



ASX Release

31 January 2012

**BLACK RANGE MINERALS
LIMITED**

Suite 9
5 Centro Ave
Subiaco WA 6008
Australia
Tel: +61 8 9481 4920
Fax: +61 8 9226 2027

Contact:

Tony Simpson
Managing Director

E-mail:

info@blackrangeminerals.com

Directors / Officers:

Alan Scott
Tony Simpson
Ben Vallerine
Mike Haynes
Duncan Coutts
Nick Day

Issued Capital:

840.9 million shares
23.6 million unlisted options

Australian Stock Exchange

Symbol: BLR

**QUARTERLY ACTIVITIES REPORT
DECEMBER 2011**

Highlights

- Tony Simpson appointed Managing Director and will relocate to Colorado to most effectively manage the Company.
- The Company received two awards from Colorado mining regulatory agencies.
- Pre-Feasibility Study activities for the Hansen/Taylor Ranch Uranium Project are progressing well:
 - Metallurgical test work to date indicates:
 - 97-98% uranium recovery with pressure alkaline leach.
 - 91-96% uranium recovery with atmospheric acid leach.
 - Geotechnical results indicate that it may be possible to mine the Hansen Deposit either by underground or open pit-mining methods.
- Preliminary studies have indicated the potential to upgrade mineralised material from the Project by recovering 95% of the uranium in only 10% of the mass.
- Preliminary studies on borehole mining indicate that this may be a potentially viable method for mining the Project.
- The Company has enlisted WWC Engineering¹ of Sheridan, Wyoming to serve as the lead consultant for permitting activities.

**HANSEN/TAYLOR RANCH URANIUM PROJECT,
COLORADO, USA**

During the December quarter, Black Range Minerals Limited (ASX: BLR; "Black Range" and the "Company") completed its inaugural drilling program at the Hansen and Picnic Tree Uranium Deposits ("Hansen") and further progressed its Pre-Feasibility Study ("PFS") and permitting studies.

Metallurgical Test Work

In October 2011 Black Range contracted Hazen Research Inc.² ("Hazen") to evaluate extraction of uranium from samples of mineralised material taken from Hansen. Hazen had previously (between 1977 and 1980) performed numerous acid leaching tests on ore samples from this deposit, with this work indicating that the ore is amenable to acid leaching. The current study covers initial assay characterization of new samples of uranium-bearing mineralised material taken from the 11 hole, 2011 drill program, as well as preliminary amenability test work. Samples of this mineralised material were subjected to both alkaline leach and acid leach amenability studies. Hazen observed that in both cases uranium extraction was nearly complete for all samples.

Alkaline pressure oxidation (POX) tests yielded 97–98% uranium extraction, while atmospheric acid leach tests yielded 91–96% uranium extraction. Hazen concluded that the scoping tests performed in this program demonstrate that the bulk composite samples are amenable to both POX and atmospheric acid leaching. The results indicate that the Company may have the ability to choose the most economical and environmentally friendly processing method, without being restricted by the metallurgy.

Geotechnical Studies

Tetra Tech³ was commissioned to design, review and determine the geotechnical feasibility of potential underground mining and surface mining operations at Hansen.

Underground

Tetra Tech concluded that an underground mine at Hansen may be possible from ground support and geotechnical requirements, except pillar support. The higher grade and thicker mineralised zone at Hansen ranges from 170 to 220 metres below surface. The mining method of supported and backfilled room and pillar extraction, which allows for cut dimensions and immediate support to be applied as conditions change, would probably be the most applicable for mining Hansen. Tetra Tech has tested paste fill design using uranium tailings for other projects. The results of these tests indicate that paste fill can be developed with sufficient strength for structural fill to be used as artificial pillars in cut & fill mining. Similar strength paste fill and cemented rock are currently used in underground mines with greater depth of cover than at Hansen.

Open Pit

Tetra Tech confirmed that the 2011 drilling program verified the data utilised to determine the previous pit slope designs, and that open pit mining is geotechnically possible. Tetra Tech concluded that the mine plan developed and permitted by Cyprus Mines Corporation in the early 1980s is still a viable method today.

The results have confirmed that both underground mining and open pit mining methods may be technically possible. The Company will continue to assess the advantages and disadvantages of both alternatives during the next quarter.

General

Awards

Black Range is pleased to announce that it recently received two awards for excellence from the two principal mine permitting agencies in Colorado. The awards recognise the quality of the Company's exploration programs and practices in Colorado. The Colorado Mined Land Reclamation Board (CMLRB) selected Black Range to receive a Reclamation Award honoring outstanding reclamation of hardrock mines permitted under the CMLRB. Black Range was recognised for its outstanding permitting, reclamation, and outreach to stakeholders during exploration at the Project.

In addition, the Colorado Mining Association (CMA), in cooperation with the Pollution Prevention program within the Colorado Department of Public Health and Environment (CDPHE), selected Black Range as a winner of the 2011 Environmental Stewardship Pollution Prevention Program Award. The Company is proud of the work that it has completed to date and is thrilled that two of Colorado's principal regulatory agencies have recognised the high quality of work being conducted.

The Company looks forward to building on the strong relationships developed as it continues to work with these same regulatory agencies through the development of mine and milling permit applications.

Permitting

Black Range is pleased to have secured WWC Engineering of Sheridan, Wyoming ("WWC") to act as the lead consultant for its permitting activities. WWC has worked with Mr Simpson on other projects and has a proven track record of preparing the highest quality permitting applications for uranium projects in the USA. It is anticipated that the respect WWC commands in the public and regulatory arena will have a marked effect on the permitting process and the development of the PFS. WWC is confident that permits for the Project will be secured by following a similar model to that established by Energy Fuels in achieving recent approval for its Piñon Ridge Uranium Mill Application. The Piñon Ridge project is the first new conventional uranium mill to be

approved in the USA and in the state of Colorado in the past 25 years. Energy Fuels conducted significant public and regulatory outreach in support of the successful Piñon Ridge application.

Technologies Evaluation

In considering mining methodologies for the Hansen Deposit, Black Range recently engaged Kinley Exploration LLC⁴ (Kinley) of Overland Park, Kansas, to complete a detailed preliminary technical and economic evaluation of mining the Deposit using an engineered borehole mining technology. Kinley's evaluation included assessment of the Deposit's geotechnical and geological parameters, to develop a suitable approach for extracting the mineralised material. This methodology could provide an environmentally protective and economically feasible approach to mining without the need for large infrastructure or open excavation.

Black Range is also investigating the potential use of ablation technology, a simple, low-cost, efficient and robust technology that mechanically separates uranium from the barren fractions of mineralised material without the use of chemicals. Ablation could produce a concentrate consisting of approximately 95% of the uranium in approximately 10% of the mass. The use of this technology could significantly reduce capital and operating costs and would allow for off-site processing, providing flexibility in siting the potential mill and hence creating a significant advantage in the permitting process.

Black Range is continuing to explore the efficiency and the economic and environmental viability of underground, open pit, borehole and ablation methods. The Company is currently working to identify strategic partners to assist in the development of an effective mining program, to work through the PFS analysis of the Project, and to involve all stakeholders.

JONESVILLE COAL PROJECT ALASKA, USA

During the quarter, the Alaska Department of Natural Resources renewed the Company's permit to mine at the Jonesville Coal Project for an additional 5 years. Meanwhile, the Company continued to assess numerous opportunities to realise value from this project.

CORPORATE

At 31 December 2011, cash reserves were approximately \$4.82 million. The Company also holds shares in listed entities with an approximate value of ~\$200,000 (based on recent closing prices).

During December 2011, Mr Anthony (Tony) Simpson was appointed Managing Director of the Company. Mr Simpson intends basing himself predominantly in Colorado, USA, where he can aggressively advance pre-feasibility studies, permitting and development of the Project. Mr Simpson is a mining engineer with over 40 years experience. Recently Mr Simpson has been the Chief Operating Officer for Strata Energy, Inc., a wholly-owned subsidiary of Peninsula Energy Limited (ASX:PEN). The Company's previous Managing Director, Mr Mike Haynes, has assumed the position of Non-Executive Director and will remain an integral member of the Company's Board of Directors.

During January 2012, as partial consideration for the acquisition of Hansen, the Company made a share-based payment of 43,970,888 shares to STB Minerals LLC. This share issuance was approved at the Company's Annual General Meeting in November, 2011.

Tony Simpson
Managing Director

References

- ¹ WWC Engineering (WWC) is an independent, employee-owned, multi-disciplinary, professional firm specializing in transportation engineering, municipal services, civil/site engineering, water resources engineering, environmental services, and surface mine engineering. WWC has been serving the Rocky Mountain region in the USA since 1980.
- ² Hazen Research, Inc. is an employee-owned industrial research and development firm located in Golden, Colorado. The company was founded in 1961 by a small group of metallurgists with strong backgrounds in research and process development for the mining and chemical industries. Over the years, Hazen has grown to its present size of 190 employees, with 17 buildings containing an extensive inventory of laboratory and pilot plant equipment. Hazen serves clients from all over the world on projects ranging from bench-scale experiments and analyses to multimillion-dollar continuous pilot plants.
- ³ Tetra Tech, a public company, is a leading provider of consulting, engineering, and technical services worldwide. It is a diverse company, including individuals with expertise in science, research, engineering, construction, and information technology. Its strength is in collectively providing integrated services — delivering the best solutions to meet clients' needs.
- ⁴ Kinley is a team of specialists providing engineered solutions for resource exploration and development. The Kinley team includes Colin Kinley, a recognised expert in international exploration and in-situ mining and development technologies, Dr. George Savanick, world leading scientist in hydraulic jet and hydraulic mining technologies, and senior engineering staff. Kinley's team members have built significant expertise over several decades in applied drilling engineering, bulk sampling systems and the development of hydraulic borehole mining expertise and technology.

Figure 1. Location of Black Range Minerals' Hansen/Taylor Ranch Uranium Project in Colorado, USA.

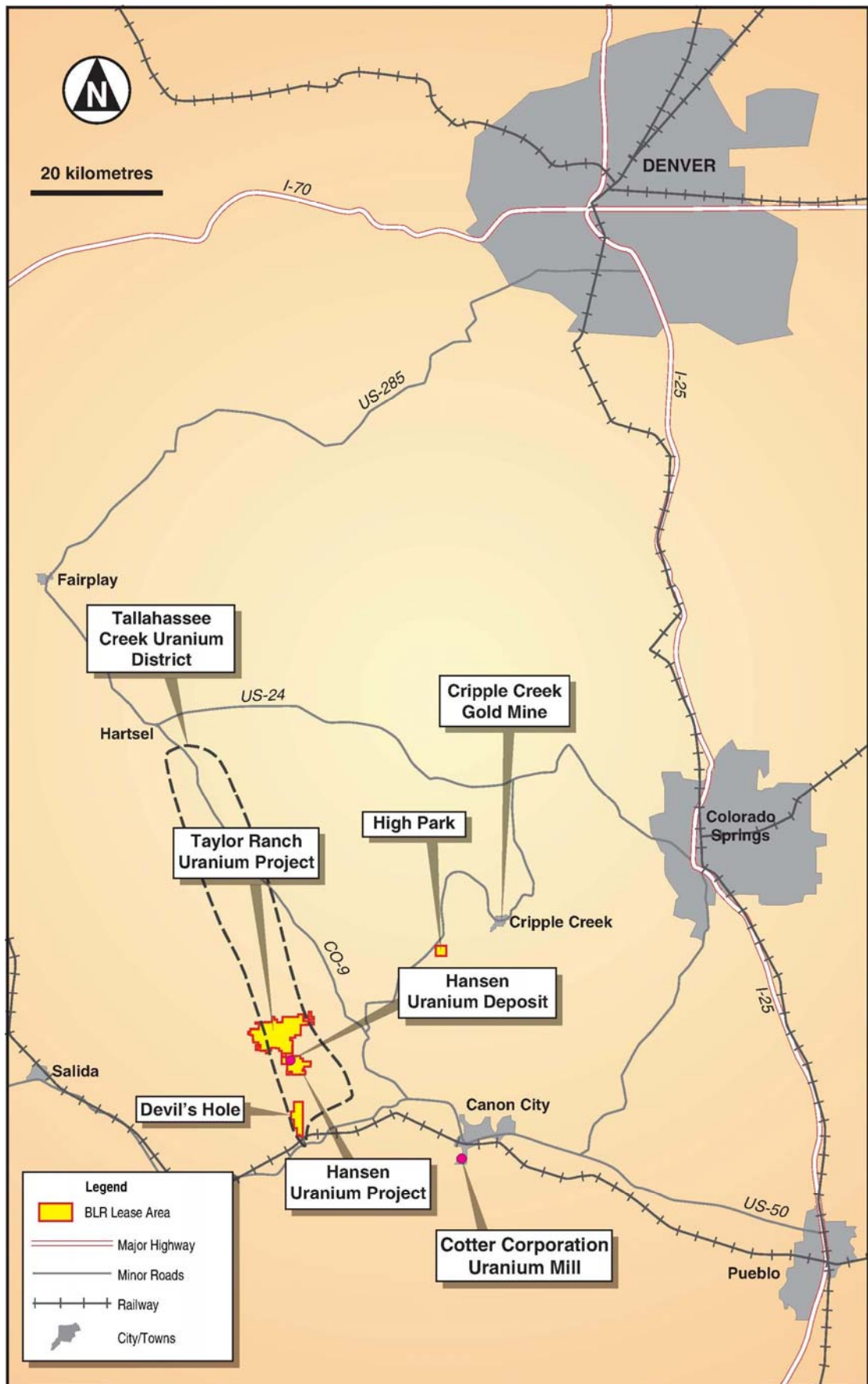


Figure 2. Location of uranium deposits within Black Range's Hansen/Taylor Ranch Uranium Project.

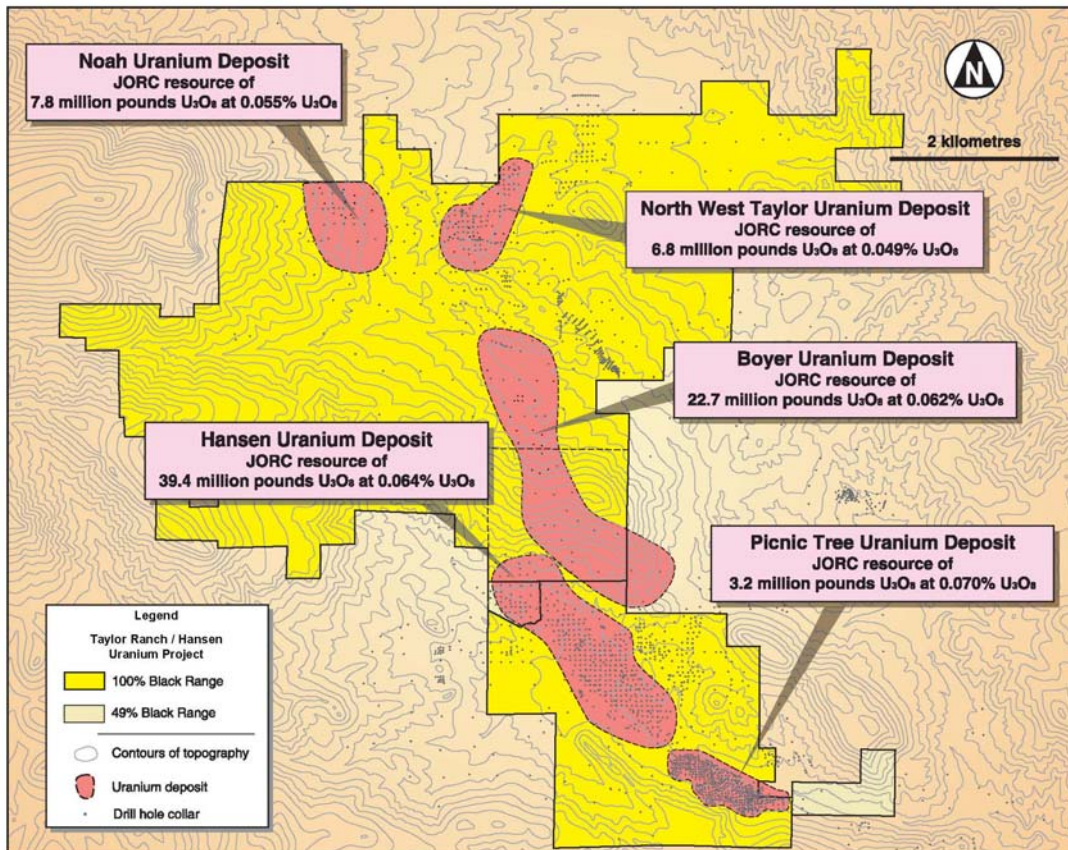


Figure 3. Schematic cross-section through the Hansen Uranium Deposit.

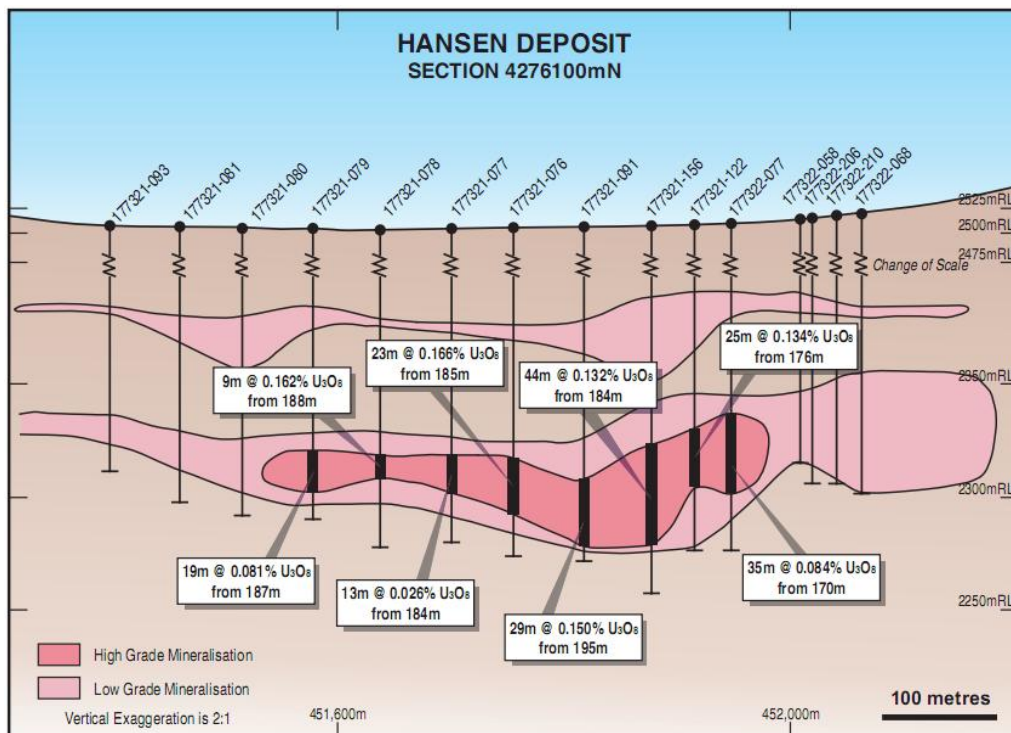


Figure 4. Location of previous and recently drilled holes at the Hansen and Picnic Tree Uranium Deposits, in relation to the boundary of the open pits as proposed and permitted in the 1980s (despite all permits being awarded, mining was never undertaken).

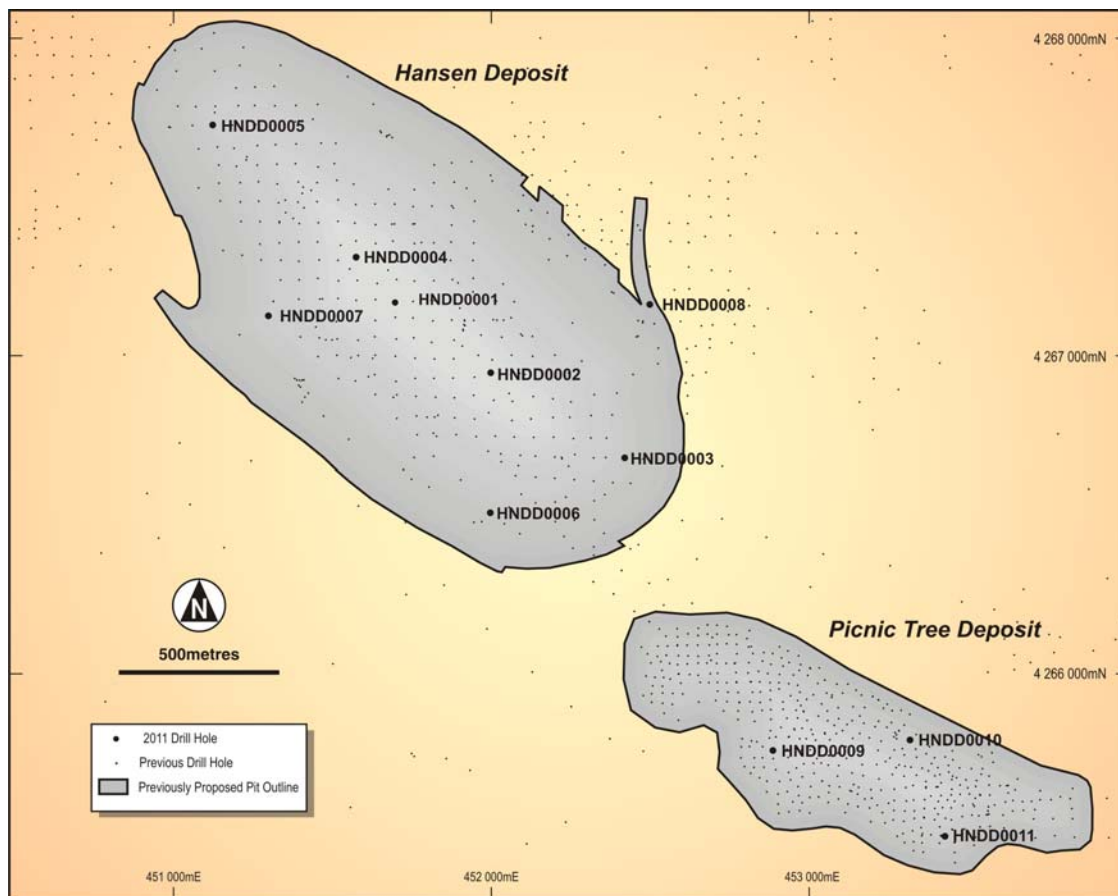


Table 1. JORC Code compliant resources for the Company's 100% controlled Hansen/Taylor Ranch Uranium Project at different cut-off grades.

Using a cut-off grade of 0.025% U₃O₈:

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

Or using a 0.075% U₃O₈ cut-off grade:

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

Competent Person Statement:

The information in this report that relates to Mineral Resources at the Hansen and Taylor Ranch Uranium Projects is based on information compiled by Mr John Rozelle who is a member of the American Institute of Professional Geologists. Mr John Rozelle compiled this information in his capacity as a 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 "Australasian 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 "Australasian 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.