



**BLACK RANGE**  
**MINERALS**

# INVESTOR PRESENTATION

## MAY 2011



# Black Range Minerals Limited – Corporate Overview



- Current cash reserves of approximately \$8.4million.
- Market capitalisation ~\$24.4 million (at \$0.033).

## BOARD OF DIRECTORS

### Alan Scott – Non-Executive Chairman

- Considerable experience in accounting, finance and mining.
- Managing Director of Mesa Minerals Limited.

### Mike Haynes – Managing Director

- Geologist/geophysicist and corporate finance.
- Chairman of Overland Resources Limited, Coventry Resources Limited and Genesis Minerals Limited.

### Duncan Coutts – Non-Executive Director

- Mining engineer.
- Formerly Operations Manager (WA and PNG) for Harmony Gold and Chief Development Officer for Metals X.

### Nick Day – Company Secretary

- Formerly Company Secretary of Albidon Limited – brought the Munali Nickel Mine in Zambia into production.

	Million shares	% of Shares
Board & Management	37.3	5.0%
Top 20	190.9	25.8%
<b>Total Shares</b>	<b>738.4</b>	<b>100%</b>



Black Range Minerals Limited's share price during the past 12 months.

# Taylor Ranch/Hansen Uranium Project - Overview



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- BLR controls 100% of the third largest uranium resource in the USA – hosting 90 million pounds of  $U_3O_8$ .
- Located in Colorado – a pro-uranium mining jurisdiction :
  - 5 conventional uranium mines permitted in Colorado during the past 3 years.
  - Energy Fuels Resources Corp. very close to obtaining all permits to build the first new conventional uranium processing facility in the USA in the past 25 years.



Diamond core drilling at the Hansen Uranium Deposit.

- USA consumed ~50 million pounds of  $U_3O_8$  in 2010 yet produced only 4.2 million pounds of  $U_3O_8$ .
- BLR recently completed consolidation of ownership of key assets - notably the Hansen Uranium Deposit.
- ~30 million pound  $U_3O_8$  Hansen Deposit:
  - 3 feasibility studies completed previously.
  - Fully permitted for mining in 1981.
- Drilling commenced at the Hansen Deposit in May.
  - Exciting results returned in first drill hole.

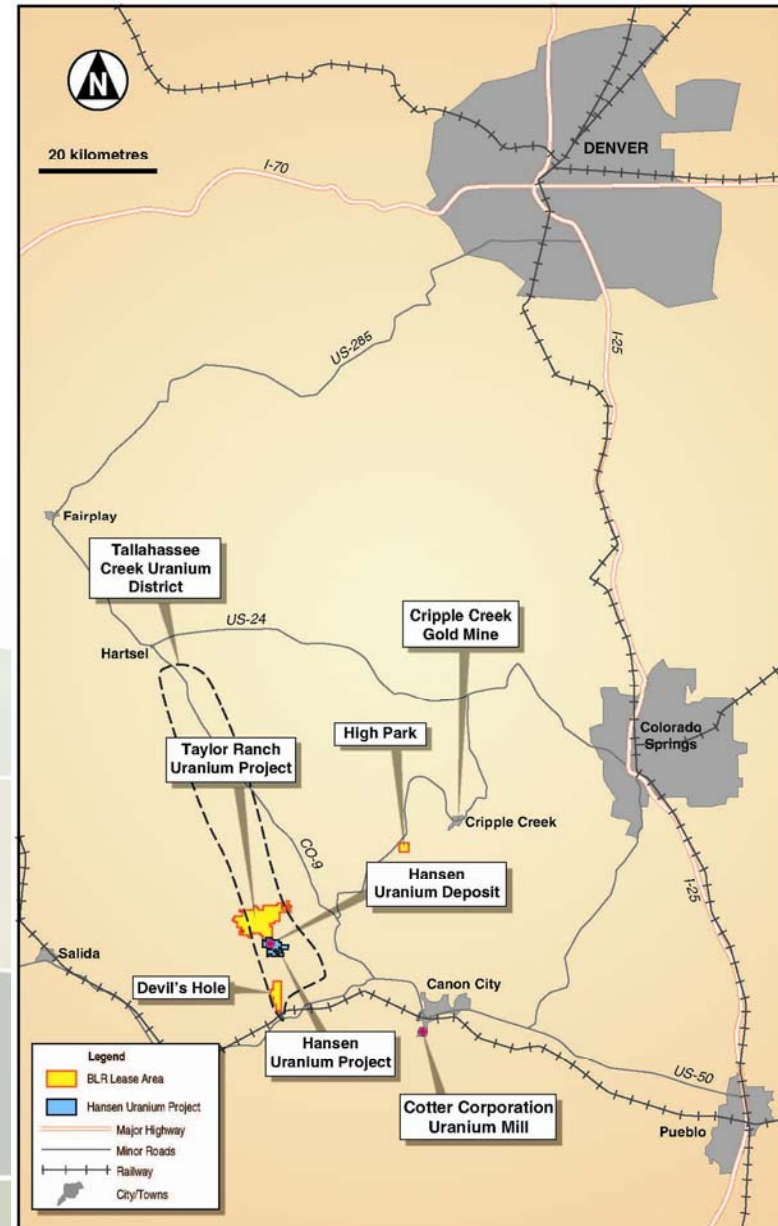
# Taylor Ranch/Hansen Uranium Project –



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## Location

- The Tallahassee Creek Uranium District covers an area of approximately 120,000 acres.
- Project is located 30km NW of Canon City, the location of one of the USA's four licensed uranium mills.
- Black Range holds a 100% interest in ~13,000 acres.
- These leases give Black Range the right to **explore, mine and develop infrastructure** on its properties.
- AngloGold-Ashanti's large Cripple Creek heap leach gold mine is operating immediately to the east (historic production of 23Moz gold).
- Established mining industry and mining culture in the district.
- Pro-uranium mining jurisdiction.
- Largest employer in the district is the prison industry.

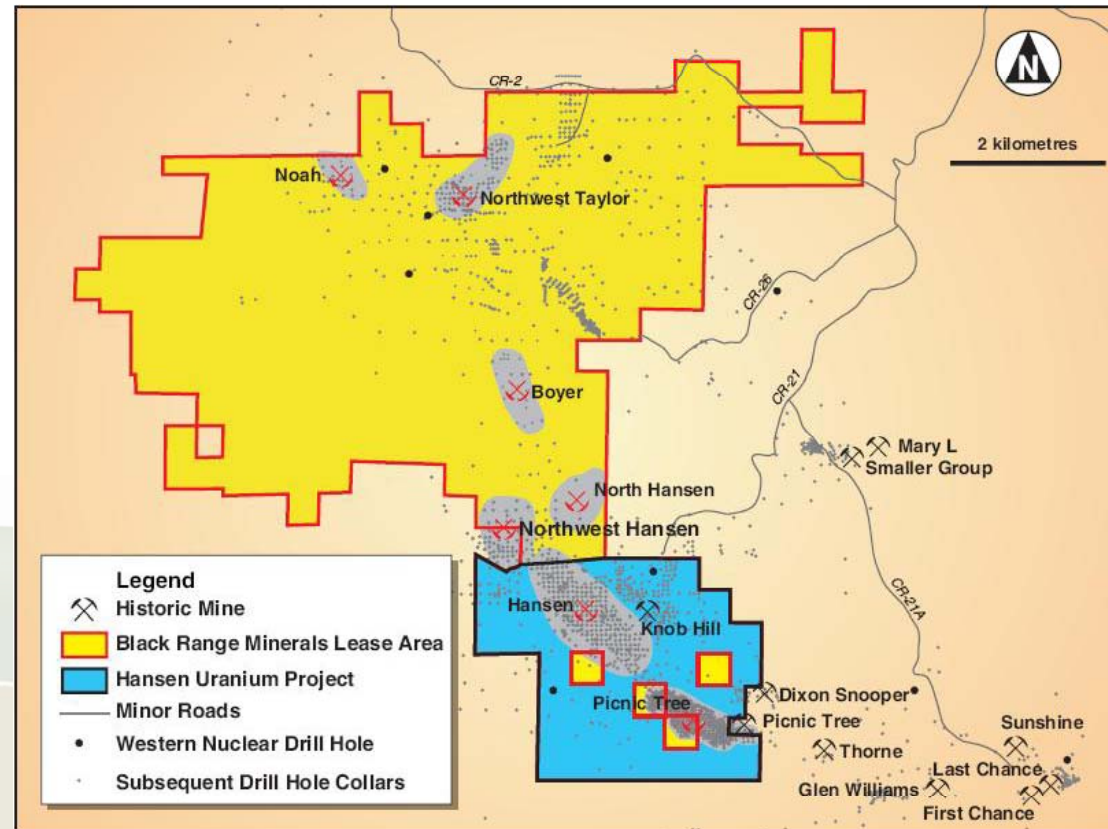


# Tallahassee Creek Uranium District – History



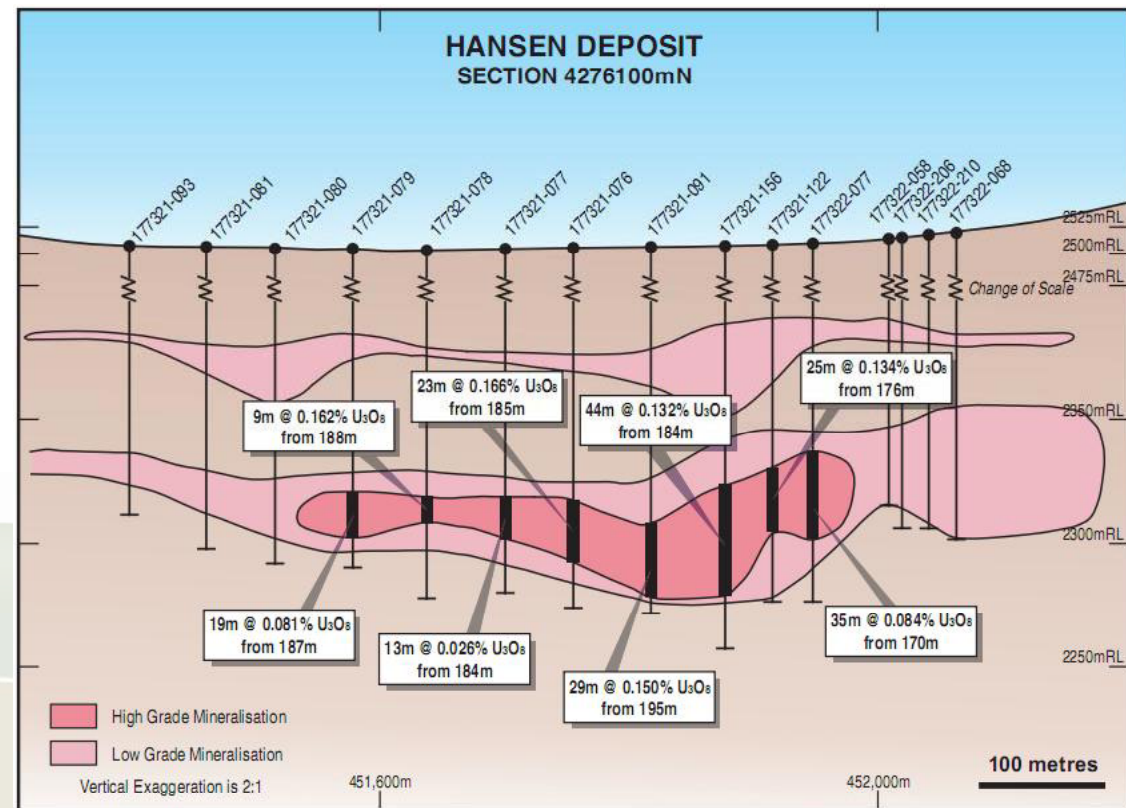
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- Uranium was first discovered in the district in 1954.
- From 1954 until 1972 16 small open pit and underground uranium mines operated in the Tallahassee Creek district.
- Total production was 79,306 tonnes at an average grade of 0.25%  $U_3O_8$  for a total of ~435,000 lb's  $U_3O_8$ .
- Hansen Uranium Deposit was discovered in 1977.
- The Hansen Deposit was fully permitted for mining in 1981.
- More than 2,200 holes have been drilled for more than 350,000 metres.



# The Hansen Uranium Deposit

- Approximately 1,000 holes have been drilled previously.
- Previous ore estimate of approx. **17 Mt at a grade of ~0.08% U<sub>3</sub>O<sub>8</sub>** for **~30 million pounds of U<sub>3</sub>O<sub>8</sub><sup>1</sup>**.
- Mining was to be an open cut operation followed by underground mining.
- Planned mining rate was ~1Mtpa.
- Recoveries of +95% anticipated with conventional acid leaching.
- All permits had been obtained to commence mining and to construct a processing facility on the Taylor Ranch property.
- Mining never eventuated due to the collapse of the uranium price.



# Taylor Ranch/Hansen Uranium Project

## Company's Progress



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- November 2006: Secured initial lease over the Taylor Ranch (~4,300 acres).  
*Initial exploration target was 2-3 million pounds  $U_3O_8$ .*
- March- July 2007: Secured leases over the Boyer Ranch and over State Section 16 (additional ~6,200 acres).
- June 2008: Awarded 8-year permit from Fremont County to conduct exploration over these leases.
- Aug-Nov 2008: Completed 71 drill holes for 25,000 metres.
- June 2009: Secured option to acquire 49% of the Hansen Deposit.
- Sept. 2009: Upgraded resource to 60.2 million pounds of  $U_3O_8$  (just within 100% owned properties, excluding the Hansen Deposit).
- May 2010: Executed Letter of Intent to acquire remaining 51% interest in the Hansen Deposit.
- Nov 2010: Secured 8-year permit to conduct further exploration and feasibility studies at the Hansen Deposit.
- Feb 2011: Finalised right to acquire 100% of the Hansen Deposit.
- May 2011: Commenced drilling at the Hansen Uranium Deposit.



Drilling at the Taylor Ranch Uranium Project.



# Taylor Ranch/Hansen Uranium Project

## Resources and Mineral Inventory/Exploration Target

### Taylor Ranch Project Area

- JORC Code compliant indicated and inferred resources (0.025% cut-off grade) of:

**47.8Mt at 0.057%  $U_3O_8$  for  
60.2 million pounds of  $U_3O_8$**

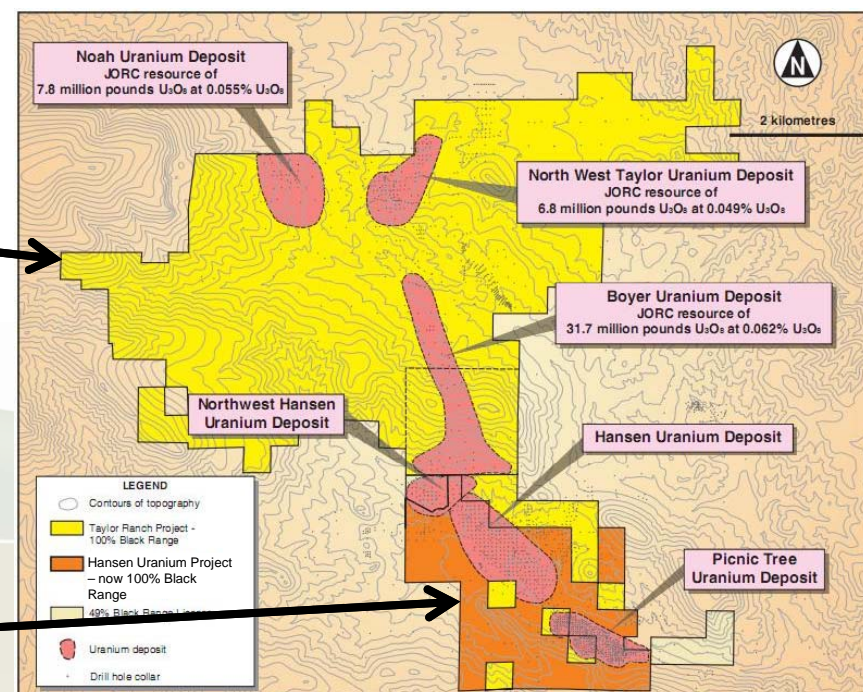
### Hansen Uranium Deposit

- Based on more than 1,000 previous drill holes and 3 feasibility studies BLR has an exploration target of:

**15-20 Mt at 0.06-0.08%  $U_3O_8$  for  
circa 30 million pounds of  $U_3O_8$**

### TOTAL

**Approximately 90 million pounds of  $U_3O_8$**



# Taylor Ranch/Hansen Uranium Project



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## Historic Feasibility Study

- Positive feasibility study into development of the Hansen Deposit completed in the 1980s:
  - Reserves delineated.
  - Engineering studies conducted.
  - Mine designed.
  - Metallurgical test work conducted.
  - Processing stream designed.
  - Environmental approvals obtained.
- Hansen is the most advanced deposit in the district, hence the logical starter mine.
- Cash flows from the Hansen Deposit will be used to explore and develop the other deposits in the district.
- Opportunity to capitalise on economies of scale not previously possible in the district, as BLR has discovered an additional 60 million pounds of  $U_3O_8$ .
- Program now being implemented to update historic feasibility studies.



# Taylor Ranch/Hansen Uranium Project



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## Forward Plan

- JORC resource for the Hansen Deposit being finalised.
- 10-12 diamond core drilling program has commenced to acquire additional:
  - Geological
  - Geotechnical;
  - Metallurgical; and
  - Hydrological data.
- Drilling program expected to take ~3 months.
  - Electrical logging results then chemical assay results to be released systematically.
- Historic feasibility study will then be updated.
- Further development plans will then be formulated.
- Base line environmental studies have been continuing in preparation for mine permitting.



Yellowcake – typically the first stage product recovered when processing uranium ore.

# Taylor Ranch/Hansen Uranium Project



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## Recent Drilling Results

- Recently completed first drill hole at the Hansen Deposit as part of the program to update historic feasibility studies.
- Multiple horizons of thick, high grade uranium intersected.
- Results include:
  - **33.5 metres at 0.061% eU<sub>3</sub>O<sub>8</sub>, including**
  - 10.1 metres at 0.093% eU<sub>3</sub>O<sub>8</sub>,**
  - 4.3 metres at 0.100% eU<sub>3</sub>O<sub>8</sub>, and**
  - 1.5 metres at 0.171% eU<sub>3</sub>O<sub>8</sub>**



Diamond core drilling at the Hansen Uranium Deposit.



# Black Range Minerals Limited – Peer Comparison



Company	Mkt Cap (dil) (A\$m)	Cash (A\$m)	Resource (mt)	Grade (ppm)	Contained U3O8 (Mlb)	EV/resource (A\$/lb U3O8)	Location
A-Cap Resources Limited (ACB)	\$60	\$14.9	463.7	154	157.8	\$0.28	Botswana
Bannerman Resources Limited (BMN)	\$73	\$18	400.5	190	170.0	\$0.32	Namibia
<b>Black Range Minerals (BLR) post finalisation of Hansen Acquisition</b>	<b>\$24.4</b>	<b>\$6.4</b>	<b>71.7</b>	<b>570</b>	<b>90.0</b>	<b>\$0.20</b>	<b>USA</b>
Berkeley Resources Limited (BKY)	\$256	\$53	79.3	455	78.1	\$2.60	Spain
Deep Yellow Limited (DYL)	\$202	\$16.9	168.4	264	97.9	\$1.89	Namibia, Northern Territory & Queensland
Energia Minerals NL (EMX)	\$5.5	\$2.8	12.2	290	7.4	\$0.36	Western Australia
Energy and Minerals Australia Limited (EMA)	\$60	\$3.6	55.4	491	59.8	\$0.94	Western Australia
Energy Resources of Australia Limited (ERA)	\$885	\$187	184.1	1543	633.0	\$1.10	Northern Territory
Extract Resources Limited (EXT)	\$3,510	\$86.5	366.5	453	367.3	\$9.32	Namibia
Forte Energy NL (FTE)	\$59	\$12	19.0	324	13.7	\$3.43	Guinea and Mauritania
Manhattan Corporation Limited (MHC)	\$50	\$1	16.0	310	10.9	\$4.49	Western Australia & South Australia
Mantra Resources Limited (MRU)	\$1878	\$51.7	108.9	422	101.4	\$18.01	Tanzania
Paladin Energy Limited (PDN)	\$4797	\$275	391.7	587	495.4	\$9.13	Namibia, Malawi, NT, QLD & Canada
Peninsula Energy Limited (PEN)	\$167	\$31	26.6	429	25.2	\$5.39	USA
Thundelarra Exploration Limited (THX)	\$56	\$14.9	-	0	0.0	-	Northern Territory, Western Australia
Toro Energy Limited (TOE)	\$89.7	\$32.2	29.7	467	30.6	\$1.87	Western Australia
Uranex NL (UNX)	\$68.7	\$5.1	120.0	160	43.0	\$1.47	Tanzania
UraniumSA Limited (USA)	\$28.5	\$6.2	45.5	280	28.0	\$0.80	South Australia

- Black Range Minerals has one of the largest resources.
- Black Range Minerals has one of the highest grade resources.
- Black Range Minerals is exceptionally cheap compared to its peers.

*Adapted from Austock Securities – January 2011 Uranium Sector Review.*

# Taylor Ranch/Hansen Uranium Project



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## Summary

- ✓ One of the largest uranium resource bases in the USA.
- ✓ Thick, high grade mineralisation.
- ✓ Previously permitted for mining.
- ✓ Consolidation of ownership completed.
- ✓ Consolidation allows Black Range to control the development of the district to optimise economics.
- ✓ Update of previous feasibility study commenced.
- ✓ 10-12 hole drilling program commenced in May 2011.
- ✓ Outstanding initial results.
- ✓ Feasibility study will be updated on completion of drilling program
- ✓ Black Range Minerals Limited exceptionally cheap compared to its peers.



Drilling at the Taylor Ranch Uranium Project.



# Competent Persons Statement



*The information in this report that relates to Mineral Resources at the Taylor Ranch Uranium Project is based on information compiled by Mr. John Rozelle who is a member of the American Institute of Professional Geologists. 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 Exploration Manager, USA for Black Range Minerals 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.*

<sup>1</sup> From the abundance of work undertaken at the Hansen Uranium Deposit previously, including approximately 1,000 drill holes and mining feasibility studies, it was reported that the deposit hosts the order of 15-20 Mt of mineralised material at a grade of 0.06-0.08% U<sub>3</sub>O<sub>8</sub> for circa 30 million pounds of U<sub>3</sub>O<sub>8</sub>. As a mineral resource is yet to be calculated for the deposit under the JORC Code, this quantity and grade of mineralisation is conceptual in nature and is an exploration target, and it is uncertain if further exploration will result in the determination of a mineral resource of this size.





# Taylor Ranch Uranium Project – JORC Resources on 100%-owned properties

- JORC Code compliant resources on Black Range's 100% owned properties at the Taylor Ranch Uranium Project, **applying a 0.025% cut-off:**

Category	Tonnes	Grade(%)	Tonnes of U3O8	Pounds of U3O8
Indicated	17,910,008	0.057	10,237	22,567,741
Inferred	29,897,723	0.057	17,079	37,652,173
<b>TOTAL</b>	<b>47,807,731</b>	<b>0.057</b>	<b>27,316</b>	<b>60,219,914</b>

- JORC Code compliant resources on Black Range's 100% owned properties at the Taylor Ranch Uranium Project, **applying a 0.075% cut-off:**

Category	Tonnes	Grade(%)	Tonnes of U3O8	Pounds of U3O8
Indicated	4,406,192	0.111	4,890	10,781,688
Inferred	6,386,543	0.121	7,704	16,982,818
<b>TOTAL</b>	<b>10,792,735</b>	<b>0.117</b>	<b>12,594</b>	<b>27,764,506</b>

- A JORC compliant calculation of resources at the Hansen Uranium Project is yet to be finalised.**
- Based on more than 1,000 previous drill holes and 3 feasibility studies BLR has an exploration target of:  
**15-20 Mt of mineralised material 0.06-0.08% U<sub>3</sub>O<sub>8</sub> for circa 30 million pounds of U<sub>3</sub>O<sub>8</sub>**



# Taylor Ranch/Hansen Uranium Project

## Terms to Acquire the Hansen Deposit

- To acquire a 49% interest in the Hansen Deposit:
  - US\$1m cash and US\$1m shares on execution of agreement to acquire the 51% interest.
  - US\$2m cash and US\$2m in shares on commencement of commercial scale production.
  - 1.47% royalty.
- To acquire the remaining 51% interest in the Hansen Deposit:
  - US\$1m in cash and US\$2.5m in shares on satisfaction of conditions precedent.
  - US\$2m in cash and US\$7.5m in shares to exercise option at any time in next 6 years.
  - If option not exercised after 3 years, additional US\$1m in cash and US\$1m in shares payable to extend the option for a further 3 years.
  - 1.5% royalty.



View from the Boyer Uranium Deposit, south across the Hansen Uranium Deposit.

