



## ASX Release

**Monday 29 October 2007**

### **BLACK RANGE MINERALS LIMITED**

**Level 2 / 675 Murray Street  
WEST PERTH**

**Australia**

**Tel: +61 8 9481 4920**

**Fax: +61 8 9226 2027**

#### **Contact:**

**Mike Haynes  
Managing Director**

**E-mail:  
info@blackrangeminerals.com**

**Tel: +61 8 9481 4920**

#### **Directors / Officers:**

**Alan Scott  
Mike Haynes  
Matthew Wood  
Timothy Flavel**

**Issued Capital:  
603.1 million shares  
100.3 million options**

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

**Media:  
Fortbridge +61 2 8399 0089**

**Bill Kemmery 0400 122 449**

## **DRILLING CONTINUES TO INTERCEPT HIGH GRADE URANIUM MINERALISATION: TAYLOR RANCH URANIUM PROJECT**

Black Range Minerals Limited (ASX: BLR and “Black Range” or the “Company”) is pleased to advise that extensional drilling at its 100% owned Taylor Ranch Uranium Project in Colorado, USA continues to intercept considerable thicknesses of high grade uranium mineralisation.

Four drilling rigs have been undertaking extensional drilling at the Northwest Taylor Uranium Deposit, the Noah Uranium Deposit and the recently discovered Boyer Uranium Deposit. A location map is included in the Attachment - Figure 1.

Drilling results continue to highlight the high grade and robust nature of the mineralisation at the Taylor Ranch Uranium Project. Better results in recent drilling include:

- **15.5 metres at 0.052% eU<sub>3</sub>O<sub>8</sub>**
- **5.5 metres at 0.125% eU<sub>3</sub>O<sub>8</sub>**
- **4.4 metres at 0.115% eU<sub>3</sub>O<sub>8</sub>**
- **15.8 metres at 0.030% eU<sub>3</sub>O<sub>8</sub>**
- **8.8 metres at 0.050% eU<sub>3</sub>O<sub>8</sub>**
- **3.7 metres at 0.094% eU<sub>3</sub>O<sub>8</sub>**

Results for all drill holes are presented in Table 1 on the Attachment below.

The JORC Code compliant inferred resource base at the Taylor Ranch Uranium Project currently exceeds 46 million pounds of U<sub>3</sub>O<sub>8</sub>. It comprises:

**74.8Mt at a grade of 0.028% U<sub>3</sub>O<sub>8</sub> for 46.1 million pounds of U<sub>3</sub>O<sub>8</sub><sup>1</sup>**

<sup>1</sup>Applying a cut-off grade of 0.01% U<sub>3</sub>O<sub>8</sub>

**or**

**24.4Mt at a grade of 0.054% U<sub>3</sub>O<sub>8</sub> for 29.2 million pounds of U<sub>3</sub>O<sub>8</sub><sup>2</sup>**

<sup>2</sup>Applying a cut-off grade of 0.025% U<sub>3</sub>O<sub>8</sub>

The Company’s target is to increase the JORC Code compliant resource base at the project to more than 60 million pounds by the end of 2007.

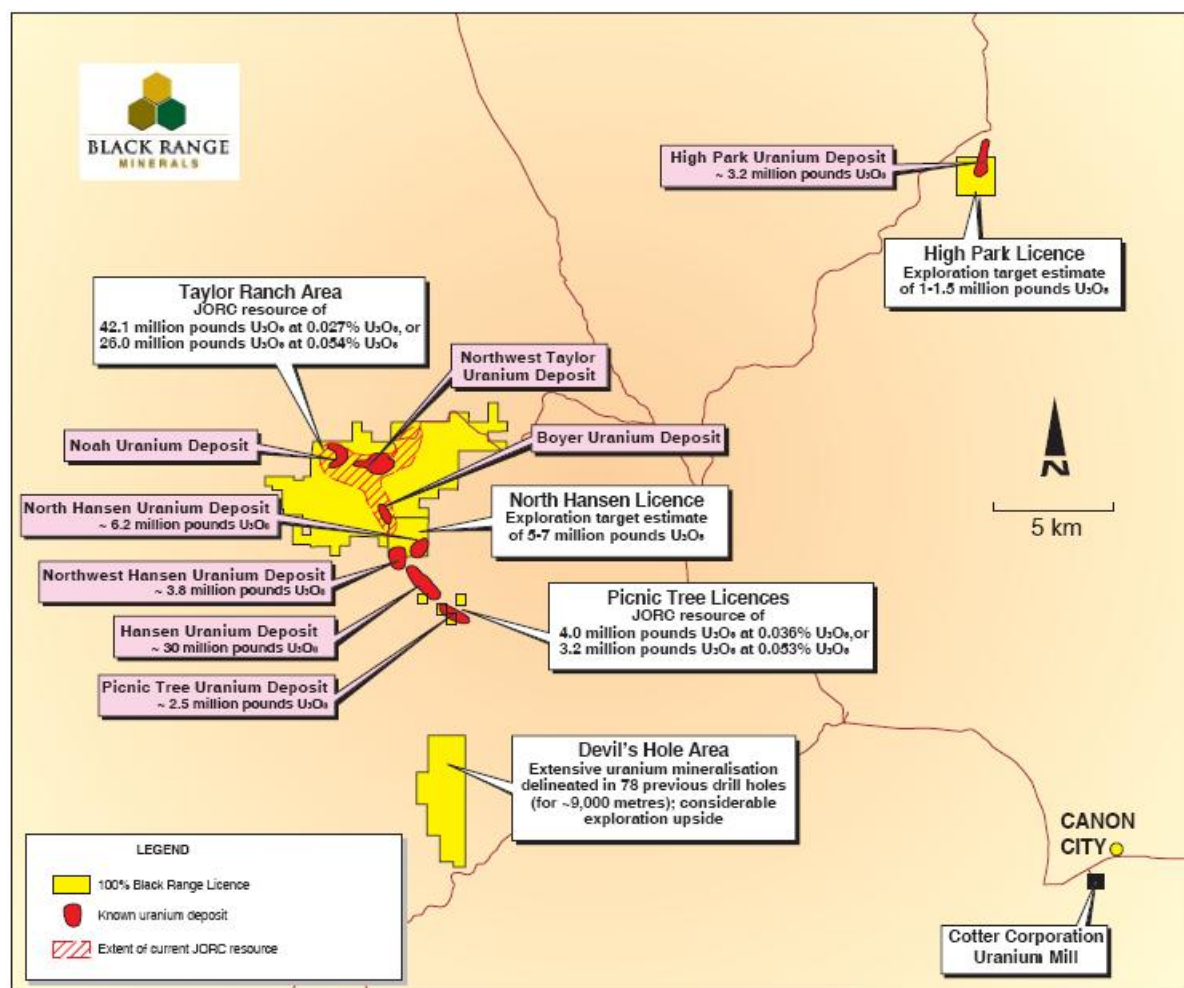
Black Range’s aggressive drilling programme at the Taylor Ranch Project will continue as the Company works to rapidly advance this project towards production. A scoping study is being undertaken to evaluate the economics of commencing a mining

operation at the project.

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

## ATTACHMENT

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



**Table 1.** Significant intersections of uranium mineralisation returned from recently completed drilling at the Taylor Ranch Uranium Project in Colorado, USA.

Hole ID	Easting	Northing	Azimuth	Dip	Depth (m)	From (m)	To (m)	Interval (m)	eU3O8 (%)
TRMR028	450648	4270500	-	-90	310.9	50.7	52.7	2.0	0.010
TRMR028						245.1	248.6	3.5	0.012
TRMR028						249.4	251.4	2.0	0.044
incl.						250.8	251.4	0.6	0.127
TRMR028						251.5	254.6	3.0	0.016
TRMR028						267.7	270.3	2.6	0.030
TRMR028						273.3	277.7	4.4	0.115
incl.						275.0	276.2	1.2	0.358
TRMR028						278.7	280.0	1.4	0.011
TRMR029	450701	4270440	-	-90	329.2	240.0	241.6	1.7	0.016
TRMR029						252.6	253.8	1.2	0.014
TRMR029						255.3	257.0	1.7	0.012
TRMR029						282.0	284.0	2.0	0.011
TRMR030	450705	4270494	-	-90	310.9	243.3	246.8	3.5	0.018
incl.						244.5	245.1	0.6	0.059
TRMR030						247.9	249.1	1.2	0.013

TRMR030						251.1	252.6	1.5	0.015
TRMR030						254.6	256.6	2.0	0.018
TRMR030						271.8	275.3	3.5	0.032
incl.						272.7	274.4	1.7	0.058
TRMR030						282.6	286.4	3.8	0.011
TRMR031	451080	4270673	-	-90	288.0	277.4	280.9	3.5	0.012
TRMR032	450934	4269806	-	-90	347.5	296.3	298.2	1.8	0.016
TRMR032						302.4	306.7	4.3	0.012
TRMR032						313.7	314.9	1.2	0.012
TRMR033	450815	4269610	-	-90	347.5	244.7	246.8	2.1	0.010
TRMR033						334.3	341.0	6.7	0.020
incl.						337.9	339.6	1.7	0.045
TRMR033						341.1	346.6	5.5	0.125
incl.						342.5	345.3	2.7	0.240
TRMR034	450907	4269568	-	-90	384.0	334.9	343.7	8.8	0.050
incl.						336.6	337.8	1.2	0.220
TRMR034						346.3	362.2	15.8	0.030
incl.						357.1	360.7	3.5	0.077
TRMR035	451010	4269616	-	-90	417.6	320.1	321.9	1.8	0.036
TRMR035						331.4	332.5	1.1	0.010
TRMR035						334.3	336.7	2.4	0.016
TRMR035						344.3	345.6	1.2	0.011
TRMR035						346.3	350.0	3.7	0.047
incl.						346.9	348.2	1.2	0.117
TRMR035						362.0	363.4	1.4	0.010
TRMR035						366.8	368.4	1.7	0.010
TRMR035						371.3	375.9	4.6	0.013
TRMR035						377.6	379.7	2.1	0.025
TRMR036	450814	4268922			371.9				NSI
TRMR058	449911	4272584	-	-90	376.4	181.0	182.0	1.1	0.011
TRMR058						211.9	215.1	3.2	0.034
incl.						212.7	213.3	0.6	0.115
TRMR058						227.8	229.6	1.8	0.024
TRMR058						230.0	236.3	6.2	0.055
incl.						231.4	233.9	2.4	0.124
TRMR058						282.2	283.7	1.5	0.019
incl.						282.5	283.1	0.6	0.044
TRMR058						299.8	300.9	1.1	0.006
TRMR059	448692	4272843	-	-90	416.4				NSI
TRMR060	448916	4272950	-	-90	378.0	249.7	253.2	3.5	0.016
TRMR060						253.5	257.0	3.5	0.015
TRMR060						258.1	260.8	2.7	0.015
TRMR060						266.0	267.4	1.4	0.010
TRMR060						285.2	288.9	3.7	0.025
incl.						286.6	287.7	1.1	0.062
TRMR060						301.4	303.4	2.0	0.011
TRMR061	450834	4269918	-	-90	347.5	167.6	169.1	1.5	0.013
TRMR061						296.9	312.4	15.5	0.052
incl.						297.3	300.3	3.0	0.067
incl.						301.8	305.5	3.7	0.056
incl.						308.7	312.3	3.7	0.076
TRMR062	450936	4270026	-	-90	349.0	243.2	244.8	1.7	0.015
TRMR062						282.0	283.7	1.7	0.015
TRMR062						290.9	292.5	1.7	0.017
TRMR062						335.5	337.6	2.1	0.010

TRMR062						342.4	345.7	3.4	0.010
TRMR076	450382	4271336	-	-90	378.0	286.3	287.5	1.2	0.012
TRMR076						312.5	316.0	3.5	0.018
TRMR076						318.0	321.0	3.0	0.015
TRMR076						328.3	331.4	3.0	0.027
incl.						329.4	330.3	0.9	0.065
TRMR076						337.8	341.1	3.4	0.014
TRMR076						341.3	345.6	4.3	0.021
incl.						343.0	343.6	0.6	0.083
TRMR076						348.9	350.9	2.0	0.014
TRMR076						352.4	357.6	5.2	0.012
TRMR077	450008	4271775	-	-90	362.7	278.7	279.9	1.2	0.011
TRMR077						298.8	302.4	3.7	0.094
incl.						299.7	301.5	1.8	0.178
TRMR077						333.8	336.9	3.0	0.042
incl.						334.7	336.1	1.4	0.083
TRMR077						356.1	359.1	3.0	0.011
TRMR078	450203	4271353	-	-90	338.3	241.8	243.0	1.2	0.027
TRMR078						246.0	251.5	5.5	0.056
incl.						247.4	250.0	2.6	0.102
TRMR078						274.7	278.4	3.7	0.013
TRMR078						283.2	285.4	2.1	0.014
TRMR078						308.5	310.2	1.7	0.015
TRMR078						316.3	321.2	4.9	0.026
incl.						317.5	318.7	1.2	0.045
TRMR079	450025	4271384	-	-90	335.3	25.7	27.8	2.1	0.010
TRMR079						266.5	268.8	2.3	0.018
TRMR079						300.8	304.3	3.5	0.014
incl.						302.1	303.5	1.4	0.024
TRMR079						304.3	305.6	1.4	0.010
TRMR079						316.0	318.3	2.3	0.015
TRMR080	448330	4272841	-	-90	304.8	96.5	98.1	1.5	0.018
TRMR080						247.0	255.3	8.4	0.013

### Exploration Targets

The exploration target estimates are presented here as conceptual targets that may result from the completion of a JORC Code compliant resource calculation. It should not be understood as indicating the existence of resources in the sense implied by the JORC Code, as JORC Code compliant resources are yet to be calculated for some of the deposits. 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 Uranium Project, based on the data currently available to the Company.

### Equivalent $U_3O_8$ ( $eU_3O_8$ ) Grades

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<sub>3</sub>O<sub>8</sub> 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. Mr John Rozelle is the Principal Geologist of Tetra Tech. 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 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 the Exploration Manager, USA for Black Range Minerals Limited. 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.*