Cazier, Tim

From: Khawklee@aol.com
Sent: Monday, July 30, 2012 11:29 PM
To: Cazier, Tim
Cc: King, Mike; Pineda, Loretta
Subject: Modification comment
Attachments: Monitoring Well KH Comments to DRMS FINAL.doc; AdrianBrown Geohydro Report.doc; Black Range Minerals in the Early Stages of Mining.docx; Presentation-Aust-Uranium-Confrence_18-7-12.pdf

Dear Mr. Cazier, Mr. King and Ms. Pineda,
Please find my comments attached regarding Black Range Minerals (BLR) communication to DRMS regarding Monitoring wells.

I send this email to all three of you because I believe that the type of mining BLR intends to use has **no current regulations.**

I respectfully request a reply as to how this type of mining would be regulated.

And an answer as to whether or not at this stage it would fall under the ISL rule 1.4.3 for pre-application requirements?

Thank you for your time.
Kay Hawklee
(719) 275-2881

Kay M. Hawklee
1739 Fremont County Rd 21A
Canon City, CO 81212

July 30, 2012

Mr. Tim Cazier
Environmental Protection Specialist
Division of Reclamation, Mining and Safety
1313 Sherman Street , Room 215
Denver, CO 80203
Via Email

Re: Hansen Uranium Project, NOI P-2009-025

Dear Mr. Cazier:

Thank you for taking my comments on the second proposed modification of NOI P-2009-025. I believe that by being situated within 1.5 miles of the NOI boundary, I am an affected party and my comments should be considered in this matter.

I appreciate Black Range Minerals (BLR) notification to DRMS of installation of monitoring wells, since the responsibility for permitting and establishing construction standards for these wells rests with DWR. However, the first question should be: What is the purpose for which these monitoring wells are intended?

If they are intended to be monitoring wells for a conventional open pit or an underground mine there is no need – as Mr. Siglin states – to alert DRMS. In a recent article published in the Canon City Daily Record, the method of mining is not going to be conventional. http://www.canoncitydailyrecord.com/ci_21064727/black-range-minerals-early-stages-mining?source=email

If they are intended to be monitoring wells for In situ Leach (ISL) mining, there is a need for pre-application requirements, per rule 1.4.3 to be placed upon the monitoring wells. The article also stated that the method will not be ISL.

Which method of mining is Black Range Minerals (BLR) stating publicly that they will be using?

Please find attached a presentation by BLR stating that they intend to mine using Underground Bore Hole Mining (UBHM) and Ablation. http://www.blackrangeminerals.com/content/wp-content/uploads/2012/07/Presentation-Aust-Uranium-Confrence_18-7-12.pdf

There are no current DRMS rules that cover UBHM and Ablation.

Having searched DRMS rules for monitoring wells, I find that the current situation most-closely matches that of rule 1.4.3. Therefore, I have submitted these comments under the 10-day deadline stated in that rule—as I believe the In situ Leach (ISL) rules that placed pre-application requirements on monitoring wells is the closest regulation in keeping with the Divisions and the MLRBs' intent to protect groundwater quality.

I believe that a solid first step is to determine what type of mining is going to be used. And if UBHM and Ablation do not come under the ISL rules, then rules must be promulgated for this type of mining and all actions must wait until a determination is made as to what rules will be applied.

I would also like to make comment that I have no objection to DRMS requiring this type of mining to fall under the ISL rules.

Further, I believe there should be the same amount of public scrutiny applied to UBHM and Ablation as was for ISL. ISL requires a confined aquifer, UBHM and Ablation does not. Only by giving proper notification and full public participation will there be proper regulation of this new type of unproven, experimental mining that has never been used commercially.

Having been a party to the 2010 Rulemaking process for HB08-1161, I understood that it was the Mined Land Reclamation Board's (MLRB) intent to protect groundwater quality not only during In-situ Leach operations; but for all Designated Mining Operations (DMO).

My foremost comment is that the same public process should be undertaken before any UBHM and Ablation operations are considered—even at the pre-application level. This is the level at which the current rules begin to shape the planning of an ISL process—it should be the same level at which DRMS should choose to shape any plans for UBHM and Ablation.

I also do not agree that approval should be given for all future bore holes to be 12 inches. While conducting research on 12 inch monitoring bore holes, I found mention of monitoring well designs used by the EPA in California. Many questions arose after reading this document:

1. Are these monitoring well holes or are they prospecting holes? There should be a stated intention to drill monitoring well holes versus prospecting holes used for metallurgic procedures. "*When planning such surveys it is important to remember that drilling methods and well casings/screens will influence the selection of geophysical methods (e.g., electrical resistivity logging cannot be performed in cased wells).*"
http://www.dtsc.ca.gov/SiteCleanup/upload/SMP_Monitoring_Well_Design.pdf

2. Why there is need for 12 inch diameter monitoring hole?

3. How much contaminated groundwater would be purged for testing?

4. Where the contaminated water be "stored?"

- Would not BLR's deep wells be purged of contaminated water from the Echo Park formation (one of four area aquifers—see attached)?
- Would that contaminated water (281 ug/l, 1979, Cyprus Mines Corporation, per Western Water & Land 2009) be purged into a retention pond and "removed" as stated below should be the case? (see attached Adrian Brown, P.E, Geohydrologist's description of area aquifer properties)
- Would the requirements for the new mud pits be the same as in the original NOI approval?

5. During hearings on HB 08-1161 Geohydrologist, Robert Longenbaugh, testified that there was danger of cross-contamination of downhole waters. Couldn't this happen more easily while drilling a 12 inch diameter hole into a formation that will be hollowed out into a cavern?

6. What downhole equipment would BLR need that necessitates a 12 inch prospecting bore hole?

7. Below mention of purging of water from the holes also brings the question: How much water will be used and does BRM have the water permits and water rights necessary for these actions? These permits must be proffered to DRMS before this activity is condoned, per rule 3.1.6 *(a) compliance with applicable Colorado water laws and regulations governing injury to existing water rights.*

"Although the diameter of the casing for a monitoring well depends on the purpose of the well, the casing size is generally selected to accommodate downhole equipment. Additional casing diameter selection criteria include:

1) drilling or well installation method used, 2) anticipated depth of the well and associated strength requirements 3) anticipated method of well development, 4) volume of water required to be purged prior to sampling, 5) rate of recovery of the well after purging, and 6) anticipated aquifer testing."

"To minimize the volume of contaminated water that must be purged before sampling, Cal EPA recommends the use of either 2-inch or 4-inch diameter wells whenever practical (generally to depths less than 200 feet). The use of larger diameter wells may be necessary where dedicated purging or sampling equipment is used or where the well is screened in a deep formation. When considering whether to install larger diameter wells, the investigator should recognize that the quantity of contaminated ground water that will require proper disposal and, for some hydrogeologic settings (i.e., zones of low hydraulic conductivity), the time required for well recovery will increase with well diameter. "…maximum annular space - 5 inches. Annular space widths larger than 5 inches may reduce the ability to develop a well, or may contribute to casing damage from heating during grout curing."

"However, where precise geologic or hydrogeologic information is needed from deep boreholes (significantly greater than 200 feet), borehole deviation surveys are recommended. The depth of each monitoring well is determined by site-specific hydrogeologic conditions and monitoring objectives. For example, wells may be designed to monitor the water table, within a water-bearing zone or at the base of an aquifer.
http://www.dtsc.ca.gov/SiteCleanup/upload/SMP_Monitoring_Well_Design.pdf

8. Is there proper *"site-specific hydrogeologic information"* in order to proceed? BLR's Taylor Ranch Project Baseline Hydrologic Monitoring Plan contained 33 pages of hydrologic information. Although it was never performed, it was comprehensive. This monitoring plan is nothing more than a reiteration of the original NOI with a one-page map showing the location of monitoring wells with no hydrologic information whatsoever. Is this monitoring plan comprehensive enough given the method of mining BLR says it will use?

9. Will this monitoring plan be reviewed by a Third Party Expert per rule 1.4.3?

I also request that all drilling pits be lined per: 3.1.6 Water—General Requirements: *(5) Drilling pits used during prospecting or mining shall be constructed and operated to minimize impacts to public health, safety, welfare and the environment, including soil, waters of the State, including groundwater, and wildlife. In its discretion, the Office may require the use of pit liners, fencing, netting or other measures to minimize impacts to the public health, safety, welfare and the environment.*

Additionally, the Tallahassee Area Community has submitted a question to NRC as to whether or not either or both UBHM and Ablation constitute "milling." This question must be answered before any pre-application monitoring holes are drilled. If these activities do constitute milling, the Nuclear Regulatory Commission (NRC) and Colorado Department of Public Health and the Environment (CDPHE) must also become involved.

Finally, I concur with the Mined Land Reclamation Board's decision in promulgating Rule 1.4.3 that protections of groundwater quality when dealing with uranium should begin at the pre-application level when groundwater will be used to dissolve uranium. I believe that this same standard should be used in conjunction with UBHM and Ablation. I feel very strongly that the above issues must be answered before any action is approved.

The regulations also state that a Third Party Expert should be involved at the pre-application stage. This cautionary principle should also be used for UBHM and Ablation. Allowing this experimental type of process to proceed without caution is unthinkable, and against the stated goal of DRMS of being responsible for the "policy, regulation and planning" of mines. This is the time to develop policies, regulations and planning for a type of mining that has never occurred in Colorado.

Thank you for receiving these comments. I look forward to your response.

Sincerely,

Kay M. Hawklee

Attachments:

Canon City Daily Record Article

BLR Investor Presentation dated July 18, 2012

Adrian Brown paper on Hydrology at Hansen mineral deposit

GROUNDWATER AND SOIL CONDITIONS AT THE SOUTH T-BAR RANCH

Prepared by Adrian Brown, P.E, Geohydrologist, Denver, Colorado

History

The South T-Bar Ranch occupies a unique and historic location in Colorado. Part of the Ranch contains a number of uranium orebodies, of which the largest is the Hansen Uranium deposit. The locations of the principal deposits in the area are shown on the attached map. As a result of the uranium mineralization present in the area, there has been historic uranium prospecting and some modest uranium production from small mines in the area. In the late 1970s a major development of the Hansen deposit was proposed, and the land parcel which included what today comprises the South T -Bar Ranch was assembled to allow this development to proceed. However the uranium deposits in the area, while large, are of low grade, and are generally buried at great depth below ground surface (typically 600 feet or more). For these reasons, it is not economic to develop these deposits for the extraction of uranium under current or reasonably foreseeable market conditions. As a result, the mine proposal was abandoned, and the parcels of land that make up the South T -Bar Ranch have become available for ranching and residential use.

The presence of the uranium deposits beneath some of the areas on the South T -Bar Ranch raises some issues for future use of this land, relating to impact on surface use and on water. These issues have been evaluated by technical experts retained by Land Properties Inc., and the results are presented below.

Orebody Formation

The uranium in the orebodies beneath the Ranch comes from volcanic eruptions that occurred more than 100 million years ago. The volcanic materials produced in those eruptions covered the entire area around the Ranch, and filled the existing valleys with volcanic rock to considerable depths. These volcanic materials were gradually decomposed and eroded by natural weathering, and small amounts of uranium that were contained within the volcanic material were leached into the ancient groundwater system. This groundwater moved downward from the ground surface, and in the Ranch area flowed through the organic-rich valley fill materials that had been buried by the volcanic eruptions. Conditions in the valley fill material caused the uranium to precipitate out of the groundwater, concentrating the uranium and creating the orebody. Since then sedimentary materials have been deposited in the area, and have consolidated; thus the orebody is now covered with about 600 feet of rock. Relatively recently, a mantle of soil has formed on the surface by sedimentary deposition and weathering of the upper rock materials.

Surface Use

Because of the way that the orebody developed, and its great depth, the current soil and near-surface rocks in the South T -Bar Ranch area have not been affected by uranium mineralization, and were not the source of the uranium in the orebody. In general the soil is free of uranium, except to the extent that all soils contain low levels of uranium (typically 5 parts per million in the Rocky Mountains). Accordingly, the soil at the Ranch is not a source of radiation or other impacts from the uranium orebody.

It might be considered that the presence of the orebody has radiation impacts on the surface. However, this is not possible. The type of radiation released by the small radioactive component of natural uranium is alpha radiation. This radiation has the ability to penetrate less than 1 foot of soil or rock. Accordingly, no radiation can reach the ground surface from the orebody 600 feet below.

It might also be considered that radon (a radioactive gas produced in the radioactive decay chain of uranium) may be released from the orebody, and might ultimately affect conditions at the surface. However, the life of radon is short (it has a half life of 3.82 days), and it decays to below normal background levels in the time it takes to pass through less than 10 feet of rock or soil material. Accordingly, it is not possible for radon emanating from the orebody to affect conditions on the surface. Note, however, that radon occurs naturally in many rocks, and it is always prudent to check any residential space for radon.

Groundwater Use

Groundwater in the area has been evaluated in great detail, in particular as a part of the engineering and environmental studies performed during the permitting period for the proposed mining activity. The locations of known wells (some of which may still exist) are shown on the accompanying map. These studies show that potable groundwater is available to all tracts with relatively shallow wells.

Groundwater in the area exists in four different geological materials, most of which are present on each of the tracts on the South T-Bar Ranch. The details of the groundwater availability are as follows:

- Alluvium. There is up to 40 feet of alluvium in Tallahassee Creek and its tributaries. Groundwater is freely available to most wells in this material, and is of very good quality, with total dissolved solids content being less than 400 milligrams per liter. This groundwater is not impacted by the orebody, and it meets all primary drinking water standards.
- Shallow Bedrock. The upper 600 feet of bedrock at the Ranch contains groundwater that can be extracted at limited rates (up to 50 gallons per minute per well). The water has not been affected by the uranium orebodies, but is of lower quality than the alluvial water due to the long residence time in the rock. Typically this water contains about 600 milligrams per liter total dissolved solids, and it meets all primary drinking water standards.
- Deep Bedrock. The deep bedrock in the area is of Precambrian Age, the oldest know rocks on earth. These rocks yield water with difficulty, and the quality of the water is generally fair. Typical total dissolved solids content is about 1,400 milligrams per liter, and it is very hard. Generally this water has not been affected by the orebodies in the area, and while it is not a particularly good source of drinking water due to the dissolved constituents, it meets primary drinking water standards (but not secondary standards).
- Orebody. The orebody rocks occur at depths greater than 600 feet, in locations that are identified on the attached maps. The orebody rocks contain groundwater of very poor quality, with total dissolved solids contents in excess of 6,000 milligrams per liter, and relatively high dissolved metal concentration (although the uranium concentration is low). This water does not meet drinking water standards. The water is brackish, and is therefore easy to identify by taste.

Accordingly, potable groundwater is readily available in all locations on the Ranch, but it would be prudent to limit new water wells to less than 400 feet to avoid the possibility of encountering brackish, metal-bearing orebody water. It is not possible to inadvertently consume orebody water, due to its taste.

Summary

In summary, the uranium orebodies that underlie part of the South T -Bar Ranch area have no impact on surface activities, and do not affect the availability or quality of groundwater at the Ranch provided wells are not drilled to great depth.

Subdivision:	**South T -Bar Ranch Filing No.5 and 6**				
Lot No:	**110**				
Expected Geology	Alluvium [1]	Volcanics [1]	Orebody [3]	Precambrian [3]	U.S.EPA
Thickness	0-50'	~500'	~100'	>1000'	Drinking Water
Depth	~0-50'	~50-550'	~550-650'	~650'+	Standards
Water Quality	aver	aver	typical	typical	MCL (unless noted)
TDS (mg/l)	350	540	6083	1360	500
pH (s.u.)	7.0	7.3	7.6	7.5	6.5 - 8.5[a]
Bicarbonate (mg/l)	290	425	3150	1120	--
Sulfate (mg/l)	24	11	113	11	250[a]
Nitrate as N (mg/l)	16.00	1.29	0.38	ND	10
Iron, dissolved (mg/l)	ND	0.21	0.17	ND	0.3[a]
Molybdenum (mg/l)	ND	0.06	<100	ND	---
Uranium, diss (mg/l)	0.000	0.026	0.379	0.027	0.020[b]
Zinc (mg/l)	0.54	0.40	229	0.18	5[a]

Wells on Lot	94968F
Depth (ft)	765
Installed	5/16/80
Aquifer	EchoPrk
TDS (ppm)	

Comments

Property underlain by ore body

Notes

[1] average of chemical data for all wells screened in this aquifer within the NZU Ranch area

[2] average chemical data for well screened in the aquifer on this lot only

[3] chemical data for well screened in this aquifer within the NZU ranch

[a] - Secondary Maximum Contaminant Levels

[b] _ 1991 Proposed National Primary Drinking Water Rule for Radionuclides

[*] - only one sample analyzed

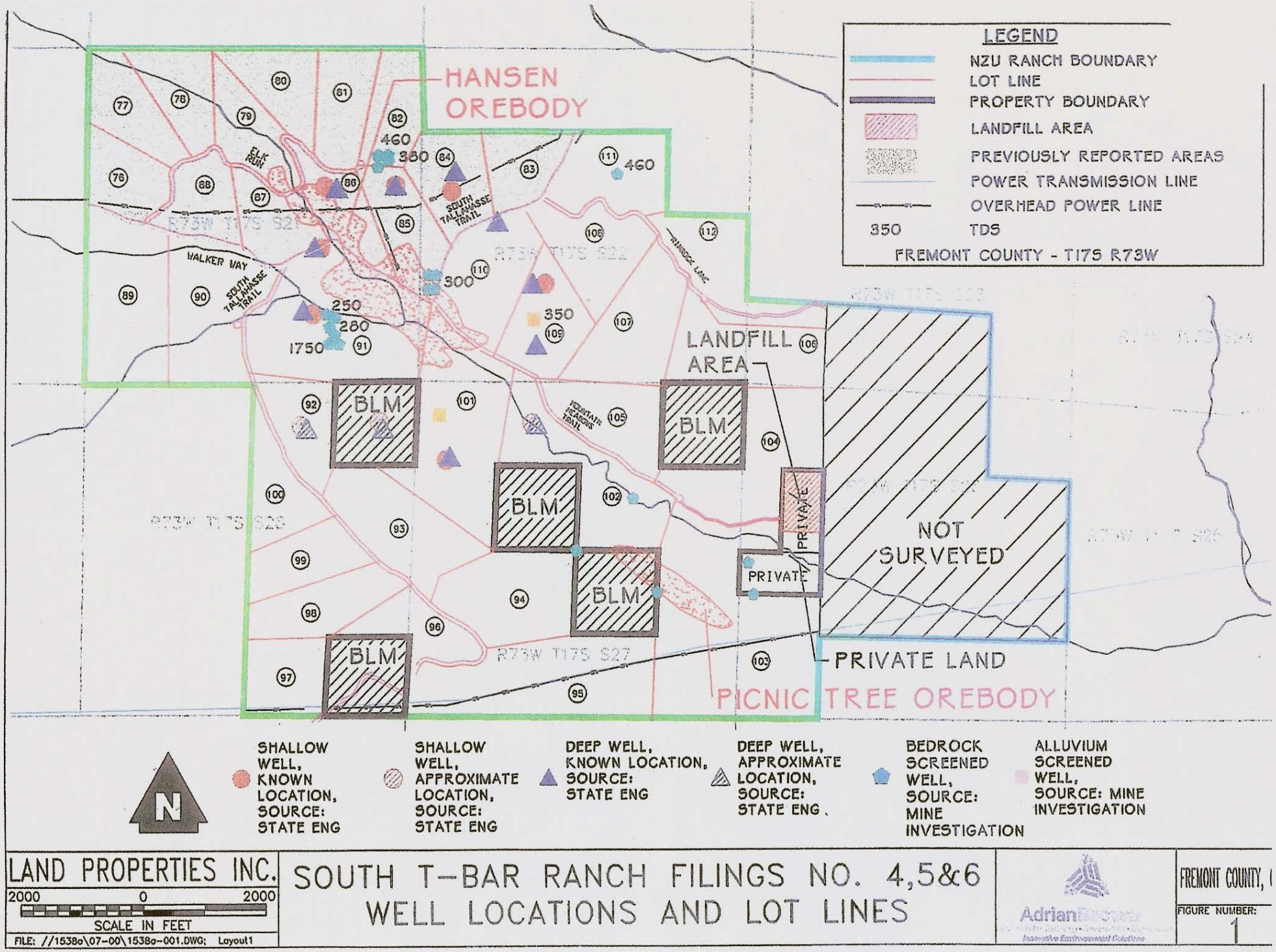
ND- Non-detectable

T.C.- Tallahassee Creek

MCL- Maximum Contaminant Level, U.S. EPA, October 1996

Survey: Shy Surveyors and Assoc.

Averages calculated using 1/2 of the method detection limit in cases of a non-detectable result.



LAND PROPERTIES INC.

2000 0 2000

SCALE IN FEET

FILE: //1538a\07-00\1538a-001.DWG; Layout1

SOUTH T-BAR RANCH FILINGS NO. 4,5&6 WELL LOCATIONS AND LOT LINES

Adrian Brown

Innovative Environmental Solutions

FREMONT COUNTY, (

FIGURE NUMBER: 1

Black Range Minerals in the Early Stages of Mining

Black Range Minerals moves from exploratory drilling into permitting process
By RACHEL ALEXANDER alexanderr@ canoncitydailyrecord.com
Posted: 07/12/2012 08:26:04 PM MDT

Black Range Minerals Vice President of Regulatory Affairs Rod Grebb talks about the area that the Hansen Uranium Deposit site Wednesday near Tallahassee Creek. Jeff Shane/Daily Record
It will take some time, but Black Range Minerals is moving toward mining for uranium in the Tallahassee Creek area.

Vice President of Regulatory Affairs Rod Grebb said the company has completed exploratory drilling on the Hansen deposit and is moving into scoping and permitting for mining.

"We will be mining the ore and shipping it off site," Grebb said. "These are early stages of moving from exploration to development."

Grebb expects the permitting process to be complete sometime in 2015 or 2016, if approved by the Fremont County Commissioners. Until then, the company is doing mine design and characterization of the deposit.

The project area is located 18 miles northwest of Cañon City. Uranium was discovered in the area in 1954. There is 90.9 million pounds of uranium in the project, making it the third largest uranium resource in the United States, Grebb said. The Hansen deposit has 38 million pounds.

Cypress Mines previously permitted the area in the 1970s. That company permitted an open-pit mine and mills operation before abandoning the project when the price of uranium dropped.

"We are not going to open pit," Grebb said. "We are not doing in situ leach."

If the company's permits are approved by the county, they plan to use underground borehole mining in the area. The method uses a drill rig to bore a hole through the ground to the deposit. Then, pressurized water is used to excavate material in a 360-degree arc around the borehole. Once the borehole has been completely mined, the remaining cavity will be filled with specialized cement slurry and the borehole then will be backfilled with clean material.

The company will use an ablation process to remove the mineral petina from the sand grains of the ore. The clean material will be used to backfill the borehole. The process will reduce the amount of material to be shipped by 90 percent, Grebb said.

He said the mining process would provide the company with flexibility and create a sustainable operation.

For more information about the Hansen deposit mining project, visit: http://www.blackrangeminerals

.com /content/projects/hansen-taylor-ranch-uranium-Minerals now has a local office at 613 Main St., Ste. 3.

For more information, call Grebb at 458-1220.

"What we're looking for is to listen to the community and understand their concerns," Grebb said.

The mining operation is opposed by the Tallahassee Area Community, a group that has expressed concerns about the location of the operation in the vicinity of residential subdivisions and possible risks to groundwater.


BLACK RANGE
MINERALS
Australian Uranium Conference
18 – 19 July 2012
Tony Simpson
Managing Director

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.

Black Range Overview

- Key asset is Hansen/Taylor Ranch Deposits in Colorado
  - JORC Resources of **90.1Mlbs U_3O_8 at 600ppm**
  - Permitting now for 2016 start
- Joint venture for commercialising ablation process
  - Game changer for sub-economic uranium deposits with suitable geology
  - Significant de-risking of BLR with ablation JV providing the opportunity to acquire interests in new projects
  - Early cash flows whilst permitting Hansen/Taylor Ranch
- Jonesville coal project in Alaska

Corporate Overview

ASX Code	BLR
Shares on Issue	841m
Options on Issue	23.4
Share Price	$0.02
Market Cap	$16m
Cash (30/6/12)	$3m
JORC Resource	90.1Mlbs U_3O_8 @ 600ppm
EV/lb	$0.12

Capital Structure	Shares	%
Board & Management	42m	5
Top 20	285m	34
Total	**841m**	**100**

Share Price Performance

Board and Management

Managing Director - Tony Simpson

Mining engineer with over 40 years industry experience in the development and operations of mining projects in Australia, South Africa and the USA. Previously employed by ASX-listed Peninsula Energy Limited as its Chief Operating Officer. He was directly responsible for the successful exploration and permitting activities at Peninsula's Lance Uranium Project in Wyoming, USA.

Executive Director - Ben Vallerine

More than 10 years experience in the mining industry. Involved in a numerous resource projects, predominantly in Australia, Canada and the USA. He has worked for both junior and major mining companies, including Harmony Gold Mining Company Limited and Rio Tinto Limited.

Chief Financial Officer - Mike Drew

Mike has over 22 years experience in resources and has worked in Australia, SE Asia, Africa and Europe, with skills in project development, financing and commercial management. Most recently Mike was Managing Director of ASX Listed Ram Resources Ltd.

Manager Regulatory Affairs -Rod Grebb

Rod has more than 30 years experience in mine permitting and reclamation for uranium projects in the US and has previously worked for Tetra-Tech Inc and SRK in a senior consulting capacity.

Non Executive Directors			
Alan Scott	Non-Executive Chairman	Duncan Coutts	Non-Executive Director
Mike Haynes	Non-Executive Director	Nick Day	Company Secretary

Uranium Market Overview

Demand

- World Nuclear Association estimates that the global fleet of ~440 operating nuclear reactors consumed ~**163*Mlbs* 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 countries like China and India where there is a struggle to keep up with demand growth and balance pollution problems.

Supply

- In 2011 mine production was estimated at ~**144*Mlbs* 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 the predicted mine supply growth to fall behind predictions; e.g., Areva has decided to suspend the Trekkopje uranium mine project.

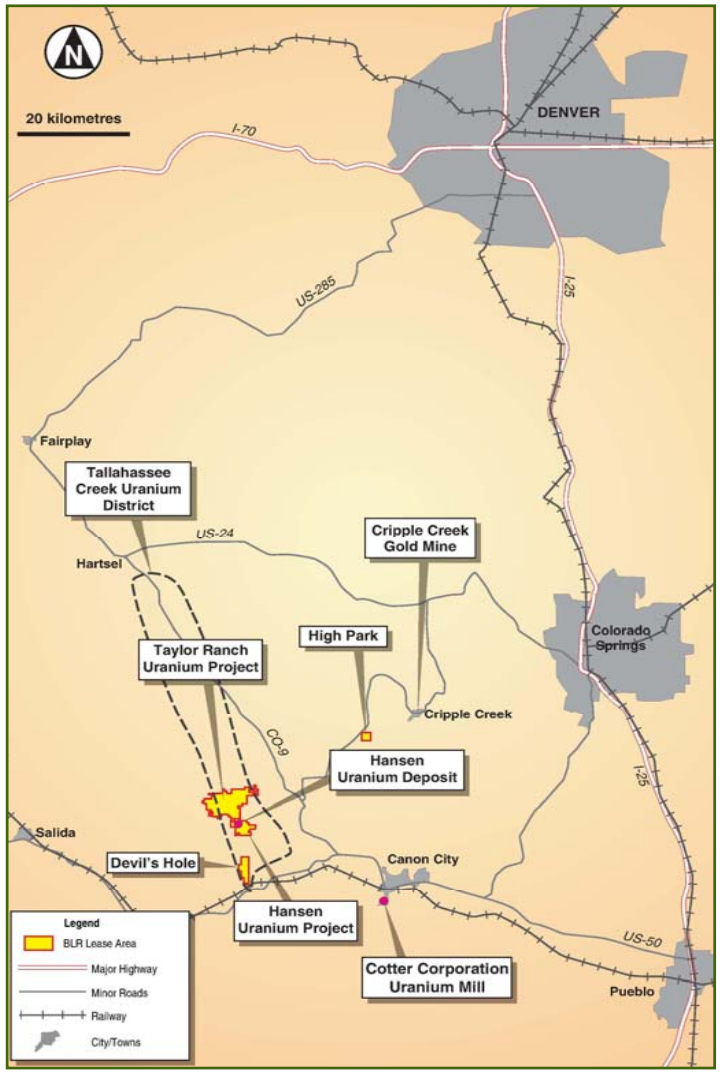
Targeting the USA Domestic Market

Energy Security

- 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

Tallahassee Creek Uranium District

- Hansen is the largest uranium deposit in Colorado & 3rd largest in USA
- 30km NW of Cañon City
- Hosts 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, and 16 small mines operated up to 1972

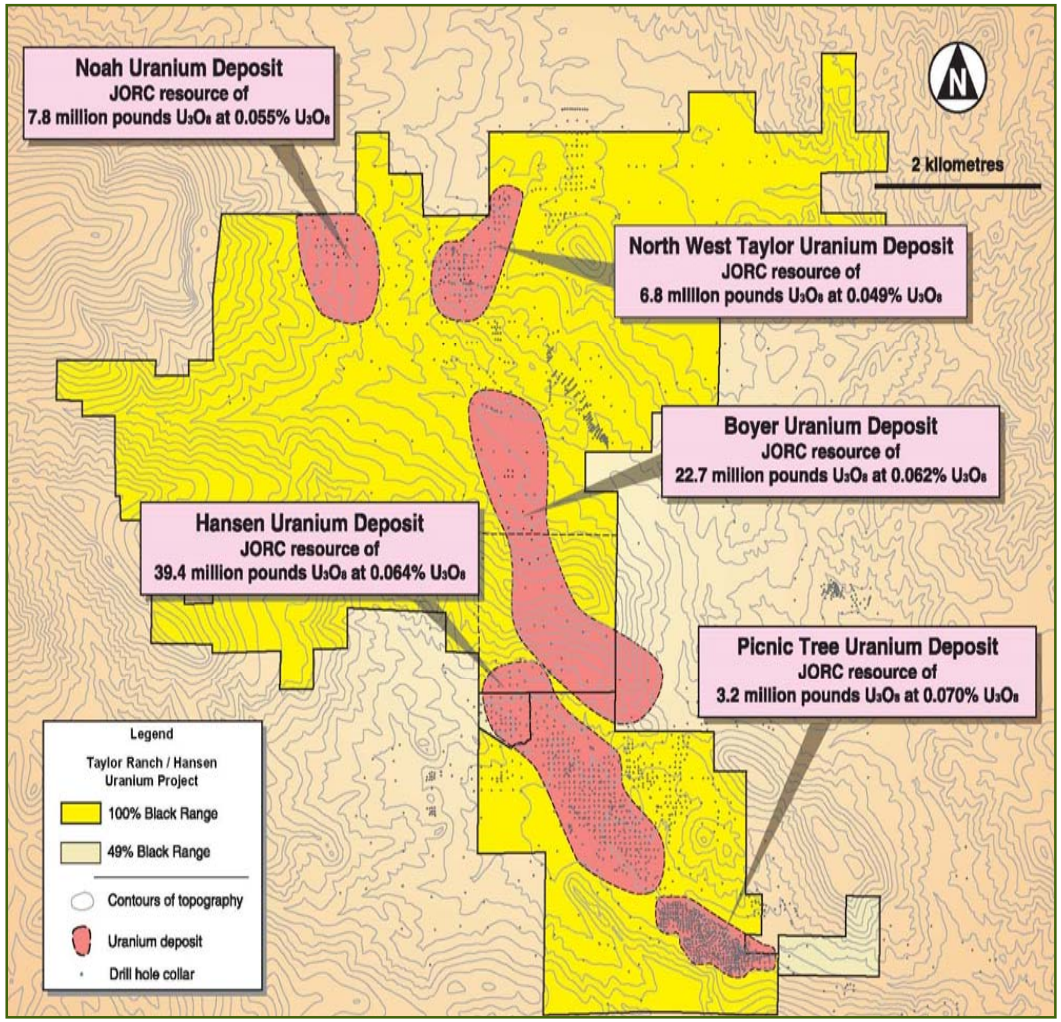


Hansen/Taylor Ranch Resources

- JORC compliant resources, applying a 0.025% cut-off:
  - 68.9 Mt at 0.06% for 90.1 Mlbs of U3O8
- JORC compliant resources, applying a 0.075% cut-off:
  - 16.6 Mt at 0.13% for 43.8 Mlbs of U3O8

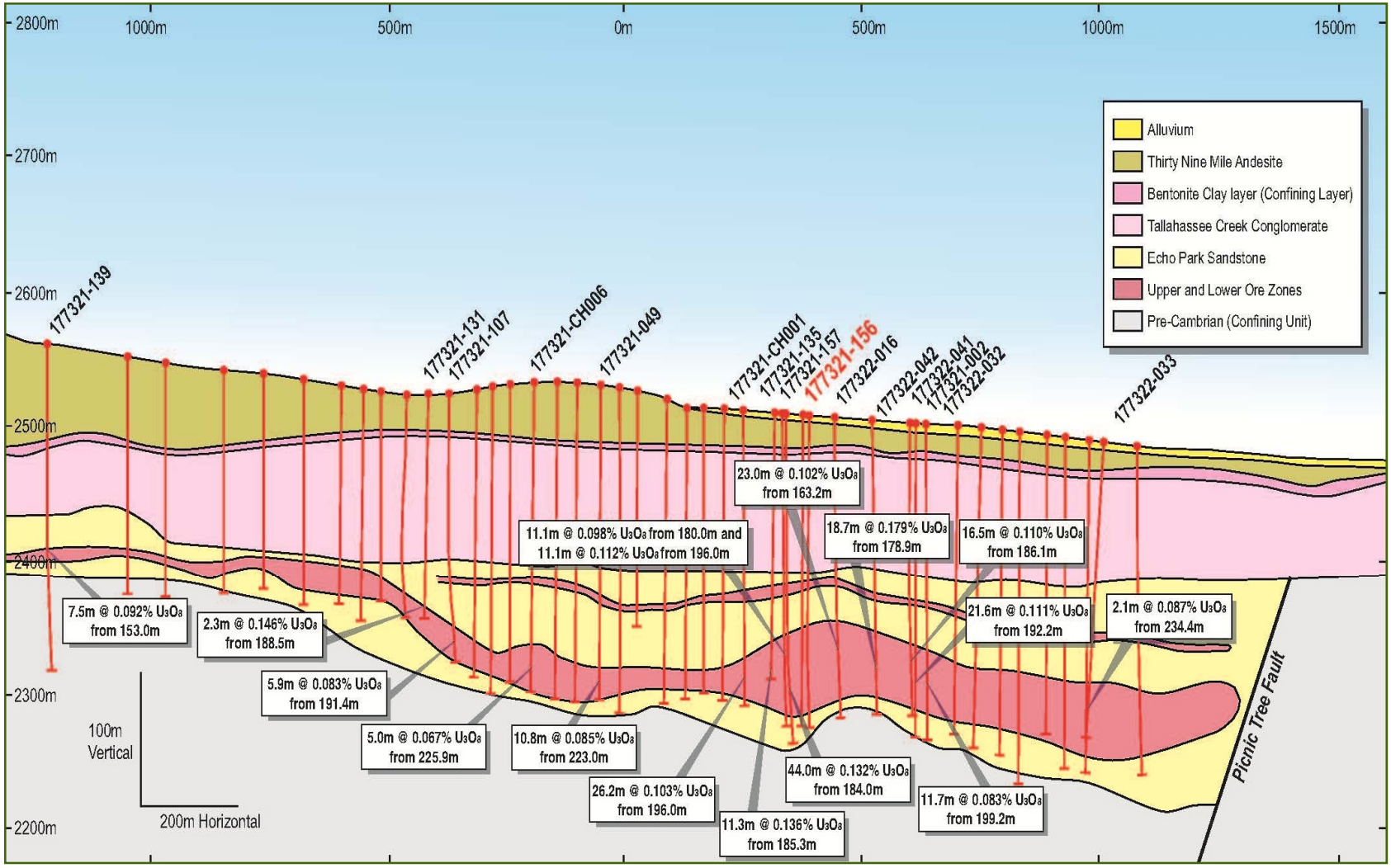
Hansen Deposit

- Discovered in 1977
- Fully permitted for mining in 1981
- More than 2,200 holes drilled for more than 1.15 million feet



2012 Deposit Outline

Hansen Deposit Extensively Drilled to JORC/43-101 Resource Standard



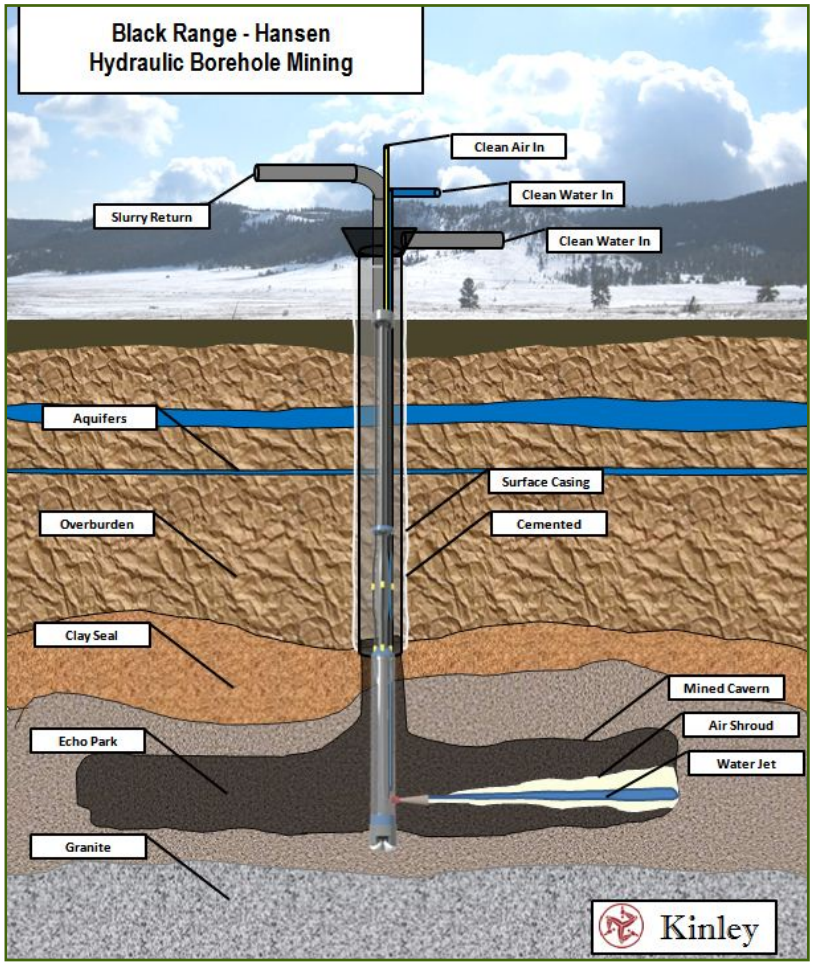
Scoping Study Demonstrated Robust Economics

- High grade Hansen deposit the first to be developed as it is the most advanced
  - JORC Indicated & Inferred Mineral Resource of19.7Mlbs @ 1,270ppm (750ppm cut-off)
- Scoping Study completed in April 2012 determined that development using UBHM with ablation is best option:
  - 2Mlbs U_3O_8 per annum operation for 7- 8 years
  - Opex of ~US$30/lb
  - Capex of < US$80M with off site milling
  - Lowest environmental impact – streamlined permit process

Capex & Opex above excludes royalties, taxes and contingency

Underground Borehole Mining

- 22” drill hole excavated out to11m (36ft) cylinders on the mining horizon
- Selective mining method and controlled economic pace of mining.
- Air lift of ore to surface in controlled, safe and closed environment.
- Backfill of cavity with sealed inert waste rock
- Small surface footprint with mobile equipment

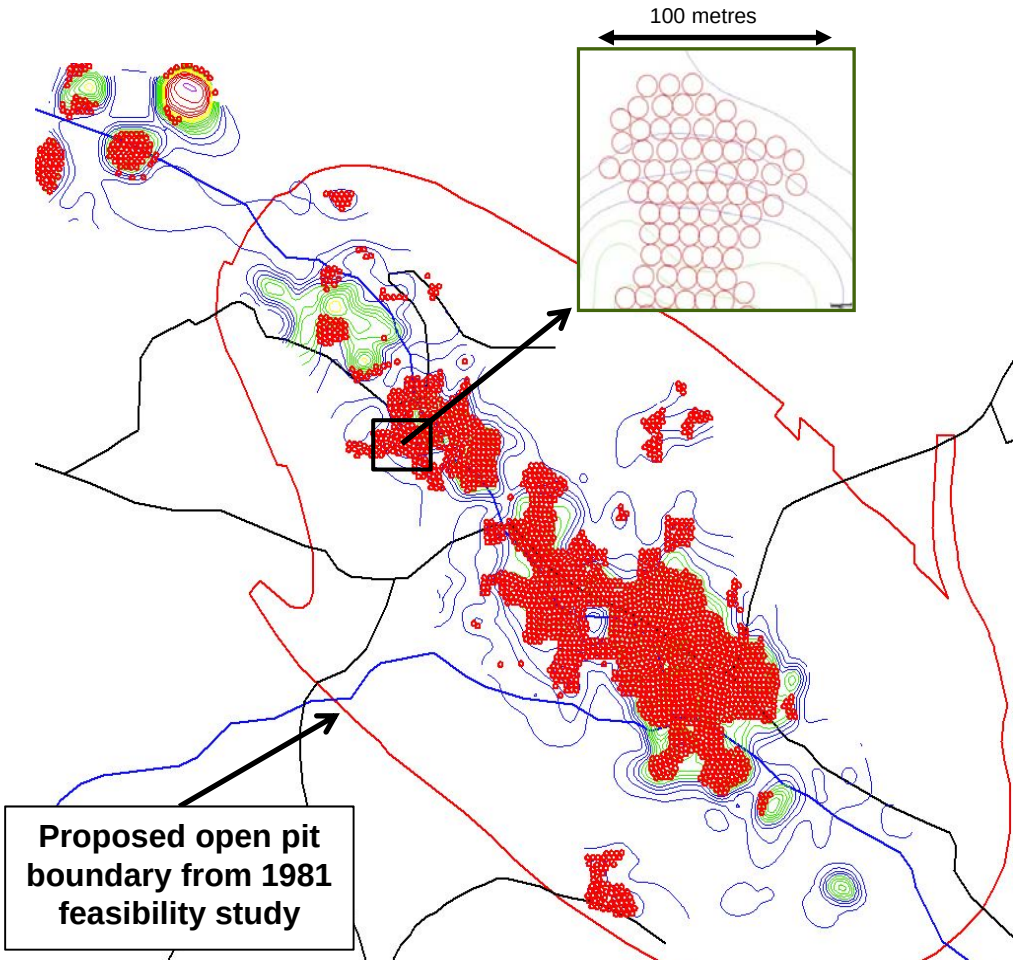


Underground Borehole Mining
(continued)

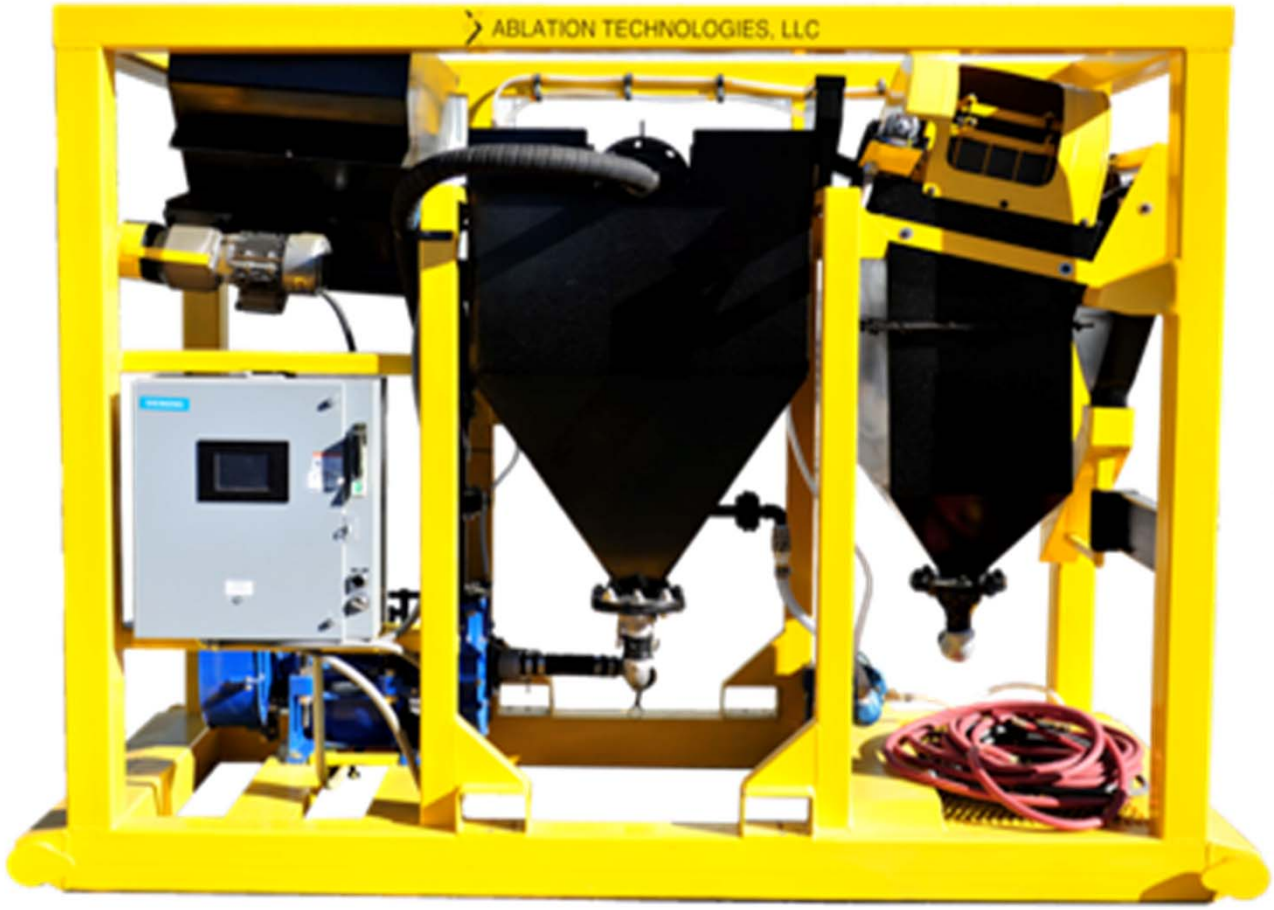
- Used in USA & Canada on various ore types including uranium
- Significant reduction of environmental impact
- Selective mining method
- Controlled economic pace of mining
- A material reduction in capital costs compared to other mining methods

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



Ablation Pilot Scale Unit



Approximate Dimensions 3m (L) x 2m (H) x 1m (W)
Throughput 750/lbs per hour

Ablation Results

Pre-Ablated Hansen Ore

Post-Ablated Barren Material

Borehole & Ablation to Streamline Approach to Permitting

- Major Permits Required:
  - Mine Permit from the Colorado Division of Reclamation Mining and Safety
  - Underground Injection Control Permit from US Environmental Protection Agency
  - Fremont County Conditional Use Permit
  - Discharge Permit from the Colorado Department of Public Health and Environment (CDPHE)
  - Air Quality Permit from CDPHE
- Targeting mine permit by 2015
- Production 2016

Ablation – Global Game Changer

- Ablation successfully tested on ores from projects in USA that have combined resources >150Mlbs U_3O_8 (excluding Hansen)
- These projects are otherwise sub-economic or face a long permit process
- Ablation produces high-grade, high value concentrate that can be economically transported
- Hansen as an example in-situ resource of ~ 7.0Mt @ 0.127% U_3O_8 would be concentrated to ~ 0.7Mt of concentrate at ~ 1.2% U_3O_8
- Ablation could be the key to unlocking sub-economic uranium deposits worldwide

Ablation Joint Venture

- Focus on uranium & associated minerals world wide
- 50/50 BLR and Ablation Technologies
- The aim is to promote, market, and commercialise the ablation process
- Next step is to build a commercial scale ablation unit
- Expenditure in developing ablation on a commercial scale would have been incurred by BLR in the feasibility phase of Hansen Project

Ablation Potential of Colorado Plateau

- Area of over 33,000ha covering parts of Utah, Colorado, Arizona & New Mexico
- Uranium with vanadium by-products
- Over 550Mlbs U_3O_8 and 400Mlbs V_2O_5 produced from mines in the Colorado Plateau
- Potential to acquire further resources >40Mlbs (0.1%-0.35% U_3O_8

Benefits of Ablation Joint Venture

- Ablation de-risks BLR from being a single-project company
- Earlier cash-flows from potential application of ablation whilst still advancing Hansen/Taylor to production in 2016
- Huge potential to apply ablation either;
  - Providing licence for use
  - Joint ventures
  - Acquisition of new projects
- **Securing ablation for Hansen/Taylor is a major project milestone**

Future Activities

Activity	Timing
Borehole mining cutting verification test	Q3 2012
Complete Preliminary Economic Assessment	Q4 2012
Base line data infrastructure for Hansen	Q4 2012
Constructing first 20t/hr commercial scale ablation unit	Q1 2013
Securing first commercial deal for ablation	Q4 2012
Full scale UBHM test at Hansen	Q3 2013
First commercial operations for ablation	Q3 2013
Submit permits for Hansen Project	Q2 2014

EV/lb Averages by Stage (Global)

Stage	# of Constituents	43-101/JORC EV/lb Avg	Global Resource EV/lb Avg
Producer	6	$4.38	$3.81
Developer	4	$2.57	$2.53
Feasibility	9	$0.47	$0.43
Pre-Feasibility	8	$1.04	$0.77
Exploration	30	$0.81	$0.93
Group Average		***$1.29***	***$1.24***
Black Range Minerals		**$0.12**	**$0.12**

Source: Versant Partners and Capital IQ (June 11, 2012)

Australian Comparisons

Peninsula
EV/lb=$1.60
41Mlbs
430 ppm
Feasibility

U308 Corp
EV/lb=$0.35
48Mlbs
800 ppm
Pre-Feasibility

BLACK RANGE MINERALS
EV/lb=$0.12
90Mlbs
600 ppm
Pre-Feasibility

Forte Energy
EV/lb=$0.77
12Mlbs
300 ppm
Exploration

Deep Yellow
EV/lb=$0.50
119Mlbs
300 ppm
Pre-Feasibility

UraniumSA
EV/lb=$0.88
24Mlbs
300 ppm
Pre-Feasibility

Source: Versant Partners and Capital IQ (June 11, 2012)

BLACK RANGE
MINERALS

Hansen/Taylor Ranch Uranium Project Update

Value Proposition (Aus Peers)

Company Name	ASX Code	Price $	Mkt Cap $m	EV $m	Resource (mlbs)	U_3O_8 (ppm)	EV/lb A$/lb	Grade Rank	Size Rank
Aura Energy	AEE	0.14	19.15	17.5	684	166	$0.03	18	1
Stonehenge Metals	SHE	0.03	13.7	12.14	65	320	$0.18	10	9
A-Cap Resources	ACB	0.14	30.6	23.9	261	152	$0.09	19	4
Marenica Energy	MEY	0.02	10.03	10.9	68	94	$0.16	21	12
Black Range Min.	BLR	0.02	15.94	10.9	91	600	$0.12	5	7
Bannerman Res	BMN	0.12	36.2	29	213	193	$0.14	17	5
Energy Ventures	EVE	0.02	7.3	6.44	38	248	$0.17	16	15
UraniumSA	USA	0.09	13.25	8.5	22.9	284	$0.37	12	14
Energy & Min Aus	EMA	0.05	19.8	18.4	60	490	$0.31	6	11
Curnamona Energy	CUY	0.14	9.6	8.1	4.7	260	$1.73	15	21
PepinNini Minerals	PNN	0.03	5.1	1.9	8.3	275	$0.23	13	20
Deep Yellow	DYL	0.06	67.72	59.79	114	263	$0.50	14	6
Energy Metals	EME	0.25	38.44	13.09	17	910	$0.77	2	18
Uranex	UNX	0.11	23.3	20.6	29.8	140	$0.69	20	16
Toro Energy	TOE	0.8	78.0	67.1	79.7	430	$0.76	8	8
Manhattan Corp	MHC	0.2	18.7	17.2	17	300	$1.01	11	19
Peninsula Energy	PEN	0.04	85.44	66.41	51.5	485	$1.28	7	13
Paladin Energy	PDN	1.28	1,069.3	1,836	576	679	$3.51	4	2
Summit Resources	SMM	1.61	350.95	343.42	62	750	$5.53	3	10
Alliance Resources	AGS	0.31	78.5	43.6	17.5	3,240	$2.49	1	17

Global Uranium Comparisons

SUM	Exch	April 16, 2012 Company Name	Stage	All figures in $CAD Stock Price	Market Cap (MM)	Based on Global Resource MKT/LB	EV/LB	Resources and Reserves (MM lbs) Avg Grade	P&P	M&I	Inferred	Historical	Total
BLR	**ASX**	**Black Range Minerals Ltd. (ASX:BLR)**	**Exploration**	**$0.02**	**15.94**	**$0.18**	**$0.12**	**0.06%**	**0**	**39.75**	**51.18**	**0**	**90.93**
AIW	ASX	Australian American Mining Corporation Limited (ASX:AIW)	Pre-Feasibility	$0.05	3.37	$0.27	$0.19	0.088%	0.00	0.00	12.31	0.00	12.31
BYU	TSXV	Bayswater Uranium Corp. (TSXV:BYU)	Pre-Feasibility	$0.17	3.79	$0.05	$0.04	0.048%	0.00	22.92	15.41	40.65	78.98
LAM	TSX	Laramide Resources Ltd. (TSX:LAM)	Pre-Feasibility	$0.82	58.03	$0.89	$0.88	0.116%	0.00	43.26	19.07	2.70	65.03
PEN	ASX	Peninsula Energy Limited (ASX:PEN)	Pre-Feasibility	$0.04	85.44	$2.06	$1.60	0.043%	0.00	11.20	30.20	0.00	41.40
PWE	TSX	Powertech Uranium Corp. (TSX:PWE)	Pre-Feasibility	$0.12	12.40	$0.52	$0.53	0.138%	0.00	17.06	6.85	0.00	23.91
RSC	TSX	Strateco Resources Inc. (TSX:RSC)	Pre-Feasibility	$0.38	63.54	$1.77	$1.76	0.413%	0.00	7.78	19.22	8.80	35.80
UEX	TSX	UEX Corp. (TSX:UEX)	Pre-Feasibility	$0.62	137.32	$1.56	$1.35	0.741%	0.00	72.77	15.49	0.00	88.25
UNX	ASX	Uranex Limited (ASX:UNX)	Pre-Feasibility	$0.14	25.54	$0.86	$0.77	0.014%	0.00	4.35	25.40	0.00	29.74

Source: Versant Partners and Capital IQ (June 11, 2012)

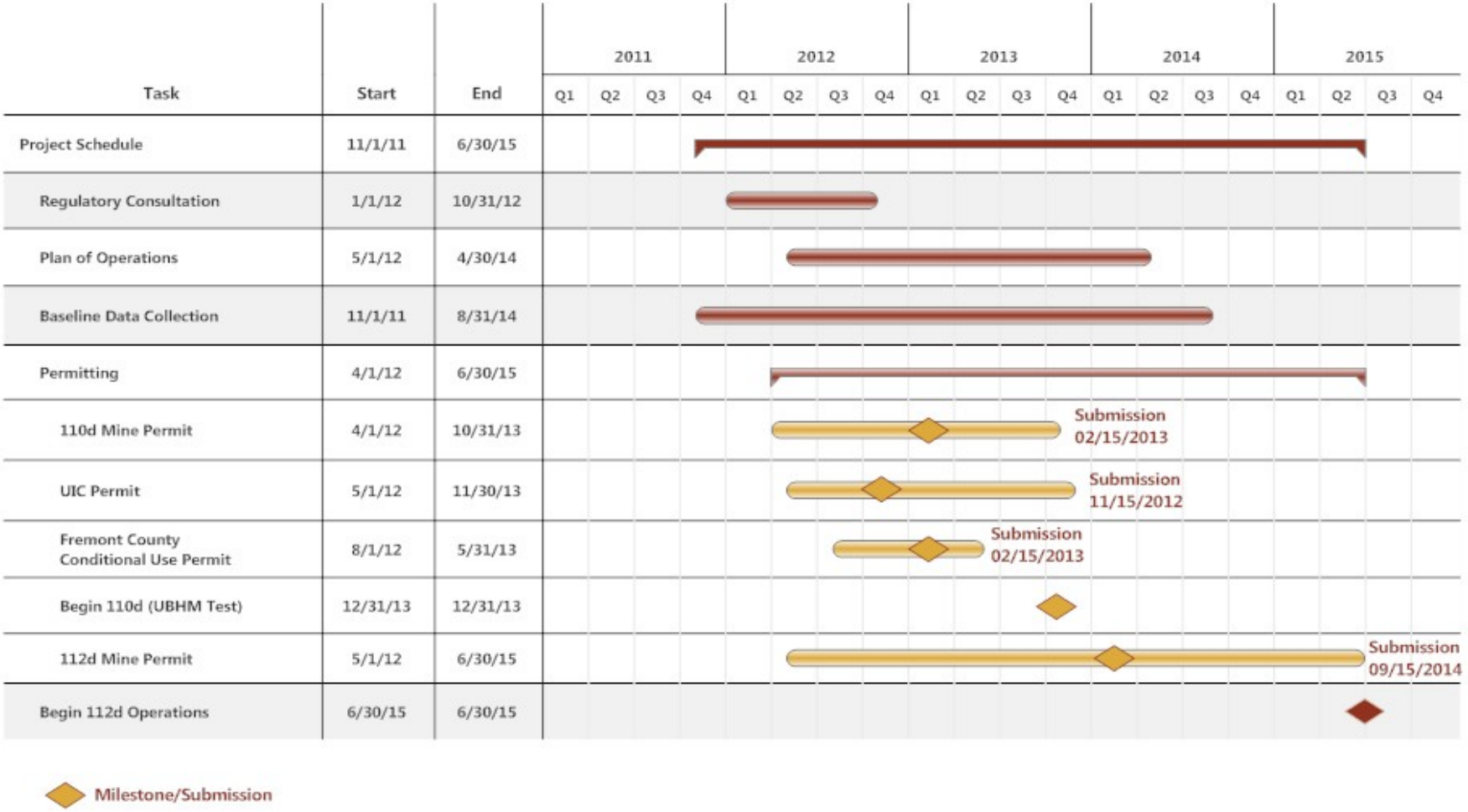
Global Uranium Comps (continued)

SUM	Exch	April 16, 2012 Company Name	Stage	All figures in $CAD Stock Price	Market Cap (MM)	Based on Global Resource MKT/LB	EV/LB	Resources and Reserves (MM lbs) Avg Grade	P&P	M&I	Inferred	Historical	Total
BLR	**ASX**	**Black Range Minerals Ltd. (ASX:BLR)**	**Exploration**	**$0.02**	**15.94**	**$0.18**	**$0.12**	**0.06%**	**0**	**39.75**	**51.18**	**0**	**90.93**
ABE	TSXV	Abitex Resources Inc. (TSXV:ABE)	Exploration	$0.03	2.85	$0.43	**$0.31**	0.53%	0	1.96	4.63	0	6.59
AEK	ASX	Anatolia Energy Limited (ASX:AEK)	Exploration	$0.07	6.90	$0.53	$0.45	0.12%	0	8.12	4.94	0	13.06
AEE	ASX	Aura Energy Limited (ASX:AEE)	Exploration	$0.14	19.15	$0.03	$0.03	0.02%	0	0	688.2	0	688.2
CZQ	TSX	Continental Precious Minerals, Inc. (TSX:CZQ)	Exploration	$0.23	11.90	$0.01	$0.00	0.02%	0	14.41	1,037.96	15.34	1,067.71
CXZ	AMEX	Crosshair Energy Corp. (AMEX:CXZ)	Exploration	$0.34	18.32	$0.75	$0.70	0.05%	0	12.91	10.4	1.1	24.41
DYL	ASX	Deep Yellow Ltd. (ASX:DYL)	Exploration	$0.06	67.72	$0.57	$0.50	0.03%	0	39.01	80.57	0	119.58
EMX	ASX	Energia Minerals Limited (ASX:EMX)	Exploration	$0.05	5.48	$0.73	$0.26	0.03%	0	0	7.46	0	7.46
EME	ASX	Energy Metals Limited (ASX:EME)	Exploration	$0.25	38.44	$2.26	$0.77	0.09%	0	4.9	12.08	0	16.98
FIS	TSXV	Fission Energy Corp. (TSXV:FIS)	Exploration	$0.47	53.96	$1.79	$1.16	0.35%	0	4.42	25.8	0	30.22
FTE	ASX	Forte Energy NL (ASX:FTE)	Exploration	$0.02	13.91	$1.20	$0.77	0.03%	0	0	11.6	0	11.6
JNN	TSXV	JNR Resources Inc. (TSXV:JNN)	Exploration	$0.09	9.47	$10.19	$9.31	0.09%	0	0	0	0.93	0.93
KIV	TSXV	Kivalliq Energy Corp. (TSXV:KIV)	Exploration	$0.43	64.13	$2.36	$1.89	0.69%	0	0	27.13	0	27.13
YEL	TSXV	Macusani Yellowcake, Inc. (TSXV:YEL)	Exploration	$0.17	28.40	$1.04	$0.66	0.02%	0	10.37	16.97	0	27.34
MEY	ASX	Marenica Energy Ltd (ASX:MEY)	Exploration	$0.02	10.03	$0.15	$0.16	0.02%	0	9.6	58.4	0	68
MAW	TSX	Mawson Resources Ltd. (TSX:MAW)	Exploration	$1.45	75.55	$0.60	$0.53	0.03%	0	0.12	15.17	110	125.29
GEM	TSXV	Pele Mountain Resources Inc. (TSXV:GEM)	Exploration	$0.09	13.41	$0.29	$0.24	0.05%	0	15.18	31.44	0	46.63
PIT	TSXV	Pitchblack Resources Ltd. (TSXV:PIT)	Exploration	$0.11	2.43	$0.08	$0.07	0.06%	0	0	0	29	29
PXP	TSXV	Pitchstone Exploration Ltd. (TSXV:PXP)	Exploration	$0.09	4.07	$0.99	$0.56	0.23%	0	0	4.1	0	4.1
RGT	TSX	Rockgate Capital Corp. (TSX:RGT)	Exploration	$0.46	53.66	$2.08	$1.00	0.11%	0	18.65	7.09	0	25.74
SMM	ASX	Summit Resources Ltd. (ASX:SMM)	Exploration	$1.61	350.95	$5.65	$5.53	0.08%	0	32.7	29.44	0	62.14
TU	TSXV	Tigris Uranium Corp. (TSXV:TU)	Exploration	$0.18	10.76	$0.34	$0.05	0.11%	0	32.08	0	0	32.08
UWE	TSXV	U3O8 Corp. (TSXV:UWE)	Exploration	$0.36	44.61	$0.94	$0.35	0.08%	0	16.20	31.40	0	47.60
ULU	TSXV	Ultra Uranium Corp. (TSXV:ULU)	Exploration	$0.04	1.39	$0.25	$0.25	0.06%	0	0	0	5.49	5.49
URC	TSXV	Uracan Resources, Ltd. (TSXV:URC)	Exploration	$0.05	6.64	$0.15	$0.14	0.01%	0	6.86	37.1	0	43.95
UNR	TSXV	Uranium North Resources Corp. (TSXV:UNR)	Exploration	$0.05	4.28	$0.44	$0.14	0.09%	0	0	9.71	0	9.71
URRE	NASDAQ	Uranium Resources, Inc. (NasdaqCM:URRE)	Exploration	$0.71	75.42	$0.69	$0.61	0.17%	0	0	0	109.15	109.15
USA	ASX	Uraniumsa Limited (ASX:USA)	Exploration	$0.09	13.25	$0.58	$0.37	0.03%	0	0	22.9	0	22.9
VEM	TSX	Vena Resources Inc. (TSX:VEM)	Exploration	$0.24	29.90	$1.12	$1.20	0.02%	0	13.66	13.07	0	26.73
VAE	TSX	Virginia Energy Resources Inc. (TSXV:VAE)	Exploration	$0.11	10.73	$0.34	$0.30	0.08%	0	28.56	0	3.4	31.96

Source: Versant Partners and Capital IQ (June 11, 2012)

Project Timeline

- Targeting Mine Permit by 2015



Task	Start	End
Project Schedule	11/1/11	6/30/15
Regulatory Consultation	1/1/12	10/31/12
Plan of Operations	5/1/12	4/30/14
Baseline Data Collection	11/1/11	8/31/14
Permitting	4/1/12	6/30/15
110d Mine Permit	4/1/12	10/31/13
UIC Permit	5/1/12	11/30/13
Fremont County Conditional Use Permit	8/1/12	5/31/13
Begin 110d (UBHM Test)	12/31/13	12/31/13
112d Mine Permit	5/1/12	6/30/15
Begin 112d Operations	6/30/15	6/30/15

Underground Borehole Mining

- Animation of underground borehole mining process available for viewing at:

http://youtu.be/rptNdp8NLcs