



Northern Mining News

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MINING STATS NWT/NU :

Three diamond mines in operation and one tungsten mine

**Value of mineral production (2008)
\$2,163,067,000**

**Value of mineral exploration (2008)
\$406,700,000**

Mineral Exploration: Doing it Safely and Responsibly

The mineral industry is on the top of its game in the 21st century. It has learned from past mistakes and is now pushing forward with procedures that will safeguard the environment and provide benefits to local communities.

Best management practises for mineral exploration have been standardized as part of the ISO:14001:2004 framework. One company, Areva Resources Inc., has adopted these guidelines at its uranium exploration project in Nunavut.

Areva's policy is to identify any negative effects of activities, determine which affects will have the greatest impact, develop a plan to mitigate those affects, assign responsibility, and monitor progress.

Here are some of the things Areva has been doing in the past few seasons of work near Baker Lake:

Camp: Facilities were rebuilt and planked walkways were connected to all buildings to reduce, quite literally, human footprints on the tundra.

Drill Cuttings: They installed a cyclone to separate the mineralized drill cuttings from the drilling wastes.

Drill Core Storage: There are strict requirements regulating gamma radiation in uranium drill core. All handling and storage of core follows these strict guidelines, and Areva has built a fence to keep humans and wildlife away.

Fuel: All fuel is stored in secondary containment

facilities, even portable jerry cans.

Wildlife Surveys: Areva has been working with the Government of Nunavut to monitor and tag caribou. Considerable baseline surveys for wildlife, heritage resources, and endangered species have been completed. Also, Areva, by policy, does not explore in caribou calving grounds.

Support: Use of helicopters in the summer is mandatory to prevent damage to tundra. Tracked vehicles in the winter.

Drilling: Directional drilling is encouraged to reduce the surface footprint caused by hole collars and pads.

"We try to preserve the environment while doing what we were trained to do, which is find the ore."

- Peter Wollenberg, Areva geologist

More Safety Milestones

Northern mining operations operate at some of the highest standards, both in terms of environmental protection and safety. Rio Tinto's Diavik Diamond Mine has been a recipient of the prestigious John T. Ryan Safety Award several years. De Beers Canada's Snap Lake Diamond Mine recently surpassed two million hours without a lost time accident. Congratulations everyone!



Part of the DeBeers crew celebrate 2 million hours of safety

Avalon Rare Metals Inc.

A Mining Project for a 'Greener' World



RARE EARTH KEY APPLICATIONS

- High strength magnets
- Wind turbines
- Solar power
- Energy efficient motors
- LED lighting
- Rechargeable batteries
- LCD screens
- Consumer electronics

Can mining make a better world and contribute to new 'Green' technologies?

The advancement of technology to make important everyday devices and tools, whether it be cell phones, cars, computers, construction materials, or satellites, is almost entirely dependant on the material that we mine.

Certain elemental metals have important chemical properties that make them unique for specific functions. For example, copper is very conductive; zinc is resistant to corrosion; diamonds are very hard; tungsten has high heat tolerance; and lead is very dense and heavy.

In the advanced age of electronics and technology, a unique group of elements called Rare Earths is proving to be of great importance.

The joke is that Rare Earths are those elements on a periodic table you can't pronounce. Yttrium, praseodymium, dysprosium, neodymium....the list goes on.

They all have important roles in the development of all those nifty gadgets consumers love to get their hands on. Did you ever stop to think about what minerals go into the production of a typical cell phone, or our new iPod Nano?

It might surprise you that a typical cell phone is full of Rare Earths. Consider the

application of lanthanum in rechargeable batteries, or europium, yttrium, and terbium as phosphors in LCD screens.

They are also key ingredients in making hybrid cars, flat-screen plasma TVs, and energy efficient lighting.

A recent push towards application of wind energy to help reduce our dependency on fossil fuels is good news for Rare Earths neodymium, samarium, gadolinium, and dysprosium, which can be made into super magnets, reducing the size of the motors that use them, thereby improving their efficiency.

Gallium and indium may also have important applications in solar panel technology as a replacement for silicon cells, and research is ongoing.

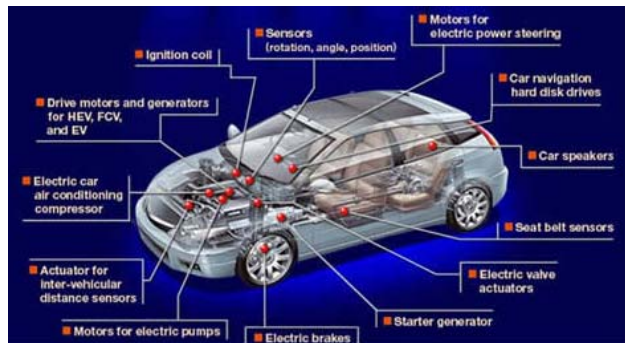
Toyota has been developing the popular 'Hybrid' cars, which contains 30 kilograms of Rare Earths, for the magnets discussed above and rechargeable batteries.

Today, almost all (95%) of the world's production of Rare

Earths comes from China. New deposits are being found in North America, but few have proven economic. The one exception is the 'Lake Zone' deposit at the Thor Lake project in the N.W.T., now owned by Avalon Rare Metals.

The 'Lake Zone' is a world-class ore deposit full of all those unique minerals. They estimate the orebody could be a multi-generational mine. Avalon is a small company, but they have made huge strides in promoting responsible mineral exploration and development. It is the first junior exploration company in Canada to adopt the PDAC e3 operating standards, which specify how an exploration company will do business with aboriginal communities.

The mine is still in a pre-feasibility stage, but we are confident that a world class mine, one that will be important not only for the future of the NWT but the world, is in the works. If you support the development of 'Green' technology, then you should support this mining project.



WWW.AVALONVENTURES.COM

Photos from Mining Week 2009



Volunteer Penny Shaw teaches kids how to pan for gold



Diavik's mine rescue team was declared winner of the 2009 NWT & Nunavut mine rescue competition



Minor Miners



A big thank you to the BBQ's from Diavik, BHP, and DeBeers!



Fire fighting at the competition

Nunavut Land Use Planning Legislation

In April 2009, INAC released draft legislation for the Nunavut Land Use Planning and Impact Assessment Act for public review.

The release of the draft legislative proposal is an important step toward achieving the full implementation of the land use, impact assessment and environmental regulatory regime contemplated by the 1993 Nunavut Land Claims Agreement.

The Chamber hired a lawyer to conduct a thorough review of the legislation, and submitted a joint industry response along with the PDAC and the Mining Association of Canada in May 2009. The Chamber is

eager to advance this key document, one that will have a profound impact on the future of our industry, and therefore the economic development of the Nunavut territory, for decades to come.

However, industry's submission concluded that the draft still requires substantial revision and modification before it will be ready for introduction into Parliament, and recommended to INAC that it defer plans to present the legislation to the House until amendments to address industry concerns were made.

The Chamber urged INAC to undertake the necessary amendments

and allow potentially affected parties the opportunity to review a revised draft before the formal legislative process is commenced.

The Chamber has recently received a new draft of this legislation for public comment and will work further with INAC to provide industry perspective on this key bill.

The original submission to INAC is available in the Reports section of our website at:

www.miningnorth.com



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KNOW YOUR METAL - Tantalum

What is it? Tantalum is a rare-earth element (REE). Its properties include high conductivity to heat and electricity, resistance to corrosion, and a high melting point. It occurs naturally in the environment in the mineral tantalite.

Where did it come from? Tantalum is almost exclusively found in granite pegmatite-dyke intrusions in rocks of all ages. The minerals were distributed in these dykes by hydrothermal placement during periods of granite intrusion up to 3 billion years ago.

Where is it mined? Western Australia produces 50% of the world's tantalum. Yearly world demand for the metal reached an all-time high of five million pounds in 2000.

What is it used for? Tantalum is an important ingredient in electronics as a conductor of heat and electricity. Used in powder and anode form to coat and protect capacitors, it is a key factor in the race for miniaturization of technology. Because of its size and weight advantages, tantalum is used in electronic components of the smallest gadgets, including cell phones, remote controls, iPods, and laptops. Telecommunications is by far one of the largest users of tantalum and other rare earth elements, followed closely by the computer sector (including gaming, digital photography, and video).

What is the mineral potential in the NWT and Nunavut? The NWT has witnessed tantalum prospecting since WWII when the Peg Tantalum deposit at Ross Lake and the DeStaffany deposit on Great Slave Lake were discovered. The Thor Lake REE deposit, owned by *Avalon Ventures*, is the most significant deposit in the Great Slave Lake region. A tantalum project in the Mackenzie Mountains known as the MAC and owned by *War Eagle Mining Company* is also being evaluated.

2008 NWT & Nunavut Mineral Statistics

The value of mineral production in the NWT & Nunavut totaled \$2,163,067,000 during the calendar year 2008 according to recently obtained statistics from corporate and government sources. The NWT produced diamonds and tungsten concentrates during calendar year 2008 at a value of \$2,084,047,000 and \$55,510,000 respectively. Nunavut territory and its single diamond mine produced at a value of \$12,654,000. Quarry production for both the NWT and Nunavut was valued at \$6,452,000 for sand and gravel production of 534,000 tonnes and \$6,452,000 for stone production of 665,000 tonnes.

Ekati Diamond Mine

Ore Processed: 4,425,000 metric tonnes
Diamonds Recovered: 3,563,700 carats

Diavik Diamond Mine

Ore Processed: 2,414,000 metric tonnes
Diamonds Recovered: 9,225,000 carats

Snap Lake Diamond Mine

Ore Processed: 903,000 metric tonnes
Diamonds Recovered: 926,000 carats

Cantung Mine

Ore Processed: 404,536 short tons
Grade: 1.02% tungsten oxides
Tungsten Concentrates: 287,164 metric tonne units
Recovery: 73.4%

One diamond mine was in salvage production in Nunavut Territory in 2008 at the Jericho Diamond Mine which ceased processing operations in April 2008.

Jericho Diamond Mine

Ore Processed: 185,600 metric tonnes
Grade: 0.63 carats per tonne
Diamonds Recovered: 117,700 carats

Upcoming Mineral Industry Events

Mark your calendars now for these important industry events and functions:

- Northern Transportation Conference ... September 9-11, 2009 ... Iqaluit, NU
- Aboriginal Business Conference ... September 22-24, 2009 ... Yellowknife, NWT
- Strategic Northern Infrastructure Symposium ... October 14-15, 2009 ... Yellowknife, NWT
- Geoscience Forum ... November 17-19, 2009 ... Yellowknife, NWT

