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Table of Contents

COVER STORY:

Big Business: Mining in Ontario8

DIGGING FOR DETAILS:

FragMetrics™, an in-Shovel Camera-based Technology for Automatic Rock Size Analysis in
Open Pit Mining..... 13
Scaling Back Isn't Always the Answer..... 17
Virtual Mentoring: A Modern Way to Address the Needs of Today's Industry 18
Transaction Report..... 19
Tools of the Trade..... 22

NEWS WATCH: FROM COAST TO COAST

The North..... 24
British Columbia..... 26
Alberta 27
Saskatchewan 28
Manitoba 29
Ontario 30
Quebec..... 32
Atlantic Canada..... 33

BUYER'S GUIDE.....38



ON THE COVER:

The Tatlock Quarry is located in the Darling Township, Lanark County, Ontario. This active quarry is the source of feed for the OMYA plant near Perth, which has recently undergone a major expansion and provides easy access to customers in the St. Lawrence Seaway corridor. The qualities of the dry ground calcium carbonate products produced at this plant are used by the paint, plastics and building products industries, while the slurry grades are used by paper and packaging manufacturers in Canada and the United States. The Tatlock Quarry is the largest calcium carbonate quarry in Canada. Photo by Darlene Greydanus.

Big Business: Mining in Ontario

In March 2009 mining experts from Ontario headed west to showcase the province's mining prowess at an annual convention hosted by the Prospectors and Developers of Canada. What did the delegates from the Ontario Pavilion have to say?

Well, Northern Development and Mines Minister Michael Gravelle was one of the many representatives that made the journey in order to promote Ontario's natural mineral endowment, efficient permitting and approvals processes, electronic access to valuable geoscience data, focused incentives for exploration and commitment to sustainable mineral development.

He said, "by promoting Ontario's advantages at this high-profile event, we are

positioning ourselves to further advance our mining industry. Now more than ever, given the current economic challenges, we must continue to promote this vital industry."

More than 18,000 people from more than 100 countries attended this international mining conference. Those who passed through the Ontario pavilion were hit with numerous impressive facts, including:

- There were 364,000 active mining claim units in Ontario at the end of 2008.
- In 2008, there were more than 800 active mining exploration projects in Ontario—an all-time record.
- More than 100,000 people across the province are employed in mineral exploration, production and the mining equipment and services sector.

Whether or not statistics like these will hold true in 2009 is yet to be seen.

So far the Year of the Ox has been everything but a bull market. Investor confidence has yet to bounce back from 2008's rough ride and cutbacks are making headlines on a regular basis. For example Vale Inc. Ltd. announced in early March that it would be chopping 261 jobs from its Greater Sudbury workforce of 5,500 as part of a move to eliminate 900 full-time positions across its global nickel operations.

This round of cuts followed on the heels of an announcement by Xstrata Nickel that it was trimming 686 workers from its Sudbury operations.

The price of nickel has steadily declined over the past few months. At press time it

Ontario mining out of this world

Penguin Automated System Inc. based out of Sudbury, Ontario was awarded two contracts with the Canadian Space Agency in late 2008, to deliver studies on the socio-economic benefits of potential lunar mining and transportation infrastructure as part of the corporate strategic plan for the Canadian Space Agency's Space Science and Exploration Program.

Dr. Greg Baiden, Chairman and CTO of Penguin ASI and Canadian Research Chair in Robotics and Mine Automation at Laurentian University along with his research team and assistance from leading individuals in US space initiatives, Mining Technologies International (MTI), Mafic Studios and other Canadian space leaders will deliver the two reports

These studies will build linkages between businesses specializing in mining technologies and space technologies for the benefit of Canadians and our economy. "Mining and transportation technologies will have a major impact in the future of the Canadian and International space programs. These studies uniquely position Canadians to play a major role in space from industries that represent our mining heritage," says Dr. Baiden.

The Canadian Institute of Mining, Metallurgy and Petroleum will be working closely with Penguin ASI to increase the mineral industry's access to knowledge on the results of these reports. Penguin with the support of the CIM is working closely with the space agency to investigate plans for an underground base and transport system to explore, mine and process lunar minerals for exploring the solar system and beyond to the benefit of mining and Canada.

These studies are part of the government strategic planning process to provide insights to decision making in government.



was US\$4.28 per pound (March 13, 2009), compared with US\$5.50 per pound in early January. In the same period last year, prices sat at nearly US\$15.00, before dropping to nearly US\$9.00 in September 2008.

Good news is gold

While times are tough for some, there are companies in Ontario that are planning major exploration projects for 2009. Premier Gold Mines Limited is one such company. This well-financed mineral exploration and development company is planning approximately CDN\$15 Million in exploration for its northwestern Ontario projects; making it one of the industry's largest explorers.

Already in 2009 Premier has announced that drilling at their Hardrock Project (located in the Beardmore-Geraldton Greenstone belt, primarily in Ashmore and Erington Townships, District of Thunder Bay) has intersected broad intersections of near-surface mineralization as well as narrow vein high-grade gold in separate target zones. These gold zones confirm extensions to previously drilled open pit zones, and define the potential to identify significant high-grade mineralization in close proximity to existing mine workings in both the OREO and PIT target areas.

The Hardrock Project is operated under a joint venture with Roxmark Mines Limited (Premier Gold owns 70 percent) and is host to several past-producing mines. The current drill targets represent the second and third of several targets currently being tested on the property, and are in addition to the EP-Zone, where the companies recently announced intersections of up to 11.8g/t Au across 11.4 meters (see press release dated February 17, 2009 at www.premiergoldmines.com). The current program is expected to consist of more than 50,000 metres of definition and exploration drilling leading to NI 43-101 compliant gold resources in 2009.

Diamonds are a province's best friend

De Beer's Victor Diamond Mine posed what seemed to be insurmountable challenges when construction began in February 2006. The mine's location—about 90 kilometers west of the First Nation community of Attawapiskat in the James Bay lowlands—created a number of logistical challenges, including limited access for transporting resources. During the construction phase of the mine, the 400 kilometre winter road was only available for two months each year.

However with the help of AMEC, a

Did you know?

Sudbury will host the 13th Mine Ventilation Symposium in 2010, June 13-17. This symposium will provide a forum for the exchange of mine ventilation knowledge and R&D experience amongst experts from industry, government, academia and the supply sector. The 2010 symposium is being hosted by MIRARCO, of Laurentian University, and includes visits to MIRARCO's world renowned virtual reality lab, exciting mine tours, and a great program!

For more information go to www.mirarco.org/minevent.

consulting, engineering and project management firm that specializes in energy, power and process industries, the construction phase of the project finished as scheduled in 2008. The Victor mine is the first diamond mine in Ontario and the second in Canada for De Beers. It also provides sustainable, long-term employment for First Nation communities and other communities in northern Ontario with approximately 375 workers involved in the ongoing diamond production.



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Other facts include:

- Victor is one of 18 kimberlite pipes discovered on the property, 16 of which are diamondiferous.
- The Victor kimberlite has a surface area of 15 hectares and consists of two pipes that coalesce at the surface: Victor Main and Victor Southwest.
- The mine will be open-pit with an expected life of 12 years and a total project life of 17 years.
- The site facilities include an open-pit mine, processing plant, workshops, warehouse, offices, fuel storage, pit dewatering

system, accommodation complex and airstrip.

- Mining will utilize standard open-pit mine equipment comprised of 100 tonne trucks, large front-end loaders, dozers and the necessary support equipment.

Juniors taking leaps and bounds

Junior mining company West Timmins Mining is the largest land holder in the West Timmins Gold Camp. In February 2009 the company announced the discovery of a new gold mineralized system on its 100 per cent owned Hwy 144 Property in Timmins,

Mining Show Way Ahead of Schedule—Despite Economy!

The Canadian Mining and Industrial Expo, a familiar trade show on the Sudbury landscape that has taken place since 1994, is rolling full speed ahead. "This year's trade show is way ahead of schedule in the area of booths booked and companies registered. We have had more companies register months ahead of time," says Darren Ceccarelli, trade show organizer.

"We understand, like everyone, that the economy is very depressed. However, statistics have shown from the Great Depression that companies that advertise and market in these times come out of a bad economy stronger and in a better market position. Many companies have cut back budgets but the more progressive companies realize the pie might be smaller but they must still capture a piece of that pie or they will starve; plants and equipment still need to be serviced and there are still breakdowns, and manufacturing plants and mines are still operating, maybe not at capacity but they are still operating," states Ceccarelli.

"It looks like the companies we have in the mining show, in excess of 100 companies, still understand this concept. There are many new products and services which will be on display (some operating) which could help companies save money in these times. Also, some of the new methods and procedures could help," states the show promoter.

The Canadian Mining and Industrial Expo takes place April 22 to 23, 2009 at the Exhibition Centre on Falconbridge Road, in Sudbury, Ontario. The trade show attracts mining personnel, purchasing agents, buyers, project co-ordinators, safety supervisors, mine foremen, miners, plant supervisors, owners, presidents, etc. Admission to the two day show is free to anyone in the industry and there are exceptional door prizes including a flat screen television, a patio set, clothing and much more!

Times for the show are: Wednesday, April 22, 12 noon to 6pm and Thursday, April 23, 10 am to 4pm. You can register online at www.dac-shows.com or at the door. For more information call (705) 929-SHOW.

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Ontario. Drilling has intersected a new, 16.10 metre wide zone of gold mineralization grading 1.11 g/t gold in hole Hwy 08-05. This new gold discovery is located along the same trend which hosts the company's high grade Rusk Gold Zone and the 1.3 million ounce Timmins West gold deposit.

"We are very encouraged by the width of this newly discovered gold system, its location along the key sediment-ultramafic contact and the obvious comparisons to the nearby Rusk Gold Zone and Timmins West deposit," says Darin Wagner, President and CEO of West Timmins Mining Inc. "These results indicate that the syenite body related to the recent high-grade results at Rusk, and the new discovery on our Hwy 144 Property, may be much more extensive than initially thought, opening up a great deal of additional exploration potential in the West Timmins District."

Many of the larger gold deposits, including the multi-million ounce McIntyre, Hollinger and Dome deposits, in the Timmins Gold Camp are spatially associated with porphyritic intrusions similar to the host to the new discovery on the Hwy 144 Property and the deeper intersections from the Rusk Zone. The increasing evidence for a spatial relationship between gold mineralization and porphyritic intrusions in the West Timmins District is therefore seen as a very positive development and has significant exploration implications for the district.

Ontario's Timmins Gold Camp is North America's most prolific gold camp, having produced over 70 million ounces of high-grade gold mineralization. The Timmins Camp is celebrating the 100th anniversary of gold discovery during 2009.

Agreement strengthens mining and First Nations links in 2009

A Memorandum of Understanding (MOU) signed by the Mining Association of Canada (MAC) and the Assembly of First Nations (AFN) is poised to strengthen the existing links between these two groups. The MOU was signed by National Chief Phil Fontaine and Jim Gowans, President of the Ontario Mining Association (OMA) member De Beers Canada and Chair of the MAC. This historic initiative got underway when MAC and the Assembly of First Nations signed a letter of intent in November 2007. "In resource development, First Nations and the mining community are natural partners," said National Chief Fontaine. "Developing

a new partnership between the AFN and MAC will complement and enhance the growing relationships between First Nations and Canada's major mining companies." Numerous examples of mutual benefit and cooperation among OMA members and Aboriginal communities can be found. For example:

- The Musselwhite gold mine in Northwestern Ontario, which opened in 1997, established a creative agreement with a number of First Nations that provides for education, training, employment and business opportunities in local communities.

- De Beers Victor Mine also has a working relationship with First Nations communities in the vicinity. Approximately 140 people, or 40 percent of the Victor workforce, are Aboriginal.
- Recently, Lake Shore Gold signed an agreement with the Flying Post and Mattagami First Nations related to its Timmins West property.

"Canada's mining industry is the largest private sector employer of Aboriginal people," says OMA President, Gowans. "Across Canada, mining companies and First Nations communities have agreements in place that include commitments on hiring,



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training, business development and environmental practices. We believe this growing relationship will be strengthened through dialogue and partnership with the AFN."

Mining in Ontario: on the right track

Even though the current economic reality has hit some Ontario mining companies hard, even in heavily-affected Sudbury, there is some good news to be found. In December 2008 Wallbridge Mining Company Limited, which primarily explores for and develops nickel, copper and platinum group element deposits in the Sudbury Basin, announced that along with joint venture partner major

platinum producer Lonmin Plc, CDN\$1.5 million funding was allotted to carry out the 2009 work program on the Wallbridge/Lonmin Sudbury Camp Joint Venture (SCJV) properties. The funding provides for approximately 3,700 metres of diamond drilling and other exploration work for the period from October 1st, 2008 to September 30th, 2009.

"We are very pleased that Lonmin is again participating in our exploration efforts in Sudbury," says Alar Soever, President of Wallbridge. "This will allow us to further advance these properties, in spite of the current difficult economic environment."

Did you know?

The second annual Ontario Mine Reclamation symposium is scheduled for June 9 and 10, 2009 in Timmins, Ontario. Sponsors of the environmental conference are the Ontario Mining Association, the Canadian Land Reclamation Association (CLRA) and Goldcorp. Go to www.clra.ca for more information.

Wallbridge and Lonmin formed the SCJV in January 2002 to explore a number of properties in the Sudbury area for platinum group metals, as well as copper and nickel. The 2008 Exploration Program is focused on target areas on the Skynner Lake, Trill, Foy, and Cascaden properties which have geophysical targets coincident with favourable geology.

The future, looking bright

Most experts agree that the economy will shape up in Canada, sooner rather than later. This is good news for Ontario and for the province's future mining executives, CEOs and researchers. Mining engineering students at Sudbury-based Laurentian University, for example, aren't waiting to see how mining emerges from these troubling times. Instead, they're putting all they've got into excelling at their studies.

When competing against 10 other teams from mining programs offered across Canada, the Laurentian University mining engineering team took home top honours, placing in the top-three positions in 9 of the 21 events: mine design, mine rescue, ventilation, stock market challenge, AutoCAD, Jackleg drilling, materials handling, seminar competition and mineral identification.

The Canadian Mining Games is an annual competition between students from major mining engineering programs across Canada, where students compete in over 20 academic and hands-on events. The Mining Games originated in Montreal in 1991. Since then, Laurentian University has won the games seven times.

Even though some Ontario-based mining companies and mining properties are scaling back, most are moving forward and continuing to experience growth and success. Only time will tell the whole story but most indications in this first quarter of 2009 tell a tale of triumph. **M**

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FragMetrics™, an in-Shovel Camera-based Technology for Automatic Rock Size Analysis in Open Pit Mining

By Nima Ziraknejad, M.A.Sc., Motion Metrics International

Fragmentation analysis is employed in various industries such as mining, space, forestry and biotechnology. In particular, the mining industry has introduced applications in rock engineering in which sensing and analysis of rock segmentation and fragmentation have gained strong value in the past decade. The blast engineers use such information to carefully adjust the blasting parameters such as where to put drill holes and what amount of blast material to use.

This article presents a novel technology for sensing the size of rocks after blasting in hard rock mines. Blast engineers require rock size statistics to carefully adjust the blasting parameters. The rock fragmentation requirements vary depending on the ore type and crusher specifications. The most popular statistical parameters in the industry are the so-called P numbers (e.g., P80 and P100).

Introduction

Mechanical tools such as screens (sieves) and rock classifiers are the traditional non-vision solutions to obtain rock size statistics in mining industry. The rocks are simply passed through different screens (with different mesh sizes located vertically on top of each other) and an operator labels the remaining rocks in each level. With the advent of powerful computers and improved image processing algorithms and methodologies, the process of rock segmentation can be performed through processing and analyzing rock images captured by conventional camera devices from the surface of a pile of blasted rocks or inside the bucket of mining shovels.

Unlike indoor image processing applications (with controlled lighting and no environmental disturbances), jumbled rock images, captured from different locations in a mine, may introduce imaging noises and disturbances such as shadows,

washed-out regions, dust, uneven surface lighting and so on. An automatic image collection and machine vision-based rock fragmentation analysis system has been developed by Motion Metrics International and is commercially available as FragMetrics™.

The system provides rock fragmentation analysis of the material right inside the bucket or dipper of mining shovels. A heavy-duty camera provides the required imaging data to an embedded computer mounted inside the cab. A custom machine vision software continuously analyzes the captured bucket images and stores the suitable ones in local storage which are then fed to a Desktop software for automatic fragmentation analysis.

Performing a fast and efficient machine vision-based rock segmentation and fragmentation analysis is directly affected by introduction of several regions on a single rock (over-segmentation) as well as formation of several rocks into one region (under-segmentation). Due to the difficulty in dealing with such over and under-segmented rock images, manual correction by a human operator is often needed to compensate for the errors in automatic fragmentation analysis in order to achieve a reasonable accuracy for blast engineers.

Currently, if rock segmentation analysis of a particular location in an open pit mine is desired, the conventional method is to collect images manually from that region and later retrieve and feed them to a segmentation software at the office.

FragMetrics™ provides an autonomous rock fragmentation sensing and analysis platform with automation introduced in both image capturing (from desired digging operation sites using an in-shovel image collection system) and segmentation and fragmentation analysis with no manual correction (using a desktop software). However, as mentioned earlier, the process of rock segmentation is a difficult problem and cannot be considered providing flawless results. FragMetrics™ offers a fragmentation sensing solution with minimal requirement of manual corrections as confirmed by the field results collected from various mines around the world.

What is our approach?

FragMetrics™ collects the desired rock images from a camera installed on top of the boom structure of different mining shovels. The system automatically captures the suitable bucket images and stores them digitally on its permanent

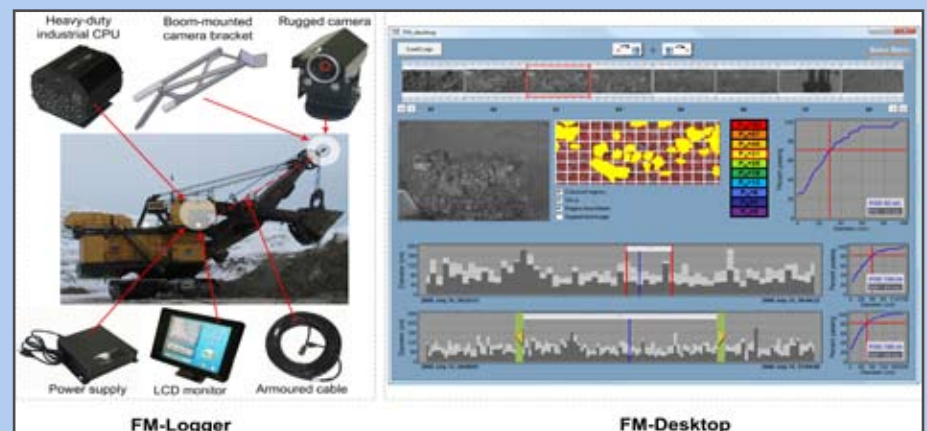


Figure 1. System schematic of FragMetrics™ system. The FM-Logger (left) is a combination of software and hardware components and the FM-Desktop (right) is purely a software application.

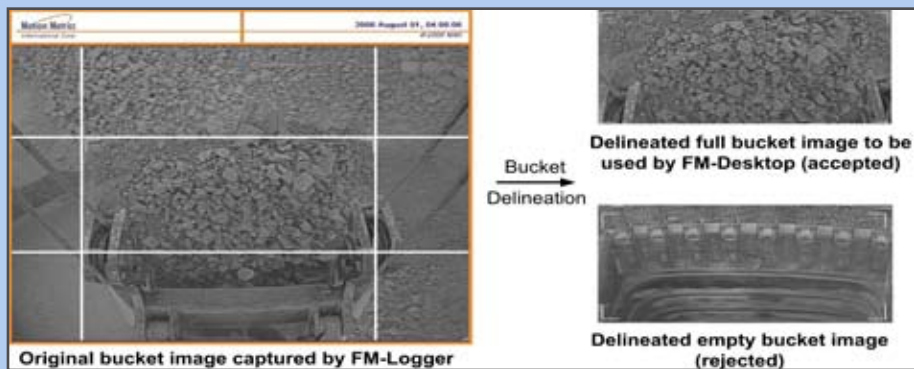








Figure 2. An example of a suitable bucket image obtained after the process of bucket extraction and empty bucket detection. The obtained image (top right) only contains the bucket and the material inside it. This image is passed to the rock segmentation algorithm to be analyzed.

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storage device. A bucket image is considered suitable if it is captured close enough to the camera to obtain a reasonable resolution and if it corresponds to a full bucket (i.e., not an empty or partially full bucket). The stored images are retrieved (via mine mesh network or manual data collection) and fed to the FM-Desktop office software. This software reads the bucket images and after performing the segmentation algorithms provides the fragmentation analysis results in different numerical and graphical representations.

How is the system designed?

FragMetrics™ is comprised of two main components:

1. The FM-Logger: A shovel-based image capture and logging system; and
2. Two, the FM-Desktop: An office software for fragmentation analysis and visualization of results.

Figure 1 shows a schematic of the system design and the various components in FragMetrics™.

What are the system components in FM-Logger?

1. A real-time image collection and processing software developed by MMI in the course of past 10 years. This software processes the bucket images received from the camera at approximately 30 frames per second. The collected suitable full bucket images are later fed to the FM-Desktop software for analysis.
2. The bucket images are sensed by a heavy-duty camera, equipped with a heater for cold temperature conditions, is shock-mounted on a removable bracket on top of the shovel arm.
3. The embedded computer (CPU box) is 6"x6.5"x6.5" and uses aluminium anodized enclosure. The back panel of the CPU box contains MIL-spec connectors for the sensors, power, display, and other peripheral devices. Additionally, an easily accessible industrial-grade extended temperature Compact Flash (CF) card is used as permanent memory and storage device for the embedded operating system (Microsoft Windows XP Embedded), the embedded image acquisition and processing software, and for image and data logging.
4. The CPU boxed is powered by



1	Bucket image strip
2	Selected bucket image
3	Selected images history graph
4	Total images history graph
5	Delete and retrieve buttons
6	Segmentation result area
7	Segmentation result modes
8	Estimated P numbers
9	Current cumulative graph
10	Sel/total cumulative graph

Figure 3. FM-Desktop graphical user interface with different labelled and explained components.

12VDC power which is provided by an AC/DC adapter for cable shovels and a DC/DC adapter for hydraulic shovels.

- Heavy-duty armoured power and signal cables are used to connect the bucket camera to the FM-Logger CPU box.
- A color industrial grade touch screen LCD monitor is used to provide the required visual information to the shovel operators and to receive touch screen commands.
- A series of custom designed metal camera brackets are available from MMI for various types of mining shovels.

A suitable bucket image refers to a bucket image with characteristics such as being close enough to the camera, high contrast, dust free and enough ore material to be analyzed. The MMI Bucket Extraction (BE) algorithm constantly delineates the bucket from its background during the swing action of the shovel. This algorithm and a suitability verification layer continuously select and pass the most suitable bucket image (during the swing action) to the Empty Bucket Detection (EBD) algorithm. The EBD

algorithm decides whether the obtained bucket image is full or empty.

How does FM-Desktop software work?

FM-Desktop is an intuitive and user-friendly desktop PC application. The collected bucket images from FM-Logger are fed to FM-Desktop for automatic fragmentation analysis and both graphical and numerical displaying of the size distribution results for any desired period of time. FM-Desktop displays different indications of segmentation results on the original images as follows:

- A binary image indicating the rocks as white regions on black (fines) background.
- The original image with region boundaries drawn in red color around the rocks.
- A variable cell size graphical sieve shown on top of the original bucket image. The sieve provides an intuitive observation about how much of the material can be passed (depending on the selected P number, i.e., percentage passing) through a sieve with the indicated cell sizes.
- A Color coded format to display the rocks that are larger than the sieve size

(again, depending on the selected percentage passing).

Cumulative fragmentation graphs are provided for easier understanding of the relationship between the rock diameters and the passing percentage through an assumed sieve. As shown in Error! Reference source not found., the vertical axis in each graph corresponds to rock diameter which is plotted versus the corresponding percentage passing on the horizontal axis. In Figure 3 (Error! Reference source not found.), the yellow box of $P_{70}=31\text{cm}$ is highlighted with a red boarder and it implies 70 percent of the rocks in the current bucket image can be passed through a sieve with 31cm x 31cm cells. The white color sieve depicted on the segmentation results simulates the scale of a real sieve if one were to use it. The clickable boxes displaying the P numbers and the associated sieve sizes are shown in different colors. Using the same example, the box $P_{70}=31\text{cm}$ has a yellow color background. The rocks which cannot be passed through the sieve (with 31cm mesh sizes) are shown in yellow as indicated in the P number box.

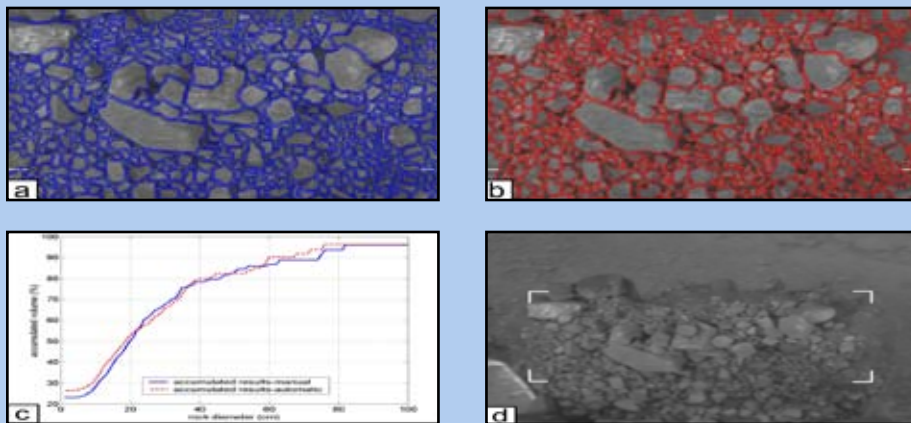


Figure 4. Comparing manual segmentation with automatic segmentation using an arbitrary bucket image.

A comparison between the manual and automatic rock fragmentation results

The fully automated segmentation process, performed by FragMetrics™, is compared with manual segmentation performed by a human operator on the same bucket image. One could safely assume that manual segmentation based on human perception of the rock shapes and textures is an accurate method of performing fragmentation analysis. The amount of error between the manual and automatic segmentation is tolerable and that has been confirmed by performing this comparison on various bucket images with different ore material. For example in the comparison below, $P80_{\text{manual}} \approx 43\text{cm}$ and $P80_{\text{automatic}} \approx 40\text{cm}$. This implies an absolute error of 3cm between the manual and automatic operations for the P80 measurement for this particular image.

Conclusion

In this article, we presented an autonomous rock segmentation system to provide rock size statistics to mine blast engineers and geologists. The experimental results verify the performance of the proposed autonomous fragmentation sensing system with small mean absolute error between the automated and manual segmentation methods. Image pre-processing and preparation module is an important step in the proposed algorithm. Poor segmentation results will be experienced if this step is not performed precisely. At MMI, we continue to improve the accuracy and speed of the proposed automatic fragmentation analysis. A conference paper with the title of "An in-Shovel Camera-based Technology for Automatic Rock Size Sensing and Analysis in Open Pit Mining" is submitted to CIM Rock Engineering in Difficult Conditions Conference to be held in Toronto in May 2009. More details about the proposed technology can be found in this paper. **M**

Nima Ziraknejad is FragMetrics™ Project Manager at Motion Metrics International. For more details on FragMetrics™ and other Motion Metrics products please visit their website at www.motionmetrics.com.

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Scaling Back Isn't Always the Answer

At a time when the mining industry is under pressure, Canadian companies are leaving hundreds of millions of dollars of potential productivity gains on the table, according to research conducted by Proudfoot Consulting.

"The mining industry, generally, is gripped by panic and the vast majority of firms are in lock-down mode," says Jon Wylie, Proudfoot's Managing Director in Canada. "They have reacted to sharply lower commodity prices by scaling back and closing older, higher-cost mines." Globally, Proudfoot estimates 50,000 job cuts have been announced by the top five mining companies alone. This has a ripple effect through international economies. For example, each mining job in the U.S. creates an additional 2.9 jobs in other sectors of the economy.

"But cost-cutting alone is not a sufficient enough response," explains Wylie. "It does not prepare the organization for either a lengthy recession, or position the company as a first mover when commodity prices start to move back up."

Mining firms need to take the next critical step—making their processes more efficient, streamlining their operations, providing relevant training for both staff and managers, and speeding up decision-making. "You can do both," says Wylie. "You can cut costs and build strength at the same time."

Based on mining sector data from its Global Productivity

Key findings

- One-third (33 percent) of mining managers agree that bureaucracy and red tape prevent good ideas from being implemented in their companies.
- Mining managers are spending 10 percent of their time—half a day of every workweek—on administrative tasks they feel are unnecessary.
- One reason mining managers are spending time on what they think is unnecessary administration is paperwork. Mining managers receive just over 14 management reports each month. These managers believe they only need seven of those reports to do their job. Fifty percent of the reports they receive every month are ones they think are unnecessary, 16 points above the global norm.
- Mining industry workers receive more training than workers in any of the other sectors surveyed. The average mining worker receives 15 days of training per year, almost 3 days more than those in the automotive sector, the second-ranked worker training sector. But the training that mining employees receive may not be the right training. Only 70 percent of mining managers report their companies formally and regularly assess their training needs. This is five points below the global norm.



Report, Proudfoot has found that mining managers worldwide spend more of their time (44 percent) on administrative tasks than managers in all other sectors except retail. On average, they feel they should be spending only 34 percent on administration—and that they are therefore wasting 10 percent of their time.

In the Canadian market, if this wasted time was applied instead to active supervision of workers, productivity would rise by 2 percent and the mining sector would realize some \$300 million in productivity improvements.

"That's just one area where gains could be achieved," Wylie says. "And yet most Canadian mining companies are focusing only on cost-cutting measures during this recession. They should also be looking at their operations in terms of core strengths and structuring for scalability so they're ready to expand as markets improve."

Proudfoot's global data shows that the number-one barrier to improved productivity—identified by 31 percent of mining managers, the highest percentage in any sector—is skilled labour shortages. During a recession, this concern may not be as acute.

But companies that close mines or significantly reduce operations will have a more difficult time ramping back up because the skilled workers may have moved out of the community. Companies that can stay open through efficiency improvements, thereby retaining personnel, will likely enjoy a competitive advantage when commodity prices turn around.

As well, about a third of mining managers worldwide agree that bureaucracy and red tape prevent good ideas from being implemented in their companies. Wylie explains that "it is critical for mining companies to enable their managers by moving decision-making to the frontlines." **M**

The Proudfoot Global Productivity Report is a definitive source of information on global productivity, used by the media and respected by the business community. The data is based on interviews with managers in 12 countries and across 8 sectors, interviews with C-level executives from a number of those markets, and analysis of data collected during Proudfoot client engagements around the world. For further information, visit www.proudfootconsulting.com

Virtual Mentoring:

A modern way to address the needs of today's industry

"Things are going great! My V-mentor is a really nice and helpful guy and we have been speaking on an almost daily basis since I was set up with him. I have also spoken with some of the other v-mentors who seem happy to provide information."

Brett (v-mentee)

By Melanie Sturk

The Virtual MineMentor Program, developed by the Mining Industry Human Resources Council (MiHR), is an innovative tool designed to encourage new workers to join the industry. One of several contributing factors to the forecasted skills shortage is the dramatic rate of attrition in mining-related programs at Canadian colleges and universities. The 2005 Prospecting the Future Study revealed that in 2005 there was a 28 percent attrition rate in certificate programs and a 7.4 percent attrition rate in undergraduate degree programs. So, how can virtual mentoring help industry and HR professionals address this?

By establishing an early link to the mining industry, mentors will provide students with general guidance and workplace knowledge, creating a stronger bridge from school to work. Sector exposure will also improve, decreasing mine-related program attrition rates over time. HR professionals will also be familiar with research that mentoring encourages employee loyalty through a sense of belonging and a desire to achieve more within their role.

When designing the tool it was important that it be sustainable and fit in with the demands of industry professionals. Online collaboration removes the geographical barriers that traditionally impede mentorship between these types of participants. Instead, mentorship occurs by means of an online portal that incorporates instant messaging, blogging, email, and other interactive forms of communication between pairs and the MineMentor community. Virtual Mentoring requires little to no face-to-face contact making it ideal for when connecting with participants in remote areas. This type of mentoring is also beneficial due to the fact that it increases the frequency and speed of communication.

Use of virtual mentoring is progressing well. An evaluation of the two month pilot, completed at the end of September 2008 showed:

- Some pairs spent more than 90 minutes per week communicating;
- 75 percent of the mentees felt they were well matched with their mentor; and
- 75 percent communicated exclusively through the use of the portal.



The success of the pilot means we are now recruiting for a full launch and are seeking both V-Mentors and V-Mentees. The first Virtual MineMentor participant orientation session will be held at CIM on Tuesday May 12, 2009.

So, what is involved? V-mentors will receive guidance through training developed by MiHR and an industry steering committee to provide professional, quality mentoring to their respective protégés. They will have ongoing access to support from the MineMentors coordinator and resources on the MiHR website. The V-mentor will: (1) provide general guidance, support and advice; (2) promote the exploration of career possibilities within the minerals and metals sector; (3) be a first point of contact for networking within the industry and (4) act as a role model. Mentors should have excellent communication skills, be open and tolerant, and most importantly they should possess an infectious love for their work and sector. They must be willing to invest their time to inspire and engage. Does this sound like you or someone you know?

If you would like to get involved, there is an application process, after which the program coordinator will match mentors (industry employees) and mentees (post-secondary students) based on their objectives. To become part of the program as a mentor or mentee, or for further information, please contact Jennifer Clark: jclark@mihr.ca. The MineMentor portal is found at www.acareerinmining.ca/mine-mentor. **M**

Melanie Sturk is Senior Project Manager for the Mining Attraction, Recruitment and Retention Strategy (MARS). For more information on MARS and other MiHR initiatives please visit www.mihr.ca.

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This project is funded in part by the Government of Canada's Social Council Program

TRANSACTION REPORT



Gold Reserve granted interlocutory injunction restraining Rusoro takeover bid

Gold Reserve Inc. announced in mid February 2009 that the Ontario Superior Court of Justice has granted an interlocutory injunction restraining Rusoro Mining Ltd. from proceeding with any hostile takeover bid to acquire the shares of Gold Reserve until the conclusion and disposition at trial of the action commenced by Gold Reserve.

The injunction was granted by the Court following a motion by Gold Reserve on the basis that Rusoro had access to or benefited from the use of Gold Reserve's confidential information as a result of Rusoro's relationship with Endeavour Financial International Corporation. The Court also issued an interlocutory injunction restraining Endeavour from having any involvement with a hostile takeover bid for Gold Reserve. The Court further required that Rusoro, Endeavour and their agents return to Gold Reserve both all the confidential information of Gold Reserve and also anything produced from that confidential information.

Doug Belanger, President of Gold Reserve said, "we are very pleased with the Court's ruling and believe it is entirely appropriate in the circumstances. We remain committed to ensuring that our shareholders receive full value for their investment."

As previously announced on December 30, 2008, the Gold Reserve Board unanimously voted to reject Rusoro's hostile offer and recommended that shareholders reject the offer.

Mega Silver Inc. and Skybridge Development Corp. enter binding agreement

Mega Silver Inc. and Skybridge Development Corp. announced February 5, 2009 that they have entered into a binding letter agreement to combine the companies through an all share transaction.

Skybridge is a publicly-listed mineral exploration company that owns the Blue Caribou properties in Nunavut. The Blue Caribou properties include a high-grade copper deposit, with significant molybdenum and rhenium credits, and an appreciable gold zone (see Skybridge's press release dated October 14, 2008). Skybridge also recently announced an agreement on the historical Lavery claims in the Red Lake gold camp (see Skybridge's press release dated February 2, 2009) and has initiated geological and geophysical compilation work in preparation for an upcoming drill program in Red Lake to be conducted under NI 43-101 quality assurance and quality control reporting standards.

Mega Silver holds interests in the promising Spidermann, Fisher and Eagle claims in the historic Keno Hill silver camp in Keno Hill, Yukon Territory. Mega Silver has identified several under-explored vein structures on its claims which form a continuous block immediately south of the historic Hector Calumet mine. Hector Calumet, the largest single producer in the Keno Hill camp, produced 96 million

ounces of silver at a grade of 34 ounces per tonne.

Completion of the transaction is subject to a number of conditions, including, but not limited to, a fifteen day due diligence period, the receipt of all required approvals, including approval of the TSX Venture Exchange and Skybridge shareholders at a meeting to be held as soon as practicable during the second quarter of 2009.

Reverse takeover not proceeding

Cierra Pacific Ventures Ltd. announces that its proposed reverse takeover transaction with Alange, Corp., as announced on December 5, 2008, will not be proceeding and it has terminated the November 30, 2008 Acquisition Agreement with Alange, Corp. Messrs. Miguel de la Campa, Luis E Giusti, Serafino Iacono, Robert Metcalfe, Luis M. Morelli and Horacio Santos, all of whom were elected as directors of the company at the Annual Meeting held on November 10, 2008 in anticipation of closing of the reverse takeover transaction, have resigned from the Board of Directors of the company and Jeff Durno and Julie Rennie have been appointed as directors. Peter Leitch has been appointed CFO and Corporate Secretary of the company.

The company's shares resumed trading on the NEX board of the TSX Venture Exchange on February 23, 2009. **M**

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NORTHWEST TERRITORIES

Diamond industry principal economic driver in the territories

A new study by Impact Economics indicates that the Canadian diamond industry has been the principal economic driver within the territorial economy during the past decade. The report, released March 2, 2009 by the Mining Association of Canada and the Northwest Territories and Nunavut Chamber of Mines, highlights the contributions of the Canadian diamond mining industry to the economy of the Northwest Territories between 1997 and 2007 and provides a critical analysis of the effects of the industry on the economic and social performance of the territory.

According to the study, since diamonds were discovered in 1991 the overall impacts to the NWT economy have been dramatic, with the territorial Gross Domestic Product tripling from \$1.5 billion in 1991 to \$4.5 billion in 2007. During the same time frame the NWT unemployment rate has fallen from 13.7 percent to 5.4 percent.

"The study validates that the diamond industry is the primary economic driver in the NWT, effectively raising gross domestic product, employment and personal income levels across the territory," noted Mike Vaydik, General Manager, Northwest Territories and Nunavut

Chamber of Mines. "The size and quality of the territory's labour force has expanded dramatically as a result of increased business opportunities, and enhanced skill set and capacity."

Northern employment levels for each of the mines have grown well beyond original expectations. The study notes direct employment of NWT residents, has amounted to more than 11,800 person-years from 1997 to 2007. Of that amount, 49 percent represent northern First Nations, Inuit and Métis workers.

A copy of the study is available on MAC's website at www.mining.ca.

Production slowdown announced at Snap Lake Mine

Focused on running a sustainable business in 2009 and long term success for its new Canadian diamond operations, De Beers Canada announced an organizational restructuring at its Snap Lake Mine in the Northwest Territories in February 2009. This decision aligns staffing and production levels to match the forecast demand for rough diamond sales impacted by the global economic crisis.

The Snap Lake mining operation has been downsized, directly impacts 128 De Beers Canada employees who received notice of job loss. A small number of contractors at the mine were also provided

with notice that their contracts would be indefinitely suspended or their scope of work significantly reduced.

This impacts another 90 contract employees with job loss. Some of the positions filled by contractors are being absorbed by De Beers' employees in the newly restructured organization.

"This is a very difficult but necessary business decision as we respond to the changing client demand for diamonds in the short-term," said De Beers Canada President and CEO, Jim Gowans. "Our mines have accomplished a tremendous amount in their first year of operation and we must continue to overcome the economic challenges of today to position ourselves for a strong and long-term future in Canada."

In the last quarter of 2008, De Beers Canada undertook a number of initiatives to ensure the company continued production in the face of the difficult economic climate affecting all industries. These measures included reducing production at both Canadian mines, reducing or deferring capital expenditure and announcing temporary shut downs in both mines for 2009.

NUNAVUT

Peregrine announces \$9.2 Million, 2009 diamond exploration program

Eric Friedland, Chief Executive Officer and Brooke Clements, President of Peregrine Diamonds Ltd. announced in February 2009 that a \$9.2 Million diamond exploration program has been approved for the 9,800 square kilometre Chidliak property.

The Chidliak boundary is located only 60 kilometres from Iqaluit, capital of Nunavut. Multiple access points to tide-water that connects to the Atlantic Ocean are present within the property. Fuel, other consumables, construction materials and equipment were purchased and shipped to Iqaluit in 2008 in preparation for the 2009 exploration program. As a result, mobilization to Chidliak is scheduled to begin in April 2009, two months ahead of previous program.

Three diamondiferous kimberlites, designated CH-1, CH-2, and CH-3, were discovered at surface by Peregrine

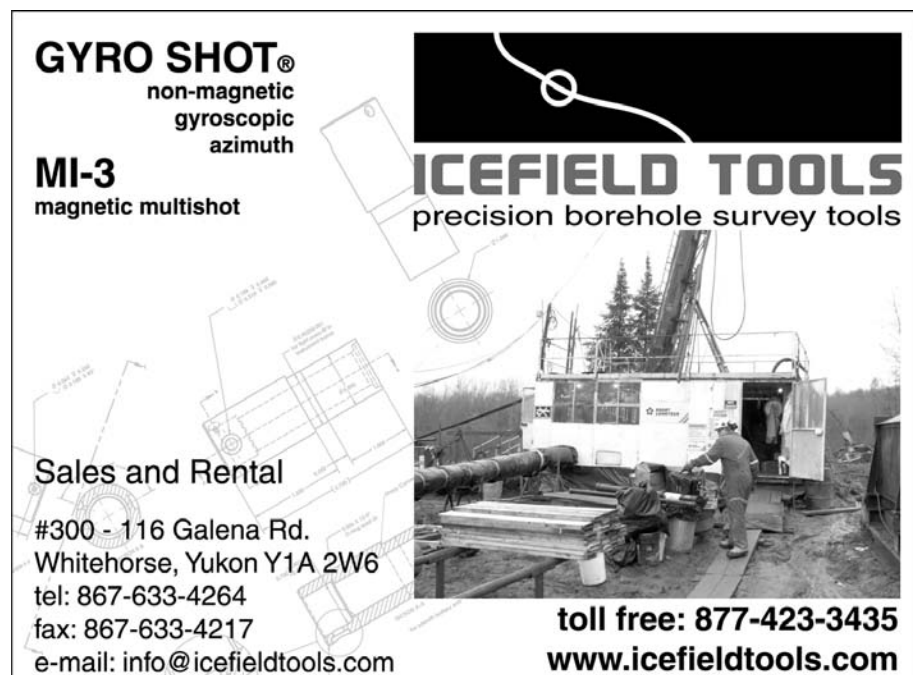
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at Chidliak in 2008. On November 18, 2008, the company announced that a 2.28 tonne sample collected from CH-1 returned a diamond content of 1.56 carats per tonne for diamonds larger than a 0.85 mm sieve size, and that a 2.01 carat, gem quality, octahedral diamond was recovered from the sample. Based on its geophysical signature, the estimated surface expression of CH-1 is six hectares. Approximately 170 kimberlite-type geophysical anomalies have been identified from an airborne geophysical survey completed in 2008 over less than 15 percent of the Property. Many of the geophysical anomalies are associated with kimberlite indicator mineral trains. Following are the key components of the 2009 exploration program:

- **Drilling.** High priority kimberlite-type geophysical targets will be drill tested and approximately 500 metres of core drilling is planned for each new kimberlite discovery. The CH-1 kimberlite will be evaluated by core drilling and consideration will be given to drilling the CH-2 and CH-3 kimberlites this season.
- **Mini-bulk sample.** A mini-bulk sample of approximately 50 tonnes will be collected by trenching from the CH-1 kimberlite, shipped to an appropriate Canadian laboratory, and processed to recover commercial-sized diamonds. The sample will be collected using a Caterpillar(r) Skid Steer.
- **Heavy mineral sampling.** Approximately 1,200 till samples will be collected and processed to extract KIMs. The data will be used to prioritize exploration activities in 2010 including future drill targets.
- **Ground geophysics.** Ground magnetic and/or ground electromagnetic surveys will be completed on approximately 20 geophysical anomalies.
- **Ground checking of anomalies.** Over 100 geophysical anomalies will be evaluated on the ground by prospecting and geochemical sampling.
- **Camp construction.** A second exploration camp capable of supporting 25 people will be constructed.
- **Environmental baseline studies.** Baseline environmental and archaeological data will be collected and future

access and infrastructure needs will be assessed.

More information can be found at www.pdiam.com.

YUKON

Modernized Mineral Claims Administration to be implemented

Changes to Yukon's Mineral Claims administration that streamline and modernize how mining claims are administered will come into effect April 1, 2009.

"The Government of Yukon has acted to modernize and increase the competitiveness of the legislative framework for hard rock mining in Yukon," Energy, Mines & Resources Minister Brad Cathers said. "These changes directly address some of the administrative and financial barriers to exploration and mine development." Seven specific sections of claim administration within the Quartz Mining Act have been changed to better facilitate the day-to-day administration of Yukon's mineral industry. Changes include:

- New minimum claim post size (1.5" x 1.5").
- The time limit to record mineral claims streamlined to reflect advances in communication and transportation.
- The number of copies of applications for mineral claims, lease renewals and any transfers of title required has been reduced.
- Claim tags will now be available prior to actual staking in the field, reducing the number of trips to the site to properly record a claim.
- Allowance for larger claim groupings for application of assessment work within a year.

"The amended claims provisions reduce administrative costs, and improve Yukon's competitiveness for attracting mining, which is especially important in the current and world economic circumstances," Cathers added.

For more information on mining in Yukon, and detailed information outlining the changes to the mineral claims administration, visit www.yukonmining.com. **M**

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British Columbia

2008 a good year for mineral exploration in British Columbia

Mineral exploration activity in the province reached \$367 million in 2008, with 98 projects spending in excess of \$1 million. This is the second-highest total for exploration spending ever and just off 2007's record-setting pace.

Last year, 26 new mine development proposals were in the works for 14 metal mines, seven coal mines, three industrial mineral mines and two large aggregate operations. Exploration drilling, another strong indicator of activity and mine development potential, remained strong at 1,050,000 metres.

B.C.'s forecast of solid mineral production for 2008 is \$5.7 billion, up one per cent from \$5.6 billion in 2007. There were nine coal, 10 metal and 35 major industrial minerals quarries and mines in operation during 2008. These figures are generated annually by the province's regional geologists who visit many of the exploration sites and survey the industry for additional information.

Complete figures can be found on the ministry's website.

Oil and gas companies encouraged to apply to Infrastructure Royalty Credit Program

The province is encouraging infrastructure development with a request for applications to oil and gas companies operating in British Columbia to participate in the 2009 Infrastructure Royalty Credit Program.

The program, first offered in 2004, continues to be aimed at increasing competitiveness and stimulating activity in B.C.'s oil and gas industry by facilitating access to new and underdeveloped areas of British Columbia, providing all-season access to oil and gas resources and generating incremental revenues to the Province.

Since 2004, B.C.'s Infrastructure Royalty Credit Program has allocated over \$316 million in infrastructure royalty credits to oil and gas companies, resulting in 72 new road-based projects and 53 new pipeline projects. This represents new total capital investment in B.C. of over \$632 million. The Province gets a return on investment of 2.5 for every

dollar invested—revenue that would not have been collected otherwise. The program is designed to reflect the competitive challenges of enabling year-round activity and providing infrastructure that enables oil and gas activity that would otherwise not take place.

The closing date and time for acceptance of applications is April 30, 2009 at 2 p.m. The request for applications information can be found on the ministry's website at www.empr.gov.bc.ca/OG/oilandgas/royalties/infdevcredit/Pages/default.aspx.

Gas land sales generates \$17.6 Million

The February 25, 2009 oil and gas land rights sale generated \$17.6 million in bonus bids, bringing the fiscal year total to over \$2.409 billion. Ninety-eight parcels covering 32,639 hectares in B.C. were offered, and bids were accepted on 89 parcels covering 29,171 hectares for an average price of \$603 per hectare.

The key parcels in the sale included:

- Two drilling licences, with bids of approximately \$750 and \$860 per hectare for a total of over \$953,000, located within the Noel gas field approximately 30 km northeast of Tumbler Ridge.
- Six lease bids of between \$3,000 and \$5,100 per hectare for a total of over \$6.5 million located west of the Beg gas field, approximately 115 km north of Hudson's Hope.

Drilling licences provide the exclusive right to explore for petroleum and natural gas by drilling wells; they are acquired by the successful bidder at the Crown sale; primary terms of three, four or five years depending on location.

The final sale for fiscal 2008-2009 is scheduled for March 25, 2009 and will offer 37 parcels covering 14,666 hectares. Complete results of the sale are posted on the website of the Ministry of Energy, Mines and Petroleum Resources www.em.gov.bc.ca/Subwebs/landsale/results/default.htm.

New mineral sites discovered

The Ministry of Energy, Mines and Petroleum Resources discovered two mineralized areas of the province that may attract new mineral exploration and

encourage further investments in the mining sector. The finds were discovered by the ministry's Geological Survey Branch during the course of their geological mapping.

Both the Murphy Lake region (50 km east of Williams Lake) and Chilanko River area (about 200 km west of Williams Lake, in the Anahim Lake area) have been under-explored for minerals. Located in central B.C., this area has been largely ignored by explorationists as it was thought that mineral deposits would be covered by young volcanic rocks and glacial clay, sand or gravel.

At Harrison Creek, near Murphy Lake, ministry geologists found significant copper, silver and gold values that warrant further exploration. The area was previously thought to be devoid of mineralization.

Near the Chilanko River, the Geological Survey team discovered three sites with copper mineralization that were confirmed by laboratory analyses of hand samples. These discoveries have mineralization similar to that at the Highland Valley copper mine. Like the Murphy Lake-area discovery, further prospecting and exploration in this area are needed to determine their full potential.

Both sites are available for tenure acquisition as of January 21, 2009. **M**

Small decline in rank draws attention

According to the Mining Association of BC, the province's small decline in this year's ranking in the Fraser Institute Report draws attention to the need to address inefficiencies in the regulatory process and the uncertain relationship between the government and First Nations as an obstacle to investment and growth.

Pierre Gratton, President and CEO of the Mining Association of BC said, "BC has improved its ranking significantly over the past number of years, but this year's report suggests more work is required. It will be important to build on the efforts already being made by government to support the mining industry and to tackle difficult policy issues collaboratively in order to improve BC's overall score next year."

Alberta

Province announces three-point incentive program for energy sector

The Government of Alberta announced in March 2009 a new three-point incentive program designed to help keep Albertans working in the province's energy sector during the current global economic slowdown.

"The oil and gas industry remains the lifeblood of Alberta's economy and communities throughout the province," said Premier Ed Stelmach. "We cannot directly influence the global economic climate. However, we can introduce measures to encourage new investment and help keep Albertans at work. This will benefit families and local businesses, while generating provincial revenues we can invest in programs that are important to Albertans."

The highlights of the province's three-point plan include the following.

- A drilling royalty credit for new conventional oil and natural gas wells. This one-year program will provide a \$200-per-metre-drilled royalty credit to companies on a sliding scale based on their production levels from last year.
- A new well incentive program, which offers a maximum five-percent royalty rate for the first year of production from new oil or gas wells. This one-year program is intended to help free up cash flow, and in turn, help provide access to the capital necessary for reinvestment by Alberta's oil and gas industry.
- To encourage the clean-up of inactive oil and gas wells, the province will invest \$30 million in a fund committed to abandoning and reclaiming old well sites. This will reduce the environmental footprint of the energy sector by returning well sites to their former states, while also helping to keep industry service crews at work.

The introduction of the package follows consultation with representatives from the energy industry and the financial community about the current challenges facing investment and oil and gas

activity in Alberta. The province will monitor the impact of the incentive program, and at the end of the year, assess whether it is necessary or appropriate for it to be continued.

Poll suggests oilsands ok with most

The Canadian Press reports that most Canadians outside Quebec have made their peace with Alberta's oilsands, new poll numbers suggest. Fifty-seven percent of respondents in The Canadian Press Harris-Decima survey said there are more benefits than drawbacks to the oilsands, while 35 percent reported the reverse. A majority of those surveyed in every province supported the benefits, with Alberta leading at 70 percent.

In Quebec, slightly less than half of respondents said there were more drawbacks compared with 39 percent who said there were more benefits. The poll surveyed 1,000 Canadians by phone in early March and has a 3.1 percent margin of error 19 times out of 20.

Softrock Minerals Ltd. is granted permits

Calgary-based Softrock Minerals Ltd. has applied for and been granted 100-percent interest in three Alberta government metallic and industrial minerals permits in Northern Alberta. The permits, totalling 26,880 hectares, were taken for potash possibilities following the company's sub-surface geological mapping which indicated that the Lower Elk Point basin in Saskatchewan, containing all of Saskatchewan's potash mines, both solution and underground extraction, could be extended along a trend northwestward into Northern Alberta.

The three permits are separate. One lying 40 km north of Grande Prairie, another 50 km northeast of Peace River town, and the third, 250 km west of Fort McMurray. The geological formation containing the potash beds existing in the Elk Point basin of Saskatchewan appear at the same depth in the area of Softrock's Alberta

permits as evidenced by a number of non-producing oil tests in the area that did not core the prospective potash zone.

The company plans geophysical work and possible core holes as normal oil well drilling rarely shows potash or salt in samples because of its solubility.

ERCB and Alberta Environment call for input on thermal in situ oil sands water use

The Energy Resources Conservation Board (ERCB) and Alberta Environment are calling for feedback from stakeholders on a draft directive, which proposes new requirements for the measurement, reporting, and use of water in thermal in situ oil sands operations that will save an estimated 220.5 million barrels of fresh water over the next 10 years.

When implemented, *Draft Directive 2009-XX: Requirements for Water Measurement, Reporting, and Use for Thermal In Situ Oil Sands Schemes* will regulate thermal in situ oil sands operations in all oil sands areas. The proposed directive will require in situ operators to limit the use of fresh and brackish water resources and maximize produced water recycling, improve the measurement and reporting of all major water streams, and minimize the disposal of water to improve water and energy efficiency and reduce the risk of contamination to water resources.

This draft directive represents one step towards achieving an overall provincial target of a 30 per cent improvement in water efficiency and productivity by 2015 (from a 2005 baseline), as set out in *Water for Life: Alberta's Strategy for Sustainability*. The *Water for Life* strategy includes the development of water conservation and productivity plans and the establishment of targets for improved efficiency for all water use sectors.

To view the Draft Directive please visit www.ercb.ca or www.environment.alberta.ca.

M

"We cannot directly influence the global economic climate. However, we can introduce measures to encourage new investment and help keep Albertans at work. This will benefit families and local businesses, while generating provincial revenues we can invest in programs that are important to Albertans."



Saskatchewan

Golden Band Resources receives a positive pre-feasibility study on La Ronge Gold Project

Golden Band Resources Inc. announced in early March 2009 that an independent pre-feasibility study has been completed on the company's La Ronge Gold Project in northern Saskatchewan by P&E Mining Consultants Inc. P&E has concluded that the operating plan for the four-year project described in the study is economically viable based on the open pit mining of the Komis and EP gold deposits, underground mining of the Bingo gold deposit, and using the company's existing Jolu mill.

Rodney Orr, Golden Band's President and CEO stated, "Golden Band is very pleased with the robust results of our pre-feasibility study. With this, we are continuing to move aggressively towards the delivery of our business plan to achieve gold production in 2009. Our environmental permitting process is well advanced and we expect to commence construction once our permits are in place in late spring—all aimed for an expected start of gold production in late 2009."

Cameco Corporation completes offering

Cameco Corporation announced in March 2009 that it has completed its previously announced bought deal public offering of common shares of Cameco at a price of \$17.25 per common share. The underwriters, led by BMO Capital Markets and RBC Capital Markets, elected to exercise their over-allotment option in full, resulting in a total of 26,666,400 common shares being issued today by Cameco for gross proceeds of \$459,995,400.

Cameco intends to use the net proceeds of the offering to strengthen its capital position and enhance its financial flexibility to allow it to take advantage of opportunities that may emerge from the current industry environment, and for general corporate purposes.

Cameco, with its head office in Saskatoon, is one of the world's largest uranium producers.

Saskatchewan mining success on display in Toronto

Saskatchewan's rich mineral resource opportunities will command attention this week in Toronto at the most important international event in mineral exploration. Energy and Resources Minister Bill Boyd promoted the province's mining industry at the Prospectors and Developers Association of Canada (PDAC) International Convention, March 1-4. Saskatchewan had a major presence at PDAC's trade show and investors' exchange, which in conjunction with the convention, was expected to attract more than 20,000 delegates from around the world.

"PDAC bills itself as 'where the world's mineral industry meets' and clearly this global marketplace is where a leading mining jurisdiction like Saskatchewan needs to be," Boyd said. "We reinforced with companies and global investors that even with the new uncertainties in world financial markets, Saskatchewan continues to be a province of great opportunities for them in mineral exploration and development."

The province's mining industry is coming off a strong year of activity. While final mineral sales figures are still being tallied for 2008, they are expected to significantly exceed the

previous record of \$4.6 billion set in 2007. Mineral exploration expenditures will be in excess of \$360 million for 2008, setting another single-year record.

Mining is Saskatchewan's third largest industry after oil and gas and agriculture. It employs 25,000 people directly and indirectly, and contributes more than \$3 billion annually to the economy in wages, goods and services, taxes and fees.

Report says Saskatchewan to grow economically in 2009

According to a March 2009 report from the Conference Board of Canada, Saskatchewan will continue to lead the nation in economic growth in 2009, thanks in part to tax reductions and infrastructure investment by the provincial government.

In its Winter 2009 Outlook, the Conference Board estimates the Saskatchewan economy will grow by 1.6 percent in 2009, the highest percentage growth rate among the provinces and well ahead of the 0.5 percent decrease in GDP estimated for Canada.

"This report confirms our decision to invest in the Saskatchewan economy through our personal income tax cuts, and the booster shot for infrastructure projects was the right one," Enterprise and Innovation Minister Lyle Stewart said.

In the report, the Conference Board said, "massive income tax cuts, combined with a swift increase in infrastructure spending, will boost Saskatchewan's economy by 1.6 per cent in 2009." It goes on to say that, "the province will benefit from an enhanced infrastructure investment program" and that, "incomes will get a further boost from the province's \$300 million personal income tax cut, which will keep retail sales growing at a healthy pace."

Saskatchewan's expanding labour market and wage growth will also exceed national averages according to the report today. In 2009, employment is forecast to grow by 8,000 (1.6 percent)—the largest increase in the country. Every other province except Manitoba is forecast to lose jobs in 2009. **M**

Saskatchewan Mining Week

The Saskatchewan Mining Association's 2009 Annual Mining Week will be held May 24-30, 2009, with the official launch taking place in Regina on Monday, May 25. The week will culminate with the Annual Emergency Response/Mine Rescue Skills Competition on May 30th. The competition will be held in Regina at EVRAZ Place.

Full details and guidelines for the competition can be found at www.saskmining.ca.

Manitoba

Forestry, mining training designed to help workers through difficult times

The province is immediately committing \$1 million to a special training initiative that will help workers in northern communities adjust to the difficult economic times, announced February 17, 2009.

The forestry and mining sectors around the world, including Manitoba, have been experiencing severe market pressures associated with the global economic downturn as well as the U.S. housing market collapse and record low commodity prices. Both sectors have had to reduce production and lay off workers, causing serious distress for workers and their families and hurting local economies, the premier said.

At the same time, First Nations are expressing growing interest in training for employment and business opportunities associated with potential future mine developments. The province is committed to providing enhanced training supports to assist aboriginal and non-aboriginal workers and communities in transition.

The new Forestry and Mining Training and Workforce Retention Initiative will:

- Work with forestry and mining companies and their employees to implement customized training and workforce retention initiatives to help bridge periods of downtime specifically to:
 - Help retain existing workforce through up-skilling or re-skilling opportunities that match current and future job demands; and
 - Support apprentices to complete their apprenticeship programs.
- Work with Aboriginal communities to train greater numbers of people for the employment and business opportunities presented by future mine developments. This will improve employment readiness, ensuring that Aboriginal communities are better positioned to benefit from local resource developments.

Crowflight Minerals Inc. makes first shipment

Crowflight Minerals Inc. announced in February 2009 that it shipped its first nickel concentrate from the Bucko Lake Nickel Mine (Bucko) located near Wabowden, Manitoba. The first shipment

of nickel concentrate from Bucko, which occurred on February 12, 2009, consisted of 98 tonnes of concentrate containing 11.5 tonnes of nickel. The commencement of nickel concentrate shipments marks a major milestone at the Bucko Mine and the Company will now focus on increasing production to reach full commercial production early in the second quarter of 2009.

Mike Hoffman, Crowflight's President and CEO, commented, "we are very pleased that we were immediately able to produce a marketable-grade concentrate from the first material that we processed at Bucko. The first shipment of nickel concentrate officially marks Crowflight's transition to a nickel producer and we are very proud of our team for reaching this milestone. This achievement is particularly satisfying since our company has managed to persevere during such difficult economic times."

As part of its offtake agreement with Xstrata, all nickel concentrates produced at Bucko are being shipped to Xstrata's smelter in Sudbury, Ontario. Crowflight's production targets for 2009 at Bucko are 9.1 million pounds of payable nickel at an average operating cash cost of US\$3.61 per pound nickel (using an exchange rate of 1.22 Canadian to 1.0 US dollar, beginning after the mine is in commercial production) from 362,000 tonnes at 1.65 percent nickel with a 77 percent recovery. Crowflight currently estimates ongoing capital requirements for 2009 to be approximately US\$10 million.

Government to provide \$1.4 Million to MEAP program

The provincial government will provide \$1.4 million from the Mineral Exploration Assistance Program (MEAP) to support 31 new mineral exploration projects, Science, Technology, Energy and Mines Minister Jim Rondeau announced in January 2009.

"It is important to find new mines and increase mineral resources near existing mining infrastructure," said Rondeau. "The economies of northern communities and indeed the whole province depend on the sustainability of a healthy mining sector. That's what MEAP is all about."

The projects are expected to generate

\$26 million in additional exploration expenditures. For every MEAP dollar spent to support exploration, mining companies spend about eight to nine dollars exploring in Manitoba. Projects are being undertaken by 20 companies, three of which have been attracted in part by MEAP's financial assistance to explore in Manitoba for the first time. MEAP was recently renewed for an additional three years starting with the April 2008 offering and will offer \$2.5 million of assistance annually through two offerings per year.

MEAP provides assistance of up to 25 percent of approved eligible expenses to a maximum of \$300,000. There are higher levels of assistance—up to 35 per cent to a maximum of \$400,000—to encourage exploration in under-explored frontier regions and to help sustain mining communities such as Snow Lake, Lynn Lake and Leaf Rapids. M

Some facts about the mining industry in Manitoba

- Production in 2007 was \$2.4 billion dollars including petroleum and non metallic minerals the total was CDN\$3 billion.
- Mining accounts for approximately four percent of Manitoba's Gross Domestic Product.
- Mining Taxes and royalties paid by the minerals industry to the Province of Manitoba for 2007 was \$135 million.
- Mining products represent approximately 12.5 percent of Manitoba's total exports.
- In Manitoba, there are 14,000 persons who are employed either directly or indirectly in mining industry.
- Of all Manitoba industry sectors, the mining industry pays the highest average industrial wage.
- The mining industry is one of Manitoba's safest industries. The time loss injury rate for the mining industry is less than that of the manufacturing, trucking, construction, agriculture and healthcare sectors.

Source: The Mining Association of Manitoba, www.mines.ca



Ontario

Mining manufacturing tool potentially saves time and money

A mining manufacturing firm in Sudbury is testing the effectiveness of a new water retrieval drilling system. Developed by Dallys Industrial Service Ltd., this innovative drilling system can potentially save considerable time and costs in core drilling. It features a special assembly that uses water to pump out drill core tubes core more efficiently.

Already proven under simulated conditions, this technology requires final field testing and the Northern Ontario Heritage Fund Corporation (NOHFC) is providing \$29,800 to complete the field tests.

This funding was provided through the Emerging Technology Program, which is designed to encourage both the private and public sectors to develop exciting new technologies that will contribute to future northern prosperity.

More than 400 mining equipment and services companies in Northern Ontario support every stage of mining from exploration on through to mine closure and rehabilitation. More money is spent within a 500-kilometre radius of Greater Sudbury on underground hard rock mining supplies than anywhere else in Canada and the United States.

Rubicon drills 2.5 m of 173.7 g/t Au at Phoenix

Rubicon Minerals Corp. provided new results from continuing drilling at its 100 percent controlled Phoenix gold project, located in the heart of the prolific Red Lake gold district of Ontario. The company is conducting drilling around the F2 gold zone from which significant high-grade and bonanza-grade gold intercepts have been reported laterally over 580 metres and to depths of up to 1,101 metres below surface. Full details are available on their website, www.rubicon-minerals.com.

"Two thousand and nine drilling, which is part of a planned 120,000-foot surface and underground drill program for this year, is off to a great start. We continue to extend the gold system and to observe a significant visible gold component. The discovery of a shallow extension

to F2 zone means that we can readily drill these target areas, all of which are within the shadow of our head frame and other infrastructure," stated David Adamson, President and Chief Executive Officer.

New technology to make mining safer

A Sudbury-area company has designed new safety technology that could benefit mining companies around the world. A leader in mining equipment design and production, Accutron Instruments Inc. has developed a new ultrasonic airflow metering system to continuously measure the flow of air in industrial applications where proper ventilation is critical. This system has been specifically designed for use by the mining industry. It will mainly be exported to global markets, demonstrating Ontario's diverse businesses.

Mining manufacturing firm reduces dependence on fossil fuels

A mining manufacturing firm is reducing its dependence on fossil fuels by installing solar collectors on its new facility in Greater Sudbury. The Northern Ontario Heritage Fund Corporation (NOHFC) provided \$56,775 to B & D Manufacturing to install an innovative system of solar collectors on its exterior walls. The new technology will help lower the company's energy costs by reducing their dependence on natural gas.

Funding is provided through the Northern Energy Program, which is designed to help northern organizations and businesses capitalize on energy opportunities, pursue clean energy alternatives and reduce their energy demand.

The solar collectors will annually produce 955 gigajoules of heat and will reduce annual natural gas consumption by 31,825 cubic metres and result in annual cost savings of more than \$11,000.

Mining sector safety performance improves in 2008

Ontario's mining industry improved its safety performance in 2008 from 2007, according to provisional numbers, which have been released by the Mines and Aggregates Safety and Health Association (MASHA). Mining's safety record outpaces sectors such as

manufacturing, services, forestry, construction, health care, municipal workers, agriculture and transportation.

The mining industry's lost time injury rate for 2008 was 0.6 per 200,000 hours worked, which is a 25 percent improvement compared with the lost time injury rate of 0.8 per 200,000 for 2007. While this moves the sector closer to zero, there was some slippage in another safety benchmark. The total medical injury frequency rose to 7.5 per 200,000 hours worked in 2008, compared with 7.1 per 200,000 hours worked in 2007—a 6 percent increase. However, the severity of those incidents showed a marked improvement of 60 percent. In 2008, the severity of injuries was reduced to 54 days from 136 days in 2007.

Ontario mining's sector has been steadily becoming safer for decades. The 2008 lost time injury rate of 0.6 per 200,000 hours is an 87 percent improvement compared with the lost time injury rate of 4.7 per 200,000 hours in 1985. Credit for these stronger safety performances reside on the shoulders of every individual who works in the industry. The statistics are moving in the right direction because of the personal diligence on the safety front and concern for oneself and his and her colleagues.

There are a number of initiatives and institutions supporting these gains. Ontario Mining Association (OMA) initiatives, the Internal Responsibility System, inspections and programs from the Ministry of Labour, regulatory changes and adjustments to Common Core skills training along with the role of the sectoral safety group MASHA and unions have played a strong role in these gains.

However, it is important to note that mining in Ontario invests in safety. The sector invests more than \$2,200 per employee annually in safety training. Mine workers in Ontario are trained better, both before they start working and throughout their careers than those employed in many other sectors of the economy. Overall, employees in the Ontario mining industry are safe, highly skilled, highly paid and highly productive. They all mesh together.

Source: Ontario Mining Industry

M

It's time to get your mine rehabilitation award contest entry ready

The May 15, 2009 deadline for entries in the second annual Tom Peters Memorial Reclamation Award is just around the corner. Entries should be submitted to Bryan Tisch, Natural Resources Canada 555 Booth Street, Ottawa, Ontario K1A 0G1 (btisch@nrcan.gc.ca).

This award was launched last year by the Ontario Mining Association in cooperation with the Canadian Land Reclamation Association (CLRA) and the Ministry of Northern Development and Mines (MNDM), with financial support from Vale Inco. The award is targeted on the reclamation of mines regulated by the MNDM and the Ontario Mining Act. For eligibility purposes, under the broad focus of mine reclamation, the general categories of exploration, mine development, progressive rehabilitation and mine closure can be represented.

Tom Peters represents the personification of excellence in mine rehabilitation practices. He was a founding member of the CLRA and he served as its president in 1981 and 1982. Through his work in the agriculture department at Vale Inco, he played a major role and provided leadership in the re-greening of the Sudbury area. Mr. Peters pioneered the use of agriculture practices in re-greening mine tailings.

Also, a \$5,000 scholarship in the winner's name will be awarded to a Masters, or PhD, level university student carrying out reclamation related research involving a mine site in Ontario. What are you waiting for? Get your entry ready and send it in before the May 15, 2009 deadline.

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Quebec

Rio Tinto starts ilmenite production in Madagascar

Rio Tinto's subsidiary, Rio Tinto Iron & Titanium, has begun production of ilmenite at its QMM mineral sands operation at Fort Dauphin in Madagascar. The development (owned 80 percent by Rio Tinto and 20 percent by the Madagascar government) began as an exploration project in the 1980s and is the second largest investment on the island.

Ilmenite from Madagascar will be shipped for processing at Rio Tinto's metallurgical complex in Sorel-Tracy, Quebec, which has upgraded its facilities to process this product. The total cost of the investment in Madagascar and Canada is US\$1.2 billion.

Madagascar ilmenite contains 60 percent titanium dioxide making it higher quality than most other global sources. It will be upgraded in Canada to produce a new 90 percent titanium dioxide chloride slag suitable for global titanium feedstock markets where it is used in the manufacture of pigments for the paint and plastics industries.

Rio Tinto chief executive Tom Albanese commented, "this first production is a major landmark in a project which, notwithstanding many complex challenges, has been described as a model for future projects in Africa and elsewhere in the developing world."

Harry Kenyon-Slaney, managing director of Rio Tinto Iron & Titanium, added, "the project will bring enormous benefits to the region. The floating dredge and wet plant, successfully launched in November, and the dry mill launched in December are producing concentrate at target quality. We are still in the early commissioning stage but expect to increase production over the coming months."

Knight Resources Ltd. reports nickel sulphide discoveries

Harvey Keats, Chief Executive Officer of Knight Resources Ltd., reported in early 2009 that drilling at the West Raglan Project in northern Quebec has discovered high-grade nickel sulphides from two new mineralized zones in the Greater Frontier Area. The results from the new 164 Zone and from a new occurrence of mineralization in the vicinity of the original Seahawk Zone were returned from the base of the "B" ultramafic unit that had not previously yielded significant mineralization and is indicative of the potential of this unit for future discoveries.

Drilling on the company's West Raglan Project in 2008 program was focused on targets in the Greater Frontier Area and 25 kilometres to the east on the Beverly Trend. Both areas are located within the 60 kilometre strike length of the Raglan Horizon that is present on the Knight-Anglo American Exploration (Canada) Ltd. Joint Venture property. A total of 28 drill holes were completed in 2008 for a total of 8313.5 metres of drilling. Further information and technical diagrams can be found on the company's website, www.knightresources.ca.

Québec Exploration 2008: another success!

Over 2,000 participants visited the Château Frontenac during Québec Exploration 2008. Organized by Ministère des Ressources naturelles et de la Faune and Association de l'exploration minière du Québec (AEMQ), this conference brought together mineral exploration representatives as well as many visitors from around the world.

As evidence of its growing success,

As evidence of its growing success, this year Québec Exploration welcomed participants from nine Canadian provinces as well as Germany, Australia, the United States, and France.

this year Québec Exploration welcomed participants from nine Canadian provinces as well as Germany, Australia, the United States, and France. The 2008 edition was an opportunity for the mineral exploration industry to meet with the Cree nation. Grand Chief Matthew Mukash of the Grand Council of the Crees, Chief Rodney Mark of the Wemindji nation, and Chief John Longchap of the Mistissini nation came to discuss the importance of this industry to the development of their communities, as well as their desire to play a greater role in mineral exploration and mining activities and the development of the territory's natural resources.

The effects of the financial crisis were at the heart of discussions held throughout the conference. "The current economic situation is affecting the industry, but that can't prevent us from working today to plan for tomorrow. In Québec, we have solid foundations upon which we can build when the time comes. We have a powerful raw material potential, recognized expertise, innovative policies that promote investment, and for a commitment to sustainable development. All these factors continue to make Québec one of the best places for exploration," stated Deputy Minister of Natural Resources and Wildlife Normand Bergeron during the gala.

Don't miss the next edition of Québec Exploration! This has become a major event in the mining sector. It will be back at the Château Frontenac in Québec City November 23 to 26, 2009.

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New Brunswick

Environmental impact assessment final guidelines issued for Geodex Minerals Ltd.

Final guidelines for a comprehensive environmental impact assessment (EIA) on a proposal by Geodex Minerals Ltd. to build and run an open pit molybdenum and tungsten mine were made available in March 2009.

Guidelines for the proposal were released for public review on December 18, 2008, with an opportunity for interested parties to provide feedback to the department until Jan. 30, 2009. Geodex Minerals Ltd. must now prepare terms of reference for the EIA study, and submit a copy to the minister for review. This is followed by the completion of an EIA report.

A review committee composed of technical experts from various provincial and federal agencies will undertake a technical analysis of the report, and prepare a general review statement. Once it is determined that the report adequately meets the final guidelines, copies of the general review statement and a summary of the EIA report prepared by the department will be made available to the public in advance of a required public meeting. All of this will take place before a government decision on the proposal.

Geodex Minerals Ltd. proposes to build the mine near Napadogan, York County. The project was registered on September 5, 2008.

The project would include the development, operation and ultimate reclamation of an open pit molybdenum and tungsten mine with an on-site ore-processing facility to produce mineral concentrates. The plant would produce 20,000 tonnes of ore per day, operate 343 days per year, and employ about 300.

Newfoundland

Province reaches improved development agreement with Vale Inco

The provincial government has negotiated improvements to the development agreement with Vale Inco for the construction of a commercial hydromet processing plant at Long Harbour. The improvements include more certainty that the project will proceed on this new schedule, enhanced local employment benefits and greater protection of the province's resource.

In exchange, government has agreed

to a later construction completion date of February 2013 due to the increased size and complexity of the project's construction. The Provincial Government and Vale Inco reached an agreement-in-principle Thursday on amending the original 2002 Development Agreement. Vale Inco was to have submitted an Implementation Plan for the hydromet facility on December 31, 2008, that met the terms and conditions of the original 2002 Development Agreement. The province extended that deadline to January 22, 2009, to have further discussion with the company when it became clear the completion date was not going to be met.

There is no change in the project beyond a new completion date of February 2013. The company will not be able to export any more than the 440,000 tonnes of nickel they were granted in the 2002 Development Agreement, despite the longer construction period. They will be required to maintain a maximum annual export average from Voisey's Bay over the next four years.

Province produces its billionth barrel

On the heels of celebrating its 10th year as an oil-producing province, Newfoundland and Labrador has achieved another significant milestone with the production on January 23, 2009, of its one billionth barrel of oil from its three offshore oil projects—Hibernia, Terra Nova and White Rose.

"Since first oil from Hibernia, we have established ourselves as a major player on the international energy scene," said the Honourable Danny Williams, Premier of Newfoundland and Labrador. "We have three world-class producing projects with a fourth in development, a skilled and knowledgeable workforce, the confidence of our oil industry partners and an estimated six billion barrels of oil and 60 trillion cubic feet of natural gas yet to be discovered. In addition to that, our energy corporation, Nalcor Energy, is now a full partner at the table in the Hebron and the White Rose extension projects. We are fully in control of our resources and our future."

Nova Scotia

Appalaches buys a gold producer in Nova Scotia

Ressources Appalaches signed an

agreement to acquire the gold producer Dufferin Resources, located in Nova Scotia, in December 2008. The cost of the transaction was established at \$4,000,000, payable in four instalments spread over three years. Once the final payment has been made, the acquisition will be free of all royalties. In the meantime, Appalaches must pay a royalty of 2 percent to Dufferin Resources. Any net income from production will be applied to these payments.

The mineralization at the Dufferin Mine consists of gold-bearing quartz veins of stratiform "Saddle Vein" type, folded en echelon and enclosed in sedimentary rocks. Thirteen veins have been identified by earlier drilling over a distance of 900 metres, down to a depth of 400 metres. The historical resources in the first two veins were estimated at 152,100 tonnes at a grade of 12.8 g/t Au (figures not compliant with NI 43-101). The historical resource estimates has been calculated in 1993 by D.R. Duncan & Ass. Ltd of Nova Scotia. Full details can be found at www.ressourcesappalaches.com.

Black Bull Resources Inc. announces strategic review

Black Bull Resources Incorporated announced in January 2009 that due to the current severe economic downturn which has hurt revenue generation the company will be investigating strategic options, including cessation of most or all operational activities until markets strengthen.

"Many companies, including Black Bull Resources Inc., have been adversely affected by the deep recession. Black Bull has not been exempt from the effects of this negative economic environment," said Rick Shearer, President and CEO. "As a result, we will be exploring several alternatives and we will be reporting these findings to the shareholders in the near future. In the meantime, the company remains open for business and continues to investigate opportunities for our quartz and kaolin resource."

Black Bull Resources Inc. is a Canadian mining company based in Nova Scotia that operates the White Rock Mine near Shelburne. The mine produces a unique, bright, white, high-purity quartz, marketed under the Scotia White™ trademark which is used in a range of value-added, specialty products.

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PREMIER GOLD MINES LTD (TSX:PG) is a Canadian-based mineral exploration company, focused on discovering and developing gold deposits within the Americas. Premier has a diverse portfolio of advanced-stage gold properties in Northwestern Ontario, Canada and one project in Mexico

Premier's Hardrock Project is located in the heart of the Beardmore-Geraldton Greenstone Belt, a highly prospective high-grade gold district that has seen relatively little exploration over the past several decades. The core area was recently acquired from Lac Properties Inc. ("Lac"), a wholly-owned subsidiary of Barrick Gold Corporation. This Property, considered to be the jewel of the district, is host to several past-producing mines which collectively produced approximately 3.0 Million ounces of gold to relatively shallow depths of approximately 2000 feet (600 metres) from 1938-1968. The mined zones remained wide open at depth at the time mining ceased. Premier, operator of the Project, holds the option to earn up to a 70% interest.

Premier's Rahill-Bonanza project is located on the main Red Lake "Mine Trend" within the Red Lake Mining District which is world renowned for high-grade gold. Goldcorp's Red Lake Gold Mines (RLGM) is considered to be one of the highest grade producing gold mines in the world, with tens of millions of ounces of gold produced. The Rahill-Bonanza Property, a joint venture with Red Lake Gold Mines (49% PG), is located immediately adjacent to Goldcorp's RLGM, and host to the Bonanza Gold Deposit, with a (NI 43-101 inferred mineral resource estimate in excess of 900,000 ounces of gold) and the past producing Wilmar Gold Mine that is host to a significant historic gold resource.

Premier is beginning to actively explore its 100% owned PQ North property, strategically located on the key iron formation that is host to Goldcorp's Musselwhite Gold Mine. Goldcorp has stated that gold mineralization has been extended north of the mine, with intersections on structures trending in close proximity to Premier's PQ North Property. These results include a drill intercept of 15.5 grams per tonne (gpt) gold across a true width of 4.5 metres (m) in hole 07-NSD-005. Goldcorp also indicated that gold mineralization within the mine horizon is estimated to have increased from 1.0 million to 2.0 million ounces per kilometre and has been intersected as far as 6 kilometres north along strike of the main mine facilities.

Premier has been exploring the Santa Teresa mineral concession, located in the historic and very high grade El Alamo District of Baja California Norte, Mexico. No diamond drilling had been conducted on the concession prior to the current program which has returned drill intercepts up to 479.3 grams per tonne gold across 2.0 metres.

Premier's strong belief that "A World of Opportunity" lies before it and aggressive exploration in proven districts continues to reward its shareholders.

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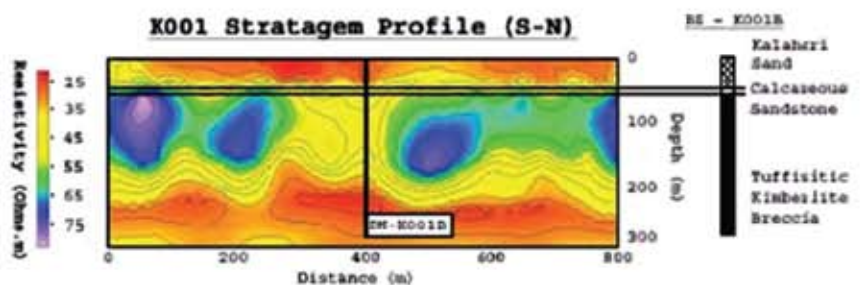
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ADVANCED MONITORING PRODUCTS

Motion Metrics International Corp. 20

AIR CHARTER SERVICES

Fast Air Ltd. 34

BORELIN FLEXIBLE DROP PIPE

Hose Solutions Inc. 22

CAREER PLACEMENT SERVICES

KMC Mining 9

COMMUNICATIONS

Danmax Communications 25

CONFERENCES AND TRADE SHOWS

Canadian Institute of Mining 21

DIAMOND DRILLING AND SURVEY

Reflex Instruments 31

ENGINEERING

Hatch 3

ENGINEERING AND ENVIRONMENTAL SERVICES

Knight Piesold Ltd. 23

ENVIRONMENTAL

Blue Heron Environmental 11

ENVIRONMENTAL CONSULTING

BZ Environmental 31

EXECUTIVE SEARCH FIRM

The Bedford Consulting Group Inc. 9

GEAR GRINDING SOLUTIONS

Havlik Gear IBC

GEOMEMBRANES

Firestone Building Products OBC

GEOPHYSICAL SURVEY

Geometrics Inc. 35, 37

GEOTECHNICAL AND DRILLING SERVICES

Tatry Geo-Environmental Drilling 31

HUMAN RESOURCES

Mining Industry HR Council 18

INDUCTION AND COLD BENDING

Triple D Bending 31

INDUSTRIAL ENGINEERED PIPE

Wolseley Engineered Pipe Manitoba 6

MANUFACTURER WEAR PARTS

Boundary Equipment Co. Ltd. 22

MINE WATER TREATMENT SOLUTIONS

John Meunier IFC

MINING COMMUNICATIONS

Mine Site Technologies 21

MINING COMPANY

Queenston Mining Inc. 31

MINING EQUIPMENT AND TOOLS

Mining Technologies International 14

MINING INTELLIGENCE AND TECHNOLOGY

Infomine Inc. 4

MINING RELAY SYSTEMS

I-Guard 11

MINING RESOURCE COMPANY

Premier Gold 36

MULTI-FUNCTION BUILDING SYSTEMS

Canam Group Inc. 5

MULTI-PURPOSE RAIL AND WHEELED VEHICLES

Brookville Equipment Corp. 38

OIL AND FLUID ANALYSIS TRAINING

Polaris Laboratories LLC 12

PIPE COATING AND INSULATING

Triple D Bending 31

POWERTRAIN PRODUCT SUPPORT

The Gear Centre 19

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Icefield Tools 24

PROTECTIVE PRODUCTS

Impacto 12

PUMPS

Technosub 16

RAISE CLIMBERS / RACK AND PINION HOISTS

Arkbro Industries 23

SITE COMMUNICATION AND MINING

Nuna Logistics 34

TRADE SHOWS AND EVENTS

DAC Marketing Ltd. 10

UNDERGROUND MINING

DUX Machinery 34

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