



# Annual General Meeting

26 November 2012

# Why Investment in Black Range is a Compelling Proposition

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1. Very large resource base, on a global basis (90.9m lbs  $U_3O_8$ ).
2. Relatively high-grade resource base (600ppm or 0.06%  $U_3O_8$ ).
3. Low capital and operating cost development path (<\$80m and ~\$30/lb  $U_3O_8$  respectively).
4. Project located in a pro-uranium-mining jurisdiction (Colorado, USA).
5. BLR share price very low on a peer comparison basis (~\$0.10/lb  $U_3O_8$  vs peer average of ~\$1.14/lb  $U_3O_8$ ).
6. Global supply-demand outlook for uranium anticipates near-medium term appreciation in the uranium price.
7. BLR share price historically closely correlated with  $U_3O_8$  price, providing excellent leverage to uranium price upside.
8. Opportunity to be producing uranium as early as H2 2013, by commercialising Ablation.
9. BLR targeting receipt of all permits required to mine the Hansen Deposit in 2015, which should afford further share price re-rating.
10. Concerted marketing program planned to realise shareholder value.

# Corporate Overview



<b>ASX Code</b>	<b>BLR</b>
<b>Shares on Issue*</b>	841m
<b>Options on Issue</b>	23.4m
<b>Share Price</b>	\$0.009
<b>Market Cap*</b>	\$7.6m
<b>Cash (30/9/12)</b>	~\$0.6m
<b>JORC Resource</b>	90.1Mlbs U <sub>3</sub> O <sub>8</sub> @ 600ppm
<b>EV/lb*</b>	\$0.07

\* Prior to completion of current Rights Issue

<b>Capital Structure</b>	<b>Shares</b>	<b>%</b>
Board & Management*	42m	5
Top 20*	251m	29
<b>Total *</b>	<b>841m</b>	<b>100</b>

\* Prior to completion of current Rights Issue

## Share Price Performance – Past 3 years



## Board and Senior Management

<b>Alan Scott</b>	Non-Executive Chairman
<b>Mike Haynes</b>	Managing Director
<b>Ben Vallerine</b>	Executive Director
<b>Duncan Coutts</b>	Non-Executive Director
<b>Nick Day</b>	Company Secretary
<b>Beverley Nichols</b>	Chief Financial Officer

# Current Capital Raising



- Currently undertaking a non-renounceable Rights Issue at \$0.005 per share to raise \$2.1million.
- Underwritten to a minimum of \$400,000 by Directors and Senior Management.
- Eligible Shareholders can apply for additional “Shortfall” shares.
- Scheduled to close on 13 December 2012.

<b>Shares currently on Issue</b>	840.9m
<b>Shares offered pursuant to the Rights Issue</b>	420.5m
<b>Total Shares on Issue on completion of the Rights Issue</b>	1,261.4m
<b>Current Share Price</b>	\$0.009
<b>Cash on completion of the Rights Issue</b>	~\$2.1m
<b>Market Cap post Rights Issue</b>	\$11.3m

# Significant Milestones during 2012

## April 2012

- Declared preferred development approach for the 90.1 million pound  $U_3O_8$  Hansen/Taylor Ranch Uranium Project:
  - Underground Borehole Mining and Ablation
- Scoping Study indicated this provides a low capital and operating cost development route:
  - Estimated Capital Cost <US\$80million
  - Estimated Operating Cost ~US\$30/lb  $U_3O_8$

## July 2012

- Secured rights to utilise Ablation at the Hansen Uranium Deposit.

## Continuing

- Advancing permitting of the development of the Hansen Uranium Deposit.

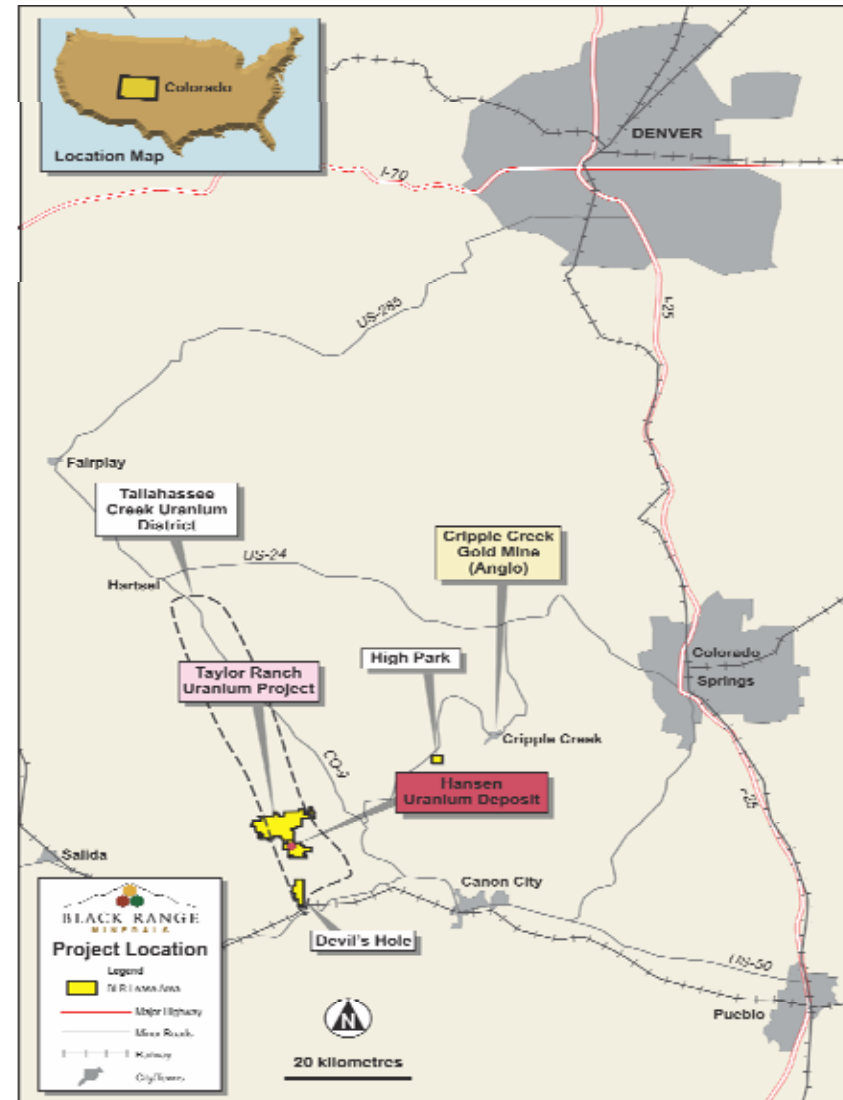


Yellowcake – recovered from uranium ore.

# Hansen/Taylor Ranch Uranium Project Location



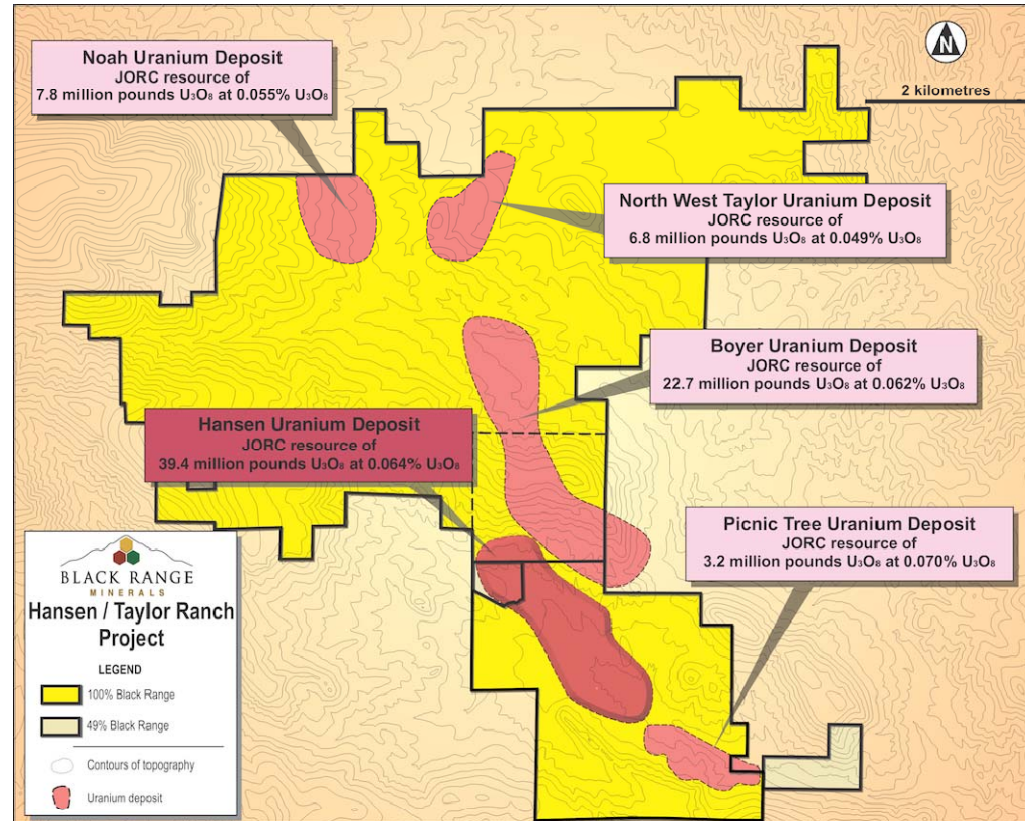
- Third largest uranium resource in the USA.
- 30km NW of Cañon City.
- Proximal to AngloGold-Ashanti's Cripple Creek heap leach gold mine (historic production of 23Moz gold).
- Established mining industry and mining culture in the district.
- Uranium first discovered in the district in 1954.
- From 1954 until 1972 – 16 small open pit and underground uranium mines operated in the Tallahassee Creek district.
- Hansen Deposit discovered in 1977.



# Hansen/Taylor Ranch Uranium Project Resources



- More than 2,200 holes drilled for more than 350,000 metres.
- Project encompasses a series of large deposits over 10km of strike.
- JORC compliant resources, applying a 0.025% cut-off:
  - **68.9 Mt at 0.06% for 90.1 Mlbs of U<sub>3</sub>O<sub>8</sub>**
- JORC compliant resources, applying a 0.075% cut-off:
  - **16.6 Mt at 0.12% for 43.8 Mlbs of U<sub>3</sub>O<sub>8</sub>**



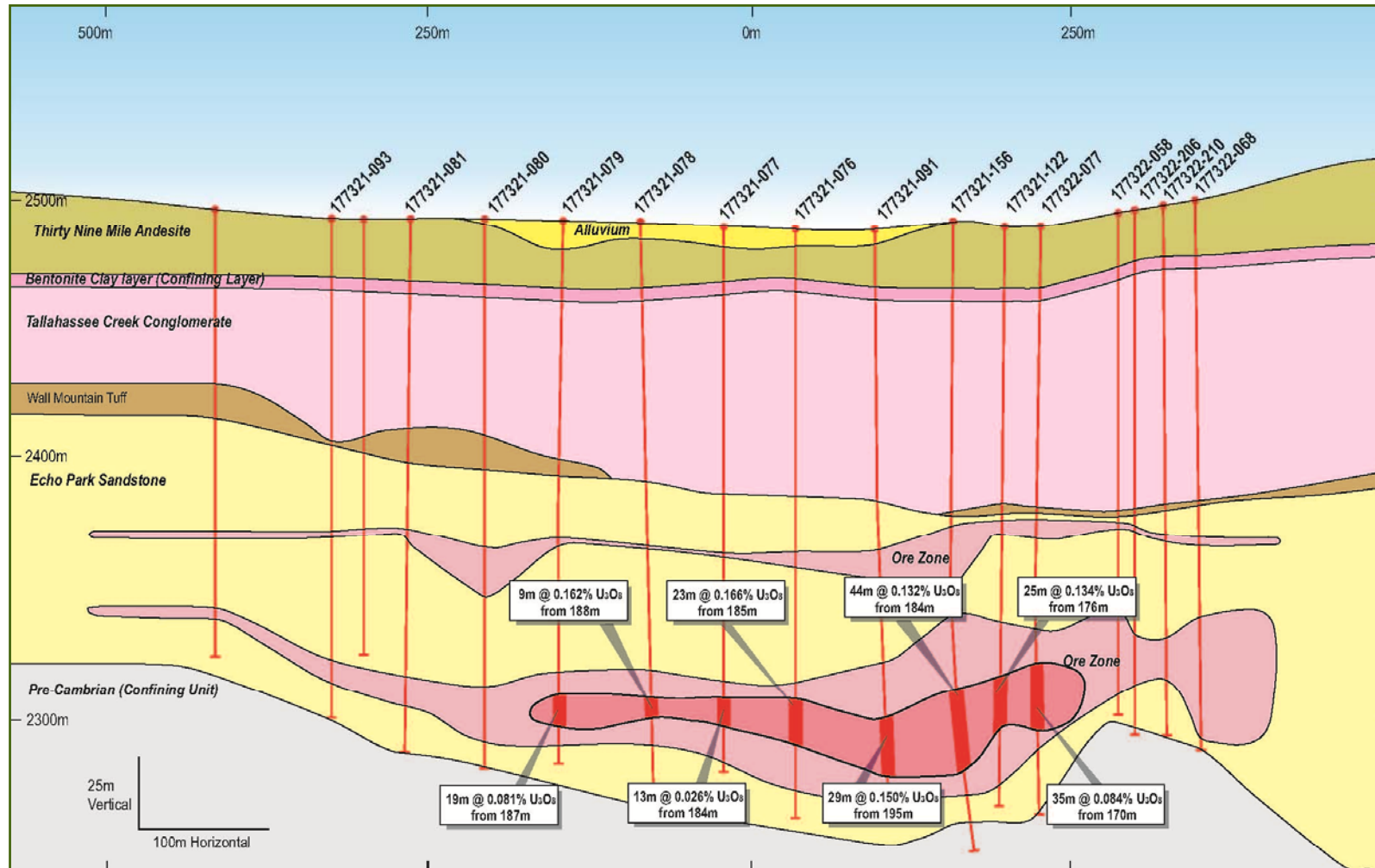
## Hansen Deposit

- Fully permitted for mining in 1981.
- Will be targeted first for mining.

## Hansen Deposit – Resources

- At a 0.025% cut-off: **28.0 Mt at 0.064% U<sub>3</sub>O<sub>8</sub> for 39.4 Mlbs of U<sub>3</sub>O<sub>8</sub>**
- At a 0.075% cut-off: **7.0 Mt at 0.127% U<sub>3</sub>O<sub>8</sub> for 19.7 Mlbs of U<sub>3</sub>O<sub>8</sub>** <sup>7</sup>

# Hansen Uranium Deposit – Cross Section



- Deposit very well defined with systematic drilling on 65 metre centres.
- Thick, tabular, flat-lying ore-body.



# Scoping Study to Initially Develop the Hansen Deposit



- Hansen Deposit largest and most advanced of all of the deposits within the Project.

## Hansen Resources (only)

- At a 0.025% cut-off: **28.0 Mt at 0.064% U<sub>3</sub>O<sub>8</sub> for 39.4 Mlbs of U<sub>3</sub>O<sub>8</sub>**
- At a 0.075% cut-off: **7.0 Mt at 0.127% U<sub>3</sub>O<sub>8</sub> for 19.7 Mlbs of U<sub>3</sub>O<sub>8</sub>**

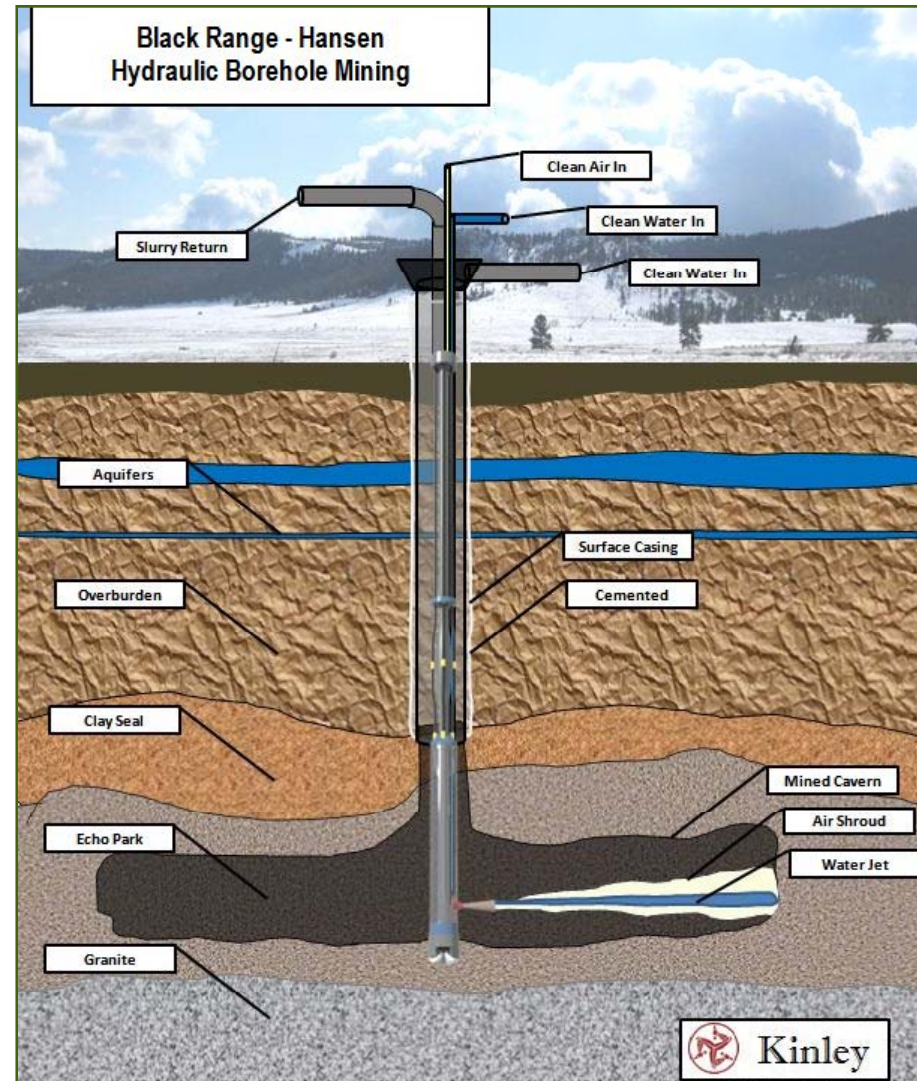
## Production Approach

- Assessed development by open-pit, conventional underground and underground borehole mining.
- Determined that underground borehole mining (UBHM) provides a low operating cost and low capital cost methodology:
  - 750,000 tonnes per annum for initial 7-8 years (to be followed by development of other deposits within the Project).
  - Produce ~2Mlbs U<sub>3</sub>O<sub>8</sub> per annum.
  - Opex of ~US\$30/lb U<sub>3</sub>O<sub>8</sub>.
  - Capex <US\$80M with off site milling (lowest in industry, even ISR).
  - Lowest environmental impact approach enabling a streamlined permitting process.
- Now targeting receipt of all permits required for mining by 2015 and first production 2016.

# Underground Borehole Mining



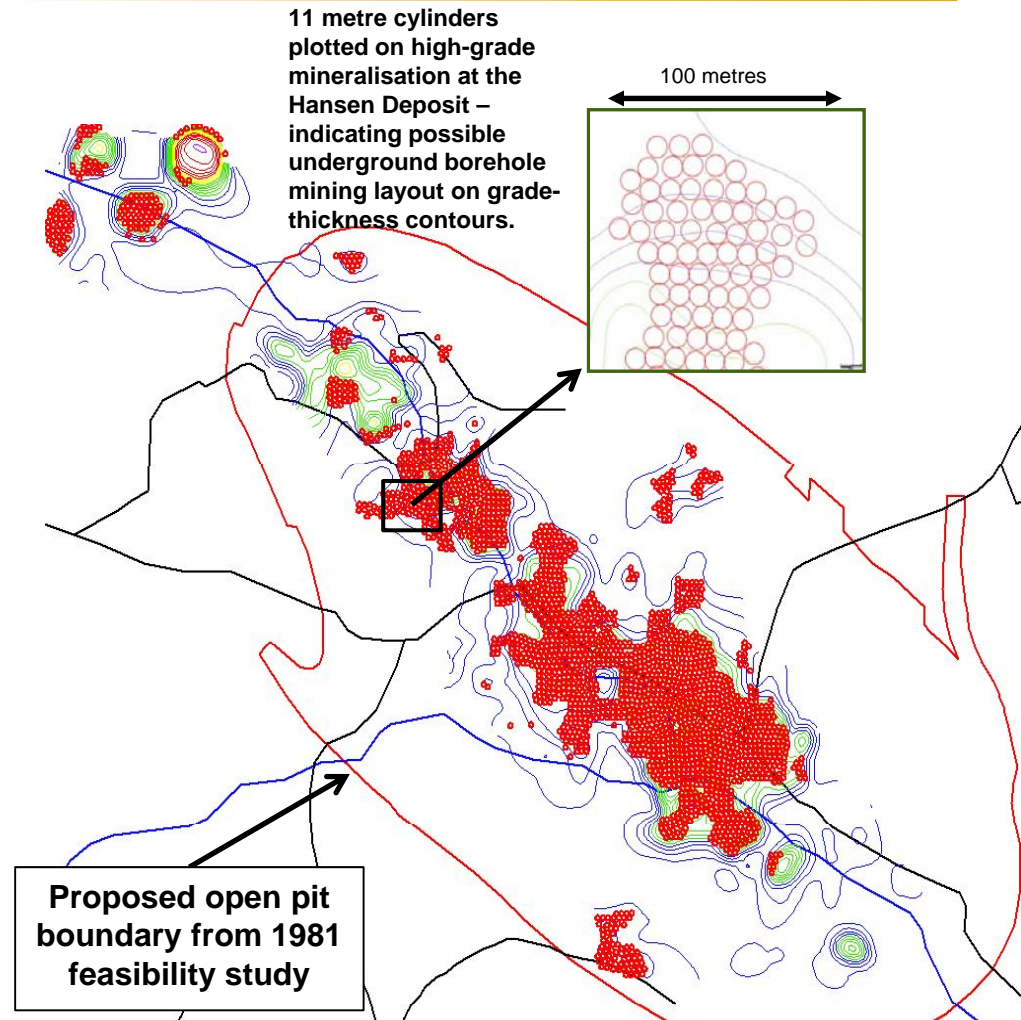
- Used in USA & Canada on various deposit types including uranium.
- Small surface footprint with mobile equipment.
- Selective mining method.
- Conventional 22" hole drilled and cased to ore horizon.
- High pressure water pumped down the tool to a nozzle that shoots at the mineralised rock face.
- ~11 metre diameter cylindrical hole excavated within the mineralised horizon.
- Ore air-lifted to surface in controlled, safe and closed environment.
- Backfill of cavity with inert waste rock.
- Very low environmental impact.



# Underground Borehole Mining Operations

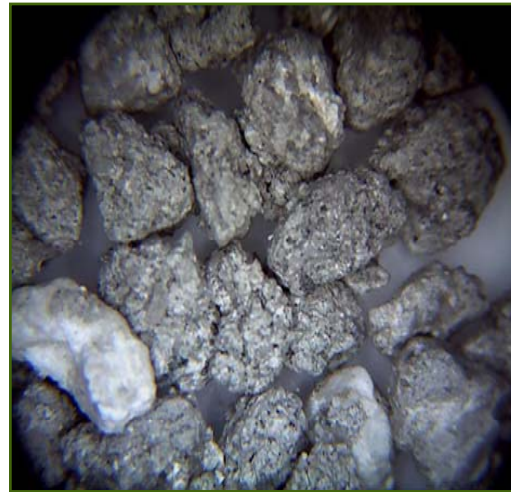


- Allows selective mining of highest grade and thickest parts of the ore deposit.
- 180 hours per hole (drill, mine & backfill).
- Cutting pressure <1000psi.
- Approximately 2,600 holes required to mine Hansen Deposit.
- 2 overburden and 3 production rigs operating.
- Each hole produces circa 3,700t of ore containing ~9,300lbs of  $U_3O_8$ .
- Contract mining.
- Eliminates upfront Capex and lead time required for conventional open-pit or underground mining.



# Ablation Technology

- Uranium minerals form a patina (outer coating) around individual grains that make up the mineralised sandstone host rock.
- Ablation uses kinetic energy and water to force grains against each other, removing the patina from the barren sandstone grains.
- The fine material comprises a high-grade, high-value concentrate.
- Testwork on multiple sandstone-type deposits consistently produces a concentrate containing 90-95% of the U in ~10% of the mass.
- This low volume of concentrate can then be economically transported off-site for conversion to yellowcake at a conventional processing facility.



Pre-Ablated Hansen Ore



Post-Ablated Barren Material

## Ablation and the Hansen Deposit

- **Extensive testwork undertaken.**
- **Consistently recovered ~95% of the  $U_3O_8$  in ~10% of the mass.**
- **Potential to reduce 750,000t of ore produced per annum to ~75,000t of concentrate.**
- **Upgrading 0.127%  $U_3O_8$  ore to ~1.20%  $U_3O_8$  concentrate.**
- **At \$50/lb, 1.20%  $U_3O_8$  concentrate is worth \$1,320/t.**

# Commercialisation of Ablation

- BLR and Ablation Technologies have a 50%:50% interest in Ablation.
- Scheduled to finalise commercialisation in 2013.
- Proprietary technology that BLR has the right to apply to uranium deposits, globally.
- Significant competitive advantages:
  - Streamlines mine permitting, as a full-scale mill is not required at each deposit.
  - Considerable reduction in cost of transport to a conventional mill, as a concentrate is transported.
  - At the conventional mill, more yellowcake can be produced with no change in mill capacity, because a concentrate is being processed.
  - Reduced tailings storage capacity required = environmentally positive and reduced capital cost.



Pilot-scale Ablation unit that processes ~0.5 tonnes/hour. This technology is being scaled up to units that can process ~20 tonnes/hour.

# Opportunities that may arise from Ablation



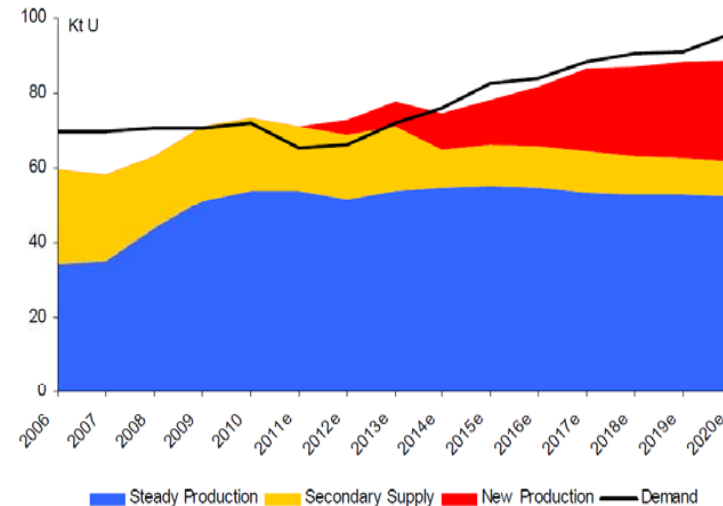
- Potential early cash flows from other acquisition opportunities.
- Targeting acquisitions to prove commercialisation as well as projects that will return positive cash flow in H2 2013.
- A high value Ablated concentrate could potentially be delivered to:
  - The operating White Mesa uranium mill in Utah, that has excess capacity; or
  - Other mills in Canada (and further abroad).
- This would see BLR exceptionally well positioned for rapid growth.



Yellowcake – recovered from uranium ore.

# Global Outlook for Uranium Price

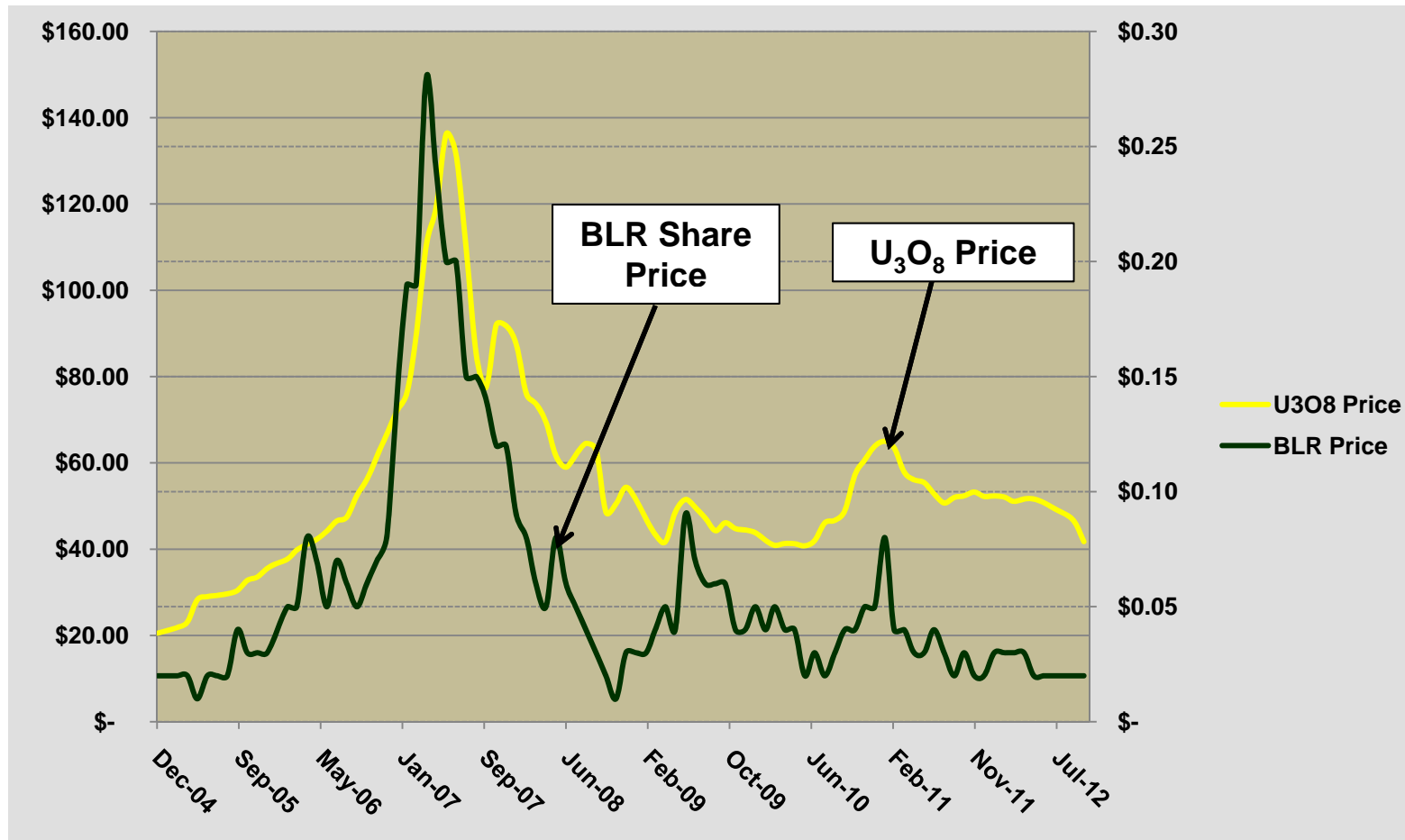
- \*Globally:
  - Currently 436 operable nuclear reactors (total capacity of 374MWe).
  - 62 reactors currently under construction.
  - A further 167 reactors “on-order” or planned (expected to be operational within 8-10 years).
  - A further 317 reactors proposed (expected operational within 15 years).
  
- \* In China:
  - Currently 14 nuclear reactors in operation, generating 11.9MWe or 1.8% of the country’s power (vs 19.2% for the USA).
  - More than 25 reactors currently under construction and a further 51 planned – for a five- or six-fold increase in nuclear capacity to at least 60 GWe by 2020, then 200 GWe by 2030, and 400 GWe by 2050.
  
- Secondary uranium supplies are diminishing, including the Russian Highly Enriched Uranium Agreement that ends in 2013.
  
- Morgan Stanley Research forecasts deficit market conditions from 2014.



Source: Morgan Stanley Research, including data from UxC.

# BLR Share Price vs U<sub>3</sub>O<sub>8</sub> Price

- BLR share price has historically been closely correlated with the U<sub>3</sub>O<sub>8</sub> price, hence provides excellent leverage to the U<sub>3</sub>O<sub>8</sub> price.





# Why BLR ?

- Very large resource base at very good grade.
- Robust economics:
  - Capex < \$80m
  - Opex ~ \$30/lb
- Clear path forward to production at the Hansen Deposit.
- Ablation has huge upside:
  - Recovers a high-value, low volume concentrate at the mine site which can be transported to a licensed processing facility.
  - Utilise at Hansen Deposit (negating need to build a conventional processing facility).
  - Potential early cash flows from other acquisition opportunities.
- EV/lb  $U_3O_8$  is only ~\$0.10.





# Further Information

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Further information on Black Range Minerals Limited:

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# Disclaimer

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## **CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS:**

Certain information in this press release constitutes forward-looking statements under applicable securities law. Any statements contained in this press release that are not statements of historical fact may be deemed to be forward-looking statements. Forward-looking statements are often identified by terms such as “may”, “should”, “anticipate”, “expects” and similar expressions. Forward-looking statements necessarily involve known and unknown risks, including, without limitation, risks associated with exploration, marketing and transportation; loss of markets; volatility of commodity prices; currency and interest rate fluctuations; imprecision of reserve estimates; environmental risks; competition; inability to access sufficient capital from internal and external sources; changes in legislation, including but not limited to income tax, environmental laws and regulatory matters. Readers are cautioned that the foregoing list of factors is not exhaustive.

Although Black Range believes that the expectations reflected in this forward-looking information are reasonable in light of the experience of its officers and directors, current conditions and expected future developments and other factors that have been considered appropriate, undue reliance should not be placed on them because Black Range can give no assurance that they will prove to be correct. The forward-looking statements contained in this press release are made as of the date hereof and Black Range undertakes no obligation to update publicly or revise any forward-looking statements or information, whether as a result of new information, future events or otherwise, unless so required by applicable securities laws.

Neither the Australian Securities Exchange nor its Regulation Services Provider (as that term is defined in the policies of the Australian Securities Exchange) accepts responsibility for the adequacy or accuracy of this press release.

## **COMPETENT PERSONS STATEMENT:**

*The information in this report 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, which 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.*

*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 “Australasian 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.*

# Appendix 1

## Targeting the USA Domestic Market

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- **Energy security is of major importance to the US domestic market.**
- ~20% of US electricity comes from nuclear power plants.
- 104 (23%) of the world's 436 nuclear power plants are located within the US.
- 27 additional reactors are either proposed, planned or under construction in the US.
- The Nuclear Regulatory Commission recently granted a license to build two reactors (first since 1978).
- US reactors consume around 50 million pounds  $U_3O_8$  per annum – 85% of which is imported.
- In 2010 the US produced 4.23 million pounds of  $U_3O_8$  with 6 active production facilities currently operating.
- The US generates more electricity from nuclear power plants than any other country in the world.

# Appendix 2

## Scoping Study – OPEX



- Evaluated mining the Hansen Deposit at a rate of 750,000 tpa to recover approx. 2 million pounds of  $U_3O_8$  per annum over an initial 7 years

Life of Mine Operation Costs <sup>1</sup>	Cost per Metric Tonne Ore	Cost per LB $U_3O_8$
Salaries and Wages (Mine)	\$8.16	\$3.07
UBHM Operating Costs	\$35.58	\$13.38
Ablation Operating Costs	\$8.32	\$3.13
Material Handling	\$0.51	\$0.19
Water Treatment	\$0.33	\$0.12
Mill Operating Costs <sup>2</sup>	\$21.64	\$8.14
Site Wide	\$5.28	\$1.99
<b>Subtotal:</b>	<b>\$79.83</b>	<b>\$30.01</b>

<sup>1</sup> Excludes taxes, royalties, preproduction expenses, product transportation, state fees, and regulatory fees. TREC have prepared the SS to an accuracy of +/-20%.

<sup>2</sup> Operating fee is an estimate using 100% of the Mill OPEX cost per pound and approx 50% of CAPEX cost per pound found in the March 2012 Borehole Desktop Study. This fee will be wholly dependent on the mill and the concentrate.

# Appendix 3

## Scoping Study – CAPEX



Item Description	Cost (\$M) <sup>1</sup>
UBHM Slurry Handling <sup>2</sup>	3.09
Ablation <sup>3</sup>	34.11
Material Handling	1.91
Water Treatment	12.07
Site Wide	7.34
Engineering and Installation	15.00
<b>Subtotal Capital Cost:</b>	<b>73.52</b>

- 1 TREC has prepared the SS to an accuracy of +/-20%.
- 2 Capital for UBHM provided under contract by Kinley is included in the OPEX numbers above.
- 3 Ablation could be a BOO agreement further reducing the capital requirements.
- 4 Assumes transportation of a concentrate off-site to a conventional mill for processing to yellowcake.

# Appendix 4

## Hansen/Taylor Ranch JORC Resources



### Applying a 0.025% cut-off:

Deposit	Indicated (0.025% Cut-Off)				Inferred (0.025% Cut-Off)				Total (0.025% Cut-Off)			
	Tonnes	Grade U <sub>3</sub> O <sub>8</sub> (%)	Tonnes of U <sub>3</sub> O <sub>8</sub>	Pounds of U <sub>3</sub> O <sub>8</sub>	Tonnes	Grade U <sub>3</sub> O <sub>8</sub> (%)	Tonnes of U <sub>3</sub> O <sub>8</sub>	Pounds of U <sub>3</sub> O <sub>8</sub>	Tonnes	Grade U <sub>3</sub> O <sub>8</sub> (%)	Tonnes of U <sub>3</sub> O <sub>8</sub>	Pounds of U <sub>3</sub> O <sub>8</sub>
Hansen	11,600,262	0.067	7,768	17,124,620	16,399,487	0.062	10,101	22,269,792	27,999,749	0.064	17,869	39,394,412
Boyer	9,102,294	0.059	5,403	11,912,352	7,577,863	0.064	4,871	10,737,856	16,680,157	0.062	10,274	22,650,208
Picnic Tree	1,703,693	0.073	1,248	2,750,840	337,473	0.054	183	403,308	2,041,166	0.070	1,431	3,154,148
NW Taylor	2,385,649	0.058	1,388	3,061,003	3,940,027	0.043	1,710	3,769,842	6,325,676	0.049	3,098	6,830,845
Noah	1,438,200	0.055	784	1,728,025	4,956,582	0.055	2,736	6,031,920	6,394,782	0.055	3,520	7,759,945
High Park	1,954,983	0.053	1,028	2,267,000	433,634	0.077	333	734,000	2,388,617	0.057	1,361	3,001,000
Other (Taylor)	409,627	0.031	126	278,146	4,398,939	0.039	1,729	3,811,314	4,808,565	0.039	1,855	4,089,460
Other (Hansen Area)	333,771	0.085	285	627,955	2,020,228	0.077	1,552	3,421,397	2,353,999	0.078	1,837	4,049,351
<b>Total</b>	<b>28,928,480</b>	<b>0.062</b>	<b>18,030</b>	<b>39,749,941</b>	<b>40,064,232</b>	<b>0.058</b>	<b>23,215</b>	<b>51,179,428</b>	<b>68,992,711</b>	<b>0.060</b>	<b>41,244</b>	<b>90,929,369</b>

### Applying a 0.075% cut-off:

Deposit	Indicated (0.075% Cut-Off)				Inferred (0.075% Cut-Off)				Total (0.075% Cut-Off)			
	Tonnes	Grade U <sub>3</sub> O <sub>8</sub> (%)	Tonnes of U <sub>3</sub> O <sub>8</sub>	Pounds of U <sub>3</sub> O <sub>8</sub>	Tonnes	Grade U <sub>3</sub> O <sub>8</sub> (%)	Tonnes of U <sub>3</sub> O <sub>8</sub>	Pounds of U <sub>3</sub> O <sub>8</sub>	Tonnes	Grade U <sub>3</sub> O <sub>8</sub> (%)	Tonnes of U <sub>3</sub> O <sub>8</sub>	Pounds of U <sub>3</sub> O <sub>8</sub>
Hansen	3,126,521	0.129	4,041	8,908,599	3,909,667	0.125	4,904	10,811,979	7,036,188	0.127	8,945	19,720,578
Boyer	3,010,039	0.103	3,097	6,828,444	2,951,979	0.100	2,964	6,534,032	5,962,018	0.102	6,061	13,362,476
Picnic Tree	532,517	0.141	749	1,650,994	55,338	0.123	68	149,744	587,856	0.139	817	1,800,738
NW Taylor	373,571	0.154	574	1,265,849	346,530	0.098	338	745,633	720,101	0.127	912	2,011,481
Noah	259,397	0.114	295	649,647	806,233	0.125	1,010	2,227,132	1,065,630	0.122	1,305	2,876,779
High Park	326,587	0.114	372	820,000	130,635	0.163	212	468,000	457,221	0.128	584	1,288,000
Other (Taylor)	-	-	-	-	234,961	0.105	246	542,864	234,961	0.105	246	542,864
Other (Hansen Area)	84,368	0.213	180	396,180	428,191	0.196	839	1,849,296	512,559	0.199	1,019	2,245,476
<b>Total</b>	<b>7,713,001</b>	<b>0.121</b>	<b>9,308</b>	<b>20,519,713</b>	<b>8,863,534</b>	<b>0.119</b>	<b>10,581</b>	<b>23,328,680</b>	<b>16,576,535</b>	<b>0.120</b>	<b>19,889</b>	<b>43,848,392</b>