exceptional result given that the Company secured its first mineral lease, comprising 4,300 acres, at the projects in November 2006. The Company has subsequently increased its land holdings in the area to more than 9,500 acres.

**JORC resources more than double the previously stated "exploration targets"**

The JORC-compliant resources for both the Taylor Ranch and the Picnic Tree Uranium Projects more than double the Company's previously stated "exploration targets", which were 15-20 million pounds and 0.7-1.0 million pounds of $U_3O_8$ respectively.

**JORC resources derived from data from more than 650 drill holes (>100,000 metres)**

The resource calculations are based on considerable historic drilling data, together with data from recently completed confirmatory and extensional drilling. More than 550 drill holes for more than 100,000 metres have now been completed at the Taylor Ranch Uranium Project. At the Picnic Tree Uranium Project more than 100 drill holes have been completed on the Company's project area for ~7,500 metres.

**Scoping study to evaluate a mining operation to commence immediately**

Given the substantial size of the resource base the Company intends immediately commissioning a scoping study to evaluate the development of a mining operation at the Taylor Ranch Uranium Project.

**Company now has JORC resources of more than 48 million pounds of $U_3O_8$**

With the inclusion of attributable resources from the Eagle Uranium Project in Wyoming (where the Company is earning a 50% interest), **the Company's JORC-compliant uranium resource base now stands at more than 48 million pounds of $U_3O_8$.** In addition to the above 48 million pounds, the Company also has exploration target estimates* for the neighbouring North Hansen and High Park Uranium Projects of 5-7 million pounds and 1-1.5 million pounds of $U_3O_8$ respectively, as well as a further exploration target* of 3 million pounds of $U_3O_8$ at the Cyclone Rim Project in Wyoming (earning a 50% interest).

The Company currently has two drilling rigs operating at the Taylor Ranch Uranium Project and another drilling rig operating

**Company now targeting confirmation of more than 60 million pounds of $U_3O_8$ by end of 2007**

at the Cyclone Rim Uranium Project as it **continues to work aggressively to confirm more than 60 million pounds of $U_3O_8$ by the end of 2007.**

The Company is suitably financed to achieve this objective, with approximately $18 million cash on hand.

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

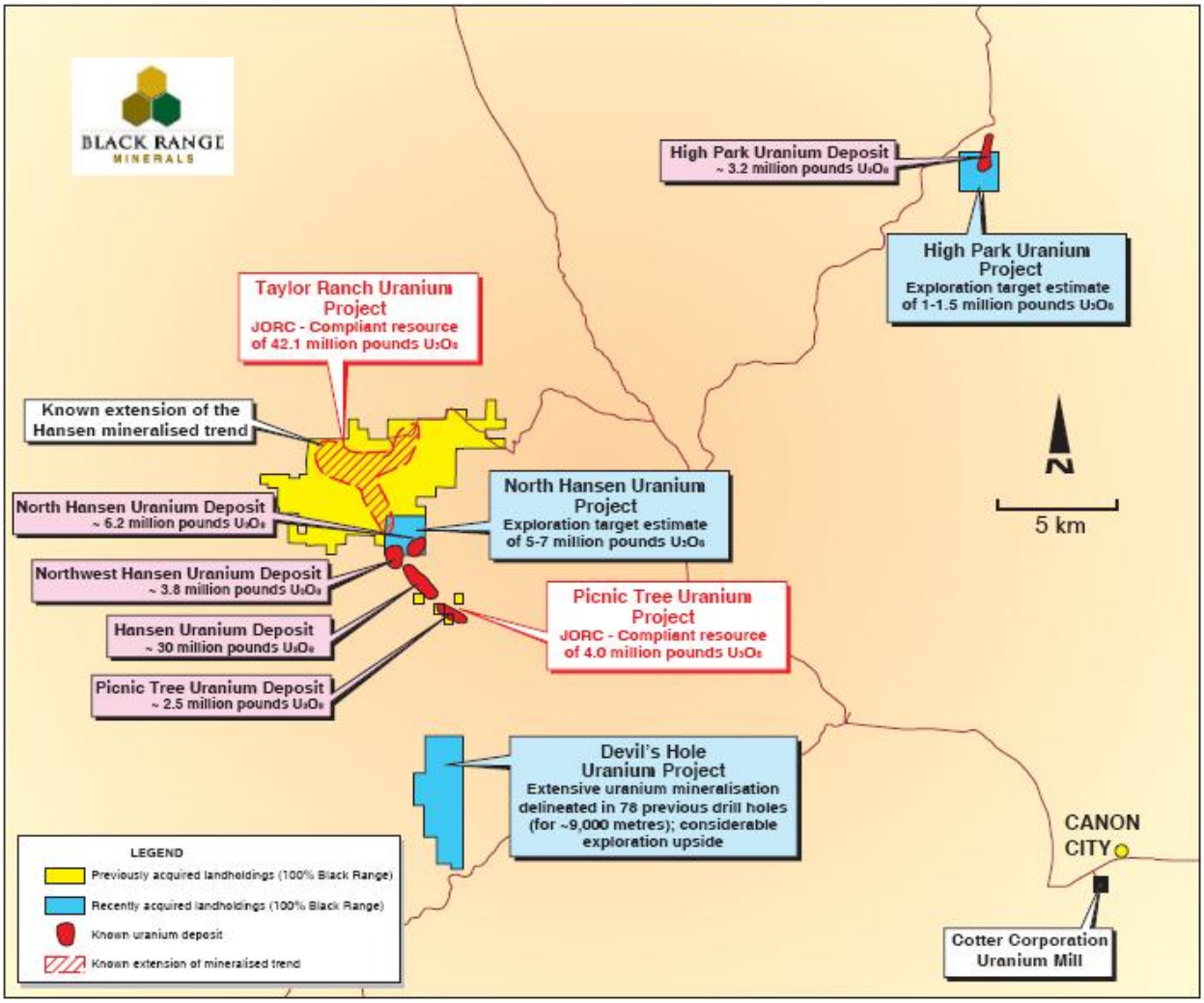


**Figure 1.** Location of Black Range Minerals Limited projects and known uranium deposits within the Canon City uranium mill area, Colorado, USA .

*Exploration Targets*

* The exploration target estimates are presented here as conceptual targets that may result from the completion of a JORC-compliant resource calculation. It should not be understood as indicating the existence of resources in the sense implied by the JORC Code, as JORC-compliant resources are yet to be calculated. However they are presented because Black Range Minerals wants to inform shareholders of the basis for its assessment of the exploration potential of the North Hansen and High Park Uranium Projects, based on the data currently available to the Company.

*Resource Calculation*

A global resource was calculated for the Taylor Ranch and Picnic Tree Project Areas using standard whole-block kriging methodologies. It is Gustavson's opinion that the estimated resources presented meet current CIM 43-101 and JORC standards for mineral reporting. Gustavson has classified all of the resources presented as inferred at this time.

A total of 470 drill holes in the northern property (Taylor Ranch area), and 101 drill holes in the southern property (Picnic Tree area) were used in the estimation process. A total of 2,996 sample assay values were composited to three-feet composites. The project area of approximately 7,500 acres was subdivided into more than 260 million blocks measuring 100x100 feet in plan and 3 feet in thickness. The geology was interpreted and modelled in section. The uranium was then estimated into the modelled geologic shapes. These modeled sections were given a code 7 for blocks inside of the geologic envelopes. All material outside of the sections was modeled separately as code 9999. Two separate mineralized zones were estimated using kriging. Kriging was done with a minimum of 4 points using interpreted variography, with a short vertical range and longer range in the horizontal (~16:1 anisotropy). The formula used for each block was: Lbs_eU308 = 100 x 100 x 3 x 1/12.5 x %eU308% x 20.

The equivalent $U_3O_8$ ($eU_3O_8$) grades obtained during recent drilling by the Company were calculated by Strata Data, a company based in Casper, Wyoming, USA that specialises in down hole geophysics and uranium logging. The system they used is truck mounted and measures both the radiometric and electric signal downhole. Two separate probes have been used; both were manufactured by Century Geophysics and include models 9041 and 9057 that measure total gamma count. The tools are regularly calibrated at the United States Department of Energy's facility in Casper, following industry standards. The calibration of the tool allows for the calculation of $eU_3O_8$ directly from the total gamma count. eU308 can be a reliable measure of uranium content, but on occasion can be subject to disequilibrium if radioactive elements other than uranium are present.

Uranium mineralisation at the Taylor Ranch Uranium Project occurs at similar depths and in a very similar geological setting to, and within the same lithological units as the uranium mineralisation at the Hansen and Picnic Tree Uranium Deposits. Extensive research into the downhole response and $eU_3O_8$ grades at the Hansen and Picnic Tree Uranium Deposits was conducted during the 1970's and 1980's as part of a feasibility study into mining these deposits. It was concluded that there are no disequilibrium problems at these two deposits. As such Black Range Minerals believes that the mineralisation at the Taylor Ranch Uranium Project also has no disequilibrium problems. It intends conducting its own studies to confirm this.

*The information in this report that relates to Mineral Resources at the Taylor Ranch and Picnic Tree Uranium Projects is based on information compiled by Mr. John Rozelle, who is a Registered Professional Geologist, Wyoming, PG-337, a Certified Professional Geologist, AIPG, CPG-07216 and a member of the Society of Economic Geologists and the Society of Mining Engineers. Mr John Rozelle is the Principal Geologist of Gustavson Associates. Mr.John Rozelle 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 "Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr. John Rozelle consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.*

*The information in this report that relates to Mineral Resources at the Eagle Uranium Project is based on information compiled by Mr. Malcolm Titley, who is a member of The Australian Institute of Mining and Metallurgy. Mr. Titley is a Director of Fin Ore Mining Consultants. Mr.Titley 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. Titley consents to the inclusion in the report of 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 Exploration Manager for Black Range Minerals Limited in the USA. 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 of the matters based on his information in the form and context in which it appears.*