

**ORE**

# CREATING A **BIGGER PIE**

**SAFETY AT  
SASKATCHEWAN'S MINES**

**IT'S NOT A PRIORITY.  
IT'S THE PRIORITY.**

**TAKING ORDERS**

**THINK BIGGER.  
BUT BE READY TO COMPETE.**

**RETURN TO  
CLUFF LAKE**

**TRY TO SPOT WHERE  
THE MINE WAS.**



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***We help the world grow the food it needs.***





Cluff Lake, page 24

ORE is produced solely by the Saskatchewan Mining Association.

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**COVER PHOTO**

The pie as a symbol of wealth and prosperity: As PotashCorp CEO Bill Doyle explains in his interview (p. 12), success can be shared and can be limitless. This edition of ORE shows how Saskatchewan mining is building something bigger and better – for mining companies, for suppliers to the industry, for those looking for meaningful careers, and for everyone.

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## MINING: GREAT FOR SASKATCHEWAN BUSINESSES! A MESSAGE FROM SMA EXECUTIVE DIRECTOR – PAM SCHWANN

\$50 billion in Saskatchewan operations in the next two decades. This translates into unprecedented business opportunities for companies that supply the mining industry with goods and services.

Our feature story, *Taking Orders*, looks at the growth that is occurring in the diverse groups of businesses that provide services to the mining sector. Whether that business provides technical or professional services, manufactures anything from mining machines to widgets, or provides everyday office supplies, that growth is driving Saskatchewan's nation-leading economic growth and making Chamber officials smile.

Additional articles in this edition are *Return to Cluff Lake*, a story of the environmental reclamation of the Cluff Lake uranium minesite; *Rising to the Top*, reflecting the priority of safety at the mine operations; and the ongoing mine rescue training that is displayed at the annual Emergency Response Mine Rescue Competition. *Saskatchewan: Now Hiring*, contains updated information on labour market needs and some of the post-secondary programs responding to this need. The talents of artist and industrial mechanic Terry Zinkowski are seen everyday by employees at PotashCorp Lanigan and through our *eARTH* feature, we are now able to share them with

you. Our *Beyond the Bio* article features Mr. Mark Plamondon, an executive with Sherritt Coal, and *Tagging Along* follows a busy day in the life of Sean Junor, an HR specialist with Cameco. Other events of interest are featured, including the Rock'n the Classroom GeoVenture, and the Energy and Resources Open House.

I hope that you will find this edition of *ORE* as engaging and informative as our previous editions!

This edition of *ORE* takes a look at what a growing mining industry in Saskatchewan means – hence the analogy to “making a bigger pie” that you will see reflected in the interview with Mr. Bill Doyle, CEO of PotashCorp, and throughout many of the articles in this edition of *ORE*.

Mining companies are directly investing over



## A MESSAGE FROM SMA PRESIDENT – DAVID NEUBURGER

industry decide whether to proceed with major projects is strongly impacted by the regulatory environment, and our governments determine how well the regulatory system works.

A regulatory system built on high standards, coupled with a track record of strong industry performance, is what gives our friends and neighbours confidence in our industry – confidence that safety of our people will always be a top priority, that we will apply proper care of the environment and that we will return benefits to the local communities.

In Canada, various aspects of our regulatory system create a disincentive to new project investments while providing no additional protection of the environment. For example, the environmental

assessment process often takes many years before a project approval decision. It doesn't have to be that way. In Australia, for example, a single approval process and review time commitments lead to significantly shorter project approvals.

Our industry currently faces a very unique opportunity. Both our provincial and federal governments understand the importance of natural resource development to the economic well-being of the nation and are committed to improvements in our regulatory system to increase timeliness and certainty, while retaining environmental protection. Recently, the Honourable Joe Oliver, Canada's Minister of Natural Resources, has been very clear in communicating that major changes are needed

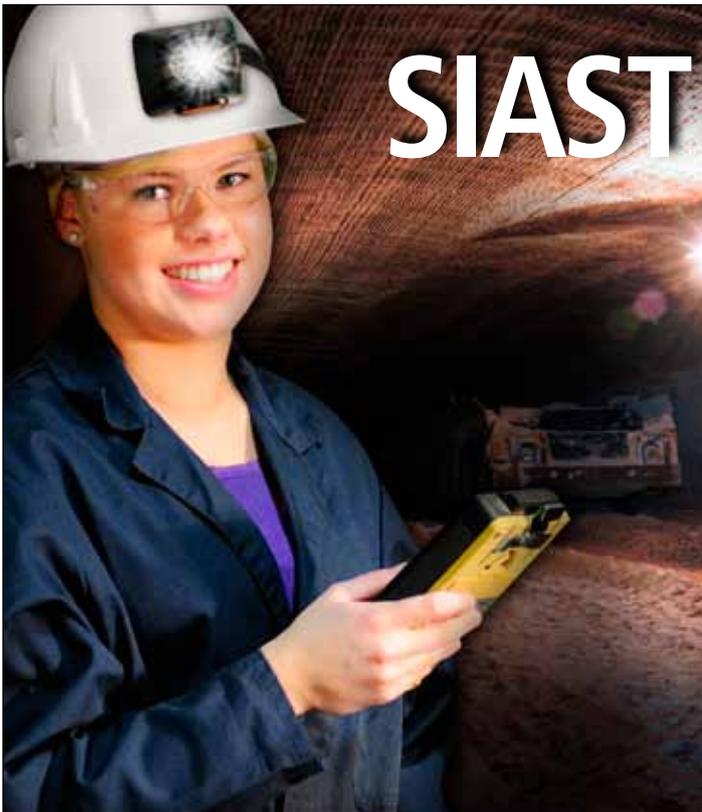
to make our regulatory processes more efficient and effective, eliminate duplication of processes and to implement fixed, enforceable timelines for environmental assessment reviews.

The Saskatchewan Mining Association and some member companies, along with other industry associations such as the Mining Association of Canada, have been extremely active in bringing the message of the need for regulatory reform to various levels of government and other stakeholders. It is extremely rewarding that our hard work and optimistic attitudes are making a difference and we are now seeing results as our governments are tackling this difficult issue.

Mining ... great for Saskatchewan ... and Canada!

The winds of change are having a dramatic impact on our industry and our province. Many of us regularly see the impact of mining's growth in Saskatchewan, through the massive investment in mine expansions, new mine investments, and all the jobs and business opportunities that this creates.

The investment climate in which the companies in our



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**ORE Samples**

Saskatchewan is the only Canadian jurisdiction to lead the world in production of two mineral commodities: potash and uranium.

Saskatchewan has the largest potash industry in the world, accounting for half of known global reserves.

The McArthur River mine, operated by Cameco, accounts for 15 per cent of the world's uranium production.

# GEOLOGICAL OPEN HOUSE

## OPENING DOORS TO EXPLORATION

For 42 years, the Saskatchewan Geological Open House has been a vital forum for the Saskatchewan Geological Survey and the province's mineral exploration community. The annual event presents and discusses the results of the Survey's minerals-related geoscience program from the previous summer. Geoscientists from the Geological Survey of Canada and various universities also present their research results. As well, Saskatchewan mining companies brief attendees on exploration and mining projects, with the hottest new exploration deposits often unveiled in the technical sessions.

"It is the premier annual minerals geoscience conference and tradeshow in Saskatchewan," says Gary Delaney, Chief Geologist with Saskatchewan Ministry of Energy and Resources. "It provides an important networking opportunity for the industry." It is also highly regarded by service providers to the mineral exploration industry as an opportunity to meet with current and prospective clients.

Delaney also notes increased interest in the event not only from within Saskatchewan, but also throughout Canada and beyond. "Twenty years ago, the event typically attracted less than 200 people,"

says Delaney. "We now have 600 to 700 delegates, including registrants from China, Japan and Korea."

With Saskatchewan's mineral exploration continuing at a rapid pace, and with new major players coming into the province, there is no doubt the Open House will continue to be a key forum to present, discuss and participate in our province's resource potential. The 2012 Open House will be held December 3-5. Those interested in attending can find out more at [www.er.gov.sk.ca/openhouse](http://www.er.gov.sk.ca/openhouse) ■

## SASKATCHEWAN RICH IN MINERALS

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# SMA CALENDAR OF EVENTS

## MAY

- **Saskatchewan Mining Week\***  
May 20 – 26
- **44th Annual Emergency Response/Mine Rescue Skills Competition\***  
May 26 (Regina)

## JULY

- **Pacific Northwest Region Conference – Mining session\*\***  
July 18 (Saskatoon)

## AUGUST

- **Rock’n the Classroom GeoVenture\***  
August 18 – 24

## OCTOBER

- **4th Edition of ORE\***  
The Official Publication of the Saskatchewan Mining Association

## ONGOING

- **Monthly Industrial Safety Supervisor Workshops\***

\*SMA hosted events

\*\*SMA affiliated events

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# TAKING



West Wind's new addition responds to resource sector growth.

# ORDERS

Saskatchewan's mining and exploration activity is placing huge demands on local suppliers. Can they rise to the challenge?

Ron Barsi points to the numbers to help tell the story. As Principal, Global Uranium Services at Golder Associates LTD. in Saskatoon, he's seen their office grow from a one-person office in 1980 to "a good solid team of 35" in 2000, to a target of about 140 employees in mid-2012. Among Golder's offices (there are 180 worldwide), Saskatoon is considered to be among the top three mining centres in Canada, along with Toronto (Mississauga) and Vancouver (Burnaby). Although the number of mining projects at the Saskatoon office has grown by just 17 per cent, it is the size of the projects that has made the difference: a growth of 270 per cent.

Over at the Saskatoon airport, West Wind Aviation's Hangar #3A, completed in 2009, features 10,000 square feet of new passenger lounge and corporate office space, along with an 18,000 square foot addition to Hangar #3. The expansions were driven by West Wind's commitment

to "provide service excellence to our resource sector customers, and to enhance working conditions for our people" according to Gord Gillespie, West Wind's president and CEO.

"We've never had the extent of scale and global interest in Saskatoon that we do now, and that certainly applies in the mining industry," says Kent Smith-Windsor, executive director of the Greater Saskatoon Chamber of Commerce. "Very few places in the world would have international interests from China, Russia, Japan, Korea, Germany, France and the United States all in one location in the mine play."

As *ORE* magazine has pointed out in previous issues, what's happening in Saskatoon is happening in centres throughout Saskatchewan. The \$43 billion prediction of investment in new mines and expansions in Saskatchewan reported in this magazine a year ago has now been revised to more than \$50 billion over

the next 20 years. In 2008, over 30,500 people in Saskatchewan were directly or indirectly employed by the mining industry, and that number has certainly been on the increase.

In northern Saskatchewan alone, in 2011 mine operations purchased \$916 million of goods – 67 per cent was from Saskatchewan companies, many of them in Saskatchewan's Top 100 List – with over \$360 million of that from northern businesses. Demand from suppliers has been the foundation of success for companies such as Kitsaki Development LP, Athabasca Basin DLP, Tron Power, Northern Resource Trucking, RobWel Industries and Mudjatik Thyssen.

Given the current and forecasted scale of opportunities for providing mining goods and services, will local companies be able to rise to the occasion? As Smith-Windsor points out, "Great opportunity is just that and only that – unless you have drive, energy and

## ORE Samples

Between 2008 – 2028 mining companies in Saskatchewan will invest over \$50B in projects.

Saskatchewan is the world's leading producer of potash (33 per cent) and the second leading producer of uranium (19 per cent).

Canadian mineral production in 2011 was \$50.3B.

Saskatchewan was Canada's second leading mineral producer in 2011, with value of sales of \$9.2B.

Potash was the MVP commodity by value in 2011, with a value of sales of \$8.0B; uranium was also one of the top 10 Canadian commodities, with a value of sales of \$1.1B.

Since 2004, there have been a dozen new uranium discoveries in Saskatchewan's Athabasca Basin.



Mining Supply Chain Forum

effort.” He commends the major mining companies in Saskatchewan for their commitment to local suppliers. However, “If local suppliers want to support world-class companies, then they themselves have to be world-class. Companies that aspire to goals such as lean processing and continuous learning will get there.”

“Getting there” doesn’t have to happen overnight. “Nobody needs to panic,” says Smith-Windsor. “Certainly, local suppliers want the work sooner and faster, but you want to be selective and think in terms of decades. With something like potash, these are extraordinarily long-term assets and projects. There is time for businesses to upsize and build their capability. It’s not like it’s a one-shot opportunity to get the contract today or it’s gone.”

But what about potential suppliers coming in from outside the province to fill the demand? Smith-Windsor believes there is no need to fear competition – and, in fact, having world-class competition in your marketplace is an opportunity to make your own company that much better. “You’ve got nothing to be ashamed of,” Smith-Windsor counsels. “We can play at a very high level. If we

commit ourselves to doing that, then we don’t have to worry about anybody.”

Ron Barsi can attest to that. Golder, which began as a geo-technical engineering company in Toronto in the 1960s, focused on providing the very best in services to Canadian mining companies. The globalization of Golder happened principally because, in Barsi’s words, “our Canadian companies expanded into other parts of the world, and took us with them.” Golder’s work for Saskatchewan’s uranium mining companies is internationally renowned. “Just the other day, I got a call from the US regarding the moratorium on the uranium industry and nuclear power. The person making the inquiry told us he was advised to contact our Saskatoon office because ‘we were the guys to talk to.’” Barsi serves as an advisor to the International Atomic Energy Agency, along with several other Saskatchewan professionals. “I treasure the fact a farm kid from the prairies had the opportunity to gain leading edge uranium experience in Saskatchewan with the result that we ended up in Vienna, advising the top nuclear and atomic energy regulator in the world.” He takes pride in Golder’s ability to attract a growing number

of other “Saskatchewan folk with a great work ethic”– the up-and-comers of a new generation of world-class professionals who are, in increasing numbers, choosing to stay in the province.

Attracting good people is a high priority at West Wind. While Gillespie claims that goal has proved “particularly challenging for employers,” he says the upside is, “the great opportunity for the talent that was forced to leave Saskatchewan in the past to now return to their roots. Those companies that excel at quickly attracting and retaining additional talent will certainly be the biggest benefactors.”

Development of local supplier capability and capacity has benefits and challenges on both sides. For the major companies, having a reliable service nearby can save hours and days of down time that otherwise would cost tens of thousands of dollars.

Recruitment of good people can be just as challenging for a mining company as it is for suppliers. Outsourcing of that talent is one solution.

Smith-Windsor says the key to creating win-win situations is to make the connections. “That’s one of the key roles of organizations



Mining Supply Chain Forum

like the Chamber and regional economic development authorities. We give our businesses the opportunity to understand what they will need to have to do." In that regard, they are also supported by the mining companies themselves, through presentations to business and community groups.

One of the best opportunities to "make the connections" is the annual Mining Supply Chain Forum, hosted by the Saskatchewan Mining Association and Enterprise Saskatchewan. Now in its fourth year, the event was designed to inform local suppliers of emerging and current opportunities forthcoming in the mining

sector. Pam Schwann, SMA executive director, is encouraged by what she sees at the Forum. "A local, strong mining supply sector helps ensure our member companies have reliable, timely and knowledgeable support that gives them a competitive advantage in the global markets. The Mining Supply Forum is the catalyst, or matchmaker, between our member companies that require services, and the companies that can, or are adapting to answer that call." The program includes updates on project operations, as well as information about the procurement process of the various mining companies.

"The Forum is a great opportunity for us as a First Nations organization to open doors and create potential partnerships within the mining industry," says Dennis Esperance, Potash Relations Manager

for the Saskatoon Tribal Council. Dennis attended for the first time last year, and was impressed by the level of participation and the quality of the presentations.

Be it at the Forum, or in the offices of companies throughout Saskatchewan, in the words of Pam Schwann, "When entrepreneurial talent meets sustainable commitment, you know good things are going to happen in our province – and they're happening now."

*For more information on the SMA Saskatchewan Mining Supply Chain Forum and other opportunities for suppliers, visit [www.saskmining.ca](http://www.saskmining.ca).* ■



# CREATING A **BIGGER**

Winston Churchill once said, "Attitude is a little thing that makes a big difference."

It's a quote PotashCorp President and CEO Bill Doyle thinks of often, especially with Saskatchewan's future top of mind.

Optimism, it seems, is the perspective of choice for Doyle. With the province turning a corner economically and socially, positive attitudes are easy to come by. But the recent success doesn't signal the end of hard work in Saskatchewan – to the CEO it's just the beginning.

# PIE

“WE LOVE TO COMPETE. IT CHALLENGES US TO BE BETTER – TO BE SMARTER, TO WORK HARDER, TO BE MORE EFFICIENT AND TO BETTER SERVE OUR CUSTOMERS AND OUR COMMUNITIES.”

**ORE:** You've said Saskatchewan's mindset has turned 180 degrees since you first joined PotashCorp in 1987. How has the province's attitude toward success changed?

**Doyle:** There was a mindset that you shouldn't rise above the crowd; that you shouldn't take a risk. Too many people in the province had a belief that if someone was getting ahead, they must be taking it from someone else.

It was a narrow view that you have to protect your share of the pie – or, spend a great deal of time talking about how to divide the pie equally. In reality, there's a better solution: bake a bigger pie.

This is what's now happening all around the province. Our economy is growing and people are recognizing that you can have a bigger slice if you're willing to work for it.

People understand that no one gets something for

nothing. There is no longer a sense of entitlement. You have to earn anything of value; and you need to value everything you earn.

**ORE:** Why do people respond to the prospect of getting a bigger slice of the pie?

**Doyle:** Because people are motivated by challenge, opportunity and reward.

PotashCorp has become a bigger, stronger, more competitive company since we were privatized by the province in 1989.

Our suppliers have new skills, services and products to share with other companies – here in Saskatchewan and around the world.

It is a model of how capitalism works. When you give people incentive and freedom, they do amazing things.

Almost every breakthrough in innovation – whether we're talking about technology

or healthcare or mining – comes from a place where people can prosper by moving things forward.

That's what we're seeing more of in Saskatchewan and it's an incredibly exciting direction for the province.

**ORE:** PotashCorp's \$5.8 billion worth of expansion projects remains underway in Saskatchewan. Did provincial government policies influence the company's decision to move forward with the project?

**Doyle:** When it became clear we needed to build new capacity, we reviewed all of our options.

Fortunately, the government of the day looked around the world and recognized that Saskatchewan's policies were preventing investment here. When the royalty structure was restructured to better incent investment in the province, it cleared the way for us to invest almost \$6 billion in Saskatchewan.



This is true of other companies as well. Look around our province – forecasts now suggest we could see \$50 billion invested in the Saskatchewan mining industry in the years ahead.

Companies like K+S, BHP, Rio Tinto, Vale – other miners around the world – are trying to gain a foothold in Saskatchewan. They are not here just because of Saskatchewan's resources. They are here because they recognize an environment that encourages growth.

**ORE:** Are you concerned about the new competition in PotashCorp's home province?

**Doyle:** You know what I say? Good. Bring it on. We love to compete. It challenges us to be better – to be smarter, to work harder, to be more efficient and to better serve our customers and our communities. That's how we'll stay strong as a company.

Competition is healthy at all levels. It raises the bar for our people and challenges them to find ways to make us a better company.

In return, we pay more to attract and keep the best talent. We take steps to ensure our people have the opportunities they need to build the careers they want – both here and around the world. Talented, hardworking people will see plenty of opportunities to advance and to make a better life for their families.

**ORE:** What does PotashCorp's success mean for Saskatchewan?

**Doyle:** As we grow, it's not just our employees who

benefit. We invest more in community organizations and charities. We spend more with our suppliers. The restaurants, the auto dealerships and the stores where our employees and our contractors shop all see the benefits.

And, of course, tax revenue increases – from our company, from the people we employ and from our suppliers. That puts money into our schools, hospitals and infrastructure to make this a better province.



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When you have companies like ours making these kinds of investments in the province, it becomes a virtuous cycle that promotes more growth and opportunities.

It is, in essence, the sharing of success. It's about building something bigger and better so that more people can benefit. That is happening around Saskatchewan today – and we have the potential to keep it going.

**ORE:** Is this 'New' Saskatchewan – one that's economically strong and creating opportunities

for citizens – the new normal for the province?

**Doyle:** We should never assume that a booming economy is certain to last. We need to maintain the spirit of hard work and the "can do" attitude that our province and our people have always been known for.

The minute you think you've arrived – that you can rest on your laurels – you are headed for a world of trouble. You have to retain your edge and be humble. That will help us remain efficient and capable of competing with any country in the world.

**ORE:** Winston Churchill's quote about attitude is a favourite of yours. How does it tie into Saskatchewan's potential for continuing success?

**Doyle:** The future for this province is almost unlimited, but it will partly be determined by our attitude. We need to continue to encourage development and to see the potential of this province realized on a global scale. The world needs what Saskatchewan has, not only our resources, but our new found enthusiasm coupled with our incredibly strong work ethic.

Others around Canada and around the world are discovering what we've known for a long time, that Saskatchewan can rival any place in the world. We are only beginning to tap the potential that for years existed just below the surface – not only geologically, but in the spirit and attitude of the people. ■

# "IT'S ABOUT BUILDING SOMETHING BIGGER AND BETTER SO THAT MORE PEOPLE CAN BENEFIT. THAT IS HAPPENING IN SASKATCHEWAN TODAY"



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## ORE Samples

The mining industry is one of the safest industries in the province - WCB data demonstrate that the Saskatchewan mining industry has a better safety record than the average Saskatchewan workplace, and has a lower injury rate than workers in government or the health care sector.

The mines employ over 130 safety professionals and have upwards of 1000 trained emergency response personnel.



Agrium was the overall underground winner of the 43<sup>rd</sup> Annual Emergency Response Mine Rescue Skills Competition.

The annual event also serves to bring rescue personnel together, to compare notes, share best practices – and to bond with each other. “The mining community is close-knit,” says Baumgartner. “For example, in a real emergency, Esterhazy and Rocanville are always ready to back each other up.” The competition gives participants the opportunity to meet with the very people they could be working with in a real emergency. In fact, even within each corporate team, the team members might not have worked together – because team members are selected from a much larger group.

Baumgartner has worked closely with the competition for several years, and is proud of “the huge strides in scoring methods and in the level of simulation.” Scoring sheets carefully weight a multitude of factors; the judges are selected to ensure objectivity. Information from actual emergencies is used to develop the scenarios. The fire at the Esterhazy mine in 2006 – where all miners were safely removed – is an example. “From what we learned from that fire, we changed a number of things in our simulation for the competition,” says Baumgartner. ■

## MINE SAFETY COMPETITION CELEBRATES EXCELLENCE

The techniques used to save the 33 trapped Chilean miners in 2010 were developed here in Canada. In fact, the Canadian mining industry has been involved in mine rescue training for over a century.

On May 26 top-level teams from mine sites across Saskatchewan will once again compete for top honours – and showcase the very latest in sophisticated techniques and technology with very real life-and-death applications. It will be the 44th Annual Emergency Response/Mine Rescue Skills Competition.

Underground and surface rescue teams compete in five separate events: fire fighting, first aid, proficiency skills, practical skills, and the Mock Field Problem consisting of

simulated surface and underground mine problems. Mock mines are constructed for the event, along with real-life emergency scenarios.

The underground teams each consist of a coordinator, team captain, vice-captain and four team members. Each team enters the mock mine to locate missing workers, extinguish or control fires, examine the mine for dangerous gases, and restore the mine to its original safe condition.

Surface teams compete in a confined space, for extrication or other industrial situation. Each six-person team must remove injured workers, test for toxic gases, and used procedures developed by the team.

“It’s great to win, but the annual competition is never the main focus of emergency rescue personnel, nor

should it be,” says James Baumgartner, contractor/special projects manager for Mosaic Potash in Colonsay. “Throughout the year, we’re concentrating on real-life situations that may occur – on safety in the mines.” That said, Baumgartner says the competition does have a number of important benefits.

“It’s a pat on the back for mine safety personnel,” says Baumgartner. “It serves to recognize excellence.” He also praises the competition for the awareness it creates amongst the general public about advanced mine safety practices and technologies.

This year’s Emergency Response Mine Rescue Skills Competition is being held in Regina at **Regina Exhibition Park, Evraz Place, on Saturday May 26**, and will feature 16 surface and underground teams.



Murray Brears of Hatch delivers a safety orientation to contractors at Mosaic K3.

Photo: Helen Solmes

# RISING TO THE TOP: SAFETY IN SASKATCHEWAN MINING

## SAFETY AT SASKATCHEWAN'S MINES ISN'T A PRIORITY. IT'S *THE* PRIORITY.

Here's a Saskatchewan mining story: It was an early Friday morning when Ron left for work at the mine. He and his wife Anne were looking forward to the weekend, to getting away to the family cottage with their two young children. As Ron rode the lift down the shaft that morning, everything seemed normal. It stayed that way all day. Ron finished his shift, drove home, they all went to the lake and had a great time. The following weekend, they did the same thing. End of story.

"Our emphasis on safety comes down to really caring about the people you work with," says Gerry Couture, Vice-President of Engineering and Expansions at The Mosaic Company. Recently, the company's Expansion Program surpassed three million on-site hours without a lost-time incident. That achievement was the result of "a big investment financially" and a company-wide commitment to uncompromised standards of excellence in safety. That

commitment extended not only to Mosaic's employees, but also to everyone who entered the sites.

"Safety is one of our core values, and that extends to contractors," says Brad Walker, Mosaic's Potash Contractor and Capital Expansion Safety Manager. With current expansions valued at \$3.4 billion taking place, the company's three potash sites are a hive of activity, with contractors constantly coming and going. Mosaic

is determined to ensure that high safety standards are observed by everyone on site, regardless of who they are or how long they are there. Over the past three years, approximately 10,000 individuals have been involved in Mosaic's safety orientation program.

When it comes to safety orientation, "Mining and contracting presents unique challenges," says Walker. "Most contractors are short term – averaging three months on-site. We

## ORE Samples

More than 30,500 people are employed directly or indirectly by the Saskatchewan mining industry.

Saskatchewan's northern mining operations are Canada's leading industrial employer of Aboriginal peoples.

The Saskatchewan mining industry will require over 15,000 new workers between 2010 and 2021 and fill new jobs related to expansions and new operations and to replace retiring workers.

There are over 120 different careers related to the mining industry.

decided we wanted to give them a quality course, where all supervisors receive two-day construction safety leadership training on top of the 10 hours of safety orientation that all workers receive on the projects."

One of the province's leading designers of industrial safety courses is Don Beahm, owner of D.B. Safety Solutions. At the request of the Saskatchewan Mining Association (SMA), Don developed a three-day mining-specific course which, "gives the view from 30,000 feet, touching on all aspects of mine safety leadership, regulatory requirements, and all responsibilities." In the past two years, over 400 front line safety supervisors from SMA member companies have taken this course. Like Walker and Couture at Mosaic, Don sees inspirational leadership – as opposed to enforcement – as the essential element in a successful safety program. That leadership has to be displayed at every level, in every facet of the organization. "The culture shift to safety has come a long way in 20 years," Beahm observes. "No longer is there the idea of scaring people into compliance."

Beahm is himself inspired by the level of commitment he sees in course participants, who range from rookies who need confidence-building to 20-year veterans who, "do a great job of mentoring the younger, newer supervisors." Beahm's course has been adopted across the province. While each mine has its unique circumstances, the underlying principles apply to all.

One of Beahm's key principles, in his course introduction, relates to a theory put forward by criminologists James Q. Wilson and George Kelling:

*Crime and chaos are the inevitable result of disorder. If a broken window is left unrepaired, people who see it will assume no one cares or is taking responsibility for it. Very soon, more windows will be broken and this anarchy will spread from the building to the streets.*

In Beahm's words, "Mine safety today is about concentrating on the little things, so the big things never occur."

The commitment of mining companies to safety cannot be measured in just the

number of lost-time hours or reportable accidents at the worksite – even though Saskatchewan companies have excelled in their safety performance according to these standards. As Couture and Walker point out, the contractors who leave the expansion sites take with them new skills and new attitudes about safety, which then become their own safety culture wherever they work. An ingrained sense of safety based on individual responsibility is also transferred into each worker's home and personal life. It is impossible to know how many farm accidents, for example, have been prevented – but they have.

Safety is "just the right way to do things," says Beahm, who sees safety within the overall context. "To be a successful mine operator, you need all three elements: productivity, quality and safety. Having excellent safety practices in place increases productivity, boosts morale, and aids in attraction and retention of good people."

It also helps to ensure that Ron and Anne's kids will grow up with lots of great memories of summers at the lake. ■



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## SASKATCHEWAN: NOW HIRING

The most recent labour study for Saskatchewan's mining industry supports what any business manager already knows: finding enough good people for your company is a challenge. The 2011 study – produced by the Saskatchewan Mining Association and Mining Industry Human Resources Council (MiHR) – predicts that 15,100 additional workers will be required over the next 10 years. This requirement is a mix of both the baby boom generation retiring and the significant industry expansion underway in Saskatchewan.

The job requirements span more than 60 key occupations ranging from entry level unskilled labourers to professional engineers. Furthermore, the study also points to an aging workforce in the mining industry, with some 12 per cent already eligible for retirement at an average age of 62. That means there will be an increasing demand not only for skills but also experience.

The SMA is taking a multi-faceted approach to address the gaps, according to Pam Schwann, executive director. In some areas, the goal is to attract more people from an existing pool of talent by promoting careers in mining both inside and outside of the province. Even with depressed economies in other regions, the industry faces a robust competition for talent. Canada-wide, the mining industry is predicting a need for 100,000 workers by 2020. Other industries, such as oil and gas in Alberta, also have a strong need. The workforce is aging not only in Saskatchewan, but throughout the country.

One of the out-of-province recruitment strategies is partnership among the SMA, Enterprise Saskatchewan and the alumni organizations of the University of Regina, the University of Saskatchewan and SIAST – with the goal of attracting ex-pat alumni in locations such as Calgary, Edmonton, Fort McMurray and Vancouver back to Saskatchewan. Another strategy leverages

key national and international mining events such as the Canadian Institute of Mining and Metallurgy and the Prospectors and Developers Association Convention to promote the vibrant Saskatchewan mining scene and positive Saskatchewan lifestyle to key groups of professionals.

The second approach advocated by the SMA is to do more to retain and re-engage the older workforce. The baby boomer workforce may be aging, but this demographic is also healthier and – because of a lack of retirement funds – more likely to want to keep working beyond the fabled “freedom 55” objective of decades past. Thanks in part to technology, there are many aspects of mining that could readily be addressed by experienced senior people without being physically taxing.

The third broad approach is to “make a bigger pie” of potential employees that grows the talent pool available. There is significant

potential in this regard. This includes attracting key talent groups who have traditionally been under-represented in the mining workforce, specifically First Nation and Métis people, women, and immigrants. According to Statistics Canada, the mining industry outperforms the rest of the economy in terms of employing Aboriginal people. The Saskatchewan mining industry leads the country in this area, due in large part to Cameco's and AREVA's northern mining operations, and promising new initiatives at potash mines in the south. As one of the fastest-growing segments of the Saskatchewan population, and with Aboriginal communities close to many mine sites and operations, First Nation and Métis youth offer the mining industry in Saskatchewan the competitive advantage of a local talent pool. Currently the mining industry underperforms the overall economy in employing women and new Canadians. According to Statistics Canada's 2006 census, the participation of women

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in mining was just 14 per cent, (compared to 47 per cent for the entire economy) and the participation of immigrants was only 8.7 per cent of the mining workforce (compared to 21 per cent of the Canadian workforce). Increasing the representation of First Nation and Métis people, women and new Canadians in the mining workforce will help address some of the projected talent pool requirements.

Another part of “making a bigger pie” is to increase the number of programs related to careers in the mining industry. The province’s educational institutions have worked closely with the SMA to identify training needs and develop appropriate courses. The most recent example – announced at the SMA’s annual general meeting in February of this year – is the new Mining Engineering Technology program at SIAST, which will provide hands-on training in mining design and operation. Jamie Hilts, SIAST’s dean of Technology, says the program, “will help ensure that Saskatchewan has both a competent and qualified labour force to meet the growing demands of the sector.” Hilts has no doubt that all 24 spots in the program will be filled when the program starts this fall.

The new program received strong support, particularly from Mosaic and Western Economic Diversification. Hilts says, “The response from the mining sector – suppliers as well as mining companies – has been tremendous. There is a real genuine interest, a shared sense of ownership of the program, and a strong desire to see the program succeed.” Various companies have come forward with offers of support in various ways, including participation in course instruction and

work study. “SIAST has a significant role to play in the advancement of the mining industry,” says Hilts.

Strong support for mining-related programs comes not only from the industry, but also students. Jim Kells, head of the Department of Civil and Geological Engineering at the University of Saskatchewan, tells the story of their new mine ventilation course. Last fall, the Department decided to proceed with developing the course. It was launched via the online registration system in late November, which meant that students who wanted to take the mine ventilation course had to trade it off against another elective. “I was in the midst of sending out an email to students notifying them of the course, when I received a call from the Engineering Student Center to let me know students had already found out about it, and that 18 students had already registered. By the end of the day, we had all 25 spots filled, with another six on the waiting list.” The same scenario had played out the year before, when the first mining course was introduced. “Within 10 minutes, all 25 spots had been filled; we then added 15 more, and within 10 minutes those, too, had been filled.”

Kells, who himself is Saskatchewan born and raised, says that students who are trained here are much more likely to stay here. His informal survey of last year’s U of S graduates in civil, geological and environmental engineering revealed that roughly 85 per cent of the grads were staying in the province. More and more of these students will be going into the mining industry. “The industry came to us, asking us to tweak our program in geological engineering so that those

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Photo courtesy of MiHR

students would be better prepared for the industry, and we're responding," says Kells. Plans are now being put into place to have a full-fledged mining option in the geological engineering program, which students would take

beginning in their third year. The option will include such courses as mine ventilation, drilling and blasting, and mining methods.

No question, the mining industry and its public sector partners are heading

in the right direction, but there is also no question it's a long road to go before the demand will be filled. Filling the gaps might be a headache for HR departments, but for ambitious hard-working students from

Frontier to Fond du Lac, opportunity isn't just knocking – it's thrown the door wide open. ■

### Hiring Requirements Forecasts - By Broad Occupational Category

Baseline Scenario – 2021\*

|   | 2013         | 2016         | 2021          |
|---|--------------|--------------|---------------|
| Trades and undesignated occupations           | 1,730        | 2,740        | 4,890         |
| Professional and physical science occupations | 345          | 545          | 975           |
| Human resources and financial occupations     | 60           | 95           | 175           |
| Support workers                               | 170          | 265          | 480           |
| Technical occupations                         | 405          | 645          | 1,155         |
| Supervisors, coordinators and foremen         | 295          | 465          | 835           |
| All other occupations                         | 2,295        | 3,635        | 6,495         |
| <b>Total</b>                                  | <b>5,300</b> | <b>8,400</b> | <b>15,100</b> |

Source: Mining Industry Human Resources Council, Spring 2011

\*Note: Numbers may not add perfectly due to rounding.



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# eARTh

## THE LANIGAN MURAL – TERRY ZINKOWSKI

After grade 12 graduation more than 40 years ago, Terry Zinkowski was hired on as a summer student by Alwinal of Canada, which became PotashCorp. The job became his career as an industrial mechanic, and now he's heading into retirement. Like his colleagues, though, he won't be forgotten when he leaves.

Art has always been an integral part of Terry's life. He dedicates on average 12 hours a week to his art, with portraits at the top of the list. His portrait skills will

leave a legacy at the Potash Corp Lanigan mine, in the form of "the retirement wall".

Located in the welding area of the surface rebuild shop at PotashCorp Lanigan, the wall is dedicated to fellow employees who have retired. It was started in 1993 at the request of one of Terry's co-workers, Bob Baker, who said, "I want to watch over these guys after I'm retired." Bob became the first inductee; his portrait was sketched in about 20 minutes.

Today, the wall features seven retirees and is 15 feet long and 7 feet high. Like Bob, they all worked with Terry in the rebuild shop. All three trades of the shop – industrial mechanic, welder and machinist – are represented on the wall. "It's a close-knit family," says Terry of his colleagues.

It's hard to say if any new faces will be added. "Time is the big thing," Terry says. Coming up for retirement himself soon, Terry muses that, "a self portrait might be

suitable." He looks forward to having more time to pursue his talent. As he says, "I always strive to do better, learn something from my last creation and incorporate the knowledge in my next piece. I like to bring new perspective into each art piece, try to create and capture "memories" and – in the case of my portraits – have them talk to you. I think a mural on the wall of the potash mine does exactly that." ■





# THE RETURN OF CLUFF LAKE

In 2002, after more than 20 years of operation, the Cluff Lake mine and mill produced its last pound of “yellowcake” (uranium concentrate). Operated by AREVA Resources Canada Inc. and its predecessor companies, the mine surpassed initial expectations, producing a total of about 62 million pounds of uranium. But that is only half the story.

Today, Cluff Lake is living up to other, equally important promises with respect to sustainability and environmental responsibility. In time, a pilot flying over the site in northwestern Saskatchewan will not be able to tell that a mine was ever there; the traditional uses of the land, such as hunting by area inhabitants, will again be the norm. AREVA, working under

the regulatory requirements of the Canadian Nuclear Safety Commission (CNSC) and the Saskatchewan Ministry of the Environment (SMOE), is moving steadily closer to that goal.

“We’re in the third quarter and I’m the quarterback,” is how Dave Hiller, AREVA’s manager of decommissioning describes his role. He’s referring to the follow-up monitoring and maintenance at the site, as well as the scientific and investigative work being done to confirm that the site has met the decommissioning commitments made in the original application to the federal and provincial governments for the decommissioning licence. Dave is confident that this work will enable AREVA to return the leased Crown land to the Province. (See insert: *Four Phases of Decommissioning.*)

It’s a long process. “We’re talking in terms of years,” says Hiller. “But as we continue to collect long-term data, the closer we get to determining when the hand-off to the Province will occur.” The lengthy process is necessary to meet the entry requirements of Saskatchewan’s newly-introduced Institutional Control Program (ICP). Under the ICP, the responsibility for the fully reclaimed land will revert back to the Province, along with a future care and maintenance fund from the company and other assurances of long-term environmental and physical stability.

Hiller calls the ICP a “win-win situation”: It helps to clearly define where a company can end its obligations, such as paying annual surface lease costs

for land no longer being used, while at the same time reclaiming the environment at the Cluff Lake site and protecting the Province from any future repercussions from the mine’s existence. Currently, Hiller and his team at AREVA are collecting the data to arrive at models that predict what will happen over the coming decades and in the longer term. Regulatory review by the CNSC and SMOE of these models, and of the underlying data upon which they are based, will provide a further level of confidence that AREVA has met its decommissioning obligations before regulatory approval is given to transfer the Cluff Lake site to the ICP program.

Assisting in that process is Bob Pollock, executive advisor at AREVA. Pollock’s experience in the nuclear industry, particularly in the



areas of environmental assessment, protection and waste management, spans close to 50 years. During that time, he has seen major advances in the mining industry overall, and calls Cluff Lake, “one of the first of the modern mines in Saskatchewan”, along with other uranium mines that began in the same time period: Rabbit Lake (1975) and Key Lake (1983).

Pollock sees the legacy of Cluff Lake in sharp contrast to Uranium City, which flourished on the shores of Lake Athabasca for about 30 years and ended in 1982. He credits the Cluff Lake Board of Enquiry, frequently referred to as the Bayda Commission, for shaping the changes which transformed the uranium mining industry in northern Saskatchewan. Three broad principles flowed from the Bayda

Commission – worker safety, environmental protection and benefits to northern Saskatchewan residents. Employment of northerners was greatly facilitated by a major difference from the Uranium City model – there would not be a town at the mine site. Cluff Lake adopted a rotational shift schedule where workers flew into the minesite and then back to their home communities. This enabled employees, especially those from the North, to stay connected to their traditional lifestyles and culture.

The rotational shift approach also created strong bonds of camaraderie among the workers while they were on-site; some workers spent their entire careers at Cluff Lake, and the legacy has been lifetime friendships and a strong sense of pride in Cluff's accomplishments.

## THE FOUR PHASES OF MINE DECOMMISSIONING

1. Planning For Decommissioning/ Obtaining Regulatory Approvals
2. On-Site Physical Work
3. Follow-Up Monitoring and Maintenance
4. Transfer of the Land to the Province – under the Institutional Control Program (ICP)

Northern participation in Cluff Lake employment reached nearly 60 per cent, with close to 90 per cent of that number being of Aboriginal descent. By not creating a mining town such as Uranium City that was inevitably destined for a boom and bust, the fly-in model has kept local communities and extended families intact. It is one of the reasons this model continues to be used today at more recent uranium mine sites.

The contrast with the past was not limited to social considerations. AREVA has performed well on all of the principles initially put forward for expanding the industry in northern Saskatchewan. Cluff Lake maintained an outstanding safety record. Twice – in 1999 and 2003 – the Cluff Lake mine was awarded a John T. Ryan trophy. The trophy is awarded by the Canadian Institute of Mining, Metallurgy and Petroleum to the mine with the best safety record for the previous year. There are three categories, with the Cluff Lake mine winning in the Metal Mines category. The Cluff Lake mine has been similarly diligent on environmental protection,

achieving certification to the international ISO 14001 Environmental Management System standard in 2004. This is the first uranium mining decommissioning project to achieve this standard.

The focus now is on completing the promise with respect to environmental protection, and Pollock has no doubts that AREVA will deliver. “I take great pride in being associated with a company that has lived up to its commitment and kept its promises,” Pollock says.

Pollock is also quick to point out that AREVA is still introducing significant advancements to promote long-term environmental sustainability. The reasons are both environmental and economic. With Cluff Lake, for example, the waste rock which contained some mineralization (“special waste”), but not enough to be processed as ore, was not segregated at the time of mining from waste rock with no mineralization (“clean waste”). In the subsequent decommissioning phase, all waste rock inventory required additional measures for long term

# CLAUDE WASTE ROCK PILE AND PIT



**2001**

Claude Pit and waste rock pile prior to decommissioning



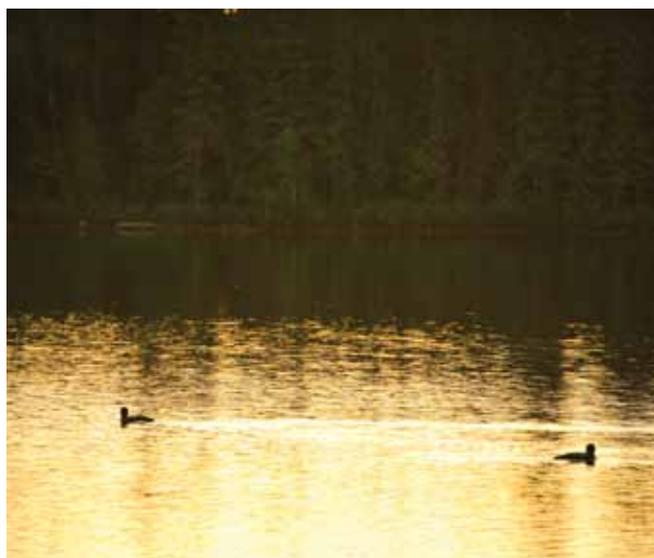
**2008**

Regraded, till cover added and revegetated but with limited plant growth showing



**2011**

Current tree growth at the Claude Pit



environmental protection. In comparison, AREVA's McClean Lake Operation illustrates today's “design for decommissioning” paradigm, and a “clean up as you go” approach, whereby all mined rock is segregated as “clean waste” posing no short- or

long-term environmental risk, and the remaining “special waste” backfilled into mined-out pits. This approach, recognized as the optimum approach for the long term, is a direct application of the lessons learned at Cluff Lake.

# TAILINGS MANAGEMENT AREA

# MILL SITE



**2001**  
Prior to decommissioning



**2001**  
Mill site prior to decommissioning



**2008**  
Back-filled pit, re-sloped and compacted waste rock pile, till covers added and area revegetated but with limited plant growth showing



**2006**  
Buildings removed, area regarded and trees planted but with limited growth showing



**2011**  
Current revegetation status



**2011**  
Tree growth to date

Although other former mining operations are also involved with the ICP, Cluff Lake is the first major uranium mine to complete its life with the Program available. "Cluff Lake is very much a source of corporate pride and a symbol of our culture at AREVA Resources Canada,"

says Pollock. Cluff Lake will have achieved the three pillars of modern sustainable development, beginning before the term became broadly used. It has proven to be profitable. It has maintained a commitment to the well-being of its workers and stakeholder

communities. Its final legacy will ultimately be to appear as if it were never there. ■



Mining Pavilion: Simulator Training

## M4S: THE ROCKS. THE ROLES.

Over 2500 students from over 60 schools had a great opportunity to learn more about mining – and possible future careers – at the M4S (Mining for Society) fair last November in Saskatoon. The world of mining was presented to a future workforce: students in Grades 4, 7 and 10 from the Saskatoon Public School Division, Greater Saskatoon Catholic School Division, Prairie Spirit School Division and Saskatoon Tribal Council. Some participants travelled from as far away as 150 km to take in the event.

The M4S show featured seven interactive themed pavilions (see inset). Students had their own passport book containing information and questions related to each theme as they toured the pavilions.

Corinne Arnold, a teacher at Bruno Central School, brought 40 students to the event. She first heard about M4S when she was on the summer GeoVenture tour (see p. 31). She was impressed with the enthusiasm of the presenters and the diversity of learning activities, such as using “real lab equipment” to discover diamonds in ore or detect

radiation in a banana. M4S accomplished its goal of making mining relevant for her students, such the display which showed how many parts of a snowmobile come from mining.

“M4S gave me optimism about the future opportunities for our students,” says Corinne. “It was good for the kids to see such good role models, both male and female, who had careers in mining.”

The event was a partnership between the Saskatchewan Mining Association, (SMA), Canadian Institute of Mining and Metallurgy

(CIM), Mining Matters and the Saskatoon Industry Education Council (SIEC).

M4S was part of the Canadian Institute of Mining’s Maintenance Engineers/Mine Operators Conference which was also held at TCU Place.

# THE SEVEN PAVILIONS

The pavilions offered a wide array of imaginative and engaging activities and displays.

## Exploration

- Acquiring land
- Exploration tools – geophysics, geochemistry, mapping, drilling – to find a deposit

## Mining

- Different types of mining: open pit, underground, solution, strip
- Different types of mining machines

## Processing

- How ore is separated from waste material at various stages: crushing, grinding, separation, flotation

## Education and Careers

- Various post-secondary programs and career opportunities
- Representatives from Saskatchewan's post-secondary institutions
- Representatives from mining company human resources departments

## Sustainability

- How mining can be environmentally sustainable and socially responsible
- Reclamation of land to its former use or for other productive uses

## Safety

- Mining's safety record
- Mine safety practices and training

## Products and Fabrication

- End uses of mining and how they are used in everyday lives – from toothpaste and computers to bicycles and skates
- Ore samples including potash, coal, gold, rare earth elements and uranium fuel rods

## Event participants:

- APEGS
- AREVA
- Agrium
- BHP Billiton
- Cameco
- Century Vallen
- CIM
- Claude Resources
- Golden Band Resources
- Great Western
- Minerals Group
- Kramer

- Mining Industry Human Resources Council
- Mining Matters
- Mosaic
- Nuna Training Technologies
- PotashCorp
- Saskatchewan Indian Institute of Technologies
- SRC
- Saskatchewan Women in Trades and Technology
- SIEC
- SIAST
- Sherritt Coal
- Shore Gold
- SMA
- St. John Ambulance
- University of Regina
- University of Saskatchewan



Safety Pavilion: Radiation Detection



Exploration Pavilion



Education and Careers Pavilion



Products and Fabrication Pavilion



Sustainability Pavilion



Safety Pavilion: Mine Rescue Relay



Processing Pavilion: Diamond Recovery

# Rock'n the Classroom!

THE SMA'S ANNUAL SUMMER GEOVENTURE TEACHERS' TOUR PRESENTS A TRULY "IN-DEPTH" EXPERIENCE IN A CLASSROOM AS BIG AS THE PROVINCE.

Every summer, enthusiastic teachers from across Saskatchewan get together to experience the diversity of our province's mineral resources. The SMA "Rock'n the Classroom" GeoVenture teachers' tour is a six-day adventure that includes a mix of formal and informal presentations along with field trips to mine sites. Key concepts are presented, with discussions on how the curriculum relates to what the participants are experiencing on the GeoVenture. Participants also receive curriculum teaching resources. As one teacher put it, "This was by far the most enjoyable, most educational and most rewarding professional

development activity I have ever been part of!"

Rock'n the Classroom is one of the SMA's major education outreach initiatives. Registrants are charged a nominal fee of \$50 which includes all tour costs, with SMA picking up the remaining costs for flights, meals, accommodation and resources once the GeoVenture starts. Literally going from top to bottom across the province, last year's GeoVenture included a half-day introductory workshop, followed by field stops at uranium, underground and surface potash, and coal mining

and milling operations, the T-Rex Discovery Centre and the Potash Interpretative Centre.

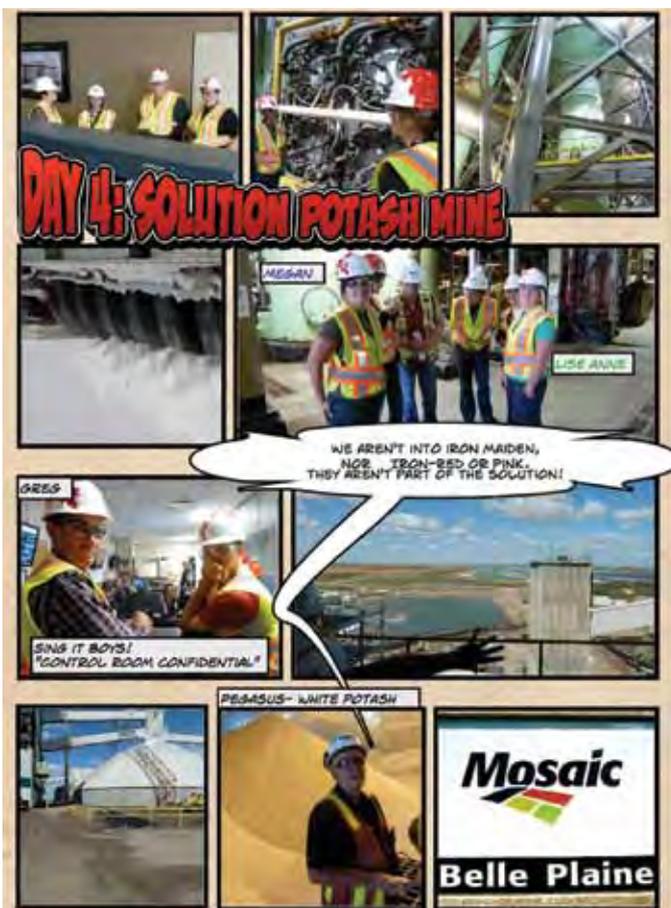
Deb deCaux, principal of Dinsmore school who was formerly a teacher at La Loche Community School, says, "I lived and taught in Northern Saskatchewan for 16 years and it was not until I was in the SMA Teachers' Tour that I gained a real understanding of all the opportunities available for Saskatchewan students. I continually recommend it to my colleagues."

Corrinne Arnold, a teacher at Bruno Central School, calls it, "a fantastic experience to see the geological and ecosystem diversity of our province." She points to the opportunities to talk with geologists and workers at the different mine sites, and to share her experiences with her colleagues on the tour. She was particularly impressed with the enthusiasm of the employees at the mine sites. "I realize there is a spectrum of attitudes within any workplace, but the people we encountered had a genuine interest in their profession, the province and the success of their mine."

Kevin East, a teacher at Yorkton Regional High School, has taught in Saskatchewan for more than 20 years. In his words, "I have worked in both Industry and in Education, but my perspective of mining was perhaps somewhat limited. After this tour and seeing firsthand the scope of mining in this province I was left with the the distinct impression

that the mining industry in Saskatchewan is second to none. From the gold, diamond and uranium mines of the north, to the coal and potash in the south, this educational tour gave us an excellent opportunity to see and understand the impact that Geoscience and mining has and will have for the future in Saskatchewan."

*continued next page*



## ORE Samples

More than 30,500 people are employed directly or indirectly by the mining industry.

Saskatchewan northern mining companies are Canada's leading employers of Aboriginal peoples.

Saskatchewan has ten operating potash mines, including two solution mines (i.e. use water as a major component of mineral extraction). Mosaic's Belle Plaine mine is the world's largest solution mine for potash.



2011 Participants

"WE BOARDED THE TRUCKS AND STARTED BACK UP TO THE SURFACE. ON THE WAY, WE STOPPED IN A 'RESCUE ROOM': THESE ARE DISPERSED THROUGHOUT THE MINE AND ARE USED TO HOUSE MINERS IF THERE IS A GAS LEAK OR OTHER ACCIDENT. THIS TYPE OF ROOM RECENTLY HOUSED THE MINERS IN CHILE WHEN THEY WERE TRAPPED FOR ABOUT 3 MONTHS"

"WE SPENT SOME TIME STANDING ON BOTH "CRUSTACEOUS" (OUR TERM FOR CRETACEOUS) EARTH AND TERTIARY EARTH AT THE SAME TIME!! WE COLLECTED A FEW ROCKS ALONG THE WAY AND TRIED TO IDENTIFY THEM. THIS IS A SURPRISINGLY DIFFICULT TASK BUT WE WERE ABLE TO FIND SOME FANTASTIC SPECIMENS TO TAKE BACK TO OUR CLASSROOMS."

"ON THE WAY BACK, ALL THREE OF THE JEEPS STOPPED AND WE ALL TURNED OUT ALL OF OUR LIGHTS, SHUT OFF VEHICLES, AND EXPERIENCED THE BLACKNESS AND QUIET OF THE MINE. I PUT MY HAND IN FRONT OF MY FACE AND TRIED TO SEE IT, BUT THERE WAS NO WAY I WAS GOING TO BE ABLE TO SEE MY OWN BODY PART. I BRUSHED MY NOSE WITH MY OPEN PALM, AND STILL COULD NOT SEE THE FINGERS ONE INCH FROM MY OWN EYES." ■

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**Saskatchewan Mining Association  
GeoVenture Program  
1500 – 2002 Victoria Avenue  
Regina, SK S4P 0R7**

**Email:  
saskmining@sasktel.net**

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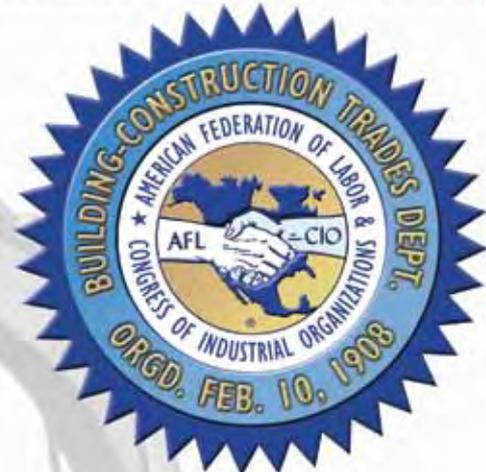
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## BEYOND THE BIO

### MARK PLAMONDON SENIOR VICE-PRESIDENT, COAL SHERRITT INTERNATIONAL

In each edition of *ORE*, we go beyond the official bios to give our readers insight into the leaders of Saskatchewan's mineral mining and exploration companies. This edition features Mark Plamondon of Sherritt International's coal business in Alberta and Saskatchewan. Sherritt – a world leader in the mining and refining of nickel – is Canada's largest coal producer, with nine coal mines in Alberta and Saskatchewan.

For anyone with a stereotype vision of coal mining – or the mining industry in general – it would be well worthwhile to have a conversation with Mark Plamondon. In less than two decades after receiving his degree in metallurgical engineering in 1992, Mark became Senior Vice-President, Coal with Sherritt International. Then, in March, he headed to a new challenge with Sherritt in Madagascar.

Mark's career in mining began with Cominco Fertilizer, at the Vanscoy potash mine (now operated by Agrium Inc.). Then, to use his term, he "went downstream" to be involved in the refining aspect with Sherritt. Then he went back to Saskatchewan, and "back to mining." During the intervening years, he gained some interesting international experience.

"My first international experience was working

in magnetic alloy research for Sanyo Special Steels in Himeji, Japan in the summer of 1992," said Mark. "The culture, language and cuisine were so very different from Canada... but it was an easy place to meet other 'gaijin' (foreigners) from all over the world. It definitely sparked my curiosity for travel. My second international work experience was with Sherritt in Cuba in 1999 as the Production Engineering Supervisor for Sherritt's joint venture nickel laterite processing plant in Moa. The experience of an expatriate assignment was fantastic, as the work intensity and level of responsibility was significantly higher than a domestic assignment, and the personal growth associated with another culture could not be overstated."

As part of the leadership team with Sherritt Coal, Mark recognized that, "With coal mining, there are always lots of challenges," but he



## ORE Samples

remains enthused by the potential that meeting those challenges will realize.

One of the most valuable things he has learned is the importance of building strong relationships – with your co-workers, employees, suppliers and customers. Those relationships now extend far beyond Canada’s borders. “The coal industry is a tough business to grow domestically,” says Mark, “but there is a lot of potential business in China, India and southeast Asia, where thermal coal electrical generation is rapidly expanding.”

Mark strongly supports development of cost-efficiencies and reducing the CO<sub>2</sub> footprint, for obvious reasons. “There’s

more coal resources in the ground in Saskatchewan than oil and gas. We need to find ways to exploit that to our best advantage.” In our province, as in many other places, there are not a lot of options for the base-load provision of electricity. “Coal must and will rise to the occasion,” he says.

Plamondon is proud to be part of Sherritt International. “It’s a fantastic company to work for, with a world-class safety record and culture. For young people contemplating a career after university or technical training, this is the ideal company to consider,” he says. “There will be a huge demand for skilled people and professionals over the next decade. Sherritt is a great place to grow. This is where you can really show

what you can do. When you join such a diverse company as Sherritt, you have the world in front of you.”

Certainly, Mark Plamondon is proof of that. His latest Sherritt assignment is in Madagascar, an island off the south-eastern coast of Africa, as Senior Vice President of Ambatovy, a large-scale nickel mine, processing facility and refinery. “Experiences and opportunities such as these are unmatched by many other companies.” ■

In 2010 there were 1660 northern residents employed at northern mine sites who earned payroll of more than \$90M.

In 2010 northern mine operations purchased \$916M worth of goods and services; \$361M from businesses in northern Saskatchewan.

\$3.39B has been earned by northern residents and northern businesses from mining operations since 1991.



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# TAGGING ALONG

## SEAN JUNOR MANAGER, WORKFORCE PLANNING AND TALENT ACQUISITION CAMECO CORPORATION

Already among the world’s top uranium producers, Cameco has set an ambitious goal of doubling its annual uranium production to 40 million pounds by 2018. Reaching that goal requires considerable strategic planning throughout the corporation. Where will people be needed? What skills will be required? Will we need to hire more people, or use existing people more productively? Answering those questions is the principal responsibility of Sean Junor, manager of workforce planning and talent acquisition.

“My team is responsible for identifying internal and external candidates for Cameco employment opportunities,” explains Sean. “That includes annual talent planning sessions with senior management, along with other recruitment initiatives in all our Saskatchewan work locations.”

Sean is a graduate of the University of Saskatchewan in Political Science. He then completed a Masters in Policy Studies at Queen’s University. He was working as an education and labour market consultant in Ontario when he decided to come back to Saskatchewan in 2007, to join the newly-formed Workforce Planning Group at Cameco. He became manager of the Workforce team in 2010. Workforce planning and recruitment were combined in 2011.

He describes workforce planning as, “the process of analyzing and forecasting the talent a company will need to achieve its strategic

business objectives.” That includes gathering data and assisting with staff planning before budgets are finalized.

One of the important aspects of



his role is to balance the needs of the company with the career and lifestyle goals of employees.

He points out that, “Ensuring that employees are engaged, challenged and rewarded is a company-wide priority. We look to managers to identify their high-potential people so we can determine what development and supports these people require to see a clear progression at Cameco.”

Sean’s job takes him to Cameco’s business units in Saskatchewan, Ontario and the United States; his recruitment efforts for hard-to-find mining specialists has taken him to places such as Johannesburg, South Africa. He is also involved with mining human resource professionals nationally and internationally, comparing and contrasting talent management programs and other initiatives.

“It’s very satisfying when I can contribute to the success of Cameco, whether it’s through identifying key talent, providing strategic direction, or anything that strengthens Cameco’s reputation as an employer of choice,” he says. ■

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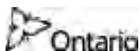
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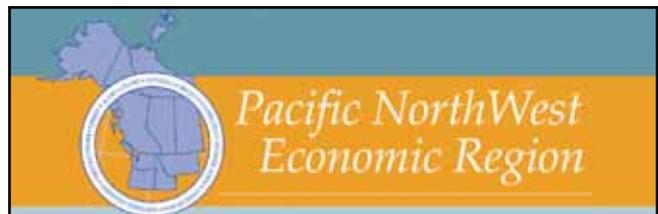
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## The Power of Partnerships

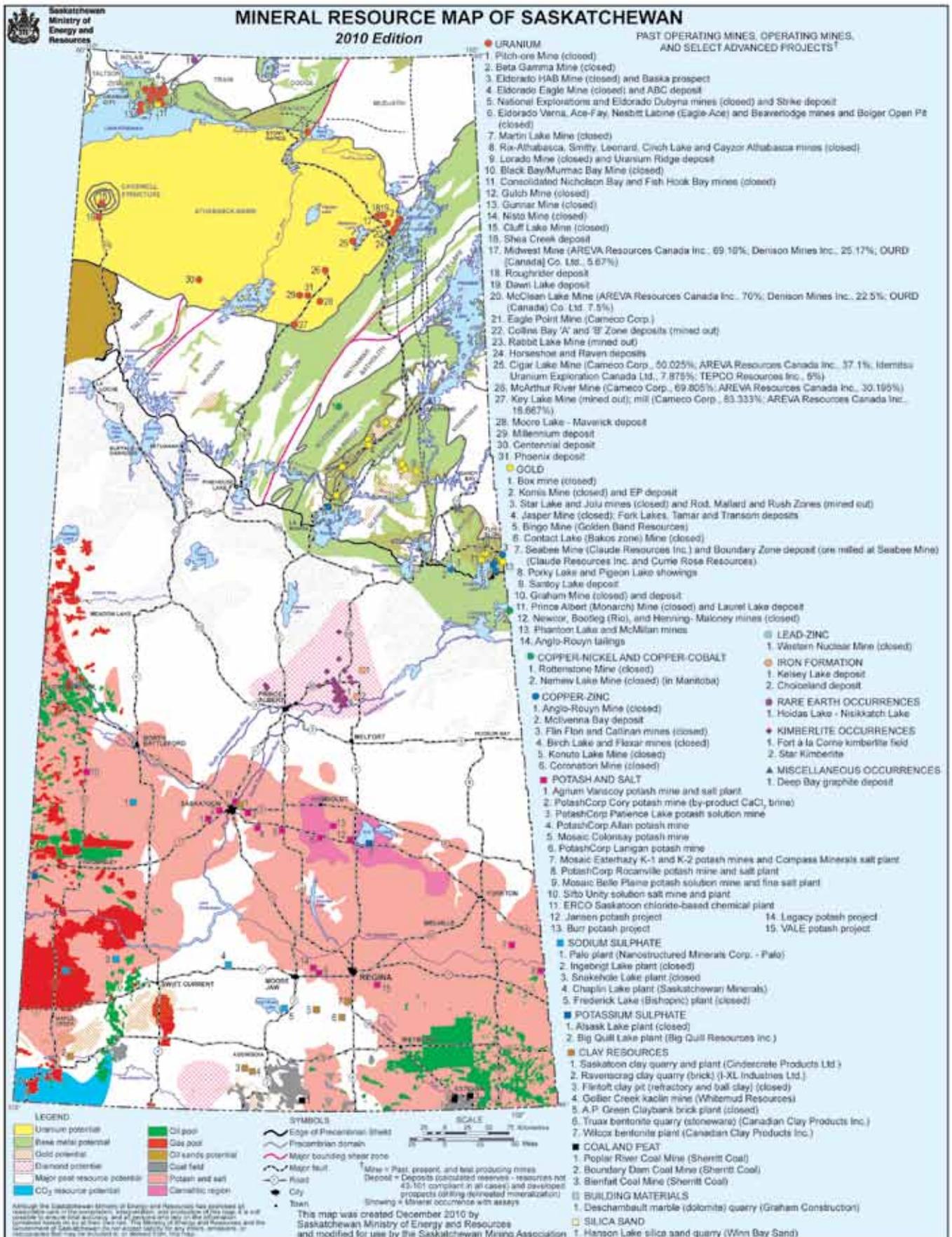
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REFERENCE

# SMA MEMBERSHIP

- Agrium Partnership
- AREVA Resources Canada Inc.
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- Cameco Corporation
- Canadian Salt Co. Ltd. (The)
- CanAlaska Uranium Ltd.
- Claude Resources Inc.
- Denison Mines Corp.
- Fission Energy Corp.
- Forum Uranium Corp.
- Golden Band Resources Inc.
- Great Western Minerals Group Ltd.
- Hathor Exploration Ltd.
- HudBay Minerals
- Hudson Bay Minerals & Smelting Co. Ltd.
- JCU (Canada) Exploration Company Ltd.
- JNR Resources Inc.
- K+S Potash Canada GP
- Kitsaki Procon Joint Venture
- La Ronge Gold Corp.
- The Mosaic Company
- Mosaic Potash Belle Plaine
- Mosaic Potash Colonsay
- Mosaic Potash Esterhazy
- North Atlantic Potash Inc.
- Pitchstone Exploration Ltd.
- PotashCorp
- PotashCorp Allan
- PotashCorp Cory
- PotashCorp Lanigan
- PotashCorp Patience Lake
- PotashCorp Rocanville
- Purepoint Uranium Group Inc.
- Red Rock Energy Inc.
- Rio Tinto
- Sherritt Coal
- Shore Gold Inc.
- Strongbow Exploration
- Thyssen Mining Construction of Canada
- Titan Uranium Inc.
- UEX Corporation
- Vale Potash Canada Limited
- Wescan Goldfields Inc.
- Westcore Energy
- Western Potash Corp.



## MINING AND GOLF: HOW FORE-TUNATE!

The next time you sink that birdie putt, remember to thank a miner somewhere who helped make it all possible:

- **Club Heads:** beryllium, chromium, copper, aluminum, nickel and steel
- **Shafts:** graphite, titanium steel, nickel and tungsten
- **Golf Balls:** tungsten and zinc for the core
- **Coal and uranium:** power for manufacturing
- **Greens:** potash-based fertilizer
- **Sand Traps:** silica sand

## WE'D LOVE TO HEAR FROM YOU!

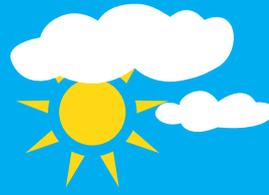
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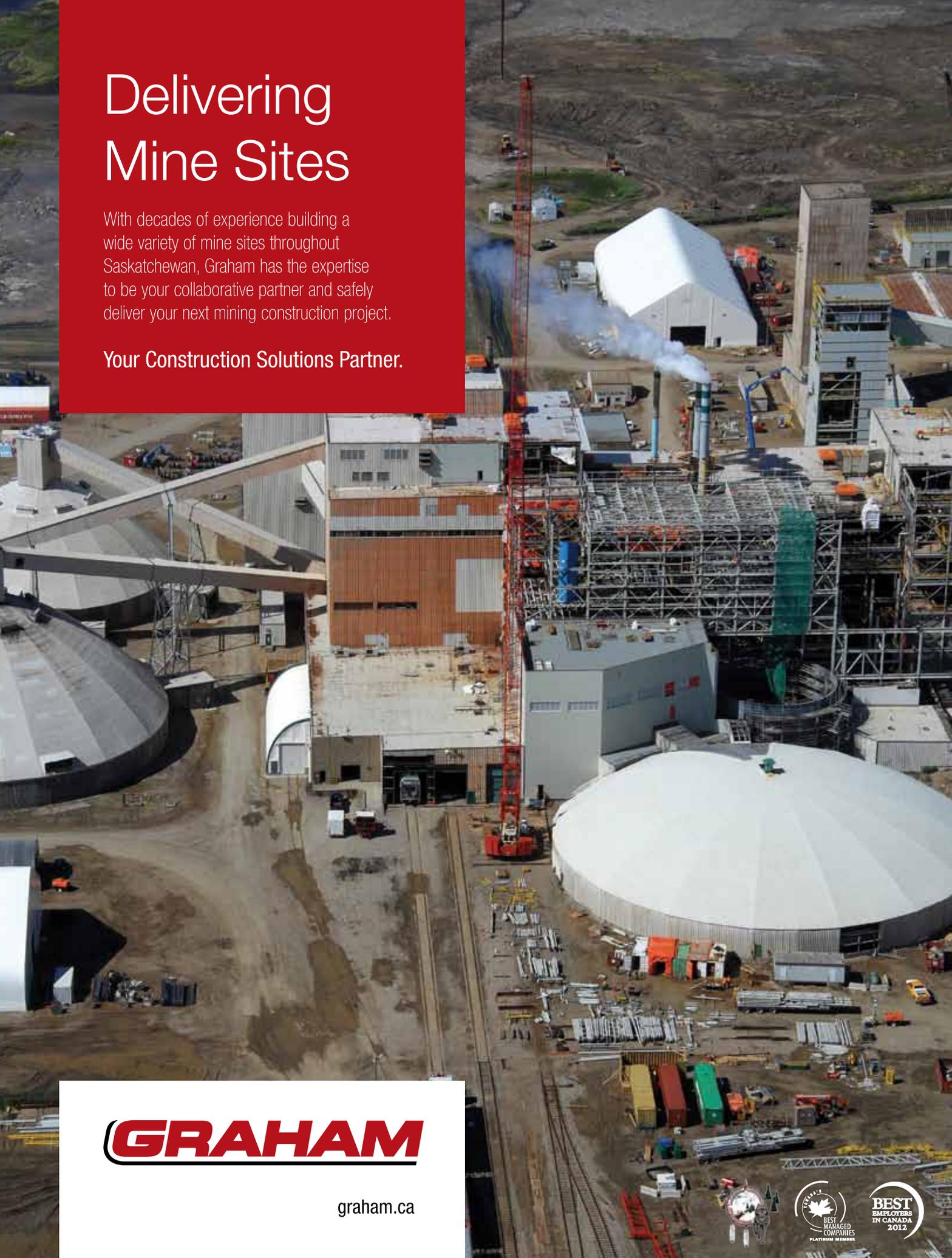
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