

# Operating highlights

## Management Approach - Operations

Our overall approach is to ensure we operate in a safe, healthy and environmentally responsible manner to maximize revenue and minimize expenses, bearing in mind that in doing this we have to do so in a way that makes a positive and lasting contribution to the communities in which we operate. This means that we have to balance the different aspects of our activities to find the optimal way forward.



*The process plant at Snap Lake Mine.*

**Table 1-5:** 2010 Operations goals and objectives

Goal	Degree achieved	Successes	Shortcomings	Additional remarks
Snap Lake Mine: Resume ramp up, achieve carat target of 1,137,000 cts and 760,000 tonnes mined, and dilution 39%.	Tonnes mined +15%; carats recovered -13%; dilution 42%.	926,000 carats recovered from 855,000 tonnes mined.	Carat and dilution targets not met.	
Victor Mine: continue operations and achieve carat target of 749,000 cts and 2,708,000 tonnes mined.	Tonnes mined -1%; carats recovered +4%.	826,000 carats recovered from 2,660,000 tonnes mined.	Target for tonnes mined, not met.	
Gahcho Kué: Feasibility study completed.	Feasibility study essentially completed by year-end. Some minor issues to be closed out.	Feasibility study first complete draft submitted. EIS submitted to regulators at year-end.		

Both the Snap Lake and Victor Mines continued operations successfully, albeit at a reduced throughput due to the economic downturn. Snap Lake produced 926,000 carats, and Victor produced 826,000 carats.

There are no small-scale manual diamond diggings (i.e. artisanal) or small-scale mining within either the Snap Lake or Victor areas of operations.



*The process plant at Victor Mine.*

# Snap Lake Mine

## Northwest Territories

This year was one in which an improving global economy allowed us to commence our careful ramp-up back toward full production, following the significant production curtailment we had put in place for 2009. We hired approximately 175 new employees and this hiring was substantially complete by the third quarter, and many employees who had worked for us in 2009 returned to work with us again at Snap Lake.

A significant achievement that is being enjoyed now by all our employees and contractors was the completion of our brand new permanent accommodations complex. The facility officially opened in December, and includes a new training centre, recreation and exercise facilities, a cultural centre and 400 new dormitory units. This project was part of a \$48 million capital plan that also included the start of construction of the East Cell of the North Pile, our processed kimberlite containment facility.

In 2010, 926,000 carats of diamonds were recovered in the process plant, which is designed to handle up to 3,150 tonnes of ore a day.

There was a continued focus on safety throughout the year. Early in 2010, the Snap Lake Mine received the John T. Ryan Western Regional Safety Award from the Canadian Institute of Mining, to commend our

excellence in safety performance for 2009. Sadly, our safety performance decreased in 2010, although we were seeing improvements toward the end of the year.

An application to renew the mine's Land Use Permit, which expires in May 2011, was filed in October, following significant community engagement activities to explain our plans and hear comments and concerns from residents in communities close to Snap Lake. The Mine's water license is also set to expire in April 2012. Community engagement activities to explain water license application plans began late in 2010 and continued through the first quarter of 2011.

As Snap Lake moves forward, we remain committed to working safely, protecting the environment, and controlling costs, with the goal of reaching full production by the end of 2012.

Brad Corrigan  
Mine General Manager



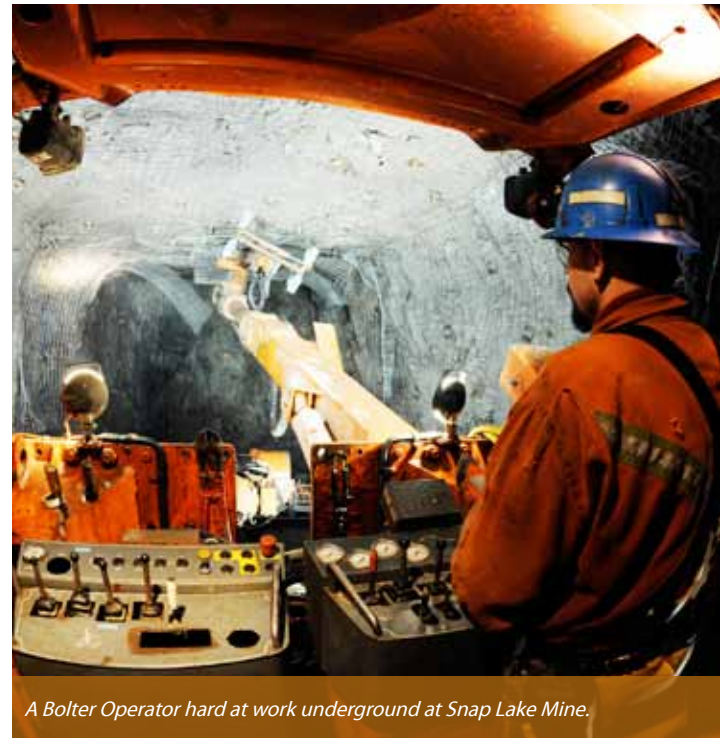
Snap Lake Mine.

### Management Approach – Snap Lake Mine

The approach for 2010 was to meet the production targets for tonnes and carats, to control working costs and to reduce dilution, all in a safe and environmentally responsible manner expected by our company and the community. To achieve our goals, a number of initiatives were developed and implemented, focusing on Best Practices. Work to reduce dilution and extend the reserves for the mine will contribute to maximizing the life of De Beers Canada and the life of its resources.

### Overview

The Snap Lake Mine is an underground mine. It is developed on a shallowly inclined kimberlite dyke. This dyke is about two metres thick, dips at average of 12 - 15 degrees from the horizontal. Access underground is via a portal and an incline. Ore is mined at a number of places underground, is crushed and then brought to the surface for processing by a conveyor. Information on the Snap Lake Mine can be found on our web site at [www.debeerscanada.com](http://www.debeerscanada.com). Production was increased in 2010 following the global economic slow-down in 2009.



*A Bolter Operator hard at work underground at Snap Lake Mine.*

Double shift operations resumed and production continued to increase throughout 2010 as we strived to reach full production by the end of the year. In order to do this, we focused on recruiting and training of labour and developing new areas underground. These initiatives positioned us for an increase production by providing our team the flexibility of multiple workings to avail of once we are in full production.

Production in 2010 totalled of 926,000 carats.

**Table 1-6:** 2010 Operations goals and objectives – Snap Lake Mine

Goal	Degree achieved	Successes	Shortcomings	Additional remarks
Snap Lake Mine: Resume ramp up, achieve carat target of 1,137,000 cts and 760,000 tonnes mined.	Tonnes mined +15%; carats recovered -13%.	926,000 carats recovered from 855,000 tonnes mined.	Carat and dilution targets not met.	
Total mined target 1,060,000 tonnes.	Actual 1,079,000 tonnes.	Target met.		
Total ore mined target 760,000 tonnes.	Actual 855,000 tonnes mined, +15%.	Ore mined target met.		
Dilution target 39%.	Not achieved.		Actual 42%.	
Total target treated 789,000 tonnes.	Actual 869,000 tonnes processed, +10%.	10% more tonnes processed than planned.		
Recovery target 1,137,000 carats.	Recovered 926,000 carats: target not achieved.		-13% below target.	

# Victor Mine Ontario

Building on the strong foundation since the opening of the Victor Mine almost three years ago, 2010 saw the mine increase output and reduce costs while undergoing a significant change to the senior management team, including my new role as General Manager. In all, five of the nine senior management positions saw changes in 2010 as career development continued. The team pulled together to focus on safety, best practices and finding efficiencies while developing the abilities of those at the mine to step up to the next level.

While production has been consistently delivering, we are not satisfied with our internal safety performance of the past year. Large, complicated tasks are being carried out extremely well with minimal safety concerns, however our collective performance on the routine-day-to-day tasks was disappointing as the number of first aids and medical aids – minor as they may be – is unacceptable. An aggressive 'Near Miss/Near Hit' reporting program was put in place in the second half of 2010 and a noticeable improvement in safety performance followed. Increased commitment to safety will be a priority as we move forward.

Continuous improvement in our operations is essential for Victor, which despite its output, is a relatively small mine with a short life-of-mine

compared to most other mining operations. As we work on responsibly developing Victor with our community and business partners, the mine is also supporting the work being carried out by De Beers Canada Exploration on extending the life of the mine, which is even more challenging in a remote environment with limited access to targets and increased working costs.

Our work in the communities continued to be a major focus in 2010 and we're pleased to report a new milestone regarding business capacity as the first wholly-owned business contract for our local First Nation communities was put in place in 2010. We all shared in the excitement of that accomplishment and will continue to work together with our community and business partners to maximize the opportunities that come from the Victor Mine in 2011 and beyond.

Rory Greyvensteyn,  
Mine General Manager



Victor Mine.

### Management Approach – Victor Mine

The approach for 2010 was to meet the production targets for tonnes and carats in a safe and environmentally responsible manner, to control working costs. A number of initiatives were planned and implemented to help us achieve this. Work to reduce dilution and extend the reserves for the mine will contribute to maximizing the life of De Beers Canada and the life of its resources.

### Overview

The Victor Mine is an open pit excavated into kimberlite. The kimberlite is present as two roughly carrot shaped bodies that pierce the surrounding rocks which are mostly limestone. Both the limestone and the kimberlite are covered by a series of sediments deposited by the glaciers, and then capped by muskeg, which forms a wet peatland. The overburden is removed and stockpiled for later use during rehabilitation at the end of



*Surveying within the open pit at Victor Mine.*

operations; the overlying glacial sediments are removed and stored in waste piles, and the kimberlite is broken by drilling and blasting, and is then loaded into trucks and transported to the processing plant where the diamonds are extracted.

Commercial production commenced on August 1, 2008, and a total of 826,000 carats was recovered during 2010.

**Table 1-7:** 2010 Operations goals and objectives - Victor Mine

Goal	Degree achieved	Successes	Shortcomings	Additional remarks
Victor Mine: continue operations and achieve carat target of 749,000 cts and 2,708,000 tonnes mined.	Tonnes mined -1%; carats recovered +4%.	826,000 carats recovered from 2,660,000 tonnes mined.	Target for tonnes mined, not met.	
Total mined target 8,339,000 tonnes.	Actual 9,612,000 tonnes: +8%.	Stripping was advanced during the period in the summer while planned maintenance took place on the plant.		
Total ore mined target 2,780,000 tonnes.	Actual 2,660,000 tonnes: -1%.			
Total target treated 2,631,000 tonnes.	Actual 2,773,000 tonnes.	Tonnes treated on target.		
Recover target 749,000 carats.	Actual 826,000 carats: +4%.	Material from the halo between the payable and unpayable ore contained more carats than anticipated.		

# Gahcho Kué Project

## Northwest Territories

### Management Approach – Gahcho Kué Project

The approach for the Gahcho Kué joint venture is to work with our partner, Mountain Province Diamonds Inc through the Environmental Impact Review process, and to complete the review and approve the feasibility study. This involves ensuring good management of all the technical aspects to ensure reliable results as well as regular communications and relations with the communities of interest for the project. A complete positive feasibility study, followed by successful environmental assessment and permitting will lead to a new mine and help contribute to maximizing the life of De Beers Canada and the life of its resources.

The Gahcho Kué Project is a joint venture between De Beers Canada (51 per cent) and Mountain Province Diamonds Inc. (49 per cent).

The majority of the year was spent in compilation of data for the feasibility study and for an environmental impact statement.

In December 2010, Mountain Province Diamonds published a Technical Report for the project which established the mineral reserves estimate for the property in accordance with National Instrument 43-101. The Gahcho Kué Project completed a feasibility study in October of 2010, and this is currently in review prior to finalization. The Environmental Impact Statement was completed and was submitted in December of 2010 to the Mackenzie Valley Environmental Impact Review Board.

A total of 447,132 hours of work have been completed for the Gahcho Kué Project without a lost time injury or reportable environmental incident.

With the completion of a feasibility study during 2010, the project has now migrated from the exploration division to the mining division.



**Table 1-8:** 2010 Operations goals and objectives - Gahcho Kué Project

Goal	Degree achieved	Successes	Shortcomings	Additional remarks
Mountain Province to complete feasibility study.	Feasibility study undertaken.	Study essentially complete.	The study is under review awaiting finalisation early in 2011 .	
File environmental impact study before end of 2010.	Achieved.	EIS submitted 23 December 2010.		Waiting for MVEIRB to complete conformance check with terms of reference, and advise of any deficiencies.

# Exploration



*Covered drill rigs on the ice at Kennady Lake.*

## Management Approach – Exploration

Exploration uses a multi-faceted approach to finding and evaluating new resources for the corporation, including the use of new technologies. We undertake research of potential target areas, plan exploration programs and then implement these programs. We exercise strict cost controls and monitor the quality of the work undertaken to ensure reliable results. We review past results periodically in the light of new information and technology, and re-evaluate old areas to increase the probability for identifying and proving new resources. We also continuously review our approach to access to land and seek ways to improve.

The success of our exploration programs is very important for the long-term growth and survival of the company. It is the main source of new resources and reserves. Work to increase reserves are primary drivers to increase the value and life of our resources.

The Exploration Division of De Beers Canada has a combined environmental, health and safety management system. The environmental component is certified to ISO14001, while the health and safety section is conformant to OHSAS 18001, and now will be registered during 2011

**Table 1-9:** 2010 Operations goals and objectives - Exploration

Goal	Degree achieved	Successes	Shortcomings	Additional remarks
Complete a program of 6 large diameter drill holes on Tango Extension and recover bulk samples for preliminary assessment of kimberlite.	Mostly achieved.	4 holes completed as planned; 1 hole stopped short because of onset of spring thaw. 1 hole not drilled. Drilled 5 holes totalling 1,173m and recovered ~800tonnes kimberlite.	Late start due to delay in permit approval. Early closure of winter road due to mild weather.	Results from program pending from laboratories.
Complete a program of core drilling to better delineate Tango Extension.	Achieved.	11 holes totalling 2,039m completed.		
Complete a program of core drilling to better delineate Delta-1 internal geometry and provide micro-diamonds for assessment of this kimberlite.	Achieved.	8 holes totalling 1,662m completed.		Drill program was an addition to 2010 work plan.
Undertake preliminary scout sampling in selected areas to check previous sample results.	Achieved.	Scout programs completed.		Results pending from laboratories.

when the rest of De Beers Canada is registered to the system. The scope of this combined management system includes processes associated with diamond exploration including office activities, sediment sampling, drilling, geophysics and sediment and bulk sample processing.

The management system underwent external surveillance audits in 2010 for our field operations within the Victor Resource Extension project, the Sudbury Sample Treatment Plant and the Toronto Exploration Office. In addition, there was a recertification audit for the Sudbury facility. There was a series of internal environmental audits at all of these exploration facilities as well. There were no major findings associated with these audits. For health and safety, there was one external Stage 1 audit for OHSAS18001, and internal audits for the Victor Resource Extension project, Toronto and Sudbury.

There was one non-compliance issue relating to taking water in excess of a permitted daily volume for winter road construction where a local sub-contractor failed to abide by permit requirements. The issue was not detected for several days because the sub-contractor and contractor were delinquent in the reporting. Subsequently, operating practices have been modified and this should prevent a repetition.

Exploration work was focused around the Victor Mine to systematically explore the other kimberlites and determine their potential as additional resources for the Victor Mine because the Victor Mine life is very short (anticipated closure in 2019). Work was undertaken on the Tango Extension and Delta-1 kimberlites. Small diameter core drilling, and ground geophysics were completed. Material collected at Tango Extension by large diameter drilling for macro-diamond evaluation was treated at the sample plant at the Victor Mine, and the diamonds recovered are currently being evaluated. Delays in permitting caused the planned large diameter drilling program to be stopped after only four of the six planned holes had been completed and a fifth hole was partially drilled and stopped about 100 metres short of its planned depth.



*A helicopter slings a small boat to a lake near the Gahcho Kué Project as part of environmental baseline studies.*