

# NORTH OF ▲ 60

# MINING

## NEWS



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Tarsis Resources President and CEO Marc Blythe pauses for a photo at the grassroots gold-copper-silver discovery made at the White River project during a tour of the southwestern Yukon Territory property in 2011. Driven Capital Corp. optioned the project in April and is currently carrying out a drill program to test the extent of high-grade mineralization seen on surface.

SHANE LASSEY PHOTO

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# Junior secures major funding for 2012

*Skillful execution of project generator model allows Millrock to mount C\$12M exploration program in disturbing financial markets*

By SHANE LASLEY  
Mining News

While most juniors are cinching their belts and scaling back programs, Millrock Resources Inc. has C\$7.5 million of exploration slated for its array of gold and copper-gold properties in Alaska in 2012, not to mention a healthy C\$4.5 million budget for its copper-gold prospects in Arizona.

Millrock President and CEO Greg Beischer said the scarcity of venture capital available to the junior exploration sector was palpable at the Cambridge House World Resource Investment Conference held in Vancouver, B.C., on June 3-4.

"Things are dire," he told Mining News during a June 13 interview. "I think that companies that have money are conserving it, because there is no telling when they will be able to raise money again — those that don't have money are in big trouble."

The grim scene at the investment conference reaffirmed Beischer's resolve to embrace the project generator model.

"Even though it was disturbing to see what is going on in the financial markets, it was gratifying for us, because we, now more than ever, believe in our business



GREG BEISCHER



COURTESY MILLROCK RESOURCES INC.

The average grade of 24 talus fines samples collected by Millrock Resources geologist at Oxide Ridge in 2008 is 2.32 g/t gold. This year, Millrock and Teck Resources Ltd are drill testing a broad arsenic- and gold-in-soil anomaly in the valley adjacent to the Oxide Ridge outcrop.

model," Beischer said. "This is going to be one of the biggest years of exploration that we have ever done, because of the model that we have chosen."

Approximately 93 percent of the some C\$12 million of exploration spending on Millrock properties this year will come from global miners Teck Resources Ltd., Kinross Gold Corp., Vale S.A. and Inmet Mining Corp. — leaving only about C\$1 million to be shouldered by the project generator.

### Reducing risk

The project generator model is allowing Millrock to capitalize on its exploration expertise and first-hand geological knowl-

edge of Alaska and southeastern Arizona. With this vantage the company seeks out grassroots gold and copper projects, completes early prospecting and mapping, and then vends the promising targets out to third party candidates that can afford to spend the millions of dollars needed to advance them from grassroots to economically viable mineral deposits.

One of the primary downsides to this model is that if the project generation successfully discovers a world-class deposit, the explorer must share its rewards with its deep-pocketed partner. The advantage, though, is that by allowing a third party to do the heavy lifting the project generator

needs to spend very little of its own funds — reducing exploration risk, limiting dilution from the constant need to raise money and exposing its shareholders to a large amount of exploration spending for their investment.

Millrock's skillful execution of the project generator model allows it cover the larger portion of its overhead through the collection of fees from its partners.

"We have income from management fees. We are the operator of all the agreements we have with other companies — they let us do the exploration and we charge a modest fee meant to cover our overhead costs. Additionally, we get option payments," Beischer explained to Mining News. "At present it is not completely enough to offset our overhead costs."

Regardless of market conditions Millrock has a loyal group of investors that like what the project generator is doing, giving management confidence that when the time comes to raise money the funds will be there.

"Even though we don't completely cover our overhead with our management fees and annual payments, we have a very strong shareholder base that we can go to and who we have created extreme value for," explained Millrock COO Sarah Whicker.

"They see we are executing our model,

see **MILLROCK** page 4

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## MILLROCK

doing what we said we are going to do and sticking to it really rigorously," added Beischer.

Millrock last needed to raise money in 2010 — closing C\$1.65 million financing in June and a C\$1 million financing in August — yet the project generator's properties were subjected to C\$16 million of exploration spending in 2011 and are expected to receive C\$12 million this year. Yet, Millrock still has about C\$3 million in the bank and won't need to consider going to the market for additional funds until after the Alaska field season.

"By the end of the year we will still have a pretty good cushion but it is going to be too thin for real comfort," Beischer said. "We are hoping the markets improve or we make a big discovery before then."

Another key advantage of Millrock's execution of the project generator model is that the company employs its full staff year-round.

"We are just trying to take some of the peaks and valleys out of the picture, both risk-wise and people-wise," the Millrock CEO explained.

### Strategic alliances

In October of last year Millrock further mitigated its risk by entering into a strategic alliance with Vale in which the global mining giant agreed to front an initial US\$1 million for the project generator to seek out a world-class porphyry deposit in Alaska.



Noticing mineral oxidation on a prominent geological feature while flying over the Estelle gold property in the Kahiltna region of Southwest Alaska, Millrock Resources geologists collected samples from the talus at the base of Oxide Ridge. The average grade of 24 talus fines samples collected here in 2008 is 2.32 grams per metric ton gold. Oxide Ridge is the primary focus of a drill program being carried out by Millrock and Teck Resources Ltd. in 2012.

The deal with Vale goes beyond the typical agreement in that Millrock has yet to generate a project. Instead, the funds are to be used to probe the prolific Alaska Range and Alaska Peninsula porphyry belts for deposits worthy of the Brazil-based mining behemoth.

"The idea is that they would provide funding for us to do research and reconnaissance exploration work for porphyry coppers," Beischer explained. "They would love to find another Pebble — as would we."

Millrock co-founder and Chief Exploration Officer Phil St. George has the geological knowledge of Alaska and track record to do just that. He is credited with

discovering Pebble while with Cominco in the 1980s before continuing on to expand Donlin Gold to 20 million ounces during his tenure as vice president of exploration for NovaGold Resources Inc.

Under St. George's leadership, Millrock's geological team has generated one designated project that caught the interest of Vale.

In early June Millrock announced that it had entered into an option agreement with Vale on the Audn project, a promising porphyry copper-gold target situated some 100 kilometers (62 miles) southwest of the world-class Pebble deposit.

Audn and any other interesting prospects turned up under the strategic alliance may be deemed designated projects and Vale will have the option to earn an initial 65 percent interest by spending US\$3.5 million on exploration and paying Millrock US\$200,000.

Beischer said that while Vale's earn-in requirements are minimal, the risk to Millrock and its shareholders is minute.

Initial investigations that led to the discovery of Audn were carried out by Millrock in 2010. This reconnaissance work was funded under a separate strategic alliance with Altius Minerals Corp. By virtue of that agreement Altius is entitled to a royalty on any mineral production that occurs from most of the Audn claims.

A ZTEM geophysical survey was flown over Audn earlier this year and Millrock feels that with the work completed this year the porphyry copper-gold prospect will be ready for drilling in 2013.

The company also plans to generate several other designated projects for Vale to look at.

"We will be proposing more designated projects over the six to eight months," said Beischer.

### Return to Oxide Ridge

Estelle, an expansive gold project situated about 160 kilometers (100 miles) northwest of Anchorage, tested Millrock's resolve to fully embrace the project generator model.

Though Estelle lies in the heart of the Kahiltna Terrane — an assemblage that

hosts enormous copper-gold deposits such as Northern Dynasty Ltd. and Anglo American's Pebble project and Kiska Metal Corp.'s Whistler property — the primary metal here seems to be gold.

"There is a lot of gold there — there are a lot of showings from one end of that claim block to the other," Beischer told Mining News.

When Teck Resources Inc. expressed an interest in funding exploration at Estelle in 2010, Millrock management was presented with the option of keeping sole ownership of the promising gold prospect or fully embracing the project generator model on which the company is built. After some deliberation, the Vancouver, B.C.-based junior chose to partner with the diversified miner.

A four-hole, 1,500-meter drill program carried out last year provided for the first drilling at Estelle since Millrock acquired the expansive property in 2008.

The most exciting intercept came in hole SE11-01, drilled at Oxide Ridge.

"Oxide Ridge caught our interest early on," explained the Millrock CEO. "It is a brand-new showing that we spotted from the air and we sampled along the base and there was gold in the talus fines."

The average grade of 24 talus fines samples collected here in 2008 is 2.32 g/t gold.

Testing this talus — the broken rocks collected at the base of steep slopes characteristic of this region of the Alaska Range — led Millrock geologists to find gold in bedrock.

Further soil sampling outlined a broad arsenic- and gold-in-soil anomaly in the valley adjacent to the Oxide Ridge outcrop. Taking into consideration that the gold could have eroded from the gold-bearing areas already identified by Millrock geologists, the company couldn't be sure that the geochemical anomaly represented gold lurking below. But a coincident geophysical (induced polarization) anomaly gave Teck and Millrock a target to test.

SE11-01 cut 450.7 meters of variably altered intrusive rock with quartz veins and stockworks averaging 0.38 g/t gold.

"We have intersected intrusion-related gold mineralization over a significant interval that includes some higher grade intercepts. The challenge now is to find the center of the system that has the grade needed for an economic deposit," St. George said upon receiving the results in November.

An eight-hole drill program designed to find the high-grade heart of Oxide Ridge is slated to start on July 1.

"We are quite excited about it," said the Millrock CEO. "Our partner Teck has been great — they really like this prospect."


### Mutually beneficial partnership

Kinross is another major that has faith in Millrock's ability to discover world-class gold deposits in Alaska. While the Toronto-based gold miner partners with many junior companies around the globe, Millrock tops a short list of "mutually beneficial partnerships" featured on Kinross' website.

In 2012 Kinross has budgeted about US\$1.2 million to explore the Humble property in Southwest Alaska and another US\$1 million at the Council gold project on the Seward Peninsula.

Humble, formerly known as the Kemuk prospect, is remarkably similar in size, age and orientation to the Pebble deposit located about 80 miles (130 kilometers) to the east.

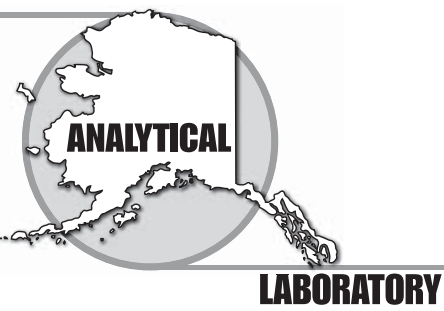
In 2010, Kinross and Millrock struck a deal in which the major has the option to earn a 60 percent interest in an area of



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## MILLROCK

interest, including the Humble claim group by spending US\$4 million on exploration by the end of 2013, paying the project generator US\$200,000 and reimbursing the costs for staking the claims. Kinross has the option to increase its ownership of the copper-gold prospect by incurring an additional US\$6 million in exploration expenditures by the end of 2016.

Humble Oil Co. originally investigated this property for its iron potential, due to its extremely strong magnetic signature.

Core from this late 1950s drilling — stored in a facility in Southcentral Alaska — has provided Millrock geologists with a peek at what lies below the surface at Humble.

“What we know of the geology, it is really reminiscent of the Pebble deposit. We have got a strong geochemical anomaly. We have got ZTEM geophysical anomalies that are coincident with the geochem, and we know by the little bit of drilling that was done by the Humble Oil Co. back in the 1950s that the right kind of rocks are down there,” Beischer told Mining News in 2011.

Millrock and Kinross conducted an initial drill program at Humble late in 2011. While the earlier surface work at the porphyry copper-gold prospect went well, drilling proved to be problematic, producing little core for analysis.

The partners had better results when they returned in April to complete a four-hole program that targeted conductive zones with coincident multi-element soil geochemical anomalies indicative of a buried porphyry deposit.

“We have seen the rocks and we are encouraged. We are hoping to go back and

drill more later this year,” Beischer said.

In the meantime, Kinross and Millrock are gearing up to drill Council, a 900-square-mile land package that blankets a region that has produced some 500,000 ounces of placer gold.

The drilling, scheduled to start in mid-July, will target what appears from the surface to be a high angle, northwest trending fault at the Elkhorn Creek zone.

“We are going to drill six short holes to test a super geochemical anomaly and very interesting looking structure,” said the Millrock CEO.

Kinross — which joined Millrock at Council in 2010 — agreed to spend up to US\$6 million to earn a 75 percent interest in this gold project situated about 60 miles (100 kilometers) northeast of the legendary mining town of Nome.

### Sustainable over time

Millrock isn't completely immune to the tough financial markets. Though the project generator has been able to secure exploration funds from global firms, partnerships with junior explorers are virtually nonexistent this year.

“We have been marketing our un-partnered properties and we haven't really seen a lot of bites. It seems that some of the bigger players are waiting to see what happens,” said Whicker.

As a project generator, Millrock has a deep pipeline of projects in various stages of readiness — including five that have drill targets and one that is optioned out to a junior but is in a holding pattern for 2012.

“Bluff, Zackly, Cristo, Distin and Fortymile are ready to drill. We have done all the work and they have great drill targets,” said Beischer.

The only junior maintaining a partnership on a project Millrock generated is

Crescent Resources Corp., which has an option to earn a 100 percent interest in the Uncle Sam gold project about 40 miles (65 kilometers) southeast of Fairbanks.

Some 1,950 meters of core drilling carried out at Uncle Sam in 2011 tested two targets, Lone Tree and Wolf.

The most exciting results came from Wolf, which appears to be on strike with Sumitomo Metal Mining Co. Ltd.'s recently discovered Naosi zone at that company's Stone Boy project located approximately 2,000 meters to the southeast.

All four holes drilled at Wolf cut gold mineralization. WLF-001 cut 2.74 meters averaging 3.63 g/t gold, WLF-002 cut 11.46 meters averaging 4.86 g/t gold, WLF-003 cut 3.05 meters averaging 3.27 g/t gold and WLF-004 cut 2.13 meters averaging 1.81 g/t gold.

Drilling by Sumitomo at Naosi has returned intercepts up to 7.92 meters averaging 7.8 g/t gold and 19.7 g/t silver.

Despite the encouraging results, Crescent isn't able to raise the funds to mount a follow-up program in 2012.

“They are in a tough spot because they would have difficulty raising money. So, they are just waiting it out,” Beischer told Mining News.

Despite the lack of activity this year, the Millrock CEO said Crescent plans to exercise its option at Uncle Sam and he would like to see the junior pick up some other projects Millrock has generated in the Pogo Mine area.

“I honestly believe that there will be other ore bodies found in that area and it is very underexplored so far,” he said. “There is going to be more mines there and I would hope they would focus on that area.”

Bluff is another promising gold project in Millrock's portfolio that is suffering from the lack of venture capital.

Bluff — located about 22 miles (35

miles) southwest of Council — was optioned to Valdez Gold Corp. in 2010. But, when that junior merged with Ryan Gold Inc. last year to form Ryan Gold Corp. — a Yukon-focused explorer under the leadership of renowned prospector Shawn Ryan — the option on Bluff was dropped.

Drilling conducted by BHP Billiton plc in the 1980s cut several significant intersections in the three zones at Bluff — Daniels Creek, Saddle and Koyana Creek — including 5.48 g/t gold over 10.9 meters, 4.19 g/t gold over 4.5 meters, and 1.93 g/t gold over 16.3 meters.

Based on the work completed by BHP, Daniels Creek is estimated to contain 3 million metric tons averaging 3.43 g/t gold for 300,000 ounces; Saddle is estimated to contain 1.5 million metric tons averaging 3.77 t/t gold for 165,000 ounces and Koyana Creek is estimated to contain 2 million metric tons averaging 0.69 g/t gold for 40,000 ounces.

Despite having a high-grade historical resource of more than 500,000 ounces, Millrock has not been able to secure a partner.

“Here is an example of this very tight market,” Beischer said. “Bluff is a great project — there is a resource of gold in the ground there and you could go in and expand it — but no one has the money.”

In the meantime, the project generator model is allowing Millrock to thrive in tough markets, which should put the explorer in a good position when investor confidence once again returns.

“The whole idea is to build a company that is sustainable over time. We have got the staff here and even though there might be a lull in the activity, they are still employed — dreaming up new ideas for Millrock to pursue,” the Millrock CEO said. ●

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• ALASKA

# AMA names new executive director

At 29 years, Crockett's age belies the breadth of resource experience she brings to the miners association's top executive office

By SHANE LASLEY

Mining News

When Steve Borell announced that he was retiring as the executive director of the Alaska Miners Association — a post he held for 22 years — the group's board of directors was charged with the daunting task of filling the void left by the association's highly regarded and beloved leader. Unbeknownst to the board members, or Borell himself, the outgoing executive director had been grooming his replacement, Deantha Crockett, for nearly a decade.

The new AMA executive director is the daughter of Marilyn Crockett — a woman highly regarded for her 41 years of service at the Alaska Oil and Gas Association. In a twist of fate typically reserved for a screenplay, the matriarch retired as AOGA executive director on Dec. 31, the same day Borell was clearing out his office at AMA. At the time, though, neither retiring resource leader was aware that the younger Crockett would assume the top position of the miners association.

Crockett did not immediately succeed Borell. Instead, Fred Parady, a former Wyoming legislator with deep mining roots, was appointed as AMA executive director. But, after three months, he relinquished the post, citing personal reasons.

Once again tasked with finding a person that could lead AMA into the future, the board found Crockett, a lifelong Alaskan with a background and education that is custom-fit to the task of AMA executive director.

"For the last seven years Ms. Crockett has worked at the Resource Development Council where she was the lead on mining and tourism issues. In that capacity she worked closely with AMA on issues of importance to the mining industry and is well known to many AMA members," said the AMA board of directors. "We are confident that, in addition to her experience with Alaskan resource issues, Deantha will bring new energy and ideas to the role and the

executive board looks forward to working with her as we plan for the challenges of the coming years at AMA."

Crockett officially moved into the AMA top office on June 1.

A firsthand insight into the issues surrounding resource development in Alaska was not the only aspect of Crockett's upbringing that readied her for the task that lies ahead — it also provided her an early opportunity to get to know many of Alaska's resource leaders.

"It prepared me to find the very best source for the answer to the question I had," she explained to Mining News during a June 12 interview.

So, when Crockett needed answers to mining-related questions as she was earning a major in political science at the University of Alaska Anchorage she would go directly to the leaders of the industry, and many times this would be her predecessor, Borell.

Borell continues to mentor his successor as she settles into the office he occupied for more than two decades.

"He has been helping me out with a lot of the historical knowledge," explained Crockett.

In addition to bringing her up to date on the multiple issues of which the mining advocacy group is involved, Borell has offered his aviation expertise to take the new AMA executive director on a tour of some 20 placer mines across Alaska.

"He knows the operations, he knows the people — there could not be a better guide for that kind of trip," Crockett said. "We are going to go to those operations and meet those people that have been involved with AMA for years and years."

## Pebble tops docket

Crockett assumes the helm of AMA at a time when Alaska's mining industry is shadowed by a faction determined to stop the development of the Pebble project situated in the Bristol Bay region of Southwest Alaska.

Whether the stratagems employed by the anti-Pebble contingent succeed in preventing a mine being built at the enormous copper-gold-molybdenum deposit, the AMA executive director said the effort is having a cooling effect on investment in Alaska.

"We are a young state; it is going to take a long time to get our infrastructure in place. It is an expensive place to operate, our geography and climate makes it expensive. These tactics taken by people who are anti-Pebble are something we shouldn't have to deal with," Crockett told Mining News.

Dealing with the effort to stop Pebble, though, fell high on the incoming executive director's docket.

Anti-Pebble groups have petitioned the U.S. Environmental Protection Agency to exercise its presumed authority under Section 404(c) of the Clean Water Act to pre-emptively deny permits for the Pebble project.

In May, the EPA released its draft Bristol Bay Watershed Assessment, a report outlining a yearlong accumulation of information on the watershed and the impacts Pebble and other large-scale mining may pose to the world-class salmon fishery found there.

Four days into her tenure as AMA executive director, Crockett expressed the mining association's concerns about the assessment and potential Section 404(c) determination during a public hearing EPA held on the Bristol Bay Watershed Assessment in Anchorage.

"Spending less than a year to assess an area of 20,000 square miles is irresponsible. The fact that the assessment was carried out without firsthand, on-ground data gathering is also irresponsible. We believe EPA must go back and provide adequate time for the assessment to be comprehensive and based on sound science — or, even better, drop the assessment altogether," the AMA executive director chided EPA during her June 4 testimony. "A pre-emptive decision on a project, whether it is approval or denial, is unacceptable to the Alaska Miners Association," she added.

Crockett said the AMA is preparing in-depth written testimony, which will be submitted to EPA before the July 23 public comment deadline.

AMA's new leader is no stranger to standing up to the anti-Pebble contingent. During her time at RDC, Crockett was instrumental in the successful effort to overcome Ballot Measure 4, a broadly written initiative aimed at Pebble but which would have likely affected all metal mining in the

state. "We fought so hard on Ballot Measure 4," Crockett reflected. "You had an organization that was against one project and knew that they could not make legislation that could only apply to a single project and so they threw out this horrible, unattainable standard to be applied to the mining industry statewide."

At the polling booth Alaska voters struck down the anti-Pebble initiative by nearly a 3-2 margin.

## MSHA strikes fear

Crockett said the Mining Safety and Health Administration is another federal agency that is wreaking havoc with Alaska miners.

"One of the top concerns I have been hearing all over the state and with pretty high intensity is the MSHA enforcement that is going on right now," said the executive director.

In her first two weeks on the job, Crockett has collected "pages and pages of stories" from frustrated AMA members.

She said these accounts point to an agency more concerned with enforcement than with safety training and accident prevention.

"A couple of (operators) have had MSHA come in and not find anything, leave without writing a citation. And a week later that inspector is back with his supervisor because they don't think it is possible that a mine could be operating that safely," Crockett explained. "Now those inspectors have a real fear so they are just looking for anything to write a citation on."

She said this focus on enforcement and the safety administration's complicated one-size-fits-all regulatory system is particularly onerous for the small-scale placer miners.

"They don't have the manpower and it's not necessary in the first place," Crockett told Mining News. "It's oppressing and I think there is real fear and belief that MSHA is trying to shut down the little guy."

## Modernizing AMA

In addition to directing the association's efforts to address the "files and files" of issues facing Alaska miners, Crockett plans to bolster the AMA's online presence.

"We are going to develop our website, we are going to start making our journal available electronically, we are going to start putting the issues that we are working on onto the website so that people can interface that way and we are going to develop our social media strategy," she told Mining News.

Recognizing that the AMA membership ranges from college students to centenarians, Crockett says that along with modernizing the way the association interfaces with its members and the world, she plans to retain many of the traditional outlets.

"We have a huge cross section of people and I want to make sure we continue to cater to all of them," she said.

This cross section goes beyond age.

"One thing I want to make sure is captured is we are not just the big mines — we are the placer miners, we are operators, we are the geologists and explorers," said the AMA executive director.

And, Crockett is looking forward to input from the entire gamut of AMA membership.

"I have been involved with AMA for a long time but I have not been running the association for very long at all — so, while positive feedback is good, I really want the constructive criticism that comes with it," she said. ●



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ALISON NORTHEY, COURTESY OF NOVAGOLD RESOURCES INC.

Donlin Gold partners, Barrick Gold Corp. and NovaGold Resources Inc. plan to file for the permits needed to develop the 40-million-ounce gold project later this summer. In the meantime, the current camp will be used to carry out environmental baseline studies and other activities in the vicinity of the world-class gold deposit located in the Kuskokwim region of Southwest Alaska.

• ALASKA

# Donlin Gold remains on permit path

*Barrick management shakeup does not change plans to submit applications this summer; new CEO quiet about focus of global miner*

By SHANE LASLEY  
Mining News

An early June shakeup at the upper echelon of Barrick Gold Corp. management, including the sacking of CEO Aaron Regent, calls to question the future of the 40 million-ounce Donlin Gold project in Southwest Alaska.

Regent, who had served as Barrick president and CEO since 2009, was replaced by executive vice president and CFO Jamie Sokalsky. Barrick founder and Chairman Peter Munk cited lackluster share performance when announcing the changes to the top executive office.

"We are fully committed to maximizing shareholder value, but have been disappointed with our share price performance," said Munk. "Our board has every confidence in Jamie's experience and commitment to take our company forward."



GREG LANG

Sokalsky, who joined Barrick as treasurer in 1993 and was elevated to CFO in 1999, said, "I feel enormously privileged to take on this role at Barrick, a company that combines operational excellence and financial strength with a track record of successful execution."

Munk also ceded a portion of his control over Barrick by elevating Director John Thornton to join him as co-chairman of the gold company he founded.

"John's knowledge and experience of global business affairs are truly exceptional and we are all fortunate that he has agreed to take on this important role," said Munk.

This turnover of management at Barrick comes at a time when Donlin Gold LLC — a company formed to develop the 40 million-ounce gold deposit and owned equally by Barrick and NovaGold — is on the cusp of formally filing permit applications for a mine that is estimated to cost upward of US\$6.7 billion.

While Barrick did not respond to questions regarding its plans to initiate permitting, Donlin Gold LLC External Affairs Manager Kurt Parkan told Mining News during a June 19 interview, "As far as we are concerned it is still full steam ahead."

*"Our board just met and we are still planning to submit our permits this summer."*

—Kurt Parkan, external affairs manager, Donlin Gold LLC

"Our board just met and we are still planning to submit our permits this summer," he added.

The Donlin Gold board of directors is a four-member panel with equal representation from both partners.

"We are all really geared to meeting the timeframe that gets us in the door sometime this summer," the Donlin Gold spokesman told Mining News.

Donlin Gold estimates that it will take about 3 1/2 years to obtain the some 100 permits required to develop the Southwest Alaska project and construction will take about as long — putting production toward the end of 2019.

## A big mine

While developing Donlin will be a monumental undertaking, once constructed the mine will be capable of producing more than 1 million ounces of gold per year, placing it in a category boasted by only a handful of operations worldwide.

"Donlin is amongst the top 1 percent of all undeveloped gold deposits in the world," NovaGold President and CEO Greg Lang informed shareholders during the company's annual meeting May 29.

Lang's familiarity with Donlin Gold is not a product of his executive office at NovaGold, a post he has only held since early January. Instead, his knowledge of the project comes from his nearly nine years as president of Barrick Gold Corp.'s North America Business Unit.

"Having come to the company directly from my position as the president of Barrick Gold North America, I had the privilege of being responsible for Barrick Gold's nine operations in the United States, Canada and the Dominican Republic. My responsibilities included representing Barrick's interest in the Donlin Gold project, which is equally owned by wholly-owned subsidiaries of NovaGold and Barrick. As such, I was intimately familiar with all aspects of the Donlin project and what I believe to be its uniquely attractive attributes," Lang wrote in a February letter to shareholders.

Among the attractive attributes touted by Lang is Donlin's enormous size. The deposit has 33.85 million ounces of gold reserves and about 6 million ounces of inferred resources.

"We have all seen a few deposits that ultimately grew to 40 million ounces but I can't think of any that started with a reserve-base of 40 million ounces," he said at the May NovaGold annual meeting.

At a 53,500-metric-ton-per-day throughput, these reserves are enough to support a 27-year mine life, according to an updated feasibility study completed for Donlin Gold in December.

The Kuskokwim-area mine is expected to produce an average 1.1 million ounces of gold per year at a cash cost of US\$585 per ounce. During the first five years of operation, this massive operation is scheduled to produce 1.5 million ounces of gold annually at an average cash cost of US\$409 per ounce.

Using a three-year trailing average of US\$1,200-per-ounce gold price as the base, the feasibility study predicts an after-tax net present value (5 percent discount) of US\$547 million and an after-tax internal rate of return of 6 percent. This base scenario foresees an annual after-tax cash flow of US\$949.5 million for the first five years and US\$500.7 million over the life of the mine — resulting in a payback period of 9.2 years.

Plugging in a US\$1,700 per ounce gold price, the after-tax NPV (5 percent) jumps 837 percent, to US\$4.58 billion, and the after-tax IRR more than doubles to 12.3 percent. Annual after-tax cash flow increases by more than 50 percent to US\$1.5 billion over the first five years and US\$814.9 million over the life of the mine — resulting in a payback period of 5.3 years.

"It's going to be a big mine, it is going to have very competitive cash-costs and it's located in the United States," Lang said.

Sokalsky will likely apply his three decades as a certified accountant as he weighs these attributes of Donlin Gold alongside Barrick's other projects worldwide.

"My focus will be on maximizing shareholder value and our mission of superior performance," said the new Barrick CEO.

Barrick's upper management has otherwise remained silent about the focus of the global mining firm since Sokalsky moved into the top executive office. ●

# Zinc projects take shape in the North

Uncertain global market conditions spur developers to adjust strategies; eye major infrastructure to transport future mine output

By ROSE RAGSDALE

For Mining News

As the scope and tenor of a long-predicted shortfall in zinc supply begins to take shape, proponents of advanced mine projects in northern Canada with substantial deposits of zinc, along with lead, copper and/or other metals, are busy refining development strategies aimed at achieving production by the end of the decade.

Near the front of the line are Tamerlane Ventures Inc., which is advancing the Pine Point Project in Northwest Territories, and Selwyn-Chihong Mining Ltd., which is working to develop the giant Selwyn Project in Yukon Territory.

Next up is China Minmetals subsidiary MMG, which recently outlined a plan to develop in tandem its Izok Lake and High Lake projects in northeastern Nunavut with significant infrastructure similar in design to the DeLong Mountain Transportation System that serves Teck Resources Ltd.'s Red Dog Mine in Northwest Alaska.

Lastly, Xstrata Zinc Canada is working to advance the Hackett River Project, which it recently purchased for C\$53 million from Sabina Gold & Silver Corp. The project also is located in northeastern Nunavut.

However, just as some projects are making headway in the choppy seas of market uncertainty, others are at best treading water and at worse threatening to sink.



COURTESY MMG

## Overland suspends permitting

Overland Resources Ltd. is one such company. The Australia-based junior suspended permitting June 13 for the Yukon Base Metal Project, citing results of a recent economic study and current uncertainty in the global equity and financial markets.

"The company remains confident that the outlook for long-term metal prices, particularly zinc, are positive and that they will increase over the next three to five years as demand increases following the recovery in global economies and

with the anticipated closure of several zinc mines, thereby reducing supply," Overland said in a statement.

"Importantly there are no expenditure obligations for the company to maintain the claims that host the Andrew and Darcy deposits in good standing until at least 2026. Hence the company can monitor the global economic situation without risk of losing an extremely valuable asset," Overland added.

Overland controls a 300-square-kilometer (116 square miles) combined land package in Yukon Territory that includes

the Selous (90 percent), Junction (100 percent) and Riddell (100 percent) projects, which together comprise the Yukon Base Metal Project.

Following evaluation of the viability of developing open pit and/or underground mining operations at the project, the company said it was determined that the best investment returns can be provided by developing separate open pits at the Andrew and Darcy zinc deposits. A total of 8 million metric tons of ore at an average grade of 5 percent zinc and 1.5 percent lead would be recovered over a seven-year mine life. The average waste to ore strip ratio for these open pits would be 12.5:1 (Andrew deposit — 14.9:1; Darcy deposit — 5:1).

The mine site development would entail establishment of a 1 million metric ton per annum SAG and ball mill crushing, grinding and flotation circuit to produce separate zinc and lead concentrates. The estimated capital cost to develop such an operation is US\$227 million with a further 20 percent contingency allowance of C\$45 million and an estimated pre-strip cost of C\$20 million.

The mining operation would be expected to produce, annually, about 95,000 wet metric tons of zinc concentrate grading 58 percent zinc and 28,000 wet metric tons of lead concentrate grading 62 percent lead for the life-of-mine. Concentrates would be transported by truck to the Port of Skagway in Alaska where they would be loaded onto bulk carriers and shipped to the customer's selected discharge port.

Estimated operating costs to deliver the concentrate to the ore loading terminal at Skagway would equate to US70 cents per pound of payable metal (zinc or lead). These operating costs include all mining and processing costs and transport charges to the port. Costs are exclusive of stevedoring, shipping, treatment and refining costs, taxes, permitting costs, government or community fees and charges.

Overland said the results of this economic evaluation indicate a sustained long-term improvement in both zinc and lead metal prices will be required to provide a suitable return to the company and its shareholders from a mine development.

## Tamerlane's project has advantages

In reporting June 5 that it has initiated coverage of Tamerlane Ventures, Hallgarten & Company LLC of New York described the company Pine Point project in Northwest Territories as one of the few potentially long-life zinc-lead properties currently on the drawing board.

"Zinc mining plays are rarer than one might imagine," wrote analyst Christopher Ecclestone. "Very few independents have made it to production in recent times, and those that have tended to have been devoured rather quickly by majors. This is a sign to us that rather than the sector being blighted, it is one in which the cognoscenti (mining majors, refiners/smelters and trading houses) are positioning themselves while the general investing public and institutions remain rather blithely unaware of the space's attractions."

While the bulk of the mining sector

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● COLUMN

# Industry experiencing unparalled changes

*PricewaterhouseCoopers' annual report on global mining outlines a growing disconnect between profits and stock value*

By **CURT FREEMAN**  
For Mining News

If you are looking for proof that the mining industry is experiencing unparalleled changes, look no further than "Mine 2012: The growing disconnect," the 9th edition of PricewaterhouseCoopers' annual report on the global mining industry.

This recently released report indicates that in 2011 the top 40 global mining companies posted record profits of \$133 billion and generated record operating cash flows of \$174 billion. However, over the course of the year, market capitalization of these same companies fell by 25 percent to about \$1.2 trillion.

The report concluded that investors don't seem to believe the industry's optimistic long-term growth predictions. The disconnect between profits and stock value was attributed to a number of factors, including the fact that the mining industry is a bellwether for the global economy and fears of a slowdown in global growth during the second half of the year as a result of the European debt crisis. The disconnect has continued into 2012.

The report indicated that production volumes in 2011 were up 6 percent over 2010, but for gold and copper in particular, production volumes remained at similar levels to those reported in 2005. Companies were not able to bring new production for these two commodities online in 2011.

## Western Alaska

**ZAZU METALS CORP.** announced the start of the 2012 field program at its Lik base metal project. The 2012 work is designed to provide the data required to advance the project to feasibility and permitting. Planned work includes environmental baseline studies on air and water quality monitoring, fisheries, cultural resource assessment, wetlands soil and vegetation mapping, hydrology and hydrogeology assessments. Studies are planned to refine bridge and haul road design and costs. These included field testing of routes, hydrology testing and spring breakup ice and water conditions assessment. Refining the resource estimates and pit models based on exploratory and engineering drilling are also planned. The work also includes metallurgical studies aimed at improving process design and enhancing recoveries. Lik South contains an indicated mineral resource of 18.74 million tonnes grading 8.08 percent zinc, 2.62 percent lead and 52.8 grams of silver per tonne; plus an inferred mineral resource of 1.23 million tonnes grading 6.80 percent zinc, 2.12 percent lead and 35 grams of silver per tonne, at a 5 percent cutoff grade. Lik North contains an additional 5.18 million tonnes grading 9.65 percent zinc, 3.25 percent lead and 51 grams of silver per tonne of inferred resource at a 7 percent cutoff grade.

**NOVAGOLD RESOURCES** announced that it has signed an agreement to transfer the Rock Creek gold property to **BERING STRAITS NATIVE CORP.** Bering Straits already owns substantial mineral rights in the region and participated in the development and approval of the closure and reclamation plans at Rock Creek. Terms of the transfer and immediate plans for

## The author

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**CURT FREEMAN**

Rock Creek were not released.

**GRAPHITE ONE RESOURCES INC.** announced completion of an airborne magnetic and electromagnetic geophysical survey over its Graphite Creek graphite prospect on the Seward Peninsula. The electromagnetic conductor that is coincident with graphite occurrences has now doubled to more than 13 kilometers in length. The program was expanded beyond its original size to determine the ultimate size of the anomaly. The survey is part of an aggressive \$4.5 million exploration program at the property which will consist of drilling, prospecting, geological mapping and sampling along conductors delineated from the airborne survey and previously defined graphite-bearing schist.

Graphite One Resources Inc. also

*The report concluded that investors don't seem to believe the industry's optimistic long-term growth predictions. The disconnect between profits and stock value was attributed to a number of factors, including the fact that the mining industry is a bellwether for the global economy and fears of a slowdown in global growth during the second half of the year as a result of the European debt crisis. The disconnect has continued into 2012.*

announced that it had relinquished its option to acquire a 100 percent interest in the Kelly Creek gold property consisting of 105,280 acres on the Seward Peninsula. In conjunction with the relinquishment of the property option, the company intends to write off all capitalized balances of approximately \$4,900,000 related to this project.

**NORTHERN DYNASTY MINERALS** commented on the draft watershed study recently published by the Environmental Protection Agency, EPA. This report targets development of mineral properties like the company's Pebble copper-gold-molybdenum project. The company indicated that they felt the report was rushed and inadequate since it took the EPA only a year to categorize more than 20,000 square miles of land while the company has spent eight years and \$150 million defining the natural and human environment at just the Pebble deposit. The EPA also failed to fully consider the data that the Pebble Partnership provided as part of its 27,000-page environmental baseline document. The EPA has said that information, provided to them last December, came too late to bear their full considera-

tion. The report generated its findings on a hypothetical mine and the company requested that EPA correct the popular myth that a modern mine occupying less than 1/20th of 1 percent of the land base, within a 400 square mile area that produces just one half of 1 percent of Bristol Bay sockeye salmon, could somehow wipe out an entire fishery. Public meeting have been scheduled and comments are being accepted on this report.

**TNR GOLD CORP.** has arranged a \$3.5 million loan from a private backer to provide funds for the company to conduct drilling and other exploration work on its Shotgun gold project. Objectives of the Shotgun Gold Ridge prospect drill program include: Infill drilling to support a compliant NI 43-101 resource calculation, testing of new geophysical targets identified in 2011 and further test at depth feeder zones discovered in 2006. During 2011 a 3-D geophysical orientation survey was conducted across Shotgun Ridge covering the area of historical drilling and extending beyond there along the ridge. The survey demon-

see **FREEMAN** page 11

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• COLUMN

# Lilliputian views 9th Circuit decision

*'Notices of Intent' filed by placer miners operating on claims within the National Forests held now to be subject to ESA consultation delays*

By **J.P. TANGEN**

For Mining News

The 9th Circuit handed down an en banc ruling on June 1, 2012, counter-posing placer mining on federal claims within the national forest along the Klamath River pursuant to a 36 CFR 228.4 Notice of Intent and Section 7 of the Endangered Species Act. *Karuk Tribe of California v. U. S. Forest Service*, No. 05-16801. Unsurprisingly, the majority ruled against the USFS and concomitantly against the miners on the single question of whether before consenting to a notice of intent, NOI, the Forest Service had to consult with the Fish and Wildlife Service about whether the activities contemplated in the NOI would adversely impact the "threatened" coho salmon habitat in the Klamath River system.

As an administrative appeal, the matter was dealt with solely on the record

## Mining & the law

The author, J.P. Tangen has been practicing mining law in Alaska since 1975. He can be reached at [jpt@jptangen.com](mailto:jpt@jptangen.com) or visit his Web site at [www.jptangen.com](http://www.jptangen.com). His opinions do not necessarily reflect those of the publishers of Mining News and Petroleum News.



J.P. TANGEN

compiled by the agency; and, inferentially, there was no significant discussion in the opinion as to whether the contemplated mining operations actually would have any impact on the coho population. On the contrary, the question upon which the majority focused was whether the ESA required consultation in the

*The opinion was not unanimous. Four judges on the panel signed on to a stinging dissent which focused on the costs and delays of the ESA's "arduous interagency consultation process." Referring to Gulliver's Travels, the author of the dissent contended that "decisions such as this one, and some other environmental cases recently handed down by our court ... undermine the rule of law, and make poor Gulliver's situation seem fortunate in the ligatures of new rules created out of thin air by such decisions."*

case of a "no action" decision, or whether the USFS could rely on its own biologists in consenting to the NOI.

The regulations in place in 2004, when the NOI was approved (substantially the same as the current regulations), differentiated among three categories of mining: de minimis activities, such as panning and the collection of samples, that "will not cause" significant disturbance of surface resources; activities that "might cause" disturbance of surface resources which require the preparation of a NOI, that would put the USFS on notice of the proposed activities and allow the USFS to determine whether a more detailed Plan of Operations must be prepared; and activities that "will likely cause" significant disturbance and do require an approved Plan of Operations. The first category requires no USFS action, the second requires the USFS to decide within 15 days whether a Plan of Operation is required and the third category gives the USFS 30 days (with extensions if necessary, up to 90 days) to approve the Plan of Operation and appropriate stipulations.

For small operators with little staff or resources to deal with bureaucratic delays, this reasonable timeline is functional and appropriate. In the case of the challenged NOIs, the applicants apparently were cooperative with USFS concerns and made suitable modifications in their respective notices which resulted in timely approvals. The Klamath Tribe, represented by the Western Mining Action Project (read Roger Flynn), on the other hand sought and succeeded in

persuading seven of the 11 judges on the panel hearing the case, that consultation with the U.S. Fish and Wildlife Service was mandated under the ESA. The net result from the decision was to extend the application period for a maximum of 15 days to a minimum of 90 days.

For Alaska miners, this decision is not likely to have a huge impact, because there is very little NOI placer mining ongoing in our two forests; however, as always, the precedent is disturbing. The Bureau of Land Management has analogous rules (43 CFR 3809) concerning operations on the public domain. Operations on anadromous fish streams which could be pursued on the basis of a NOI may now be at risk of falling into the bureaucratic abyss. Key holding of the court was that although these mining activities are of "marginal" impact for the purposes of NEPA, the review the standard for ESA consultation is even lower.

The opinion was not unanimous. Four judges on the panel signed on to a stinging dissent which focused on the costs and delays of the ESA's "arduous interagency consultation process." Referring to "Gulliver's Travels," the author of the dissent contended that "decisions such as this one, and some other environmental cases recently handed down by our court ... undermine the rule of law, and make poor Gulliver's situation seem fortunate in the ligatures of new rules created out of thin air by such decisions."

The right to mine on the federal lands, subject to reasonable regulations, once again has taken a hit at the hands of the 9th Circuit. ●

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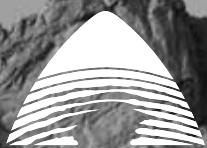


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## FREEMAN

strated that resistivity and conductivity methods are able to detect controlling structures within the ridge. These targets will be tested prior to completing an updated resource calculation. Additional geophysical surveys will be conducted on prospects Shot and King prospects to locate similar controlling structures and develop drill targets where extensive geochemical anomalies have not yet identified bedrock sources.

**REDSTAR GOLD CORP.** is planning an aggressive exploration program at its Unga project in Alaska. Work is expected to include additional drilling along the Shumagin high-grade vein, where drilling in 2011 intersected high-grade gold mineralization within a wide quartz-vein stockwork. The 2012 program will focus on expanding the known mineralization at depth and along strike. Gold mineralization with grades exceeding 1 ounce of gold per ton is known from historic drilling in the 1980s to cover a vertical range of at least 350 meters and a strike length of at least 800 meters. First-phase drilling is also planned at the Zachary Bay porphyry Cu-Au target 7 kilometers northwest of the Shumagin vein. Surface rock-chip sampling in 1974 returned 46 meters of 0.36 percent copper and 0.550 grams of gold per tonne. A short drill hole completed in 1975 intersected disseminated copper-gold mineralization in intrusive rocks over its entire length below overburden, with 107 meters grading 0.11 percent copper and 0.280 grams of gold per tonne. There has been no drilling conducted since 1975. Drilling is also planned along the Apollo-Sitka Au-Ag vein system, where sampling by Redstar in 2011 returned high-grade mineralization, including a vein separate of 94.7 grams of gold per tonne and 1,840 grams of silver per tonne within a 2 meter channel sample of 13.2 grams of gold per tonne. Other targets scheduled for drilling include the Aquila high-grade vein field, where drilling in 1980 intersected 113 g/t over 0.45 meters at the bottom of a 49 meter long drill hole. There has been exploration at Aquila since. The Centennial gold deposit on Popof Island is also scheduled for drill testing, with the focus on potential high-grade vein feeder structures underlying the shallowly drilled disseminated gold mineralization defined in the late 1980s. Results of that work included 1.07 g/t over 62 meters and 18.14 g/t over 3.0 meters.

## Interior Alaska

**FREGOLD VENTURES LTD.** announced additional drilling results from its Golden Summit project near Fairbanks. At the Dolphin zone, significant results include 96 meters grading 0.79 grams of gold per tonne in hole GSDL1209 within a broad zone of highly sheared and locally brecciated quartz mica schist and hornfels. Results also include 260.9 meters which returned 0.51 grams of gold per tonne in hole GSDLS1211 from altered intrusive rocks and hole GSDL1212 which intersected 283.5 meters grading 0.42 grams of gold per tonne including 17.7 meters grading 1.08 grams of gold per tonne and an additional 38.1 meters grading 0.87 grams of gold per tonne. Host rocks were mixed intrusive and schist with strong, pervasive sericite alteration, quartz and quartz-sulfide veinlets and mineralized breccia zones. Mineralization is associated with disseminated and quartz vein-hosted arsenopyrite and pyrite with lesser silver and lead sulfosalts. Additional drilling is

ongoing in the Dolphin zone and is planned for other areas of the project in 2012.

**MIRANDA GOLD CORP.** announced that **AGNICO-EAGLE (USA) LTD.** has started its 2012 drilling program on Miranda's Ester Dome project. Agnico plans to drill approximately 5,900 feet in nine holes. Drilling is designed to continue testing a large northwest-trending soil anomaly associated with a cluster of granitic bodies intruding schist and quartzite. Drilling will test internal north-east-trending geochemical highs within the broader soil anomaly, which may possibly represent controls to higher-grade mineralization, and also magnetic anomalies associated with anomalous gold values and mapped intrusives. Drilling will test internal northeast-trending geochemical highs within the broader soil anomaly, which may possibly represent controls to higher-grade mineralization, and also magnetic anomalies associated with anomalous gold values and mapped intrusives.

**ALIX RESOURCES CORP.** announced that it has begun its 2012 exploration and drilling programs at its Money Rock and West Pogo gold projects in the Goodpaster Mining District. Previous work at West Pogo identified two zones of gold mineralization from rock-chip grab samples with up to 118.5 grams of gold per tonne. At Money Rock, reconnaissance sampling has recovered rock grab samples with up to 200 grams of gold per tonne. Numerous grab samples with more than 1 grams of gold per tonne have been obtained from both properties. Drill targets have been identified through integration of geochemical and/or geophysical data, with a cumulative total of 6,000 feet of core drilling planned for the 2012 season. Geologic mapping and reconnaissance silt, soil, and rock sampling are also planned for the properties.

**LIBERTY GOLD CORP.** announced acquisition of a 60 percent interest in the 2,200-acre McCord Creek gold project in the Livengood-Tolovana district. The property contains five gold-in-soil anomalies with the maximum soil value exceeding 100 parts per billion gold. The two largest anomalies lie within the same sedimentary and volcanic package of rocks that contain International Hill's nearby Money Knob gold deposit. Terms of the acquisition and immediate exploration plans were not announced.

## Alaska Range

**MILLROCK RESOURCES** announced

that that it has entered into an option agreement with **VALE EXPLORATION USA** to discover large-scale copper-gold porphyry deposits in target zones of Alaska. Initial work will focus on the AUDN project, a promising porphyry copper-gold target situated approximately 100 kilometers southwest of the world-class Pebble deposit. The claim block is situated along a trend of porphyry occurrences. Aeromagnetic, gravity and radiometric potassium survey data indicate possible buried, mineralized intrusions within the AUDN project area. The companies plan to carry out geophysical and geochemical surveys in 2012. Under the terms of the option agreement, Vale may earn a 65 percent interest by expending \$3.5 million for exploration on the project over a three-year period and by paying Millrock \$200,000. Vale can earn an additional 10 percent by paying for all costs through completion of feasibility. Under the terms of the strategic alliance agreement, Vale is providing funding to Millrock for research and early-stage exploration to identify targets that may be nominated for designated project status. The work is focused on specific, defined areas of interest in the Alaska Range and Alaska Peninsula porphyry belts. Strategic Alliance funding consists of a minimum \$1 million in the first year, and a further \$1 million at Vale's option in the second year.

## Northern Alaska

**NOVACOPPER INC.** and **NANA REGIONAL CORP. INC.** announced that field exploration activities have begun on its Upper Kobuk project in the Ambler District. This year's planned program will focus exploration efforts on the Arctic, Bornite and Sunshine deposits. Four rigs have been mobilized to the project, targeting three principal areas for significant resource drilling: 1) The South Reef zone at Bornite where exploration in 2011 encountered very significant thickness of high-grade copper mineralization; 2) The historically explored Ruby Creek zone at Bornite where an initial resource estimate is expected by the end of June; and 3) the Sunshine deposit, a satellite polymetallic volcanogenic massive sulfide deposit located 12 kilometers west of the Arctic deposit where historical drilling identified significant intersections of massive sulfide mineralization in the same stratigraphic horizon as the Arctic deposit. A total of roughly 18,000 meters of diamond drilling is currently planned for the 2012 program to define

and/or expand resources at these prospects.

**ANDOVER MINING CORP.** announced mobilization for its 2012 drill program at the SUN copper-silver-lead-zinc-gold volcanogenic massive sulfide project in the Ambler District. The 2012 SUN drilling program will include an estimated 21 hole, 19,000 foot, drill program designed to further extend and delineate the Main SUN deposit (15,000 feet) and to extend and further test the S.W. SUN deposit (4,000 feet).

## Southeast Alaska

**GRANDE PORTAGE RESOURCES LTD.** announced that it has received approval to commence drilling at its Herbert Glacier gold project in the Juneau Gold Belt. The company plans to perform a two-rig drill program which will consist of 12,000 meters of close-spaced infill drilling with the objective of converting the existing inferred resource to an indicated resource. In addition, 3,000 meters of exploratory drilling will be targeting other vein targets (Goat and Ridge Veins) and along the open strike extents of the Main and Deep Trench Veins.

**UCORE RARE METALS INC.** announced that custom processing has been initiated on a 20 ton bulk sample extracted from three sites along its Bokan Mountain rare earth deposit. The samples will be crushed and segregated into four specified size fractions. The individual samples will then be transported to Germany to be processed through a production scale X-ray sorter to prepare an upgraded ore sample for future metallurgical testing. Previous production scale sorter tests showed that 50 percent of the material mined will be rejected as waste, while recovering approximately 97 percent of the rare earth metal content.

**ARROWSTAR RESOURCES LTD.** announced commencement of its first exploration program on its Snettisham iron ore prospect about 30 miles southeast of Juneau. Work will include mapping, hand held geophysical surveys and geochemical sampling over the prospect. This work is designed to help with a proposed drilling program to confirm the grade and quantity of the previously studied magnetite ore resource situated on the prospect claims. Some of the proposed drilling in the next phase will be designed to confirm results of some of the previous 49 holes drilled on the property for grade and structure. ●

# All Seasons





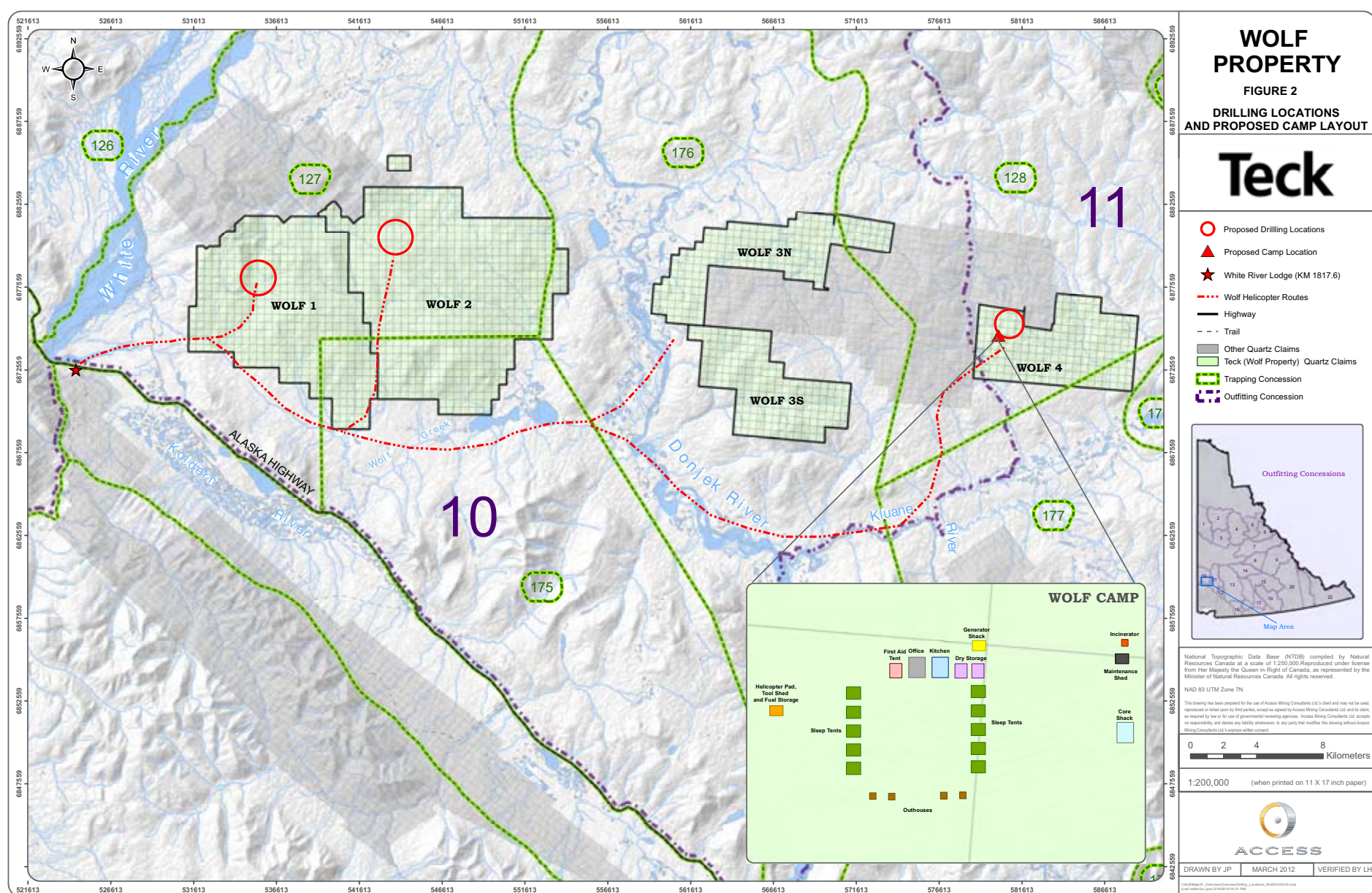
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# Driven to drill exciting gold discovery

Junior tests high-grade mineralization at White River prospect in SW Yukon; Teck readies adjacent property for extensive drilling

By SHANE LASLEY  
Mining News

Driven Capital Corp. recently launched a maiden 1,500-meter drill program to investigate the extent of high-grade gold-copper-silver rocks that pepper the surface of the White River property tucked in the southwestern corner of the Yukon Territory.

Situated about 30 kilometers (19 miles) east of the Alaska border and a mere 10 kilometers (six miles) north of

the Alaska Highway, White River is a grassroots discovery made by Tarsis Resources Ltd. in 2010.

"You just get a tingle up your spine when you see that kind of activity going on for a discovery that you made," Tarsis President and CEO Marc Blythe told Mining News during a June 19 interview.

According to an agreement inked in April, Driven can earn a 60 percent interest in White River by paying Tarsis C\$400,000 in cash; issuing 2 million Driven shares to the optionor; and com-

pleting C\$4.25 million in exploration expenditures at the property by 2016. This includes at least C\$500,000 of exploration spending this year. Tarsis will retain a 2 percent net smelter return royalty on any minerals produced from the property, half of which may be purchased by Driven for C\$2 million.

While much of the focus in the Yukon was on gold finds being made in the White Gold District and other exciting locales around the territory, Tarsis was quietly revealing White River's potential

to host a large gold-copper-silver deposit.

"The things that we are looking for are porphyry-style deposits or deposits that are related to that type of mineralization," Blythe explained when Mining News visited the site last August. "We like them because they are potentially large — and potentially large means bigger companies will be interested in them."

And one bigger company has taken notice. Teck Resources Ltd. has moved into the region, staking large blocks of claims to the south and east of the White Gold property.

When prodded about Teck's work in the region, Driven Capital President and CEO Toma Sojony told Mining News, "There are a lot of tangible reasons why we pursued the White River property — one of the intangibles was the fact that for once you have a major staking after a junior and that is pretty compelling for us."

## Inaugural drilling

Driven's first phase of drilling at White River is targeting High Grade and Cool, two zones that returned significant gold, copper and silver assays during the prospecting completed by Tarsis.

Sojony told Mining News that 10 holes are planned for this initial round of drilling, with six holes targeting the aptly named High Grade zone and four holes in the Cool zone.

The Cool zone owes its name and discovery to an east-trending surface feature marked by a series of frost boils containing abundant iron-rich limonite and traces of copper-rich malachite over some 350 meters. Sampling of the rocks heaved up by the frost along this trend returned 2 grams per metric ton gold, 274 g/t silver

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continued from page 12

## WHITE RIVER

and 3.83 percent copper.

Tarsis followed up this surface sampling with three hand-dug trenches. Highlights from 13 samples collected in trench TR-CZ11-01 include 1.18 g/t gold, 595 g/t silver and 1.77 percent copper; and 0.12 g/t gold, 345 g/t silver and 6.41 percent copper. The lowest grade sample from the end of trench 1 returned 0.08 g/t gold, 36.9 g/t silver and 0.25 percent copper.

Trenching at HG, situated about 500 meters south of Cool, reveals a gold-dominant zone.

The best results at HG came in trench TR-HG11-02, where a 1-meter continuous sample returned 82.2 g/t gold, 2.4 g/t silver and 0.24 percent copper. A grab sample from this channel returned 214 g/t gold along with 8 g/t silver and 0.1 percent copper; and an auger sample here assayed 129 g/t gold and 10.5 g/t silver.

Blythe told Mining News that while he was visiting the White River property on June 14 Driven was setting up the drill to test below the high-grade gold sampled in TR-HG11-02.

The Tarsis executive is eagerly anticipating the results from this initial drill program

“You are not going to extensively test the property with 1,500 meters but the best targets are going to get hit with this first phase of drilling and we will see what’s underneath these prospecting samples we have collected,” he said.

While the “truth machine” tests below the high-grade mineralization that peppers the surface of White River, Driven has geologists seeking out new prospects across the 6,400-hectare (15,800-acre) land package.

“Two of our geologists are up there and doing sampling at some of the other zones that will be the next priorities,” Sojonky explained. “The overall program that we envision for this year consists of the drill program, more rock and soil sampling, and possibly further trenching.”

When asked whether Driven will carry out a phase 2 exploration program in 2012, Sojonky said, “That is not beyond the realm of possibility. We are financed to carry out our first phase of exploration and, contingent on the results, we will proceed accordingly.”



SHANE LASLEY

Tarsis Resources President and CEO Marc Blythe examines rocks excavated from a hand dug trench at the White River project in southwestern Yukon Territory. A 1,500-meter drill program being conducted by Driven Capital Corp. will test the extent of mineralization below trenches that returned spectacular gold, copper and silver grades.

He said weather, logistics and market conditions will all factor into the company’s decision to conduct further drilling this year.

### Teck investigates Wolf

While Driven has a relatively small crew carrying out its 2012 program, Teck has mobilized a 20-man crew to investigate its Wolf claims situated immediately to the south and east of White River.

While Tarsis’ prospecting may have spurred Teck to investigate the White River region of southwestern Yukon, the Vancouver, B.C.-based miner has a century of information to guide its exploration.

“Between Teck and Cominco, there is probably over 100 years of exploration data for B.C., Yukon and Alaska. So we have a terrific database for gold and base metals, providing us quite a collection of historical data we utilize for making decisions on exploration.”

While Tarsis has found copper, gold and silver on its White River claims, Teck said it is solely interested in the gold potential of its claims in the Yukon.

“Our work in the Yukon is gold-only, and a fair bit of it is going back into our historical exploration files and coming up with some very encouraging stream sediment anomalies for gold,” Teck Resources VP of Exploration Fred Daley told Mining News last September. “So, over the last two years we have gone back to the Yukon and staked a couple of large properties and this year we are following up with some soil surveys and additional

*In late May, Teck filed an application with the Yukon Environmental and Socio-economic Assessment Board to obtain the permits required to conduct up to 60,000 meters of drilling at its Wolf property over the next five years.*

rock sampling.”

Daley said the Teck exploration team is refining targets for a potential 2012 drill program at its two large gold properties in the Yukon Territory.

While it remains unclear whether Teck will drill Wolf this year, the diversified miner has big plans for the property.

In late May, Teck filed an application with the Yukon Environmental and Socio-economic Assessment Board to obtain the permits required to conduct up to 60,000 meters of drilling at its Wolf property over the next five years. According to the application, two of the areas Teck proposes to drill are on claims immediately adjacent to White River. The diversified miner has identified a claim block about 45 kilometers (25 miles) farther east as a third drill area and site for a 35-man camp.

“We were astounded to hear about the level of activity that is planned next door,” Sojonky told Mining News.

Blythe, who worked closely with Teck and its field crews during the 2011 season welcomes the additional exploration being carried out by the White River neighbor.

“It is really encouraging to see that work going on so close to where we are and I hope they are successful. I think it adds to the story we have,” said the Tarsis CEO. ●



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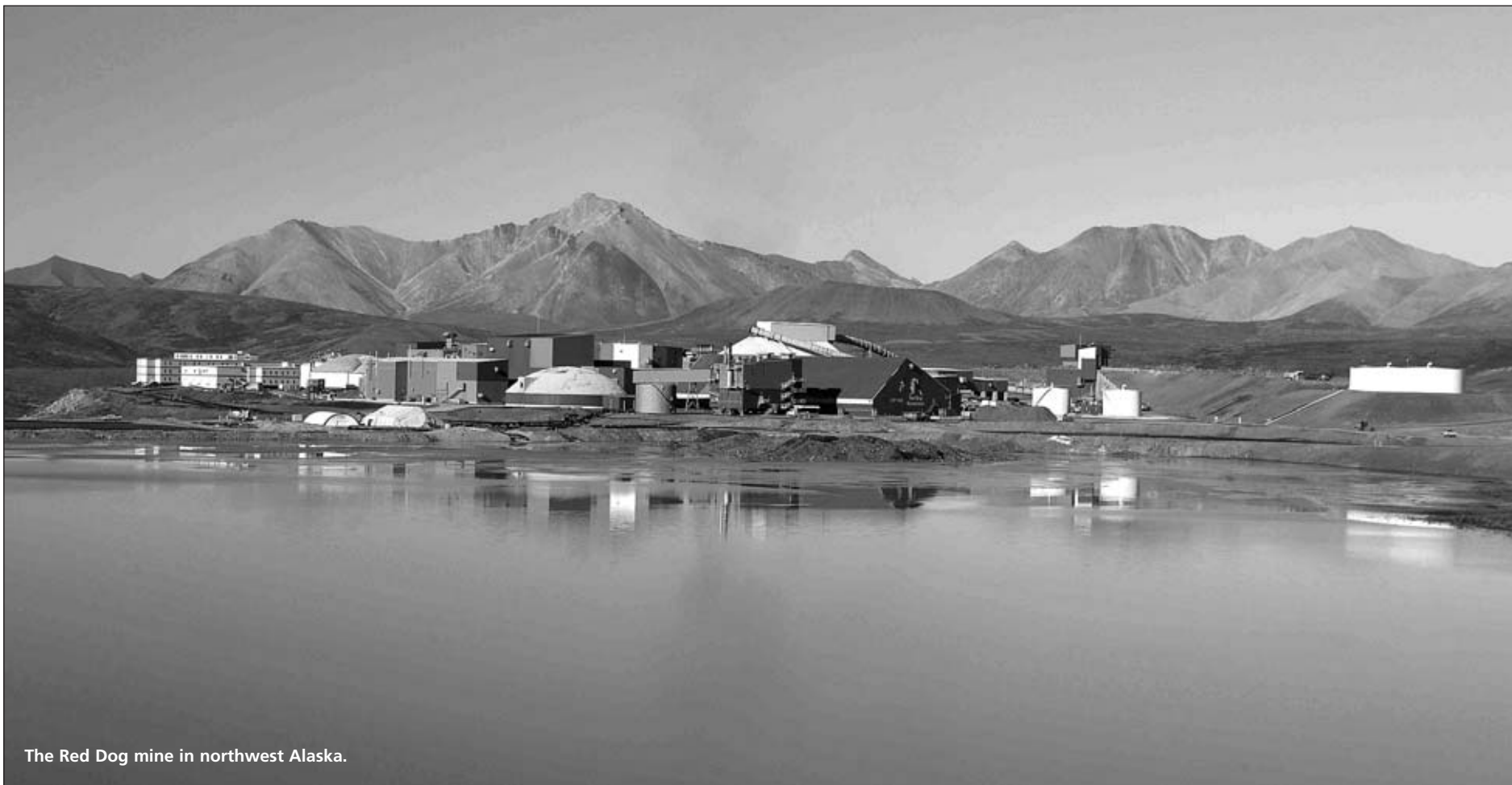
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continued from page 8

## ZINC PROJECTS

has rebounded in recent years, zinc has only ever been able to get back to US\$1.20 per pound (half its highs of last decade) and still meanders in the nether regions below \$1 per pound. Despite this, the prospect for zinc to be the top-performing major metal over the next few years (with a 24-month target of at least \$1.50 per pound) is very strong with a perfect storm of long under-investment in the space likely to coincide with re-activated demand and falling production from fading mega mines, Ecclestone said.

“In our hunt for ‘fresh meat’ in the zinc and lead space, a lot of effort is expended for the discovery of precious few candidates for investment. In itself this is a sign that there is a much more severe supply shortage coming down the pike in these two metals than in copper, where there is no dearth of junior and mid-tier names,” he added.

Ecclestone said Tamerlane’s Pine Point property includes 72 of the 97 resource areas in the historic Pine Point district, including 42 of the 45 known resource areas in the district which have not been mined. The Pine Point properties are located about 800 kilometers north of Edmonton, south of Great Slave Lake, in the Mackenzie Mining Division of Northwest Territories. The properties lie north of Territorial Highway 5 connecting Hay River and Pine Point town site, and extend intermittently from 25-80 kilometers (16-50 miles) east of Hay River. Pine Point consists of 40 mining claims, owned 100 percent by Tamerlane covering 43,340 acres (17,540 hectares). The claims cover the geological feature known as the Great Slave Reef (or the Pine Point Barrier Reef).

Tamerlane is focused on two deposits at Pine Point, the R190, which is a delineated deposit with NI 43-101-compliant proven and probable reserves of 1 million metric tons grading 10.98 percent zinc and 5.28 percent lead and 1.6 million metric tons of measured and indicated resources grading 2.72 percent zinc and 1.37 percent lead and 0.3 million metric tons of inferred resources grading 2.86 percent zinc and 1.08 percent lead. The R190 deposit lies within the main trend of the Pine Point mineralized trends.

“It is important to note that while the company is focused on first production from the R-190 deposit this is actually seen as a stepping stone to bring other neighboring deposits into production,” said Ecclestone. “In (Tamerlane’s) opinion around six million metric tons of resources from five different deposits are accessible after mining of the initial deposit is completed.”

He said a revised feasibility study in April produced a major difference in the capital requirements of the Pine Point Project from the feasibility study of 2008. This change included that five satellite deposits would each be accessed by separate surface declines, sized for underground truck haulage, as opposed to having one production shaft at the R-190 deposit and extensive connecting underground development and infrastructure to the five satellite deposits.

Tamerlane is also pursuing development of the N204 deposit as a shallow open pit mine. N204 has a diluted probable reserve of 12.6 million metric tons grading 2.6 percent zinc and 0.7 percent lead and a diluted in-pit inferred resource of 1.5 million metric tons grading 2.3 percent zinc and 0.6 percent lead.

The company’s latest feasibility study posits that the price of zinc can fall as low as US\$49 cents per pound before Pine Point would become unprofitable, according to Ecclestone.

### Selwyn eyes smaller mine, other options

Selwyn Resources Ltd. May 28 told its investors that Selwyn Chihong Mining Ltd., the joint venture company formed by Selwyn and Chihong Canada Mining Ltd. in August 2010 to advance the giant Selwyn Project located in eastern Yukon Territory to production, is evaluating a 3,500-metric-ton-per-day development concept focused on underground mining of the higher grade sections in the XY Central and Don deposits. The development plan under consideration uses selective mining methods, and has relied on detailed mine development and costing information from feasibility-level work completed to date.

This recent analysis suggests that a smaller mine has a good probability of providing a satisfactory economic return.

The JV is expected to present a detailed implementation plan and budget for the preparation of an updated



economic evaluation of this new development plan to its management committee later this quarter. Until the economic evaluation has been completed, and reviewed by external experts, anticipated economic results derived from the new development concept should be considered speculative and should not be relied upon.

A 2007 preliminary economic assessment for the Selwyn Project had considered an open-pit plan of mining 20,000 metric tons daily. Since the initial PEA was prepared, there have been significant movement in exchange rate, metal prices and capital and operating cost assumptions that would make the development plan described in the PEA no longer viable, and investors should not rely on the findings of that economic evaluation, Selwyn said.

Tetra Tech Wardrop (Tetra Tech) was engaged by the JV in January 2010 to complete a feasibility study for the Selwyn Project to NI 43-101 standards. The mining plan in the feasibility study focused on the development of the Selwyn Project as an 8,000-metric-ton-per-day underground mine operation, initially focused on the XY Central and Don deposits. In current market conditions and with the technical and engineering data consolidated to date, the JV has reported to Selwyn and Chihong that an 8,000-metric-ton-per-day development concept will not provide an economic return.

In March, Selwyn said it hired advisors Cutfield Freeman & Co. Ltd. to assist the company in evaluating its financing and strategic options in relation to the Selwyn Project and its ScoZinc Mine in Nova Scotia. Cutfield Freeman was to consider all financing alternatives including debt, equity and other financial instruments, as well as concentrate on off-take finance, partnership arrangements, corporate restructuring and sale alternatives for Selwyn and its mineral projects. Among other things, the advisors intended to enter into discussions with industrial groups that may have an interest in purchasing Selwyn.

### MMG pursues infrastructure of Izok, High Lake

A subsidiary of Chinese-controlled Mineral and Metals Group has embarked on an ambitious plan to develop its Izok Lake zinc-copper deposit located in western Nunavut about 350 miles southeast of a proposed port on Coronation Gulf and another, smaller mine at its High Lake zinc-copper deposit, which lies about 50 kilometers south of the Grays Bay port site.

MMG aims to build two mines: an open pit operation at Izok Lake, and another mine at High Lake.

Charlotte Mougeot, MMG’s environmental approvals manager, told a Nunavut audience in April that the key element, and the most expensive one, of her company’s plan is to construct a 350-kilometer all-weather road and port.

This road will head east until it hits the company’s Gondor property, then turn north just past the Lupin mine, through the mothballed Jericho mine and through the High Lake property. From High Lake, the road will continue on to Grays Bay on Coronation Gulf, which lies east of Kugluktuk, Nunavut and just west of Bathurst Inlet.

MMG’s road-port project will be similar to the one used at Teck’s Red Dog mine near Kotzebue, Alaska, Mougeot said. Big trucks will haul zinc concentrate from the Izok milling plant to Grays Bay, where it will be stored until the summer shipping season. On their return trip, the trucks will pick up crushed ore from High Lake and backhaul it to Izok for milling.

At Grays Bay, MMG intends to build a port that for three months of the year will ship ore in two directions

“It’s basically a big infrastructure project that happens to have two mines along the way.”

—Charlotte Mougeot, environmental approvals manager,  
Mineral and Metals Group

through both ends of the Northwest Passage.

Five shipments would head eastwards and, on their return voyage, head west toward the Pacific, Mougeot said.

MMG’s board must still approve a feasibility study that won’t be completed until early 2013.

“It’s basically a big infrastructure project that happens to have two mines along the way,” Mougeot said April 19 while addressing participants in the Nunavut Mining Symposium in Iqaluit.

With global demand for zinc and copper on the rise, MMG believes development of the Nunavut projects will be timely.

“If you’ve been following some of the predictions for the use of zinc and copper, it’s being driven by development in China and India and the growth of middle-class construction projects,” Mougeot said.

One existing producer, the Century mine in Australia, which MMG acquired from Oz Minerals Ltd., is expected to close around 2016, while Xstrata’s Brunswick mine in Canada will likely shut down in 2013.

So MMG hopes that its Izok corridor project and another property, the Dugal mine in Australia, will replace that lost production.

### Xstrata chases port plan for Hackett River

Meanwhile, Xstrata and Sabina are working to revive the Bathurst Road and Port project, which would provide access to Xstrata’s planned silver-zinc mine at Hackett River and Sabina’s Back River gold mine, which has up to a 6-million-ounce gold resource.

The vast and unexplored Hackett River silver-zinc property is located in the West Kitikmeot region of Nunavut, about 480 kilometers (298 miles) northeast of Yellowknife. It covers 10,637 hectares (26,285 acres) of mineral leases. In a 2009 preliminary economic assessment, the Hackett River deposit was estimated to contain total inferred and open pit resources of nearly 16 million metric tons averaging 3.53 percent zinc, 110.6 grams per metric ton silver, 0.24 percent copper, 0.46 percent lead and 0.25 g/t gold.

The advanced exploration stage project currently is estimated to contain a resource of 60 million metric tons diluted, with drilling in 2012-13 aimed at increasing the resource to allow a future mine production rate of up to 15,000 metric tons per day and more, if possible over an expected mine life of more than 15 years. Zinc, copper and lead concentrate will be produced, and to sustain the expected production rate, three to four deposits would be in production at all times.

Sabina reported March 30 that it bought the BIPR project from the Kitikmeot Corp. and other Inuit promoters in late 2011, and is now looking, along with Xstrata, at building a deepwater port in Bathurst Inlet (about 70 kilometers (43 miles) to the north of Sabina’s Back River project) and an all-weather road connecting the port to existing ice roads which service the Ekati and Diavik mines from Yellowknife.

The port facility, located 35 kilometers (22 miles) to the south of the community of Bathurst Inlet, would include the construction of a dock, 18 large fuel storage tanks, the 211-kilometer (130 miles) road to Contwoyto Lake, a 1,200-meter airstrip and two camps for about 200 workers.

“The main change we envision to the revised BIPR project will be the schedule relating to staging for construction,” the companies told the Nunavut Impact Review Board in a March 30 letter. “All the port facilities as well as the first 85 kilometers (53 miles) of all-weather road will be built in the first phase of the project. However, the western portion of the road and the camp as Contwoyto Lake will be built during the second phase once users have been confirmed, the companies added.

The project’s cost was estimated at \$270 million several years ago.

“Although not critical to the development of Back River, (BIPR) presents opportunities for synergies and potential economic benefits to Sabina,” wrote Sabina and Xstrata.

Now Sabina and Xstrata have agreed “to work together to push the project forward and will look to engage local communities and businesses and explore opportunities for direct Inuit participation in BIPR.” the companies added. ●





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• NUNAVUT

# Junior reports sizable diamond resource

Advanced exploration-stage projects on Melville Peninsula offer significant internal growth opportunities for successful explorer

By ROSE RAGSDALE  
For Mining News

With its flagship Renard project firmly on track to becoming Québec's first diamond mine, Stornoway Diamond Corp. recently demonstrated that it is also making progress in advancing its diamond exploration projects in Nunavut.

In an NI 43-101 technical report recently filed on SEDAR, the explorer reported the first mineral resource estimate for the Q1-4 kimberlite pipe located at the explorer's Qilalugaq project in Nunavut.

The Qilalugaq project includes the Qilalugaq kimberlite pipes and the Naujaat system of kimberlite dikes, and has been the focus of ongoing exploration and assessment work by Stornoway since it was optioned and subsequently acquired from BHP Billiton Diamonds Inc. in July 2006 and July 2010, respectively.

Highlights of the technical report include a total inferred mineral resource for the Q1-4 kimberlite pipe of 26.1 million carats from 48.8 million metric tons of kimberlite with an average plus-1 DTC diamond content of 53.6 carats per hundred metric tons extending from surface to a depth of 205 meters; and additional resource upside has been identified in the form of a target for further exploration for the Q1-4 kimberlite pipe of between 7.9 million to 9.3 million carats from 14.1 million to 16.6 million metric tons total content of kimberlite with an average plus-1 DTC diamond content of 56.1 carats per hundred tons, extending from 205 meters to 305 meters depth.

The reader is cautioned that mineral resources that are not mineral reserves do not have demonstrated economic viability. In addition, the potential quantity and grade of any target for further exploration is conceptual in nature, there has been insufficient exploration to define a mineral resource, and it is uncertain if further exploration will result in the target being delineated as a mineral resource.

## Kimberlites at Qilalugaq

"As we focus on the financing and development of the Renard diamond project in Québec, we continue to nurture our pipeline projects that represent the company's future growth potential," said Stornoway President and CEO Matt Manson.

The Qilalugaq project comprises 114,965 hectares (284,071 acres) of land located 10 kilometers (6 miles) north of Repulse Bay on the Rae Isthmus, which connects the Melville Peninsula to mainland Nunavut.

The property hosts 19 kimberlites, including the 14-hectare (34.6 acres) coalescing Q1-4 bodies, currently the largest known kimberlite in the eastern Arctic and the subject of a previous, large-scale sampling program by BHP. The major discovered eight kimberlites at Qilalugaq between 2003 and 2005.

The permits were initially acquired by BHP in 2001 and since that time the project has undergone several phases of exploration using airborne geophysics (mag-



This 0.587-carat stone is the largest recovered from a 4.2-metric-ton sample of the A28 kimberlite at the Qilalugaq Project in Nunavut in 2006.

netics, electromagnetics and gravity together with property-wide till sampling, drilling and limited mini-bulk sampling. Eleven kimberlites were discovered as a result of BHP's work and the 10 that were tested proved diamondiferous.

Montreal-based Stornoway discovered eight kimberlite dikes since optioning the project and taking over as operator in 2006. From 2006 to 2010, the junior was working to earn a 50 percent interest in the project from BHP.

In May 2010, Stornoway increased its ownership of the project to 100 percent, including 100 percent of the diamond marketing rights, by providing BHP with a 3 percent gross production royalty interest on diamonds and a 3 percent net smelter return royalty on other minerals.

In July 2010 Stornoway discovered a new kimberlite dike on the project. The 650-meter long Naujaat 8 body is represented by a linear series of discontinuous occurrences of frost heaved kimberlite fragments and boulders. Naujaat 8 was identified by prospecting in the vicinity of an anomalous till sample, bringing the total number of kimberlite bodies at Qilalugaq to 19.

## Advanced exploration project

"The Qilalugaq project, along with the Aviat project on the Melville Peninsula of Nunavut, is one of our advanced exploration projects where previous work has delineated a large potential inventory of diamonds, but where we have only limited diamond valuation data," said Manson.

The Q1-4 kimberlite complex at Qilalugaq is large, easily accessible from the hamlet of Repulse Bay, and exposed at surface.

"We are very pleased to have reported such a large maiden mineral resource estimate at a project that, with the long-term positive outlook on diamond prices, is becoming increasingly compelling," Manson added.

The 12.5 hectare Q1-4 kimberlite, the largest kimberlite pipe in the eastern Canadian Arctic, is situated

The Qilalugaq project includes the Qilalugaq kimberlite pipes and the Naujaat system of kimberlite dikes, and has been the focus of ongoing exploration and assessment work by Stornoway since it was optioned and subsequently acquired from BHP Billiton Diamonds Inc. in July 2006 and July 2010, respectively.

approximately 8 kilometers (5 miles) from tidewater, and less than 9 kilometers (5.5 miles) from the hamlet of Repulse Bay. Q1-4 is interpreted as a complex, steep-sided, diatreme to root-zone kimberlite, with a lobate external shape. It is comprised of five phases of kimberlite: A28a, A48a, A48b, A61a and A88a, and has been geologically modeled to a depth of 305 meters below surface. The pipe shape was defined from drill-hole data, country rock and kimberlite outcrop exposures, and magnetic geophysical surveys. Kimberlite geology has been determined using detailed logging of drill core and results of petrographic studies and includes massive volcanoclastic kimberlite classified as "tuffisitic" kimberlitic breccia, lesser coherent "hypabyssal" kimberlite, and varying proportions of country-rock xenoliths.

## Resource estimate

The mineral resource estimate was authored by Geostrat Consulting Inc. of Rancho Palos Verdes, Calif., and comprises the integration of kimberlite volumes, density, petrology and diamond content-data obtained from 5,133 meters of diamond drilling, 2,714 meters of reverse circulation drilling, 2.9 metric tons of samples submitted for microdiamond analysis, 257.7 metric tons of samples submitted for macrodiamond sampling with 59.2 carats of diamonds (2,054 stones) recovered from RC drilling, 7.5 carats of diamonds (205 stones) recovered from surface trenching and 2.36 carats of diamonds (69 stones) recovered from HQ diameter diamond drilling. These data summarize the results of exploration programs conducted on the Qilalugaq Property by BHPB from 2003 to 2005 and by Stornoway from 2006 to 2012.

The technical report recommends proceeding to the collection of a large tonnage surface sample at Q1-4 to establish a diamond price estimate. Stornoway has submitted an application to regulatory authorities to allow it to pursue this program of work, subject to an investment decision to proceed.

Though it continues to pursue growth opportunities at the Aviat and Qilalugaq projects in Nunavut, Stornoway recently said its 2012 focus will be on its new projects in Saskatchewan (Pikoo) and Québec (Aeon), following up pre-2008 indicator anomalies and potential for new kimberlite cluster close to infrastructure.

"Stornoway will continue to progress its grassroots exploration projects as it works to develop Renard," the company said in an investor presentation dated May 14. ●

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• ALASKA

# Shotgun owner targets gold resource

Securing a C\$3.5M private loan, TNR aims to confirm and expand 1 million-ounce gold deposit at Shotgun Ridge in Southwest Alaska

By SHANE LASLEY

Mining News

Following a five-year hiatus, TNR Gold Corp. has returned to confirm a 1 million-ounce gold resource at its Shotgun project in the Kuskokwim Gold Belt of Southwest Alaska. Located about 110 miles (175 kilometers) south of Donlin Gold and about the same distance northeast of Pebble, the property lies at the intersection of two trends known to host big deposits.

“So, it’s in a very, very prolific gold area. We think it has a potential not just for 1 or 2 million ounces ... we hope it’s going to host in the tens of millions of ounces,” TNR Gold President Gary Schellenberg said in an April interview with Midas Gold Money.

TNR Gold originally optioned Shotgun from NovaGold Resources Inc. in 2002. By the end of 2006, TNR had spent C\$4.5 million on exploration, more than enough to earn a 50 percent interest in the project. The Vancouver, B.C.-based explorer gained full ownership of Shotgun in 2010 by issuing 6 million TNR Gold shares and 3 million warrants to NovaGold — setting the stage for a return the Southwest Alaska gold project.

Like most junior exploration companies, TNR Gold’s share price has suffered from the current global financial unrest. This undervaluation has not prevented the company from securing funds to explore Shotgun.

At the end of May TNR announced that a private backer is willing to loan the junior C\$3.5 million to fund drilling and other exploration at Shotgun and provide the company with additional working capital. The loan — to be repaid by May 31, 2015 — is secured by a promissory note and general security agreement. The loan will bear interest at the rate of 20 percent per annum.

“Given the current financial climate and TNR’s undervalued market capitalization we are very pleased to have secured long-term, non-dilutive funding that will enable the company to advance the Shotgun gold project and return to the project generation business plan. Our present strategy is to develop TNR’s existing assets to a stage that fosters strategic joint venture partnerships,” said Schellenberg.

## Shotgun approach

Shotgun was known as Mose — a reference to the anastomosing quartz veins at the discovery outcrop — when the intrusion-related gold prospect was discovered by Cominco Alaska and Enstar Resources Corp. in the 1980s. The partners completed early prospecting and six shallow diamond drill holes (226 meters) before the phased transfer of ownership to NovaGold. Based on an additional 3,100 meters of drilling in 19 holes, the latter company outlined a pre-NI 43-101 resource of 980,000 ounces grading 0.93 gram per metric ton at a cut-off of 0.5 g/t at a zone known as Shotgun Ridge.

When TNR Gold entered the picture it did not focus on the 1 million-ounce gold resource area but took more of a shotgun approach. The company drilled several other underexplored prospects — with a particular focus on Winchester, a promising intrusion-related zone about 10 miles (16 kilometers) south of Shotgun Ridge.

“It’s one of these intrusive related gold systems that has a big look very similar to

the Donlin Creek,” according to Schellenberg.

The best intercept of some 1,653 meters of drilling completed by TNR Gold at Winchester came in hole 06-45. This hole, drilled in 2006, cut 23.6 meters averaging 1.9 grams per metric ton gold. Other significant intercepts at this intrusion-related target include 1.6 g/t gold over 14.3 meters in hole 05-32, 1.4 g/t gold over 12.2 meters in hole 06-50 and 1.22 g/t gold over 13.4 meters in hole 06-53.

TNR Gold’s exploration at Winchester has focused on a 1,400-meter zone of gold geochemical anomalies that spans some 7,000 meters.

Shot and King are two other prospects the junior has investigated.

## Targeting the resource

Though TNR Gold set out to make

new discoveries across the 16,200-meter land package at Shotgun, a small drill program targeting the historical resource area returned what could be the most significant hole of the junior’s exploration.

Hole 06-43, drilled at Shotgun Ridge in 2006, cut 210.5 meters averaging 1.29 g/t gold and includes a 27.4-meter section grading 2.3 g/t gold.

While this long section of more than 1 g/t gold was encouraging, the geological insights gleaned from this hole is what captured the attention of TNR Gold geologists. This hole transformed the understanding of structures controlling mineralization at Shotgun Ridge and revealed feeder zones, opening the 1 million-ounce gold resource to depth.

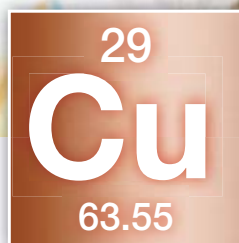
A geophysical orientation survey conducted across the historical resource area in 2011 revealed previously unknown structures within the Shotgun Ridge that

appear to correlate well with geology and mineralization identified in drilling.

Armed with the information provided by these 3-D resistivity and chargeability results, TNR Gold’s 1,500-meter drill program slated for this year is targeting mineralization to depth along the southwest dipping feeder zones identified in hole 06-43.

With the results of the 2012 program, TNR Gold aims to expand the 980,000-ounce gold resource at Shotgun Ridge and bring it up to modern NI 43-101 standards.

“Drill hole 06-43 has clearly been the most encouraging hole at Shotgun Ridge,” said TNR Vice President of Exploration John Harrop. “We are optimistic that the current drilling program will continue to increase this mineralized zone at depth which will be reflected in the subsequent resource estimate.” ●



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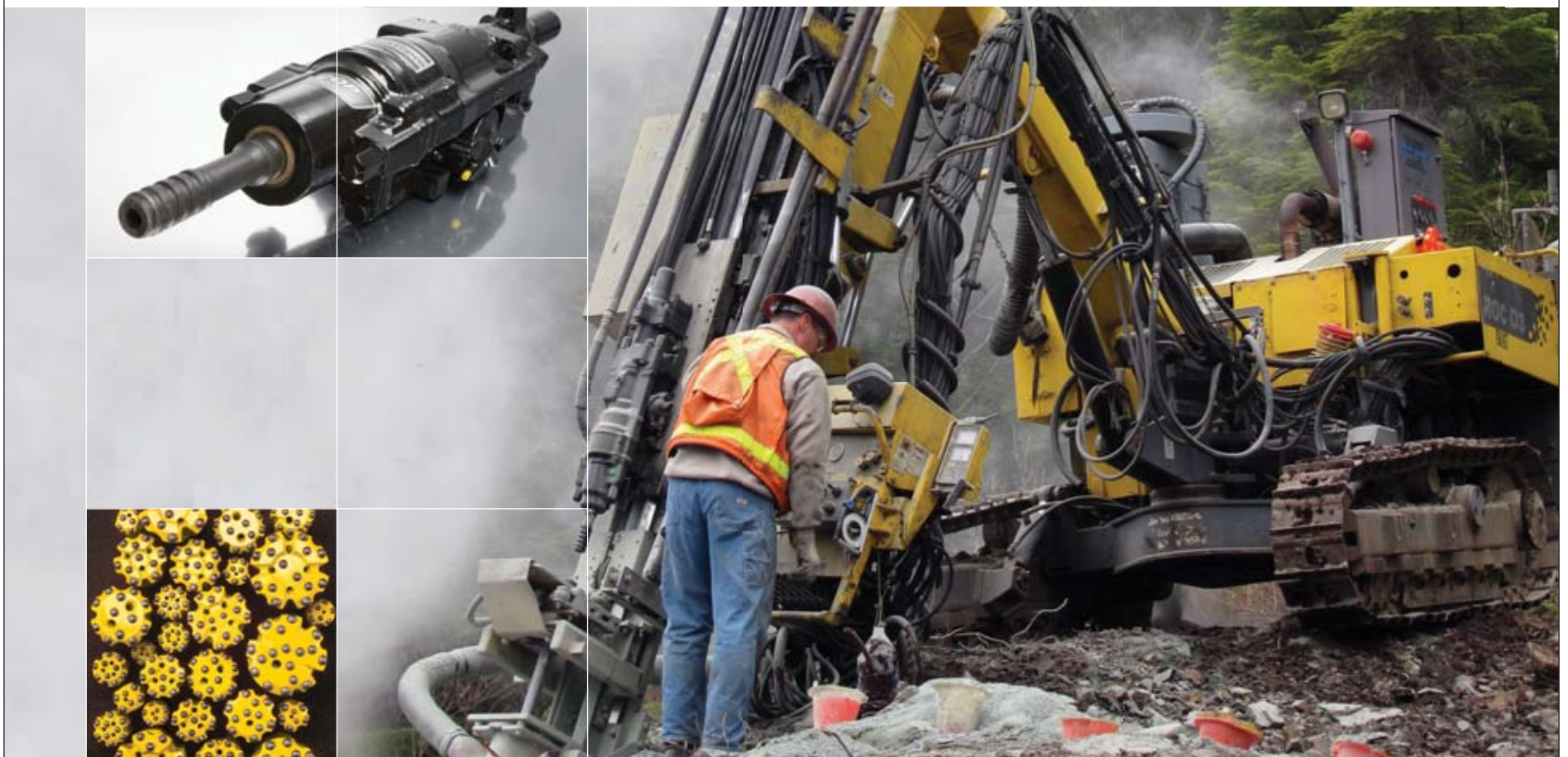
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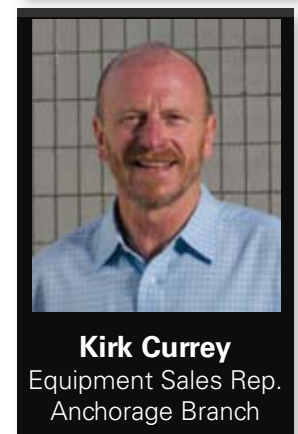
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