



**DIAVIK**  
DIAMOND MINES INC.

# dialogue

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FALL 2002

## Mine Construction Nears Completion

### Welcome

Welcome to our fall edition of dialogue.

I am pleased to report that construction of the Diavik Diamond Mine is now two months ahead of schedule. The project's first diamonds are now expected in February of next year, a testament to the hard work of our many construction teams.

Along with this hard work has come a very strong commitment to safety. At the time of publication, Diavik employees and construction contractors had accumulated just over 850,000 hours of continuous work without a lost time injury, a remarkable achievement in the construction industry.

In the area of environmental stewardship, the project continues to meet compliance requirements for environmental management and monitoring. We continue to work in partnership with local communities, and as detailed in this issue, recently involved community representatives to initiate a fish palatability study.

We remain firmly committed to supporting training partnerships that will help northerners find employment opportunities with Diavik. This fall we completed a process plant operator training program with Aurora College, and the majority of the graduates are now working for Diavik.

I invite you to read more about the Diavik Diamonds Project, both through this newsletter and a variety of other Diavik publications available through our website and corporate office in Yellowknife.

*Stephen Prest,*  
President

Diavik Diamond Mines Inc. expects the first diamond production will begin in February, two months earlier than previously reported.

Water removal from the pool overlaying the A154 kimberlite ore deposits was substantially completed by the end of September. Initially, clear water was returned directly to Lac de Gras. As water levels behind the newly completed dike were lowered they became muddier with naturally occurring lakebed sediments. They were then directed to storage ponds constructed on the island, followed by clarification in Diavik's new water treatment plant prior to being returned to Lac de Gras. This state-of-the-art facility uses flocculation and/or coagulation methods to treat up to 30,000

cubic metres of water per day.

As water overlying the first two of Diavik's four diamond ore bodies was removed, work began on removing lake bottom sediments, glacial tills and bedrock from the first mining area. This overburden is up to 30 metres deep and must be pre-stripped before sufficient quantities of kimberlite ore can be accessed for continuous processing. By the end of September, approximately 700,000 cubic metres of the anticipated three million cubic metres of overburden had been removed.

DDMI anticipates mining of A154 South kimberlite ore will begin in November with increasing quantities of ore becoming available in December. Commissioning of the Diavik processing

and recovery plants will continue as sufficient quantities of ore become available. As diamonds are recovered, they will be forwarded to the Diavik Production Splitting Facility in Yellowknife for cleaning, division and royalty valuations. If current trends continue with respect to overburden removal, initial mining and commissioning, the first production of Diavik diamonds is now expected to become available to the Joint Venture Participants, DDMI and Aber Diamond Corporation in February.

Project costs continue to be within the budgeted \$1.3 billion capital cost. Cumulative project expenditures through September 30 were just over \$1.1 billion.



Some 11 million cubic metres of water were pumped from within the A154 dike to Lac de Gras and on-land storage areas. Inset is the south barge.

### Dike Performing as Expected

In late July, pumps were turned on to dewater the 1.2 square kilometre area behind the A154 water diversion structure, or dike. By late September, dewatering was substantially complete.

As the water was removed, the dike gradually took up the load behind it, successfully holding back the waters of Lac de Gras. At its deepest, the dike holds back 22 metres of Lac de Gras.

Inside the dike, several hundred sensors measure temperature (thermistors), pressure (piezometers), and movement (inclinometers, extensometers, survey pins). The dike includes approximately 1,600 data collection points.

Diavik will continually monitor the dike because the forces affecting it will change over time, said Diavik Deputy

Project Manager John Wonnacott.

"Often, when you build a structure, the conditions are similar year after year but at the mine, over time, the pit will grow larger, the water table will move, frost conditions will change, and there will be vibrations due to blasting rock," he explained.

As the load on the dike increased to its maximum in September, Diavik engineers reported the dike performed as expected and inflow, ranging from 500 litres to 1,000 litres per minute, was well within expectations.

A water collection system, to remove inflow, is currently being completed around the base of the dike. A rock berm is being placed on it to add stability to the inside toe of the six million tonne structure.

## Safety Milestone

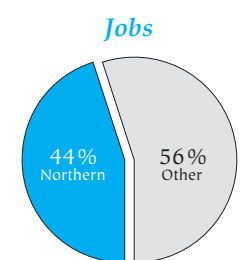
Diavik is pleased to report a new safety milestone for the project. In October, workers constructing the Diavik Diamond Mine and Diavik Diamond Mines Inc. employees accumulated just over 850,000 hours of work without a loss time injury (LTI).

Diavik is also approaching its safety target. Diavik's goal for 2002 is to halve the 2001 lost time injury frequency rate (LTIFR). Safety performance is expressed in terms of the LTIFR (the rate of occurrence of lost time injuries per 200,000 hours of work).

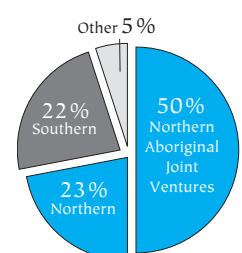
There was one LTI during third quarter with a total of six LTIs over the first three quarters. Diavik's third quarter LTIFR was 0.22, bringing its year to date LTIFR to 0.49.

## Northern Benefits

Employment and business benefits continue to flow to northern residents and companies. Presently, employment participation on the project is approximately 44 per cent northern. The majority of the project's \$1 billion in construction contracts and contract commitments are with northern and Aboriginal firms. Diavik is now beginning to award operations contracts to a number of northern and Aboriginal firms for operations' services.



**Construction Contract Values**



# Testing Diavik Fish Quality

Late this summer, Diavik began a long-term community partnership to document fish quality in Lac de Gras.

Conducted near the Diavik Diamond Mine site, the study combines traditional knowledge and science to measure fish palatability and texture. This year's study records fish health prior to the start of mining. The results will be compared to those obtained in future years.

"Diavik's Fisheries Authorization requires us to monitor fish quality over the life of the mine. We talked with community representatives and they worked with Diavik to help design a program that utilized traditional knowledge," said Erik Madsen, Diavik Environmental Manager.

The project included Dogrib Treaty 11, Lutsel K'e, North Slave Metis Alliance, and Yellowknives Dene

representatives. Poor weather prevented residents of Kugluktuk from participating.

With equipment moving along the A154 dike in the distance, 12 community representatives, among them elders, caught and cooked the fish. And how did participants describe the taste – "excellent."

Fish tissue samples were also taken in order to obtain scientific data to support the traditional information. Weight, length, fecundity, stomach content and general health were also recorded, and some whole fish were sent to Health Canada's Winnipeg lab for various analyses.

By combining traditional knowledge and scientific information Diavik has established an excellent baseline from which to monitor any potential changes in fish quality.



Elders Helen Toby, Madeline Drybones, and Elizabeth Michel (seated from right) were among participants. Assisting is Adrienne Forest of Diavik's environmental department.

## Process Plant Course Complete

Some 25 northerners successfully completed the Diavik Process Plant Training Course at Aurora College's Thebacha Campus in Fort Smith, NWT. Many graduates are now working at the Diavik Diamond Mine.

Over six weeks, each graduate received 420 hours of instruction in computer-based multimedia process plant operations and maintenance, textbook and shop studies, as well as hands-on training. Participants also visited the minesite to familiarize themselves with Diavik's diamond

processing equipment and working conditions.

Funding partners included the federal Department of Indian Affairs and Northern Development, the Government of the Northwest Territories' Resources, Wildlife and Economic Development, and Education, Culture and Employment departments, the NWT and Nunavut Chamber of Mines, the NWT Mine Training Committee, Aurora College, the Dogrib Rae Band, the Hamlet of Kugluktuk, the Kitikmeot Inuit Association and Diavik.

To deliver the course Diavik's training team utilized the Northern Alberta Institute of Technology (NAIT) and mining consultant Performance Associates. The Diavik course adapted a NAIT industrial skills program and utilized NAIT instructors. Performance Associates delivered the computer-based instruction component of the course. The course coordinator was Dwayne DeGagne who is now responsible for Diavik process plant central control room operations.

"One of the most interesting features of this program was the way the group worked together. They took ownership of the program and were very proud of what they were doing. They became a team," said Bob Dawe of Diavik's training team.



Forklift trainer Bill Fair with trainee Gary Drybones.

## Training in Wha Ti

In partnership with Aurora College, Tli Cho Logistics, NSR Employment Solutions, the Community of Wha Ti, Nahanni Construction, Independent Electric and Central Mechanical, Diavik completed a construction trades training course in Wha Ti over the summer.

During the eight-week course, trainees renovated and expanded an existing building. With the hands-on construction trades component, the course also included classroom studies focusing on upgrading pre-trades mathematics, science, and

workplace skills in preparation for the trades entrance exam. Of the 14 trainees registered, ten graduated with two successfully passing trades entrance exams.

During the course, trainees began work at 7 a.m. and concluded work at 6 p.m. mimicking actual working conditions. The participants were divided into two groups alternating between the construction site for half days and the classroom, with weekends optional. A graduation ceremony was held in the new facility August 2.

## Exploration Finds

Exploration efforts by Diavik's geology team have resulted in the discovery of five new kimberlite bodies on the Diavik property. These finds bring Diavik's total number of known kimberlites to 63, approximately half of which are diamondiferous.

The finds were part of an ongoing exploration program comprised of ground-based geophysical surveys, detailed and regional geochemical surveys, and small-diameter core drilling. Microdiamond results from the five new kimberlites are pending.

In other exploration activity, mini-bulk samples were taken from two kimberlite pipes on the property with results pending.



## Partnering With Skills Canada

Diavik Diamond Mines Inc. has partnered with Skills Canada's Northwest Territories and Nunavut chapter. Diavik's \$10,000 contribution will assist Skills Canada in its efforts to offer upcoming trades and technology programs, according to Allyson Stroeder, Skills Canada NWT/NU executive director.

"There is a tremendous need in the North, as well as nationally, for trades and technology skills. Skills Canada raises awareness about skills-based careers and conducts programs which involve northerners in skills activities," said Diavik Training Manager Glenn Zelinski. "For young people looking to get a taste of trades and technology, the opportunities are limited. Skills Canada gives youth a chance to test the waters," Zelinski added.

Skills Canada is a non-profit organization working with employers, educators, labour groups and government encouraging northerners to pursue trades and technical careers. Each year, the northern chapter, created in 1999, holds a skills competition. Northern winners may move on to the national Skills Canada Competition and the World Skills Competition. Skills Canada NWT/NU also coordinates a one-week Girl's Exploring Trades camp designed to provide participants with an opportunity to discover carpentry.

"Skills Canada has the ability to go into schools and promote the message that trades and technology are a first choice career option," added Krista Rivet, Skills Canada NWT/NU president.

### Want to Learn More?

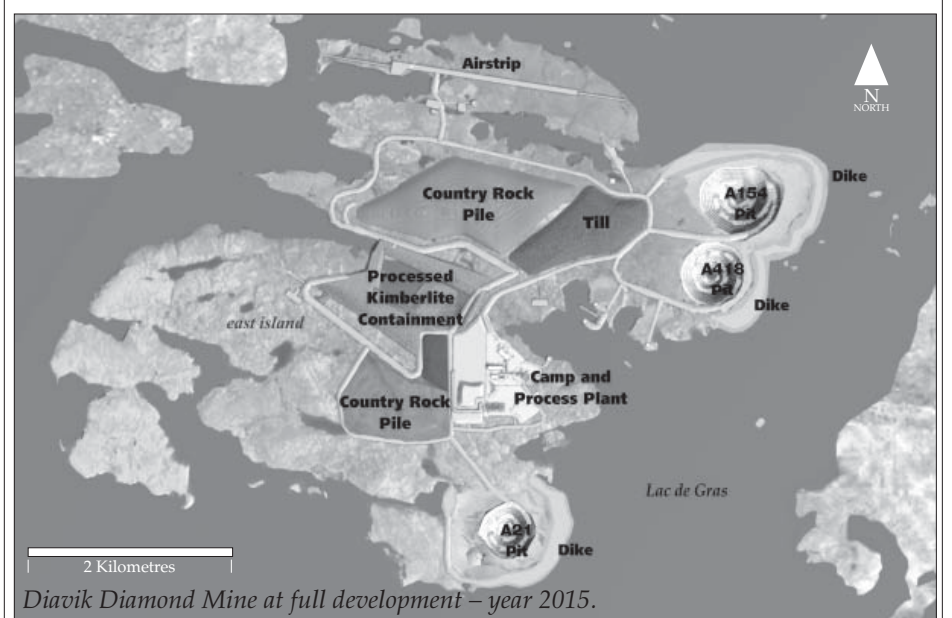
For more information about the Diavik Diamonds Project please visit our web site at [www.diavik.ca](http://www.diavik.ca).

Information may also be obtained from the Diavik Diamond Mines Inc. head office in Yellowknife, where you can also visit our Diavik Visitors' Centre.

### Diavik at a Glance

The Diavik Diamonds Project located in the NWT, 300 kilometres northeast of Yellowknife, consists of four diamond-bearing deposits, called kimberlite pipes, located just offshore of a 20-square-kilometre island, under the waters of Lac de Gras. To mine these underwater pipes, Diavik will build three water diversion structures, called dikes, out from the island, surrounding the pipes. The first dike was completed in 2002. Once the water is removed from behind the dikes, open pit mining will begin.

- Estimated diluted mineable reserves – 27.1 million tonnes at 3.9 carats/tonne from four ore bodies called A154S, A154N, A418, and A21
- Average diamond value – US \$62 per carat (2000 valuation)
- Ore production – 1.5 million tonnes annually
- Annual diamond production – peaks at over 6 million carats
- Mine life – 20 years
- Project capital cost – C\$ 1.3 billion
- Total employment – approximately 450 workers
- Northern workforce – approximately 300 at start-up
- Annual mine purchasing – C\$ 100 million
- Projected start of diamond production – February 2003



Diavik Diamond Mine at full development – year 2015.