



ASX Release

11 February 2013

BLACK RANGE MINERALS LIMITED

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**Australian Stock Exchange
Symbol: BLR**

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Directors / Officers:

Alan Scott
Mike Haynes
Ben Vallerine
Duncan Coutts
Ian Cunningham
Bev Nichols

Issued Capital:

1,319.1 million shares
53.2 million unlisted options

INVESTOR PRESENTATION

Black Range Minerals Limited (ASX: BLR) attaches a copy of its presentation to be used in an Eastern States roadshow commencing today.

Yours faithfully

Ian Cunningham
Company Secretary



A Compelling Uranium Development Opportunity

**Investor Presentation
February 2013**

Black Range Minerals Overview

- **First production of uranium concentrate anticipated Q2/Q3 2013.**
- **Hansen/Taylor Ranch Uranium Project in Colorado, USA.**
 - JORC Resources of **90.9Mlbs U₃O₈ at 600ppm.**
 - Scoping study demonstrates robust economics – **Opex ~\$30/lb; Capex <\$80m.**
 - Now permitting; targeting production in 2016.
- **Ablation**
 - Commercialising technology that facilitates non-chemical concentration of uranium deposits at the mine site.
 - Testwork on Hansen Deposit indicates **U₃O₈ recoveries up to 99% in ~10% of the mass.**
 - Will dramatically reduce capital requirements, transport and operating costs and permitting lead times.
 - Looking to apply at the Hansen/Taylor Ranch Project as well as other opportunities globally.
 - Semi-commercial scale 5tph unit scheduled for completion April 2013 and deployment for field operations scheduled for May 2013.
- **Acquisitions**
 - Numerous opportunities to acquire stranded uranium assets where a high-value, low volume Ablated concentrate can be produced.
- **Compelling Value Proposition**
 - **Low EV at ~\$0.19/lb U₃O₈.**
 - Dramatic revaluing expected from:
 - Commercialisation of Ablation;
 - Permitting Hansen Deposit;
 - New acquisitions; and
 - Production.

Corporate Overview



ASX Code	BLR
Shares on Issue	1,319.1m
Options on Issue	53.2m
Share Price	\$0.015
Market Cap	\$19.8m
Cash (31/12/12)	~\$2.1m
JORC Resource	90.9Mlbs U ₃ O ₈ @ 600ppm
EV/lb	~\$0.19

Capital Structure	Shares	%
Board & Management	72.6m	5.5
Top 20	327.7m	24.8
Total	1,319.1m	100.0

Share Price Performance – Past 3 years



Board and Senior Management

Alan Scott	Non-Executive Chairman
Mike Haynes	Managing Director
Ben Vallerine	Executive Director
Duncan Coutts	Non-Executive Director
Ian Cunningham	Company Secretary
Beverley Nichols	Chief Financial Officer
Rod Grebb	Vice President Permitting

Cornerstone Investment by Azarga Resources Limited



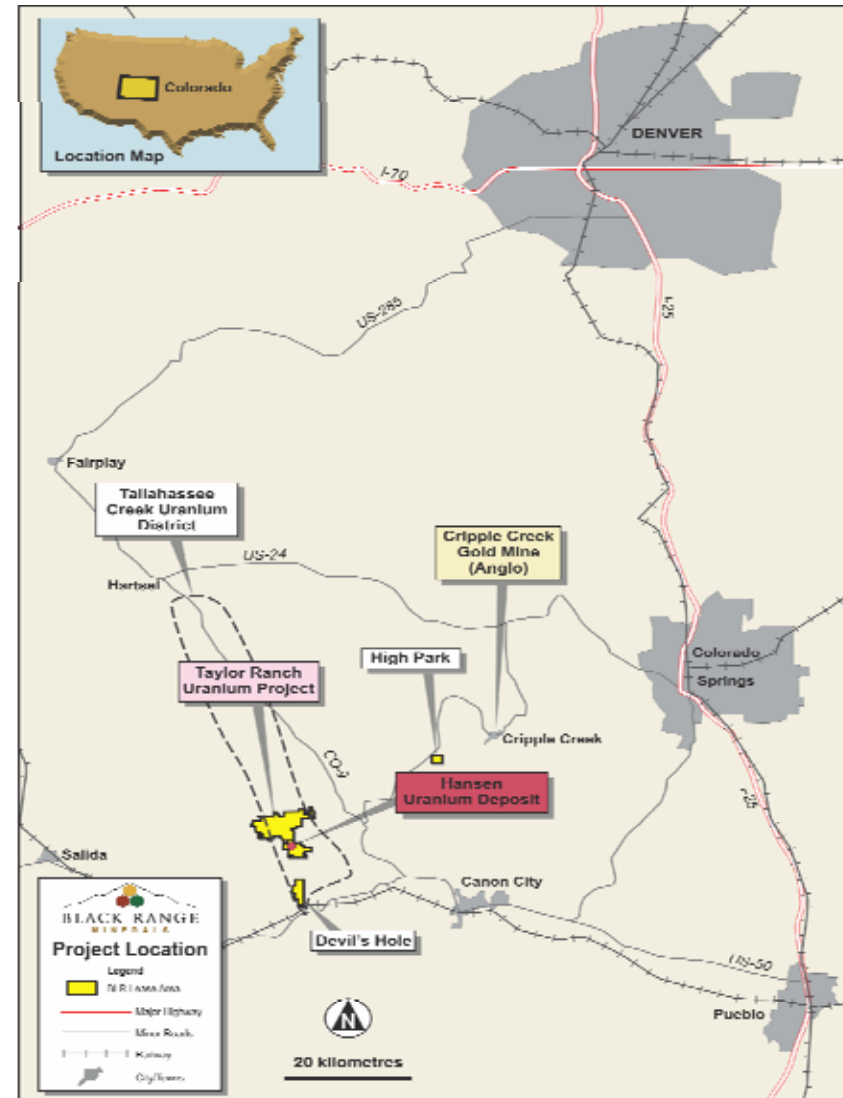
- January 2013: Agreement executed for Azarga to become a strategic cornerstone investor in BLR.
- About Azarga:
 - A private uranium and heavy rare earths company.
 - Founded by Hong Kong based mining executive Alexander Molyneux.
 - Owns 80% of the largest uranium deposit in the Kyrgyz Republic.
 - Extensive global network of institutional and private investors.
- Azarga to invest \$2.3m for a 19.9% interest in BLR, with right to maintain interest in subsequent share issues during the next 2 years.
- Azarga to provide ongoing marketing and financial support.
- Shareholder meeting to approve Placement scheduled for 25 February 2013.

BLR Capital Structure	Shares	%
Currently on Issue	1,319.1m	80.1
To be issued to Azarga	328.0m	19.9
Post Placement to Azarga	1,647.1m	100.0
Market Cap. post Placement @ \$0.015:		\$24.7m

Hansen/Taylor Ranch Location



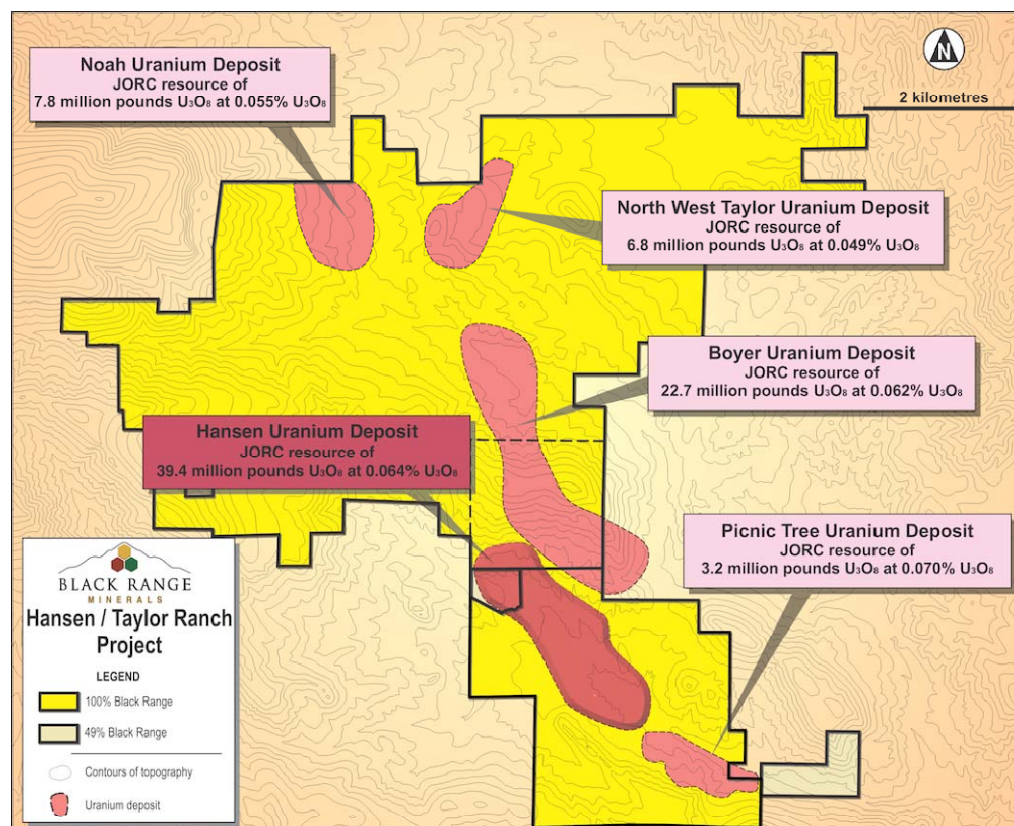
- One of the largest uranium resources in the USA.
- 30km NW of Cañon City.
- Proximal to AngloGold-Ashanti's Cripple Creek heap leach gold mine (historic production of 23Moz gold).
- Established mining industry and mining culture in the district.
- Uranium first discovered in the district in 1954.
- 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 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:
 - **69.0 Mt at 0.06% for 90.9 Mlbs of U_3O_8**
- JORC compliant resources, applying a 0.075% cut-off:
 - **16.6 Mt at 0.12% for 43.8 Mlbs of U_3O_8**



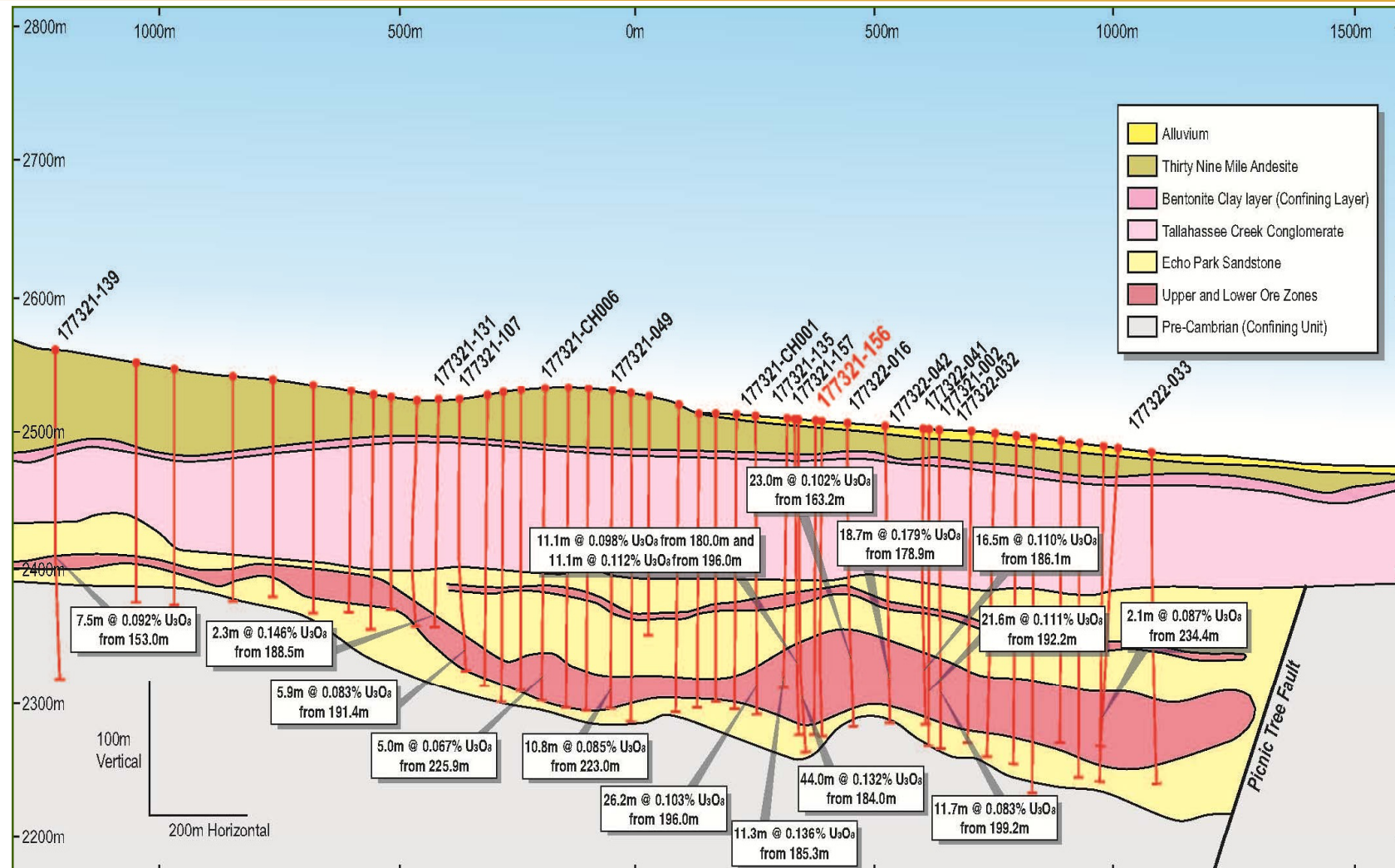
Hansen Deposit

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

Hansen Deposit Resources

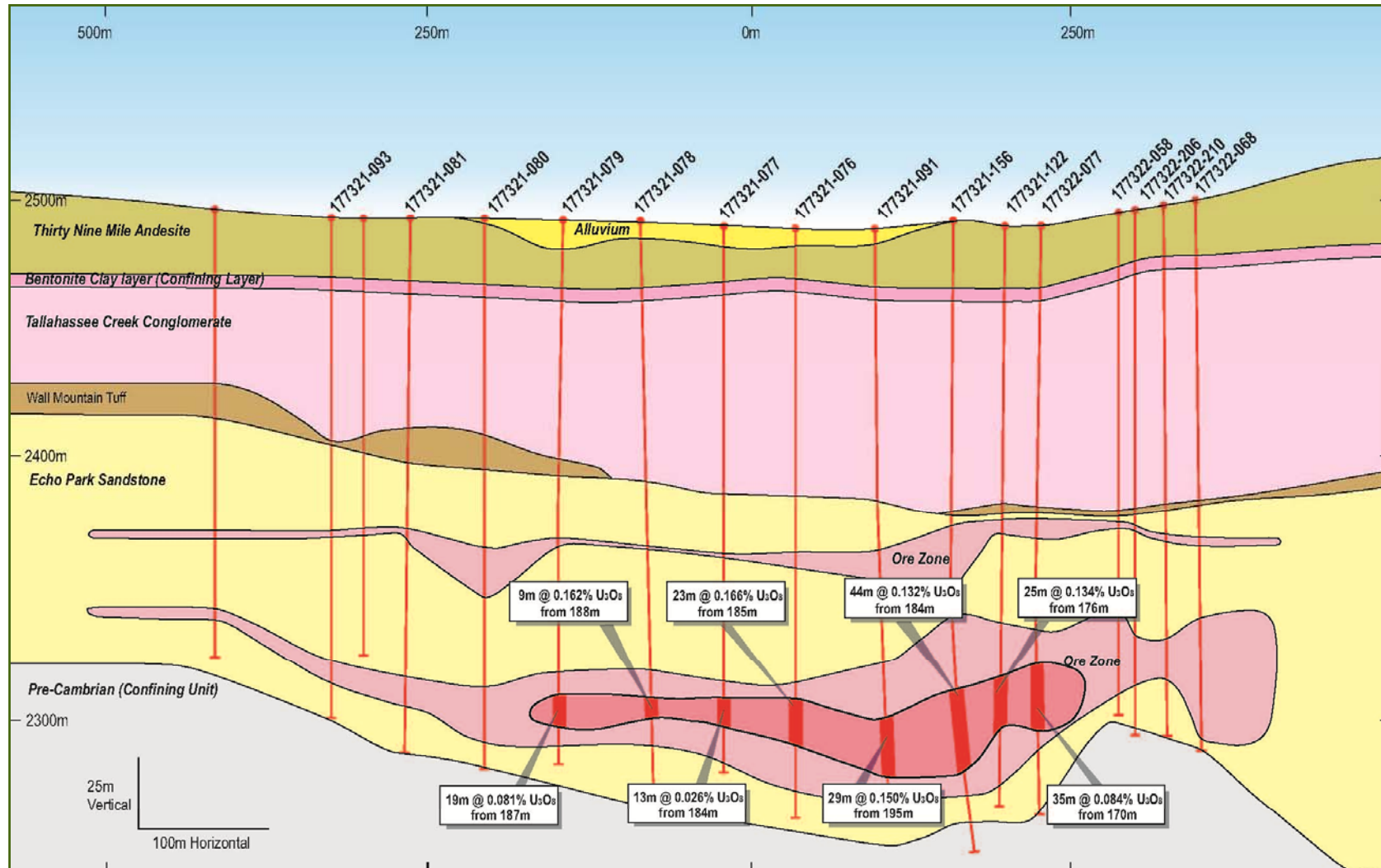
- At a 0.025% cut-off: **28.0 Mt at 0.064% U_3O_8 for 39.4 Mlbs of U_3O_8**
- At a 0.075% cut-off: **7.0 Mt at 0.127% U_3O_8 for 19.7 Mlbs of U_3O_8**

Hansen Deposit Long Section



- Deposit very well defined with drilling – 350,000 metres of drilling at the Project.
- Thick, tabular ore-body.

Hansen Uranium Deposit – Cross Section



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_3O_8 for 39.4 Mlbs of U_3O_8**
- At a 0.075% cut-off: **7.0 Mt at 0.127% U_3O_8 for 19.7 Mlbs of U_3O_8**

Production Approach

- H1 2012 – 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 development 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_3O_8 per annum.
 - Opex of ~US\$30/lb U_3O_8 .
 - Capex <US\$80M with off site milling (lowest in industry, even ISR).
 - Lowest environmental impact approach enabling a streamlined permitting process.

Hansen Mine Development Timeline

- Targeting receipt of all mine permits by 2016 and commencement of production shortly thereafter.
 - Baseline environmental data monitoring is ongoing.
 - Currently preparing permit applications to trial UBHM.
 - Anticipating trialing UBHM in H2 2013.
- Economic studies to be refined following on-site trial of UBHM and deployment of 5tph Ablation unit, at which time it will be possible to meaningfully refine operating cost estimates.

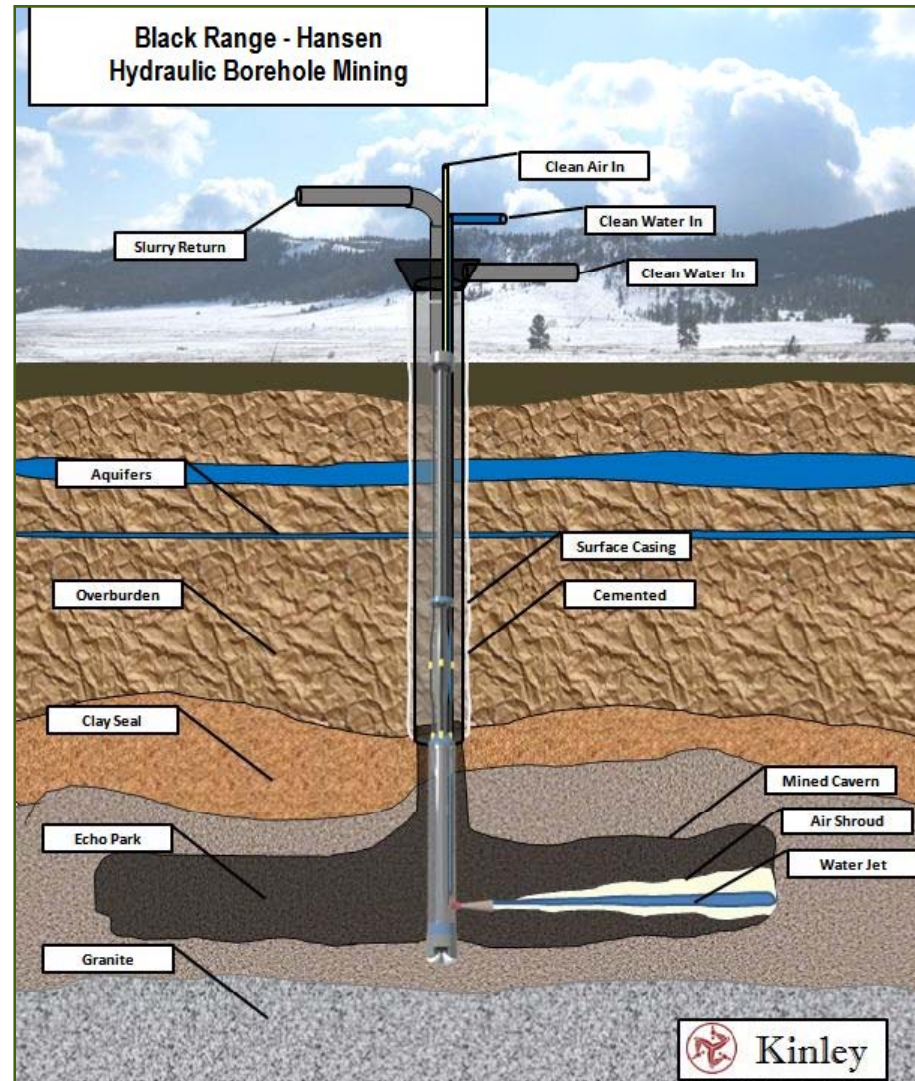


Yellowcake – recovered from uranium ore.

Underground Borehole Mining



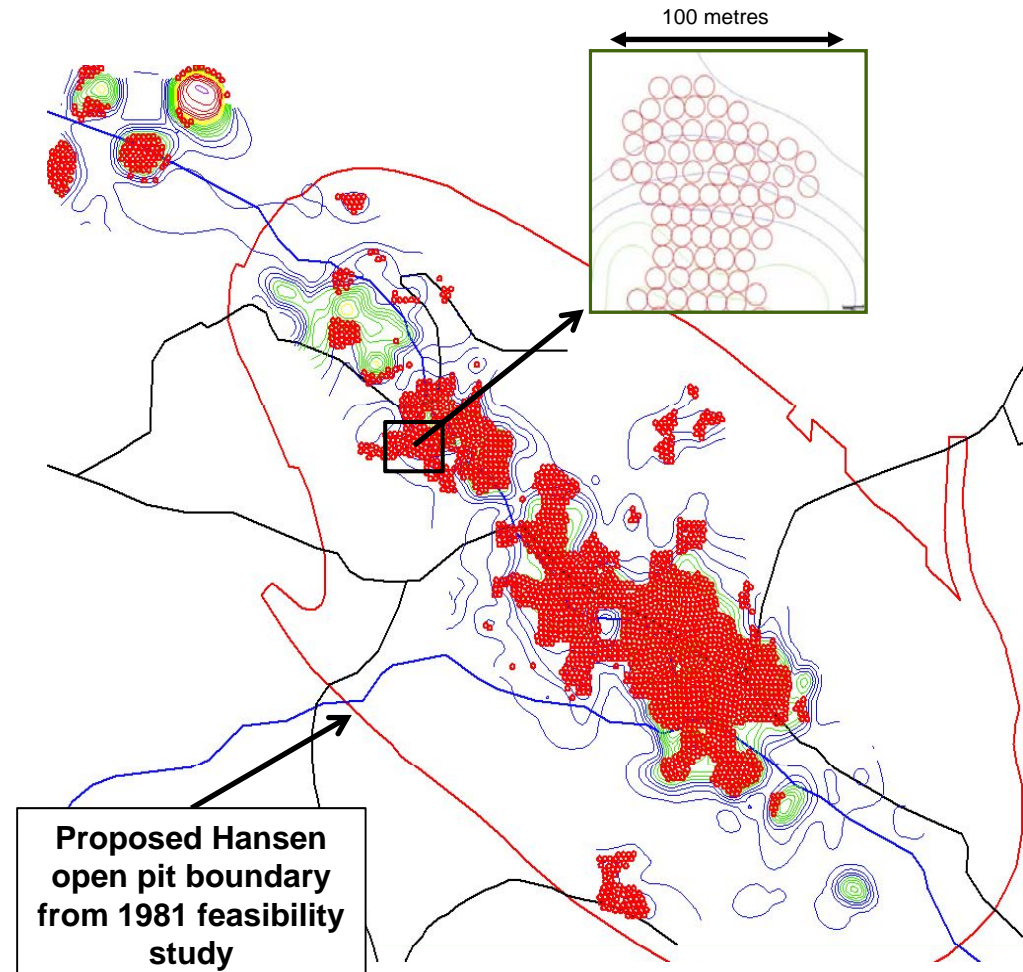
- Used in USA & Canada on various deposit types including uranium.
- In 2012 Denison Mines recovered >100,000 lbs U_3O_8 with UBHM from just 2 drill holes at the McLean North deposit in Canada.
- Small surface footprint with mobile equipment.
- Selective mining method – so can deliberately target high-grade pods.
- Conventional 22" hole drilled and cased to ore horizon.
- High pressure water pumped down the hole to a nozzle that shoots at the mineralised rock face.
- ~11 metre diameter cylindrical hole excavated within the mineralised horizon.
- Ore in a slurry air-lifted to surface in controlled, safe and closed environment.
- Backfill of cavity with inert waste rock, maximising ore-body recovery.
- Very low environmental impact.



Underground Borehole Mining Operations



- 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.



11 metre cylinders plotted on high-grade mineralisation at the Hansen Deposit – indicating possible underground borehole mining layout on grade-thickness contours.

Ablation Technology

- Applicable to sandstone-hosted uranium deposits.
- 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 uranium in ~10% of the mass.
- Recently recoveries of 95-99% consistently returned when incorporating a secondary upgrade circuit.
- The low volume 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 nominally worth \$1,320/t.

Benefits of Ablation

- Reduced capital and operating costs because:
 - Streamlines mine permitting, as neither a full-scale mill or chemical processing is required at each deposit.
 - Deposits do not need to be large enough to justify construction of their own conventional processing facility.
 - 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 higher-grade concentrate is being processed.
 - Less reagents required and less materials handling, hence operating costs reduced.
 - Reduced tailings storage capacity required = environmentally positive and reduced capital cost.
- Opportunity to utilise to clean-up environmentally unsustainable sites such as historic uranium mining operations.



Pilot-scale Ablation unit that processes ~0.5 tonnes/hour. This technology is being scaled up to units that can process ~5 tonnes/hour.

Commercialisation of Ablation

- BLR and Ablation Technologies LLC have established a 50%:50% JV to commercialise Ablation.
- Construction of a semi-commercial scale 5tph processing unit, including a secondary upgrade circuit, is underway and scheduled for completion in April 2013.
- “Off-the shelf” components being used for the 5tph unit, which is deliberately sized to fit on the back of a single semi-trailer.
- Simply replication/duplication of existing nozzle system so that slurry will pass once through multiple nozzles, rather than multiple times through the single set of nozzles on the 0.5tph unit.
- The 5tph unit will be deployed to the field in May 2013 – which will rapidly prove the applicability of this technology at commercial scale.



Pilot-scale Ablation unit that processes ~0.5 tonnes/hour in operation undertaking testwork. This technology is being scaled up to units that can process ~5 tonnes/hour.

Acquisition Opportunities

- BLR has a competitive advantage through its intricate understanding of Ablation and the benefits it provides:
 - *“Potentially the biggest single development in the conventional uranium mining industry in more than 30 years.”*
- BLR has identified numerous low-cost opportunities to acquire additional resources that are amenable to Ablation.
- BLR is confident it will acquire additional projects in the near term.
- These opportunities should see BLR produce its first uranium concentrate in Q2 or Q3 2013.
- This will see BLR exceptionally well positioned for rapid growth.



Why BLR ?

- Very large resource base at very good grade.
- Development of the Hansen Deposit shows robust economics:
 - Opex ~\$30/lb U_3O_8
 - Capex < \$80m
- 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).
 - Early cash flows from other acquisition opportunities expected during 2013.
- EV/lb U_3O_8 is only ~\$0.19.



Further Information

An animation of the underground borehole mining process is available for viewing at:

<http://youtu.be/rptNdp8NLcs>

Further information on Black Range Minerals Limited:

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Disclaimer



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

Uranium Market Overview



Demand

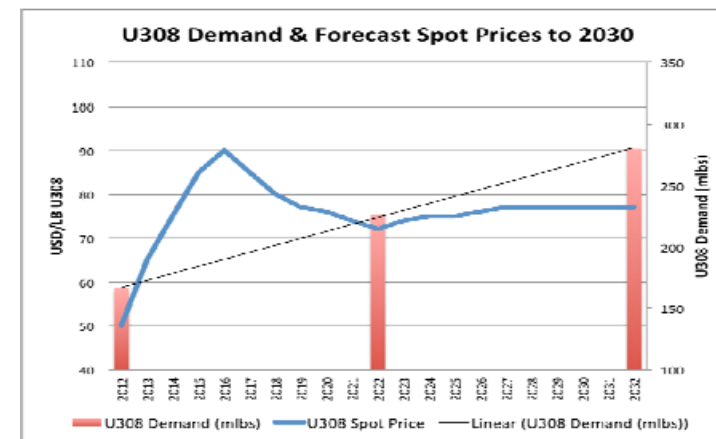
- World Nuclear Association estimates that the global fleet of 440 operating nuclear reactors consumed **~163Mlbs of U_3O_8 in 2011**.
- Reactor numbers have been flat for the last five years but there **are 61 reactors currently in construction**.
- The growth is mainly in China and India where there is a struggle to keep up with demand growth and balance pollution problems.

RCR estimates demand to rise from 166 Mlbs in 2010, to 226 Mlbs by 2020, and 280 Mlbs by 2030

Consensus view on U_3O_8 spot prices is \$65-70/lb in 2013 moving higher in 2014-5 to around \$85-90/lb before setting into a long term trend around \$70-75/lb

Supply

- In 2011 mine production was estimated at **~144Mlbs of U_3O_8** with the balance coming from secondary sources.
- The USA-Russia *HEU* deal ends in 2013 reducing supply by 24Mlb U_3O_8 .
- The current low price of U_3O_8 is causing mine supply growth to fall behind predictions.



Appendix 2

Targeting the USA Domestic Market



- **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 440 nuclear power plants are located within the US.
- 21 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 3

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 ¹	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 ²	\$21.64	\$8.14
Site Wide	\$5.28	\$1.99
Subtotal:	\$79.83	\$30.01

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

² 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 4

Scoping Study – CAPEX



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

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 5

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 ₃ O ₈ (%)	Tonnes of U ₃ O ₈	Pounds of U ₃ O ₈	Tonnes	Grade U ₃ O ₈ (%)	Tonnes of U ₃ O ₈	Pounds of U ₃ O ₈	Tonnes	Grade U ₃ O ₈ (%)	Tonnes of U ₃ O ₈	Pounds of U ₃ O ₈
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
Total	28,928,480	0.062	18,030	39,749,941	40,064,232	0.058	23,215	51,179,428	68,992,711	0.060	41,244	90,929,369

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 ₃ O ₈ (%)	Tonnes of U ₃ O ₈	Pounds of U ₃ O ₈	Tonnes	Grade U ₃ O ₈ (%)	Tonnes of U ₃ O ₈	Pounds of U ₃ O ₈	Tonnes	Grade U ₃ O ₈ (%)	Tonnes of U ₃ O ₈	Pounds of U ₃ O ₈
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
Total	7,713,001	0.121	9,308	20,519,713	8,863,534	0.119	10,581	23,328,680	16,576,535	0.120	19,889	43,848,392