

A man wearing a red mining helmet with a headlamp, safety glasses, and a dark jacket is smiling. He is wearing a yellow and black safety harness. The background is a dimly lit underground mine with visible rock walls and some equipment.

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# Welcome to the 2012 Mining Explorers

Exploration across Alaska and Northern Canada in 2012 was tempered by the turmoil and uncertainty in the global financial markets that left many junior exploration companies struggling to pull together the venture capital needed to mount drill programs on their mineral prospects.

Despite the dismal equity markets, many mining explorers had enough money in their coffers to continue to unlock the promise of their projects in Alaska, northern British Columbia, Northwest Territories, Nunavut and Yukon; others found alternative means to fund their programs.

To keep our readers abreast of the challenges and triumphs of these companies developing the mineral potential of Alaska and Northern Canada, North of 60 Mining News Editor Rose Ragsdale and I keep a watchful eye on the issues, events and projects shaping the industry across this mineral-rich landscape.



FORREST CRANE

From the informative News Nuggets in our weekly online newsletter to the in-depth analysis provided in our monthly edition, North of 60 Mining News provides you with the most complete coverage available of the issues and events important to mining in Alaska and Canada's Far North.

Drawing on this unparalleled coverage, we have compiled information on 69 companies that are seeking the rich stores of minerals this vast and underexplored northern region boasts.

Rose and I are proud to present the 2012 Mining Explorers, the fourth edition of the magazine that delivers the most in-depth and comprehensive coverage of the companies investing in the future of Alaska and Northern Canada.

If you have comments or suggestions on how we can improve the annual Mining Explorers magazine or any of the North of 60 Mining News publications, feel free to email me at [publisher@miningnewsnorth.com](mailto:publisher@miningnewsnorth.com)

For more information about North of 60 Mining News, visit our Web site at [www.miningnewsnorth.com](http://www.miningnewsnorth.com)

Thank you and I hope you enjoy Mining Explorers 2012.

—Shane Lasley, Publisher, North of 60 Mining News

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## Mining Explorers

Released October 2012

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Cover photo:

High-grade gold discoveries made within sight of Sumitomo Metal Mining's Pogo Mine are ensuring that jobs for underground miners like Todd McCormick will be available at the Interior Alaska operation for years to come (page 62).

Photo by Judy Patrick Photography

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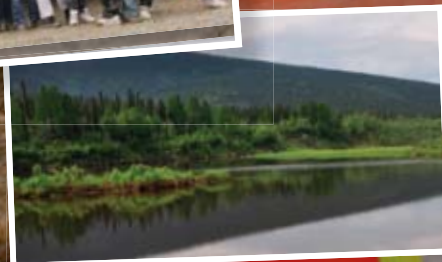
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# Alaska invests in minerals sector

Parnell administration undertakes five-part strategy to support industry

BY DANIEL S. SULLIVAN  
For Mining Explorers

**T**he state of Alaska is a strong supporter of continued investment, responsible development and growth in our minerals industry.

We recognize the key role the state plays in its minerals sector. We have an enormous endowment of minerals such as gold, zinc, copper, lead, silver and coal on state lands and can support job creation and economic growth in entire regions of the state by responsibly developing our natural resources. We are working hard to make Alaska a place where miners want to explore, invest and do business.

Alaska's mineral exploration and production continues to grow. In 2011 Alaska's mining industry grew at a healthy rate: gross mineral production was valued at \$3.8 billion in 2011, a 16 percent increase from 2010. This is significant to our overall economy: minerals accounted for more than a third of Alaska's exports. Exploration expenditures were at US\$300 million, a 14 percent increase from 2010. The spending on mineral exploration in Alaska accounts for roughly one-third of all exploration spending in the United States.

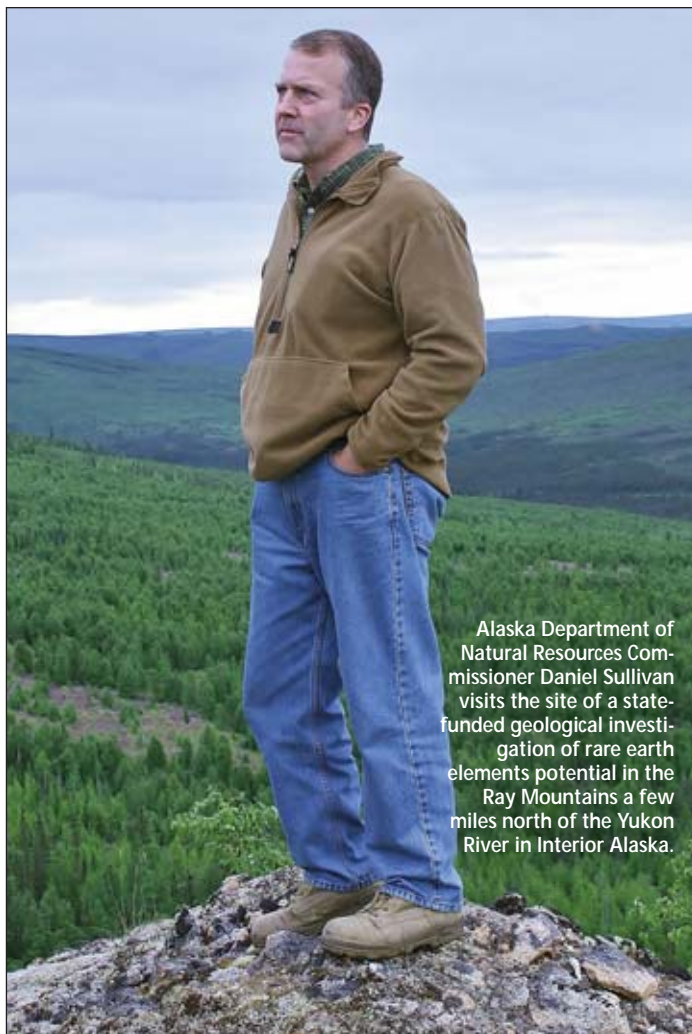
## Strategic minerals initiative

In September 2011, at the State of Alaska's first Strategic and Critical Minerals Summit, co-sponsored with the University of Alaska Fairbanks, Gov. Sean Parnell unveiled the state's five-part Strategic Minerals Initiative. This initiative is designed to grow the Alaska economy and contribute to our national security through the assessment, development and processing of Alaska's strategic and critical minerals, including rare-earth elements.

Our five-part strategy is focused on: Undertaking a statewide assessment of strategic minerals; providing incentives to develop known or highly-likely mineral occurrences; improving permitting to expedite responsible projects; strengthening partnerships and cooperation with other government entities, Alaska Native corporations and potential developers; attracting new investment and developing new markets for Alaska's mineral resources.

## Progress

One year out, we are making significant progress on many of these fronts. Regarding the statewide assessment, we worked with the Alaska Legislature this year to provide US\$2.7 million to support the Alaska Division of Geological & Geophysical Surveys' field work and analysis of data from strategic mineral occurrences around the state. This is in addition to the US\$500,000 that the Legislature previously provided to launch the assessment in 2011. This is the largest state-funded strate-



SHANE LASLEY

Alaska Department of Natural Resources Commissioner Daniel Sullivan visits the site of a state-funded geological investigation of rare earth elements potential in the Ray Mountains a few miles north of the Yukon River in Interior Alaska.

gic mineral assessment ongoing in the country.

This summer, DNR geologists fanned out across the state to work on the assessment, investigating strategic mineral occurrences ranging from Southeast Alaska to the Interior. They have published encouraging results from their fieldwork this year, such as gold and rare-earth element findings in the Melozitna mining district. An excellent summary of the division's assessment work ran on July 29 in this publication, under the headline "Alaska geologists unearth rare earths."

Regarding the second prong of our strategic mineral initiative, the state's "Roads to Resources" program prioritizes the construction of roads needed to access our minerals and other commodities. The Roads to Resources program incentivizes the

*continued on page 12*





NICK BANNERMAN  
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# GOOD FISHING IS GOOD MINING

The Elliot Highway is the westernmost extension of Alaska's contiguous road-system, which leaves a 350,000-square-mile (906,000 square kilometers) expanse of mineral-rich lands without roads and power. The Alaska's Roads to Resources program prioritizes the construction of roads needed to access minerals and other commodities in remote regions of the state.

JAMES BROOKS



#### **SULLIVAN COMMENT** *continued from page 10*

private sector to share in the cost of developing new roads and providing access to the state's natural resources. This will make projects more economical to develop and it will provide increased access to rural communities, with public input as a critical component. Working with the Alaska Legislature, we allocated US\$28.5 million for Roads to Resources projects across the state this year. Two of these projects will improve access to mineral deposits: construction of a road to Tanana, and work to develop a road to access significant mineral resources within the Ambler mining district.

The third prong of the state's strategic minerals initiative is to improve our permitting. The Department of Natural Resources and other state agencies have launched an effort over the past year to make our permitting more timely, efficient and certain. At DNR, we were able to slash our backlog of permits and authorizations by more than one-third. We continue to work over a number of fronts – including technological innovation and reforms to our statutes and regulations – and we have hired additional staff to ensure that we are processing applications in a timely manner.

This work to improve our permitting system is critical not just for the minerals industry, but also for other industries and individual Alaskans who simply want to access our state lands.

More “big-think” ideas are coming. Last year, we visited eight regions of the state to collect important public input on how to improve our permitting system. We worked with the Legislature

this year and were able to enact improvements to our statutes that will help to reduce costs and improve the timeliness of our decisions. We expect to propose additional changes to state regulations and statutes in the future.

We are also focused on building partnerships. A good example is our collaborative efforts with the U.S. Geological Survey and Alaska Native corporations on our strategic minerals assessment. We are also getting ready to host our second Strategic and Critical Minerals Summit on November 30 in Fairbanks, where many stakeholders will have the opportunity to discuss their activities and ideas to foster strategic mineral development in Alaska.

Our upcoming strategic minerals summit is also a critical tool in our overall effort to promote Alaska's mineral resources to the rest of North America and overseas markets. We are touting our vast resource base, our strategic mineral potential, our high environment standards, and interest in developing public-private partnerships to develop our infrastructure.

In the past year, state officials have traveled to large investor conferences in Canada and Asia to discuss the great opportunities that we have due to our natural resource endowment. Clearly, there is significant global interest in investing in our resources, and we are committed to doing this responsibly for the benefit of Alaskans.

*Daniel S. “Dan” Sullivan is Alaska's Commissioner of Natural Resources.*



Formed when the Wrangellia Composite Terrane thrust up the ocean floor as it collided with Alaska and suffused with copper and gold-bearing fluids at least twice, the more than 650-kilometer (400 miles) long Kahiltna Terrane provides the ideal setting for enormous porphyry deposits.

## Alaska Exploration 2012

# Alaska exploration takes a hit

Down but not out, a number of juniors fund drill programs across state

BY SHANE LASLEY  
Mining News

**E**nding a streak of robust growth, mineral exploration spending in Alaska during 2012 took a downward turn from the record US\$300 million spent a year earlier.

"More advanced-stage projects that added ounces or pounds to their resource base had a better go of it than early-stage exploration projects which have taken a hard right cross to the jaw!" Curt Freeman, a well-known Alaska geologist and president of Fairbanks-based Avalon Development, observed in September.

This blow delivered by unrelenting turmoil and uncertainty in the global financial markets was felt by junior explorers all year.

Greg Beischer, president and CEO of Mill-rock Resources Inc., said the scarcity of venture capital available to the junior exploration sector was palpable at the Cambridge House World Resource Investment Conference he attended in June.

"Things are dire," he told Mining News upon returning from the Vancouver, B.C. gathering. "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."

Despite the dismal equity markets, a number of juniors had enough money to mount 2012 exploration programs in Alaska – others found alternative means to continue advancing their projects.

"Down maybe but not out, this industry is fueled by an irrepressible optimism that we can and do create new wealth from a patch of dirt," Freeman said. "While nobody can tell us what the future will bring, this industry is the living embodiment of the old Chinese proverb that says 'Those who say it cannot be done should not interrupt those doing it.'"

Gold and copper once again topped the list of minerals sought in 2012 by junior and senior mining companies exploring Alaska. Explorers also chased clues to stores of silver, zinc, graphite and rare earth elements across the vast expanse of the Far North state.

### Copper-rich northwest

Though exploration activity slowed across many regions of the 49th state during the year, a pair of companies spent some US\$20 million investigating the Ambler Mining District – a region of Northwest Alaska renowned for a 70-mile- (110 kilometers) long belt of world-class volcanogenic massive sulfide deposits.

*continued on page 15*



CURT FREEMAN





Hole DH-187, drilled at the South Reef zone of NovaCopper Inc. and NANA Corp.'s Bornite property, cut 178 meters averaging 4.01 percent copper, including a 34.7-meter section grading 12.03 percent copper. Some 15,000 meters of NovaCopper's 2012 drill program at the Upper Kobuk Mineral Project focused on establishing an initial resource of high-grade copper for this deposit.

## ALASKA OVERVIEW *continued from page 13*

NovaCopper Inc. – spun out of NovaGold Resources Inc. to explore and develop copper-rich deposits in the Ambler District – mounted a US\$16.5 million exploration program aimed at adding to the some 3.6 billion pounds of copper resources the company and its predecessors have already outlined in the district.

About 2.6 billion pounds of this copper is found at the Arctic VMS deposit. The remaining 1 billion pounds is contained in the Ruby zone at Bornite – a carbonate replacement style deposit situated about 17 miles (27 kilometers) southwest of Arctic.

The marriage of these copper-rich deposits is the product of a partnership between NovaCopper and NANA Regional Corp., an Alaska Native regional corporation owned by the Inupiat who have called Northwest Alaska home for eons.

The Upper Kobuk Mineral Project – the name given to the alliance – focused the bulk of some 17,000 meters of drilling carried out this year on South Reef, a prospect situated roughly 250



RICK VAN  
NIEUWENHUYSE

meters east of the Ruby Creek resource.

Drilling at South Reef in 2011 encountered exceptional copper values including: DH-187, which cut 178 meters averaging 4.01 percent copper, including a 34.7-meter section grading 12.03 percent copper.

The 2012 drilling at South Reef continues to cut robust copper grades.

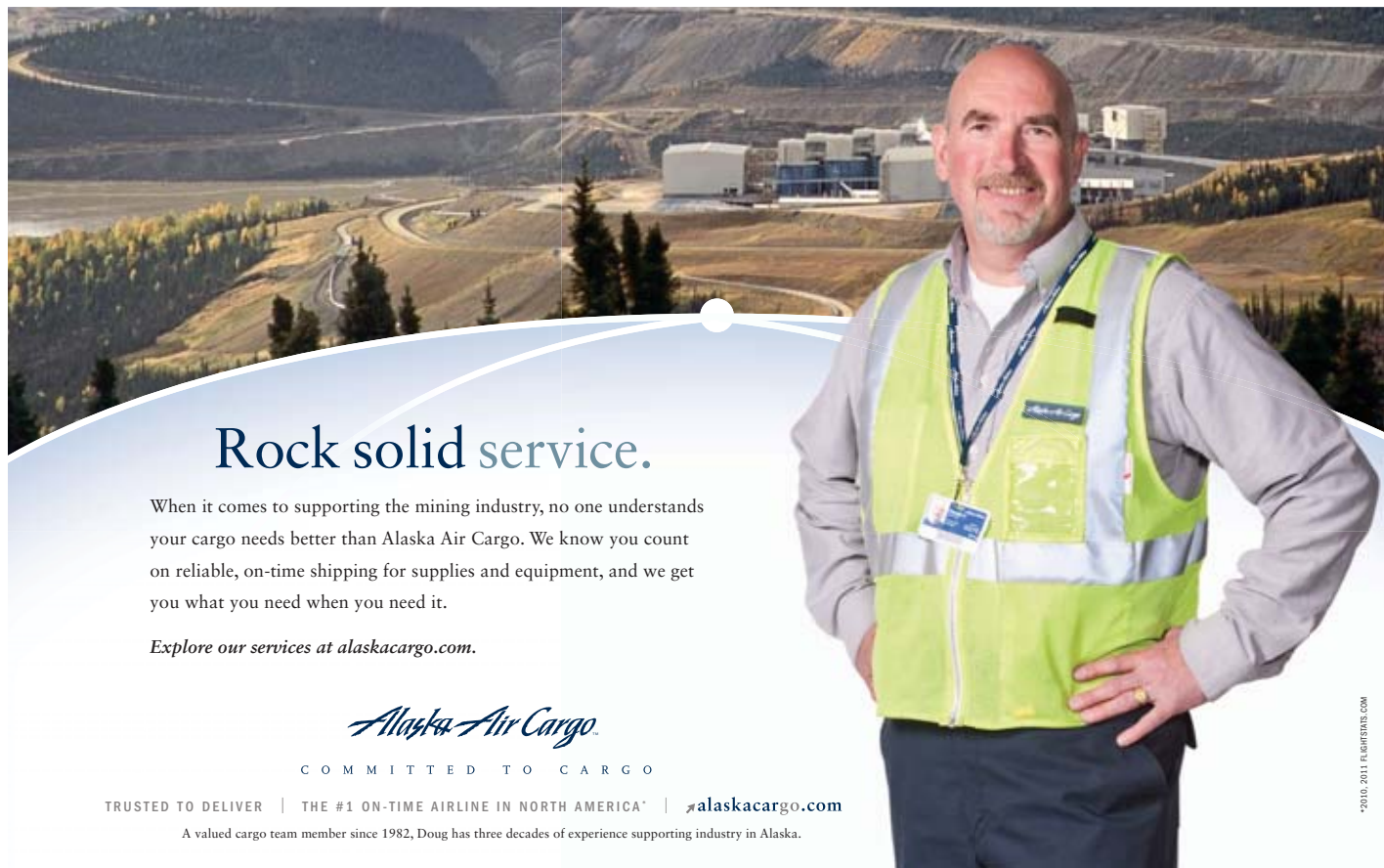
RC12-202, an early hole of the 2012 program, cut three mineralized intervals with a composite total of 50.1 meters averaging 3 percent copper, including 7.8 meters averaging 12 percent copper.

"These deposits are unfolding in a way that makes the Ambler district one of the most exciting copper plays in the world," said NovaCopper President and CEO Rick Van Nieuwenhuysse.

NovaCopper was not the lone explorer in the Ambler Mining District. Andover Mining Corp. invested US\$3.5 million on expanding the copper-silver-zinc-lead-gold mineralization at its Sun project located some 35 miles (55 kilometers) east of the Arctic deposit.

In 1977, Anaconda Copper Mining had a resource calculated

*continued on next page*



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NOVACOPPER INC.

Visitors to the Upper Kobuk Mineral Project capture this rainbow arcing over the Dahl Creek Road that links the copper-rich deposits at Bornite to the Arctic volcanogenic massive sulfide deposit some 17 miles (27 kilometers) to the northeast.

for Main Sun deposit of 2.4 million tons averaging 2.39 ounces per ton silver, 1.93 percent copper, 4.51 percent zinc and 1.2 percent lead; plus a larger underground resource of 17.89 million tons averaging 2.37 o/t silver, 1.91 percent copper, 2.46 percent zinc and 1.18 percent lead.

One of the primary goals of Andover's 2012 drill program at Sun is to upgrade and expand this resource.

"We designed our program this year to enable us to come out with a new resource calculation this fall and then move straight to PEA," Andover Chairman and CEO Gordon Blankstein told Mining News.

SUN 12-29 – the first hole of the 2012 program – cut three zones of mineralization. From a depth of 71.9 meters, hole 29 cut 8.6 meters averaging 1.5 percent copper, 9 percent zinc, 1.6 percent lead, 66.2 g/t silver and 0.19 g/t gold. From 100.5 meters this hole intersected 6.2 meters averaging 2.7 percent copper, 6.5 percent zinc 1.3 percent lead, 116.4 g/t silver and 0.40 g/t gold. At a depth of 130 meters, this hole cut 2.3 meters averaging 1.7 percent copper, 1 percent zinc, 0.26 percent lead, 48.9 g/t silver and 0.14 g/t gold.

S.W. Sun, a fault off-set extension of Main Sun, was also targeted in 2012.

Early results from the 2012 drilling at S.W. Sun include SUN 12-34, which cut 4 meters (3.6 meters true width) averaging 1.02 percent copper, 80.7 g/t silver, 6.45 percent zinc, 2.13 percent lead and 0.21 g/t gold.

As Andover and NovaCopper continue to add to the high-grade deposits in the district, the state of Alaska is studying the potential of building a road that links Ambler to the highway system some 200 miles (320 kilometers) to the east.

Over the past three years, Alaska has invested some US\$9.25 million toward making this vital transportation link a reality.

"If there was a road into there (Ambler District) you would be able to build at least two or three mines with what is already known, and we have probably 50 prospects with at least half with historic drilling on them," said Van Nieuwenhuyse.

## Bering Sea graphite

From the 1899 Nome Gold Rush to the Discovery Channel's recent reality series, "Bering Sea Gold", the Seward Peninsula has become legendary for roughly 5 million ounces of alluvial gold mined from its beaches and streams.

Though a growing crowd of individual and corporate miners continue to dredge aurum from beneath the Bering Sea waves breaking on the golden beaches of Nome, this 20,600-square-mile isthmus protruding off western Alaska is rich in a vast array of minerals.

An enormous store of graphite is one of the non-gold resources found here.

Anticipating the demand for graphite to skyrocket, Graphite One Resources Inc. is taking a fresh look at the aptly named Graphite Creek project about 40 miles (65 kilometers) north of Nome.

Some 200 million metric tons of ore at the Graphite Creek project has historically been estimated to hold 6 million to 20 million metric tons of crystalline-flake graphite.

An 18-hole, 4,248-meter drill program carried out by Graphite One focused on bringing this resource up to modern standards.

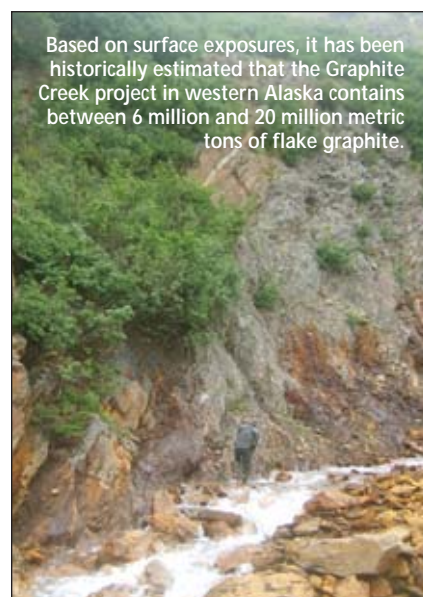
The tenor of the mineralization at the project is exemplified by 353 meters of 2.7 percent graphite cut in 12GC002, the second hole of the 2012 program.

"The results from this year's program continue to be exciting as they show us the continuity of this high-grade, large-flake graphite ore body," said Graphite One Resources President Anthony Huston.

An NI-43 101-compliant resource calculation for Graphite Creek is expected by early 2013.

While graphite grabbed the largest exploration program on the Seward Peninsula, the search for the lode source of the placer gold the isthmus is famous for continued in 2012.

Millrock Resources, in partnership with Kinross Gold Corp., drilled some 1,200 meters to find the source of some 1 million ounces of alluvial aurum recovered from the streams draining its Council project. This program targeted a northwest trending fault at the Elkhorn Creek zone.



Based on surface exposures, it has been historically estimated that the Graphite Creek project in western Alaska contains between 6 million and 20 million metric tons of flake graphite.

GRAPHITE ONE RESOURCES INC.

*continued on page 18*



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World-class deposits at Donlin Gold, Livengood, Fort Knox and Pogo only begin to account for the more than 17 million ounces of placer gold recovered from Alaska's portion of the Tintina Gold Belt.

JUDY PATRICK

## ALASKA OVERVIEW *continued from page 16*

NANA – which boasts the Red Dog Mine and Ambler Mining district as part of its traditional territory – is seeking the lode source of some 580,000 ounces of alluvial aurum recovered from the Fairhaven Mining District on the north coast of the Seward Peninsula.

“There is very little outcrop on the northern part of the Seward Peninsula – those districts have produced a fair bit of gold, and there is known copper and zinc occurrences all through that country,” explains NovaCopper’s Van Nieuwenhuysse.

Despite the limited bedrock exposure, geochemical survey carried out by NANA geologists have outlined an orogenic-stratabound gold system adjacent to the Kugruk Fault.

Rock samples gathered at Motherwood Point, where this major fault emerges on the northern shore of the Seward Peninsula, have returned assays of up to 9.4 g/t and 7.6 g/t silver.

### Golden Arc

Even in tough financial markets, the prolific Tintina Gold Belt continues to draw robust exploration programs. Though this vast aurum province that sweeps some 850 miles (1,350 kilometers) across the breadth of Alaska has given up Fort Knox, Pogo, Donlin and Livengood; these world-class deposits only begin to account for the more than 17 million ounces of alluvial gold recovered from this Golden Arc.

Alaska’s portion of the Tintina Gold Belt can be divided into two distinct groups – the eastern extent, which runs from the Alaska-Yukon border some 300 miles (480 kilometers) into the state, and the 74,000-square-mile (190,000 square kilometers) Kuskokwim Mineral Belt in southwestern Alaska.

Freegold Ventures Ltd. was the first and among the most pro-



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lific of the junior explorers active in the eastern half of Alaska's Golden Arc in 2012.

Located five miles (eight kilometers) north of the Fort Knox gold mine, Golden Summit blankets 80 known gold occurrences, including three high-grade, past-producing gold operations – Cleary Hill, Hi Yu and American Eagle.

Although remnants of these high-grade vein systems remain, Freegold is focused on large, bulk-tonnage targets more akin to Fort Knox or Kinross' True North Mine about 3.5 kilometers (two miles) to the west.

According to a late 2011 calculation, the Dolphin zone at Golden Summit contains an indicated resource of 14.84 million metric tons averaging 0.66 g/t (316,000 oz) gold; and an inferred resource of 50.46 million metric tons averaging 0.61 g/t (991,000 oz) gold.

A 15,000-meter program carried out by Freegold in 2012 aimed at significantly expanding this resource and connecting it to the nearby Cleary Hill Mine area, a target that demonstrates similar size and tenor to the Dolphin zone.

Among the most exciting developments in the eastern portion of Alaska's Tintina Gold Belt is a high-grade gold discovery made at Sumitomo Metal Mining's Pogo Mine.

The first 2 million ounces of gold produced at Pogo were mined from the Liese zone – three flat-lying, parallel quartz veins that carry some 14 g/t gold.

The gold-rich veins of the Liese zone end abruptly where they come in contact with a gold-barren body of diorite to the northeast.

Drilling on the north side of this diorite has discovered a new deposit known as Deep Trench. According to a March statement by Sumitomo, drilling here has outlined 12.33 million metric tons averaging 12.5 g/t (1.3 million ounces) gold.

The total extent of this zone is unknown and the deposit – being extensively drilled in 2012 – remains open to the west, north and northeast.

Many geologists believe that Pogo is only the first economical gold deposit that will be discovered in this region of Interior Alaska.

"I honestly believe that there will be other ore-bodies found in that area. It is very underexplored so far," said Millrock President and CEO Beischer. "There is going to be more mines in that region."

Millrock, Freegold Ventures and Corvus are amongst the junior explorers with promising land positions in the area around Pogo.

## Kuskokwim Mineral Belt

The geology of the Tintina Gold Belt begins to change as it dips towards Southwest Alaska. This sub-region – referred to as the Kuskokwim Mineral Belt – has produced some 4 million ounces of gold, 500,000 ounces of silver and more than 40 million ounces of mercury.

The 40-million-ounce Donlin Gold project — being developed by Barrick Gold Corp. and NovaGold Resources Inc. — is the crown jewel of the Kuskokwim. The search for other large intrusive-related gold deposits in this promising region of Southwest Alaska continues.

"There are a lot of porphyries throughout that belt that are a similar age to Donlin so I think there is tremendous opportunity there," said Van Nieuwenhuysse.

Hoping to expand upon a 1.74-million-ounce gold resource at its Vinasale project – situated about 90 miles (145 kilometers) northwest of Donlin – Freegold Ventures is one of the few juniors that mounted drill programs in the northern regions of the



NovaGold Resources Inc. and Barrick Gold Corp. have outlined an initial 40 million ounces of gold at the Donlin deposit in the Kuskokwim Mineral Belt. Explorers continue to seek other large intrusive-related gold deposits in this region of Southwest Alaska.

Kuskokwim during 2012.


Toward the south end of this mineral belt, TNR Gold has set out to confirm a historic 1-million-ounce gold resource at its Shotgun project.

Located about 110 miles (175 kilometers) south of Donlin and about the same distance northeast of Pebble, the property lies at the intersection of two trends known to host big deposits.

Like most juniors, TNR Gold's share price was hammered by the global financial unrest. This undervaluation, though, did not prevent the company from securing a C\$3.5 million loan to fund a drill program aimed at bringing the 980,000 ounce gold resource there up to NI 43-101 compliance.

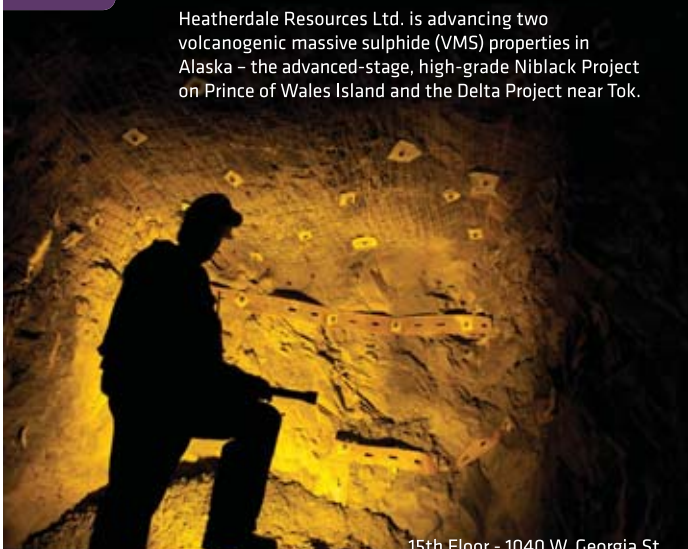
SR12-56, the first hole of this program, cut 242 meters averag-

*continued on next page*



## A HIGH-GRADE OPPORTUNITY IN ALASKA

Heatherdale Resources Ltd. is advancing two volcanogenic massive sulphide (VMS) properties in Alaska – the advanced-stage, high-grade Niblack Project on Prince of Wales Island and the Delta Project near Tok.



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Geologists conduct reconnaissance field work during the 2011 season at Millrock Resources Inc.'s Revelation gold project in the Kahiltna Terrane. Millrock continues to be among the most tenacious of the mineral explorers in this region of Southwest Alaska.

KYLE NEGRI PHOTO / COURTESY OF MILLROCK RESOURCES INC.

ing 1.25 grams per metric ton gold.

Besides Donlin Creek-style mineralization, the Kuskokwim region also hosts Nixon Fork, a carbonate skarn deposit rich in copper, silver and high-grade gold. Mercury, antimony, tin, platinum, tungsten, rare earth elements, and native bismuth have been recovered with the placer gold found along this mineral-rich belt.

### Porphyry-rich southwest

A band of terranes paralleling the Tintina Gold Belt to the south are rich in minerals and steeped in controversy. This arc consists of the Wrangellia Composite and Kahiltna terranes, two interrelated but distinct assemblages.

The Kahiltna Terrane – home of the enormous and contested Pebble deposit being advanced by Anglo American plc and Northern Dynasty Ltd. – is highly regarded for its potential to host other world-class porphyry copper-gold and intrusive gold deposits.

With its 80.6 billion pounds of copper, 107.4 million ounces of gold and 5.6 billion pounds of molybdenum, the Pebble deposit ranks amongst the world's largest for any of these metals – combined it is extraordinary.

Formed when the Wrangellia Composite Terrane thrust up the ocean floor as it collided with Alaska and pumped with copper and gold-bearing fluids at least twice, the more than 650-kilometer (400 miles) long Kahiltna Terrane provides the ideal setting for enormous porphyry deposits.

Millrock Resources continues to be amongst the most tenacious of the explorers in the Kahiltna Terrane.

Kinross has partnered with Millrock to explore Humble, a prospect that demonstrates similarities to Pebble, located about 80 miles (130 kilometers) to the east.

Targeting coincidental geochemical and geophysical anomalies, Millrock and Kinross conducted a four-hole drill program at Humble in 2012.

Millrock has also forged a strategic alliance with Brazil-based mining giant Vale S.A. to generate porphyry prospects in the Kahiltna Terrane.

"They would love to find another Pebble — as would we," Millrock CEO Beischer explained.

Porphyry copper is not the only mineralization Millrock is after in the Kahiltna Terrane. Teck Resources Ltd. is funding exploration at the junior's gold dominated Estelle project situated in the heart of the assemblage.

A four-hole drill program funded by Teck in 2011 provided for the first drilling at Estelle since Millrock acquired the expansive property in 2008. This program included 450.7 meters averaging 0.38 g/t gold in hole SE11-01, the discovery hole of a prospect known as Oxide.

SE12-04, drilled to the southeast of the discovery hole, cut 41.5 meters averaging 1.1 g/t gold, indicating the partners are narrowing in on the zone they are seeking. A strong geophysical anomaly further southeast is the planned focus of drilling in 2013.

The 2012 drilling at Estelle also cut promising gold at RPM and West Wing, two discoveries made across the 313-square-kilometer Estelle project.

A belt of much younger porphyries can be found further southwest on the Alaska Peninsula and Aleutian Islands.

Several epithermal gold and porphyry copper-gold mineralizing systems have been identified along the nearly 1,600-kilometer- (1,000 miles) long Ring of Fire island arc.

Full Metal Minerals Ltd. – which has an agreement to explore around 1.4 million acres of prospective Native-owned land on the Alaska Peninsula – is focused on the Pyramid copper-gold-molybdenum porphyry project.

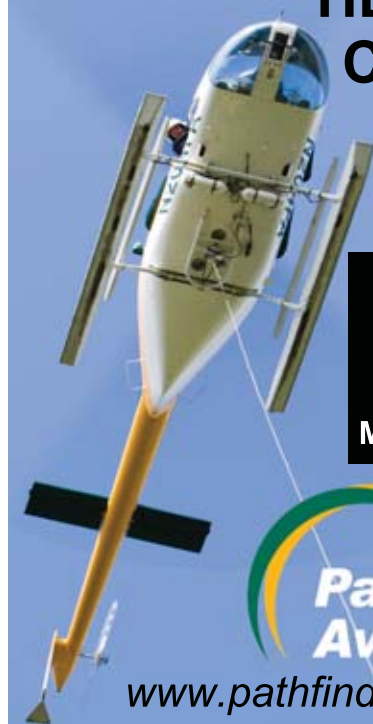
The Vancouver, B.C.-based junior and its Chile-based project

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partner, Antofagasta Minerals S.A. carried out a 3,000-meter drill program to expand and upgrade a historic resource of 125 million metric tons of near-surface mineralization grading 0.403 percent copper and 0.025 percent molybdenum.

Results from the 2012 drilling include hole PY12-019, which cut a high-grade zone averaging 1.01 percent copper, 0.165 grams per metric ton gold and 0.009 percent molybdenum over 42 meters, from 24 meters down-hole.

### Golden discoveries in Southeast

The Southeast Alaska panhandle has no shortage of precious, base and rare earth metals deposits and prospects.

Herbert Glacier – a high-grade gold deposit in the heart of the 100-mile (160 kilometers) long Juneau Gold Belt – is one such target.

Based on 65 holes and four trenches completed at Herbert Glacier through 2011, Grande Portage Resources Ltd. produced an inferred resource of 245,145 ounces of gold at an average grade of 4.86 grams per metric ton in 1.57 million metric tons of ore early in 2012.

A 15,000-meter drill campaign being conducted by Grande Portage in 2012 is focused on upgrading and expanding this inaugural resource. This program is highlighted by a 3.6-meter intercept averaging 117.5 and an 8.08-meters interval averaging 55.53 g/t gold.

A 725-kilometer- (450 miles) long belt of VMS deposits that stretches along the entire length of the Southeast Alaska panhandle.

At the southern end of this belt, Heatherdale Resources Corp. is continuing to expand a precious metals-rich deposit at its Niblack VMS project on Prince of Wales Island.

According to a resource estimate released in 2011, Niblack

contains an indicated resource of 4.1 million metric tons averaging 1.13 percent copper, 2.32 grams per metric ton gold, 2.27 percent zinc and 38.7 g/t silver; and an additional inferred resource of 1.74 million metric tons grading 1.21 percent copper, 1.77 g/t gold, 2.29 percent zinc and 25.90 g/t silver.

Heatherdale's 2012 program at Niblack is expanding this resource in preparation for a prefeasibility study expected to be completed by mid-2013.

Situated about 15 miles (25 kilometers) south of Niblack, Ucore Rare Metals Inc. is advancing its Bokan Mountain REE project toward production.

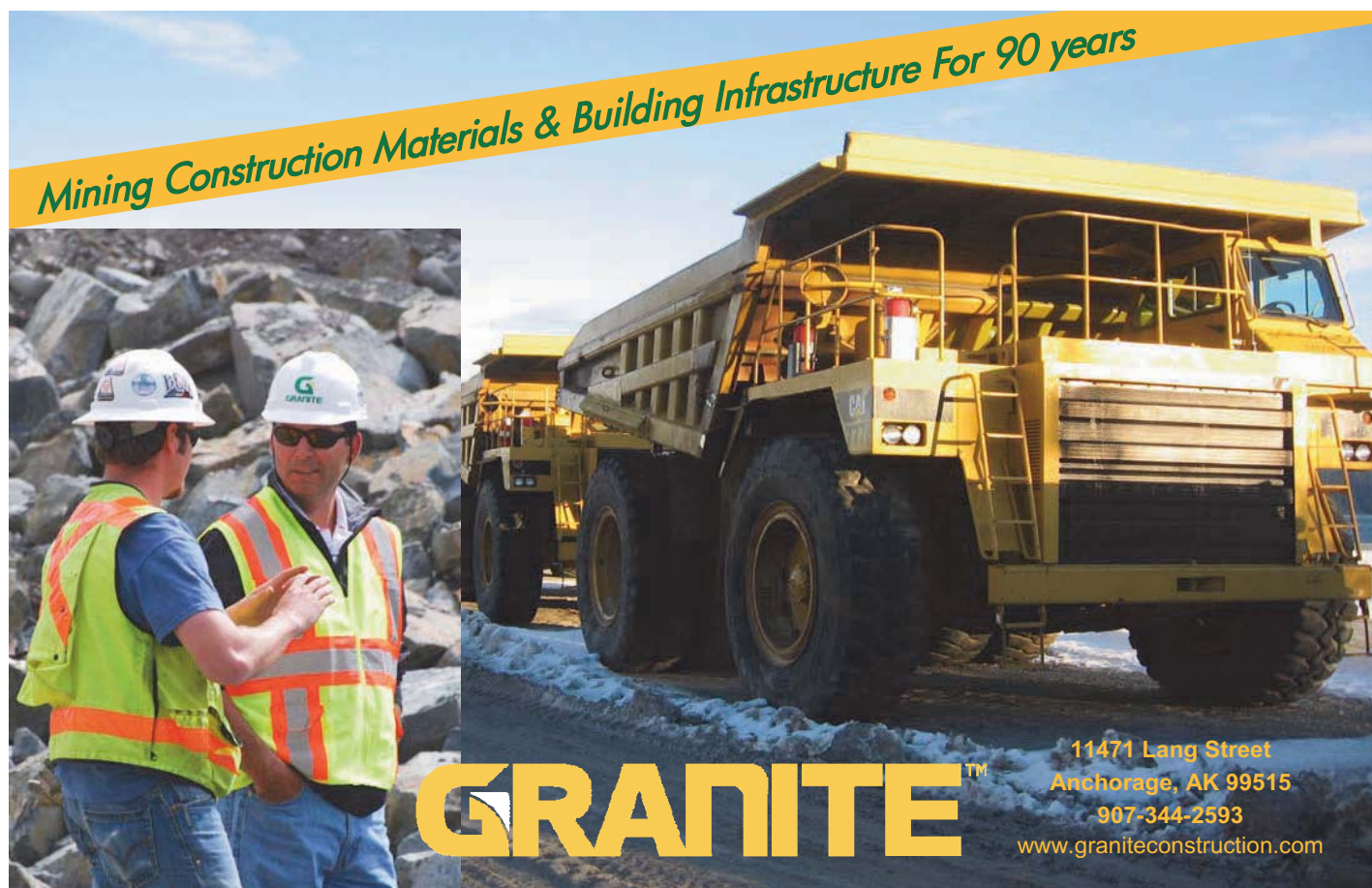
Bokan – the most advanced of a band of REE targets that span the Southeast Alaska Panhandle – hosts an inferred mineral resource of 3.7 million metric tons grading 0.75 percent total rare earth oxides.

Though not particularly large or high-grade, around 39 percent of the REEs at Bokan are the highly valued heavy rare earth oxides.

Ucore believes this heavy REE-enriched Bokan deposit holds great potential for the U.S. to develop a fully independent rare earth industry.

"Ucore is actively pursuing collaboration with the U.S. government to accelerate the development of Bokan Mountain's heavy rare earth resources, and is pleased with the progress of federal initiatives to date," said Ucore President and CEO Jim McKenzie.

From Ucore's efforts to develop a domestic supply of heavy REEs to the billions of pounds of copper being drilled by Nova-Copper 950 miles (1,500 kilometers) northwest, exploration companies continue "to create new wealth from a patch of dirt" across Alaska.



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CHAIRMAN: Ronald Netolitzky, M.Sc. Geology

PRESIDENT: James G. Pettit

QUALIFIED PERSON JUSTIN GOLD PROJECT:

Carl Schultze, B.Sc., P. Geo.

PROJECT MANAGERS: Mike McCuaig, B.Sc. (Justin);  
Aaron Higgs, B.Sc. (Selwyn Recce)

Aben Resources Ltd. focused in 2012 on its 7,412-hectare (18,314 acres) Justin gold project in south-east Yukon Territory. In August, Aben reported that the first of six holes totaling 1,298 meters drilled within the POW zone at Justin intercepted a robust zone of gold mineralization and has successfully extended massive sulfide skarn gold mineralization discovered during a 2011 program by 85 meters. Planned 2012 drilling was budgeted for 15-20 drill holes totaling up to 4,000 meters.

Aben also received a Class 3 exploration permit, allowing the company to carry out drilling, trenching, geophysical and geochemical surveys, sampling and prospecting at Justin for five years. The first hole, JN12011, returned 46.4 meters grading 1.49 grams per metric ton gold, including 9.2 meters grading 3.88 g/t gold at a vertical depth of about 100 meters. Hole JN12011 also confirmed the presence of a shallowly buried granitoid intrusion immediately underlying the POW zone. Aben said the contact zone of the intrusion with the surrounding carbonate country rocks became a primary drill target as it is an important control on the skarn-replacement mineralization observed in the first three holes at POW. This contact zone remained open along strike, down dip and to surface. Besides skarn-hosted gold mineralization, other characteristics similar to other gold deposits found within the Tintina Gold Belt have been observed at the Justin project. There are also large untested geophysical anomalies proximal to the POW discovery zone, which are considered high-priority targets. 2012 exploration activity also included prospecting, detailed mapping, ground geophysical surveys and the construction of an exploration camp adjacent to the Nahanni Range Road. Aben also reported entering into an agreement with Eagle Plains Resources Ltd. with respect to a base metal exploration program on its 55 Northwest Territories mineral claims, which specifically includes all carbonate-hosted and/or sedimentary exhalative-style silver-lead-zinc targets and/or sediment-hosted copper targets. Under terms of the agreement, all costs associated with the Sedex minerals exploration program will be shared equally, and the parties shall each own a 50 percent interest in the Sedex mineral rights to the property.

## CASH AND SHORT-TERM DEPOSITS:

C\$133,331 (at June 30, 2012)

## WORKING CAPITAL:

C\$1.48 million (at June 30, 2012; raised C\$1 million in August 2012)

## MARKET CAPITALIZATION:

C\$6.98 million (at Sept. 2, 2012)

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# CORE eyes Interior Alaska gold

## Texas explorer conducts US\$6.4M program at Tetlin; probes REE properties

BY SHANE LASLEY  
Mining News

With its sights set on gold, Contango Ore Inc. raised US\$8.8 million in March to fund a US\$6.75 million exploration program on its Alaska projects during the 2012 field season – the bulk of which was spent on a second-year drill program at the Tetlin gold-copper project about 12 miles (19 kilometers) southeast of the crossroads town of Tok.

The Houston, Texas-based explorer, known as CORE, is an Alaska-focused

mineral spinout from Contango Oil & Gas Co., an exploration and production company with petroleum resources primarily in the shallow waters of the Gulf of Mexico.

CORE Chairman and CEO Kenneth Peak is atypically frank about the pitfalls of investing in an exploration company.

"I have personally invested US\$4 million in the company's US\$8.8 million offering and am obviously enthused about our potential for success but also fully cognizant of the speculative nature of this investment and the likelihood that

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this entire investment may well be a 'dry hole,'” Peak said of the March financing.

In August, Peak announced he would be taking a six-month medical leave from CORE. Brad Juneau – owner of Juneau Exploration L.P. – has been appointed to fill the role of acting CEO during his absence.

Juneau Exploration, a private company that seeks out natural gas prospects for Contango, was instrumental in securing and negotiating the lease of the Interior Alaska copper-gold project with the Tetlin Village Council, an Alaska Native Village.

“The company is in the middle of its 2012 exploration program in Alaska, which has been previously laid out and approved by management. We will continue moving forward with this plan and do not expect any departures,” Peak said.

Avalon Development Corp. – a Fairbanks-based geological consulting firm – is providing exploration services, furthering the continuity of the 2012 program.

During a Sep. 14 interview, Juneau told Mining News that due to the efficiency of the 2012 program, he expects more drilling than originally anticipated.

“We spent the budget we wanted to spend and by the time the season is over, I think it is fair to say, we will have drilled more holes than we thought we would,” said the acting CEO.

While results from the 2012 exploration will not be released until the fourth quarter, Juneau said the company is encouraged by what it is seeing.

## Contango Ore Inc.

CTGO.PK: NasdaqOTH  
**CHAIRMAN:** Kenneth Peak  
**PRESIDENT AND ACTING CEO:** Brad Juneau  
**GEOLOGY CONSULTANT:** Curtis Freeman

Properties with mineral(s) explored:  
 Gold-Copper – Tetlin, Alaska  
 Rare Earth Element – Wolf, Alaska  
 Rare Earth Element – Swift, Alaska  
 Rare Earth Element – Spooky, Alaska  
 Rare Earth Element – Alatna, Alaska  
 Rare Earth Element – Salmon Bay, Alaska  
 Rare Earth Element – Stone Rock Bay, Alaska

**CASH AND SHORT-TERM DEPOSITS:** US\$7.65 million (June 30, 2012)  
**WORKING CAPITAL:** US\$6.01 million (June 30, 2012)  
**MARKET CAPITALIZATION:** US\$22.3 million (Sep. 17, 2012)

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## Chief gold-copper target

An 11-hole, 2,456-meter drill program carried out by CORE in 2011 centered on a gold-copper prospect at Tetlin known as Chief Danny.

Geophysical and geochemical surveys

at this porphyry prospect have outlined a zoned hydrothermal system consisting of a gold-copper-iron-enriched core covering six square miles (15.5 square kilometers) at a zone known as Chief Danny

*continued on next page*

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South and a three-square-mile (7.8 square kilometers) arsenic-gold zone at Saddle.

The best holes of the 2011 drill program at Tetlin were tapped into Chief Danny South.

Drilled at the southern end of the prospect, hole TET1105 cut 3.7 meters averaging 3.1 grams per metric ton gold, 300.2 g/t silver and 0.26 percent copper. TET1107 – drilled about 100 meters north of hole 5 – cut 6.4 meters grading 7.4 g/t gold, 4.9 g/t silver and 0.15 percent copper. TET1110 – drilled about 1,300 meters further north – cut 9.8 meters grading 1.18 g/t gold, 3.1 g/t silver and 0.04 percent copper.

Three holes drilled in the Saddle zone – believed to be a northern fault-offset extension of Chief Danny – returned weak mineralization.

Encouraged by the results of the first round of drilling, Chief Danny was a primary target of the 2012 exploration season. Some US\$3.6 million was originally budgeted for exploration at this porphyry target but Juneau hints at even more robust program at this project that remains open, particularly to the west and south.

“As opposed to more exploration we did more confirmation work,” the acting CEO told Mining News.

### Many leads

Though reluctant to provide details until exploration results are released, Juneau said Chief Danny was not the only area that warranted confirmation drilling.

In addition to the large porphyry copper-gold target, Contango has revealed five promising exploration leads across the 693,560-acre (280,680 hectares) Tetlin project.

MM, located some 5 kilometers (3 miles) southwest of Chief Danny South, is one such target.

Like Chief Danny, pan concentrate sampling lead to the discovery of MM in 2009. CORE said follow-up sampling carried out in 2010 turned up samples topping 0.1 g/t gold in several of the drainages in the area.

A magnetic airborne survey carried out in 2011 reveals a strong magnetic low at MM and refined the drill area for the 2012 drill program.

CORE is also exploring the area connecting MM and Chief Danny South with a soil auger grid survey.

Located some 14 miles (23 kilometers) south of Chief Danny, Copper Hill is another promising copper-gold lead CORE targeted in 2012.

Pan concentrates in two of the streams on the north side of Copper Hill returned assays of more than 23 g/t gold and another stream draining to the south turned up 4.9 g/t gold. Rock and soil sampling have shown that copper and gold mineralization is most prevalent along an east-west trending thrust fault that runs along the highland area dividing the gold-enriched drainages. This geochemical target was confirmed by coincident magnetic and resistivity highs.

Unlike many of the other prospects at Tetlin, it was geophysics that prompted Contango to investigate Taixtsalda, a drill target about 7 miles (11 kilometers) northeast of Copper Hill. Geophysical programs conducted in the 1970s and 2011 have outlined a distinctively round area of magnetic and resistivity highs indicative of a porphyry copper system. This geophysical anomaly is the target of a soil sample program being carried out this year.

Located about 20 miles (32 kilometers) northeast of Chief Danny, Triple Z is the only prospect with historical drilling. Unfortunately the results of the porphyry copper exploration completed by Cities Services Minerals Corp., in the early 1970s were never published.


Though the historical exploration may only provide limited clues to the potential of Triple Z, soil and rock sampling by CORE has yielded values as high as 9.07 g/t gold as well as anomalous copper, arsenic and bismuth.

Triple Z is a priority drill target of the 2012 exploration program.

### REE on back burner

In addition to its gold-copper property at Tetlin, CORE's portfolio includes six Alaska rare earth element projects, totaling some 100,000 acres.

While CORE carried out limited work on its REE projects in 2012, a 2011 field investigation carried out by the Alaska Division of Geological and Geophysical Surveys has unearthed promising



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concentrations of REEs in the area of the company's Wolf project in Interior Alaska.

One pan-concentrate sample from the DGGS survey, 2011LF540A, stands out for its particularly high concentrations of REEs and strategic metals.

Collected from Wolf Creek – a drainage on the north side of Wolf Mountain where CORE's claims are located – LF540A returned 2.9 percent total REEs (365 ppm dysprosium, 70.7 ppm terbium, 6,020 ppm neodymium, 1,460 ppm yttrium, more than 1,000 ppm praseodymium, 7,950 ppm lanthanum, more than 10,000 ppm cerium, more than 1,000 ppm samarium, 607 ppm gadolinium, 129 ppm ytterbium, 154.5 ppm erbium, 62 ppm holmium, 18.4 ppm lutetium, 30 ppm scandium, 22 ppm thulium and 6.6 ppm europium).

In addition to rare earths, the sample contained a suite of metals considered critical: 10,400 ppm manganese, 8.82 percent titanium, 890 ppm tungsten, 144 ppm chromium, 60 ppm gallium and 147.5 ppm niobium.

Strong mineralization of a stream sediment sample collected at the same location corroborates the results of the pan concentrate.

Wolf and three other properties – Swift, Spooky and Alatna – account for 97,280 acres of CORE's initial REE land position.

The company's two remaining rare earth prospects, Stone Rock and Salmon Bay, are located on Prince of Wales Island in Southeast Alaska – home of Ucore Rare Metals' Bokan Mountain REE project.

CORE limited REE exploration in 2011 and 2012 has focused on its two projects in Southeast Alaska.

"We are considering abandoning our state claims consisting of the Alatna, Spooky, Wolf and Swift claims effective December 1, 2012 to devote more time and resources to our federal claims at Stone Rock and Salmon Bay and our gold properties," CORE reported in its June 30 SEC filing.



Encouraged by the copper-gold-silver mineralization cut in 2011, Contango Ore Inc. focused a large portion of the US\$6.4-million exploration program carried out at the Tetlin project in 2012 on Chief Danny, one of several targets identified across the large land package in Interior Alaska.

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# Freegold gets a jump on exploration

Sub-zero temperatures fail to ice plan to merge zones at Golden Summit

BY SHANE LASLEY  
Mining News

**W**ith the mercury frozen at 40 degrees below zero, Freegold Ventures Ltd. lit a fire at Golden Summit, launching an aggressive 15,000-meter drill campaign at the Interior Alaska gold project in January.

Despite being located some 40 kilometers (25 miles) north of Fairbanks, a place that vies for the coldest spot in the United States, Golden Summit has the distinct advantage of being connected to a paved highway, grid power and cell phone service.

"Winter drilling is possible because of the excellent infrastructure in place," said Freegold Ventures President and CEO Kristina Walcott.

Freegold's early start on 2012 exploration follows 15,000 meters of drilling that the Vancouver-based junior carried out on its three Alaska gold properties in 2011 – an effort that culminated in updated resource estimates on its two most advanced projects, Golden Summit and Vinasale, and the first drilling completed on its Rob property in four years.

## Dolphin-Cleary Hill deposit

Located a short 5 miles (8 kilometers) north of Kinross Gold Corp.'s Fort Knox gold mine, Golden Summit blankets 80 known gold occurrences, including three high-grade, past-producing

### Freegold Ventures Ltd.

FVL: TSX-V  
PRESIDENT AND CEO: Kristina Walcott  
CHIEF FINANCIAL OFFICER: Gordon Steblin  
VICE PRESIDENT, EXPLORATION  
& DEVELOPMENT: Alvin Jackson

Properties with mineral(s) explored:

Gold – Golden Summit, Alaska  
Gold – Vinasale, Alaska  
Gold – Rob, Alaska



CASH AND SHORT-TERM DEPOSITS: C\$1.94 million (June 30, 2012) (Closed C\$1.85 million private placement subsequent to June 30, 2012)

WORKING CAPITAL: C\$1.28 million (June 30, 2012)

MARKET CAPITALIZATION: C\$38.7 million (Sept. 28, 2011)

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Suite 888 - 700 West Georgia Street  
Vancouver, BC V7Y 1G5  
Ph: 604-662-7307 • Fax: 604-662-3791  
www.freegoldventures.com

gold operations. Combined these historical mines – Cleary Hill, Hi Yu and American Eagle – turned out more than 450,000 ounces of gold from ore that averaged about 1.6 ounces per short ton gold.

Although remnants of these high-grade vein systems remain, Freegold is focused on outlining large bulk tonnage targets more akin to the ore at Fort Knox or Kinross' True North Mine about 3.5 kilometers (two miles) to the west.

According to a late 2011 calculation, the Dolphin zone contains an NI 43-101-compliant indicated resource of 14.84 million metric tons averaging 0.66 g/t (316,000 oz) gold; and an inferred resource of 50.46 million metric tons averaging 0.61 g/t (991,000 oz) gold.

While the Dolphin zone resource was being calculated, Freegold completed 3,856 meters of drilling at the nearby Cleary Hill area at the end of 2011.


Past exploration at Cleary Hill – including trenching, extensive rotary air blast drilling and some 6,400 meters of reverse circulation and core drilling – has outlined a zone similar in size and grade to Dolphin.

Results from previous drilling at Cleary

Hill include:

- CHD9704 cut 55.2 meters averaging 1.95 g/t gold;
- CHD0301 cut 124.5 meters averaging 1.02 g/t gold; and
- CHD001 cut 61 meters averaging 1.87 g/t gold, including 14.3 meters averaging 6.4 g/t gold.


The 2012 drilling at Golden Summit focused largely on merg-



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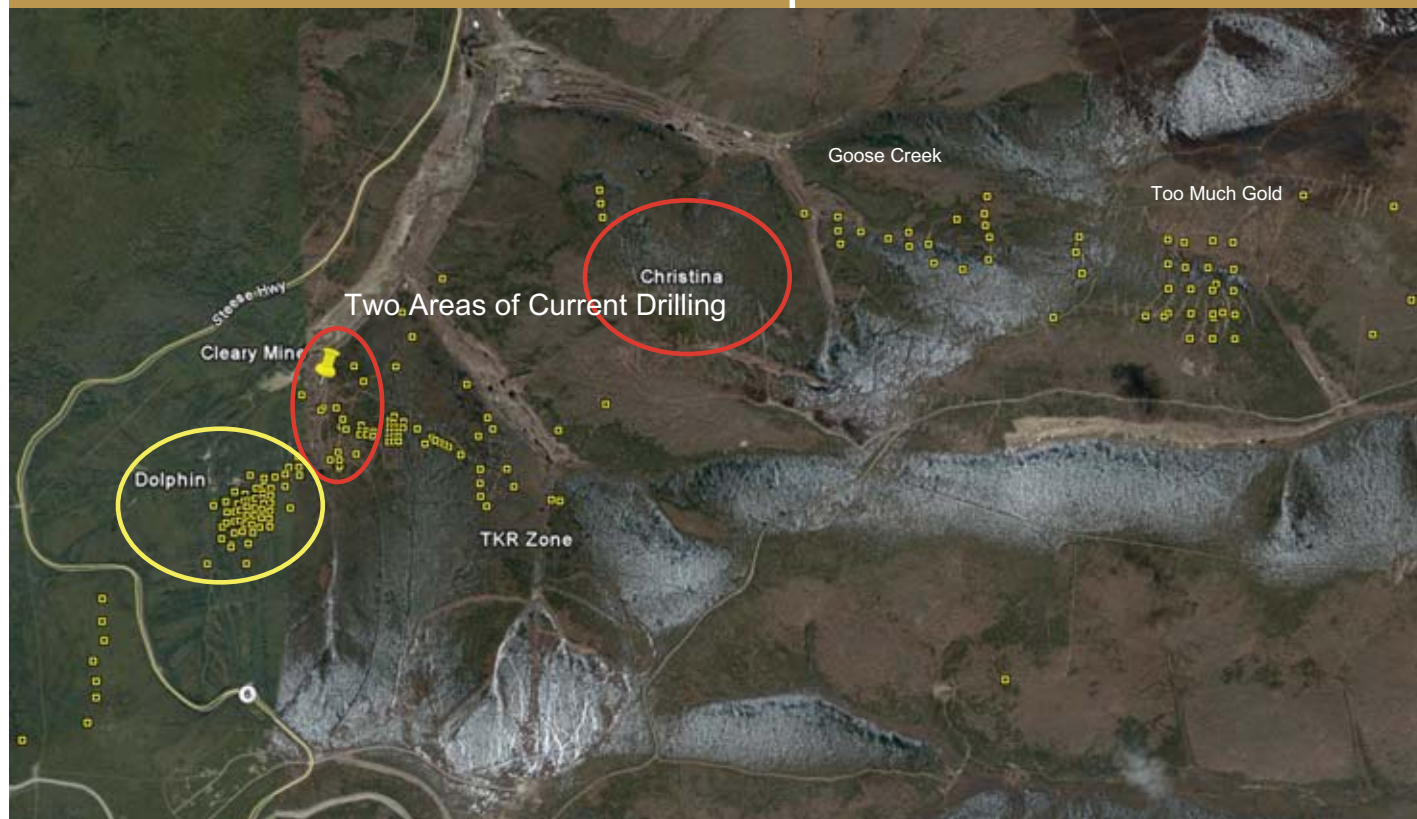
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Fairbanks, Alaska 99701  
907-452-4524



# Golden Summit Exploration Areas

FREEGOLD VENTURES LTD.



ing the Dolphin zone with the Cleary Hill Mine area to the northeast.

By drilling the 400-meter gap between the resource area and the expansion target, the company hopes the upcoming Golden Summit resource reflects a Dolphin-Cleary Hill deposit with a strike length of some 2,000 meters.

GSDL-1201 – drilled in the heart of the Cleary Hill Mine area – cut 6.24 meters near the surface that averages 2.93 g/t gold and a deeper intercept of 102.7 meters averaging 1.12 g/t gold.

GSDL12-01 – drilled in the gap between Dolphin and Cleary Hill – returned 314.1 meters averaging 0.69 g/t gold, including 132.7 meters of 1.19 g/t gold.

GSDL1204 – drilled about midway between Dolphin and Cleary Hill – cut 115.06 meters grading 1.08 g/t gold.

GSDL1207 – drilled about 100 meters north of 1204 – cut 39.6 meters averaging 1.88 g/t gold, further demonstrating the tenor of mineralization between Dolphin and Cleary Hill.

GSDL1210 – drilled closer to the Dolphin resource area – cut 20.9 meters grading 34.69 g/t gold.

GSDL1213 – drilled in the Dolphin-Cleary gap about 100 miles east of 1204 –

*continued on next page*

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### Advanced Explorations Inc.

AXI: TSX-Venture

PRESIDENT AND CEO: John Gingerich, P. Geo

VP ENGINEERING AND TECHNOLOGY: Florin Gheorghiu, Ph.D.

VICE PRESIDENT, CAPITAL PROJECTS AND STUDIES: Bernard Swarbrick

Advanced Explorations Inc. focused in 2012 on developing its Roche Bay and Tuktuk Iron Ore projects in Nunavut. The Roche Bay Project located on the east coast the Melville Peninsula boasts a NI 43-101-compliant resource estimate of more than 500 million metric tons outlined within a small portion of the potential 140 kilometers (87 miles) of banded iron formation. In August, the company reported a positive feasibility study conducted for the C Zone at Roche Bay that targeted a start-up production of a 66 percent iron concentrate a rate of 5.5 million metric tons per year. Advanced Explorations confirmed the presence of very high-grade iron at Tuktuk over a substantial area, supporting the company's belief in the direct ship ore potential of the target. In September Advanced Explorations said it identified a second horizon within the Tuktuk 2 area with high-grade iron similar to the main Tuktuk 2 occurrence. The new discovery is located on a north-south, parallel trending magnetic anomaly about 400 meters east of the



Tuktuk 2 zone. Outcrop exposure in the area of the discovery is limited and additional detailed geophysics and mapping is underway to help define strategic drill targets. The company Sept. 13 said it was drilling the northern portion of the Tuktuk 2 high-grade iron zone which yielded assays as high as 69.3 percent iron and intends to include drill testing of the new discovery. To expand its land position to cover areas deemed prospective for the discovery of nickel-copper massive sulphide mineralization, the company staked 82 mineral claims totaling 66,000 hectares (163,200 acres), bringing to 151,900 hectares (375,450 acres) in 119 mineral claims and two prospecting permits the company's entire land position on the western Melville Peninsula. Advanced Explorations also relinquished its rights in December to explore claims in Alaska for magnetite-bearing sands. The company terminated a 2010 option agreement with Alaska-based 7th Sea Holding Company LLC.

CASH AND SHORT-TERM DEPOSITS: C\$1.03 million (at June 30, 2012)

WORKING CAPITAL: C\$45,000 (at June 30, 2012; raised C\$1,792,370 in July financing)

MARKET CAPITALIZATION: C\$32.18 million (at Oct. 3, 2012)

ADVANCED EXPLORATIONS INC.

401 Bay St., Suite 2828 • Simpson Tower

Toronto, Ont. Canada M5H 2Y4

Tel: 416-203-0059 • Fax: 416-203-0059 or 416-860-9900

www.advanced-exploration.com

SHANE LASLEY

Crews working for Connors Drilling overcome minus 40F temperatures to conduct a winter drill program at Freegold Ventures Ltd.'s Golden Summit property near Kinross Gold Corp.'s Fort Knox Mine in Interior Alaska.



### FREEGOLD continued from page 27

cut 136.7 meters averaging 1.57 g/t gold.

GSDL1218 – testing the depth potential of the Dolphin resource – cut 531.3 meters averaging 0.59 g/t gold, including 90.5 meters averaging 1.1 g/t gold.

GSDL 1224 – drilled some 100 meters northeast of hole 1218 – cut 606.2 meters averaging 0.57 g/t gold.

All told, some 35,000 meters has been drilled in the combined Dolphin-Cleary Hill area of which only 11,802 meters are part of the 2011 Dolphin resource.

All drilling will be incorporated into the updated resource which is expected to be completed by the end of 2012.

### Growing Vinasale

Freegold's Vinasale gold project — found on the northern end of the Kuskokwim Gold Belt of Southwest Alaska about 26 kilometers (16 miles) south of century old gold mining community of McGrath — is also expected to get a boost to its resource based on 2012 drilling.

An inferred resource updated for Vinasale in March outlines 49.3 million metric tons averaging 1.09 g/t gold at a cut-off of 0.5 g/t.

With its sights set on upgrading this 1.74-million-ounce gold resource hosted in the property's Central zone, Freegold completed 3,425 meters of drilling at Vinasale in 2012.

Highlights of drilling in the Central zone include:

- VM1208 cut 33.7 meters averaging 1.09 g/t gold;
- VM1210 cut 29.3 meters averaging 1.63 g/t gold;
- VM1212 cut 29.3 meters averaging 1.19 g/t gold; and
- VM1213 cut 85.3 meters averaging 1.49 g/t gold.

Two holes testing a large geophysical anomaly about 1,200 meters northeast of the Central zone cut zones of lower grade gold mineralization. Freegold said the results of these wide-spaced holes indicate that additional drilling is warranted in this area as a possible resource expansion target.

Freegold's Rob gold project, located 20 miles (32 kilometers) east of Sumitomo Metal Mining Co., Ltd.'s Pogo gold mine, did not see drilling in 2012.



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# Mining booms in British Columbia

Strong demand, competitive provincial policies foster robust sector

BY MIN. RICH COLEMAN  
Special to Mining News

**B**.C.'s mineral exploration and mining industry is booming, thanks in part to strong demand in Asia. Meeting demand is just one part of fostering a globally competitive sector. Equally important are our policies at home, where strong fiscal management, competitive tax rates, streamlined regulations and good local partnerships are helping to generate billions of dollars' worth of revenues each year.

Worldwide demand for coal, metals and industrial minerals has increased dramatically and are expected to rise even more. B.C. mining products are essential ingredients to supporting the largest urbanization in human history taking place in China and India.

British Columbia is a leader in mining and mineral production. We are Canada's single-largest exporter of coal, the largest producer of copper and the only producer of molybdenum.

The 19 major mines provide jobs and opportunities for communities across the Province of British Columbia. The BC Jobs Plan goal of eight new mines and nine expansions is moving forward. Within the past year and a half, B.C. has seen two new major mines begin production, one mine is currently under construction and three more were recently permitted with construction expected to start later this year. Additionally, since the Jobs Plan was released, the Province has approved five major expansions of existing mines.

Mine development and mineral exploration has been a cornerstone of our economy for generations. It takes place in every region of the province and ranges from small, one-person operations to multi-million dollar investment projects.

B.C. is the first province in Canada to share mineral tax revenues for new or expanded mines with First Nations. The Province is committed to continue to consult with First Nations and involving them in resource development.

Our mining companies set the global standard for environmental responsibility in mines here and around the world. B.C. is an international mining centre and now we have an opportunity to finance new mining opportunities to supply the mineral demands of Asia Pacific.

B.C. is well-positioned to benefit from these global demands, with vast reserves of coal, metals and minerals, a highly-skilled workforce and the world's largest concentration of mining and exploration companies.

In 2011, exploration spending in B.C. exceeded C\$460 million, an increase of 35 per cent over 2010. Exploration activity occurs in virtually all areas of B.C., and now accounts for approximately 15 percent of all exploration spending in Canada. We will continue to work with our partners to ensure that overall exploration investment continues to increase throughout every region in the years ahead.



Rich Coleman, B.C. Minister of Energy, Mines and Natural Gas

With mineral and coal reserves hidden underground, access to land is essential to their discovery and development. The government works with communities, First Nations, industry and others to maintain security of tenure and access to land for mineral exploration. There will be a provincial review of existing mineral and coal land reserves to determine if more land can be made available for exploration.

As it has committed in the BC Jobs Plan, the Province is working to make regulatory processes smarter and more efficient while maintaining high safety and environmental standards. This includes developing a coordinated, transparent permitting and approval process with clear timelines for all industrial projects, including mineral exploration and mine developments. The Province reaffirmed its commitment to reducing red tape in 2012. Progress on regulatory accountability is reported annually.

The B.C. government will review and develop regulations to exempt low-risk exploration and mining activities from requiring Mines Act permits while maintaining health, safety and environ-

*continued on page 32*

# Operating Mines and Mine Development Projects in British Columbia 2011

BC Ministry of Energy and Mines

Metal Mine commodity codes
Ag - Silver
Au - Gold
Cu - Copper
Mo - Molybdenum
Zn - Zinc

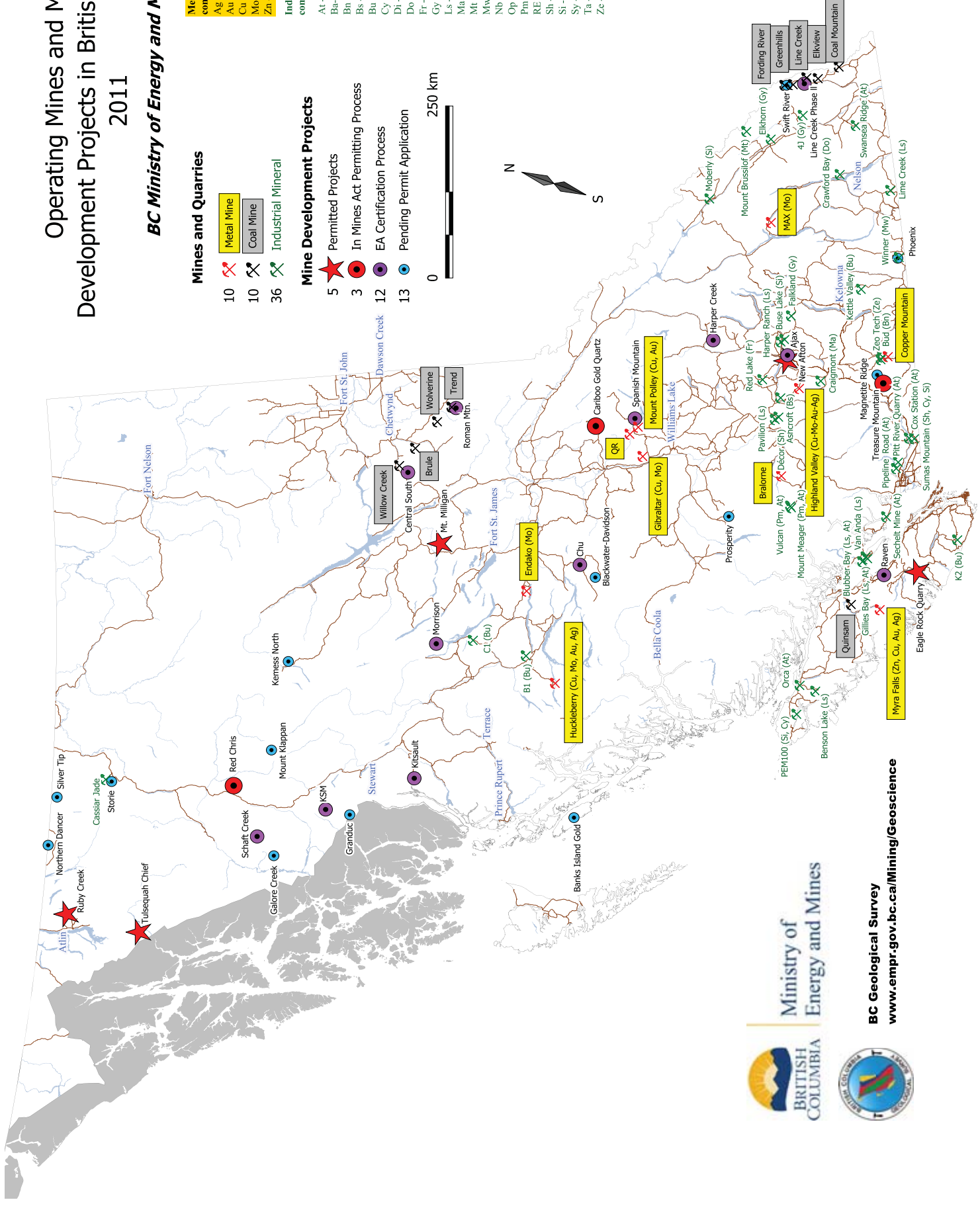
Industrial Minerals commodity code
At - Aggregate
Ba - Barite
Bn - Bentonite
Bs - Basalt
Bu - Building Stone
Cy - Clay
Di - Diorite
Do - Dolomite
Fr - Fuller's earth
Gy - Gypsum
Ls - Limestone
Ma - Magnetite
Mt - Magnesite
Mw - Mineral Wool
Nb - Niobium
Op - Opal
Pm - Pumice
RE - Rare Earth
Sh - Shale
Si - Silica
Sy - Syenite
Ta - Tantalum
Ze - Zeolite

## Mines and Quarries

10		Metal Mine
10		Coal Mine
36		Industrial Mineral

## Mine Development Projects

5		Permitted Projects
3		In Mines Act Permitting Process
12		EA Certification Process
13		Pending Permit Application



Ministry of  
Energy and Mines



BC Geological Survey  
[www.empr.gov.bc.ca/Mining/Geoscience](http://www.empr.gov.bc.ca/Mining/Geoscience)



# Mining powerhouse keeps pace

Explorers tackle dozens of mineral projects across north of province

BY ROSE RAGSDALE  
For Mining News

**B**ritish Columbia in 2012 continued to exhibit its strength as the mining and exploration powerhouse of the North American Cordillera.

The Canadian province's wealth of mineral potential is the result of geological phenomena that also created the mountain chains "that we have in our province and to the north," according to Bruce Madu, director of the Mineral Development Office of the B.C. Ministry of Energy and Mines.

Madu told participants in the 2012 Mineral Exploration Roundup in January that expansion is the theme at most of British Columbia's metal mines, with more than C\$1.2 billion currently being spent on upgrades.

He said the B.C. government anticipates at least eight new mine openings and nine mine expansions by the end of 2015.

"This could expand B.C.'s mineral mine production value by more than C\$1.6 billion per year; add more than 1,800 new jobs and sustain 5,000 existing mining jobs," B.C. Minister of Energy and Mines Rich Coleman said during his welcoming remarks at the 2012 Roundup.

"BC has the mineral resources the world needs," said Gavin C. Dirom, president and CEO of the Association for Mineral Exploration BC. "These natural resources belong to every British Columbian, and today's budget helps to ensure that the government is creating a prudent economic climate that attracts further investment to successfully and responsibly explore for and develop BC's mineral resources for the benefit of every family in the province."

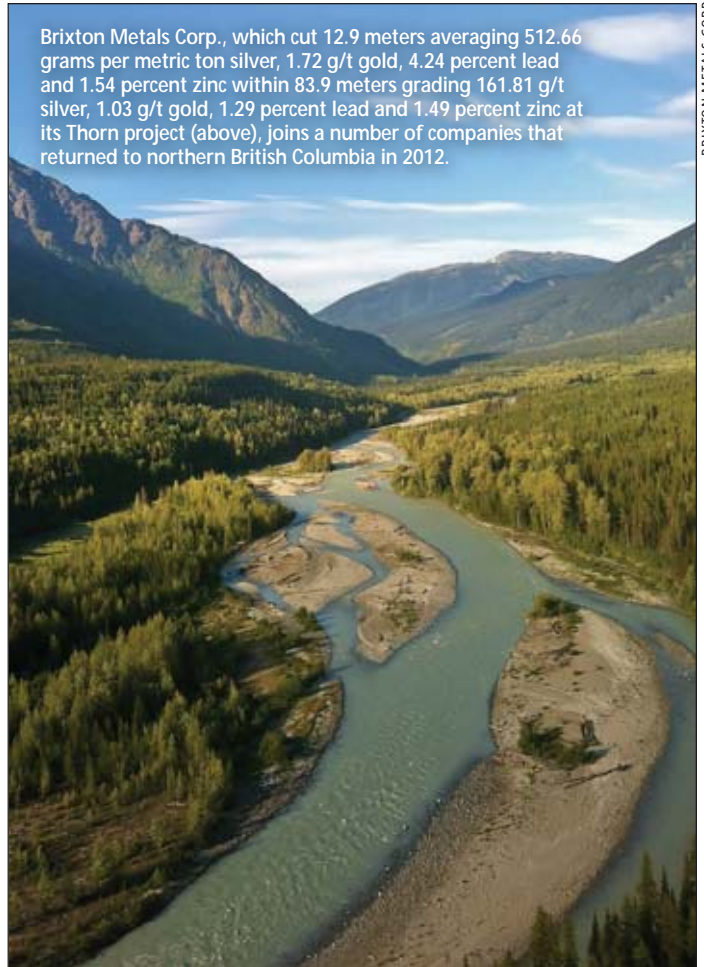
Based on industry-based surveys, Natural Resources Canada in March projected exploration and appraisal expenditures on mineral deposits in British Columbia to hit a record C\$812.3 million in 2012, up 43 percent from C\$567.7 million in comparable spending in 2011. This spending level would make the western province the second-most popular jurisdiction for such mining industry investments in Canada after Ontario. NRCAN will release updated figures in November.

Exploration activity in northern British Columbia, which reached record levels of spending and meters drilled in 2011, is again making a strong showing in 2012 despite the difficulties many junior mining companies encountered raising capital in the markets during the year.

In 2011, explorers spent about C\$220 million and drilled 380,467 meters in Northwest British Columbia, reflecting a 22 percent increase from 2010 levels and included at least 54 drilling projects (21 projects with more than C\$2 million each in expenditures.)

Several mine projects located in this diverse, mineral-rich area continued to advance through environmental assessment

Brixton Metals Corp., which cut 12.9 meters averaging 512.66 grams per metric ton silver, 1.72 g/t gold, 4.24 percent lead and 1.54 percent zinc within 83.9 meters grading 161.81 g/t silver, 1.03 g/t gold, 1.29 percent lead and 1.49 percent zinc at its Thorn project (above), joins a number of companies that returned to northern British Columbia in 2012.



BRIXTON METALS CORP.

processes in 2012, including the Red Chris copper-gold, KSM gold-copper, Kitsault molybdenum, Kutcho Creek copper-zinc, Schaft Creek copper-gold-molybdenum and Morrison copper projects.

Chieftain Metals Inc., owner of the Tulsequah Chief copper-zinc-gold-silver reported considerable progress toward development as did Fortune Minerals Ltd.'s Mount Klappan Coal.

Several small mine (less than 75,000 metric tons milled per year) projects also reported progress toward development, including Dome Mountain underground gold, Fireside barite, Yellow Jacket gold and Silver Tip silver lead-zinc.

Construction is underway on the 344-kilometer (213 miles) Northwest Transmission line from Skeena Substation (near Terrace) north to a new substation near Bob Quinn Lake. The line, currently projected to cost C\$561 million, is expected to bring affordable power within reach of many mine projects being devel-

*continued on next page*

mental standards. And will work with the federal government to eliminate duplication in environmental assessments.

Geoscience BC is an industry-led organization with a mandate to collect, interpret and deliver geoscience data and expertise to promote investment in mineral exploration and development. Since it was launched in 2005, the government has supported Geoscience BC through a series of grants totaling nearly C\$50 million.

To make the most of these advantages, we will move quickly and decisively to leverage today's high commodity prices and gain a competitive edge over other global mining jurisdictions.

The Province is ready to capitalize on high commodity prices and global demand for minerals and coal. We will be promoting B.C.'s strong fiscal policies (e.g., tax regime, incentive programs) to potential mineral exploration and mining investors.

B.C. competes with jurisdictions worldwide, and one of our biggest assets is stability – we have a stable political climate, a steady supply of goods and services, vast mineral reserves, and a fiscally responsible government.

B.C. enjoys an AAA credit rating thanks to responsible budgeting and an ongoing commitment to encouraging economic growth through common-sense regulation, competitive taxation and policies supporting new business development and inviting new investment. These advantages are at the heart of our strategy for the mining sector.

Mineral exploration, mining and related sectors provide long-

term, family supporting jobs and versatile career options to tens of thousands of British Columbians, and will provide employment for many more in the future. The mining sector, like almost every other sector, faces a series of challenges in making sure it has the right people, with the right skills, in the right places.

Our province facilitates skills development in mineral exploration and mining in a number of ways, but even with a multitude of programs in place, B.C. may not have enough workers to fill job openings over the next decade. Along with developing the skills of British Columbians, the Province will welcome and integrate skilled workers from other provinces and countries to help keep B.C.'s economy growing.

B.C.'s Pacific Gateway Alliance, a public-private partnership, is delivering billions of dollars' worth of improvements to our transportation infrastructure, making our province the gateway of choice for trade between North America and Asia. B.C.'s ports are even more attractive to Canadian and international investors as the Province recently capped the municipal port property tax rates.

The strength of our industry results from B.C.'s global competitiveness, with our location, wealth of resources and favorable policies making British Columbia a desirable place to invest, explore and develop mineral resources.

*The Hon. Rich Coleman was appointed minister of Energy, Mines and Natural Gas and Minister Responsible for Housing and Deputy Premier of the Province of British Columbia Sept. 5. He was re-elected for a fourth term as MLA for Fort Langley-Aldergrove in 2009.*

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## **BC EXPLORATION** *continued from page 31*

oped in Northwest B.C. BCHydro anticipates offering service via the 287-kilovolt conduit at Bob Quinn Lake in spring 2014.

The North-central Omineca Region reported an apparent doubling in exploration activity with spending in 2011 estimated at C\$71.5 million. Likewise, drilling activity totaled about 162,000 meters, compared with about 83,000 meters in 2010. The principal exploration focus remained upon porphyry and epithermal copper-gold prospects in the Quesnel and eastern Stikine terranes. In addition to porphyry deposits, sedimentary exhalative, rare-earth elements, ultramafic-hosted nickel, and vein-hosted gold deposits remained important targets. The main focus of industrial mineral exploration was high-purity sandstone for processing into frac sand.

British Columbia's northeast region also reported nearly doubling exploration expenditures in 2011 to about C\$44.3 million (C\$39.5 million excluding on-lease exploration) over 2009 and 2010 levels. Exploration drilling, at about 66,000 meters, was also up substantially. This increase in activity levels occurred in spite of significant environmental and cultural constraints on activities.

### **Pro-mining initiatives**

The B.C. Government has a number of initiatives underway to encourage a strong mineral exploration and development sector and build upon the record mineral exploration expenditures of C\$463 million achieved in BC in 2011.

"We have been encouraged by the government's strategic measures to reduce red tape and develop BC as a magnet for global investment. These measures include reducing the backlog of notices of work permit applications by 80 per cent by the end of August 2012, investing C\$12 million in Geoscience BC and continued funding for regional government geologists to improve the public's and industry's understanding of BC's mineral develop-

ment potential and land use opportunities," Dirom said.

In July Geoscience BC reported commissioning its 2012 QUEST-Northwest airborne magnetic survey south of Iskut, B.C. The survey specifications will be similar to two Geoscience BC surveys flown in the area in 2011, with east-west lines spaced 250 meters apart. Geoscience BC anticipated being able to release the new data set in early 2013. The QUEST-Northwest Project, originally launched in 2011, is designed to stimulate new mineral exploration activity in northwest British Columbia, and to enhance the success of existing exploration activities in the region. The 2011 program included two airborne magnetic surveys, a regional geochemical program, and geological mapping.

### **Exploration standouts in 2012**

Pretium Resources Inc. set itself apart early in 2012, reporting a prolonged series of bonanza assay results from its gold-rich Brucejack Project in northern B.C. By Sept. 18, Pretium had reported numerous bonanza-grade gold intersections up to 8,151 grams per metric ton gold uncut over 0.50 meters in the Valley of the Kings zone at Brucejack. The Valley of the Kings now extends more than 800 meters in strike length and is open to the east, west, and at depth. Nine drills continued turning at Brucejack, with the 2012 exploration program expected to be completed early in the fourth quarter.

Other BC explorers that made significant progress on their respective projects in northern and central British Columbia include Homestake Resource Corp., BCGold Corp., Romios Gold Resources Inc., Commander Resources Ltd., SnipGold Corp., Decade Resources Ltd., China Minerals Mining Corp., Clemson Resources Corp., Canasia Industries Corp., Chieftain Metals Inc., Canarc Resource Corp., Yellowjacket Resources Ltd., Brixton Metals Corp., NGEx Resources Inc., Driven Capital Corp., Consolidated Woodjam Copper Corp., Gold Fields Ltd. and New Gold Inc.



# Junior nabs vast graphite project

Graphite One confirms substantial large-flake graphite deposit in Alaska

BY SHANE LASLEY  
Mining News

**G**raphite traditionally has been regarded as a mundane industrial mineral used in steelmaking, lubricants and pencil lead. Emerging applications such as lithium-ion batteries, fuel cells, and nuclear power generation are placing increasing supply demands on this carbon polymer – a market shift not lost on Graphite One Resources Inc.

“The graphite market is only beginning to open up as green technology takes more precedence in the world today,” according to the Edmonton, Alberta-based explorer. “Graphite is vital for lithium-ion batteries, pebble bed nuclear reactors, and fuel cells among other uses. This has allowed for the price of graphite to rise; in the past seven years, the price has nearly tripled. Graphite is the mineral of tomorrow and as such, cannot continue to be overlooked and undervalued.”

Anticipating the demand for graphite to skyrocket, the explorer which recently changed its name from Cedar Mountain Exploration Inc. is taking a fresh look at the aptly named Graphite Creek project, a vast deposit of the carboniferous material situated some 65 kilometers (40 miles) north of Nome in western Alaska.

At an average of 3-10 percent graphite, some 200 million metric tons of ore that has been traced along the slopes of the Kigluaik Mountains at the Graphite Creek project has historically been estimated to hold 6 to 20 million metric tons of crystalline-flake graphite, according to a technical report written for Graphite One Resources (then Cedar Mountain) in November 2011.

Travis Hudson, author of the report, is not new to the deposit. He has explored the potential of the deposit in the past, including a 1981 investigation for Anaconda Minerals Co.

Hudson said the Graphite Creek project, also known as the Kigluaik deposits, consists of two distinctive graphite-bearing schist intervals – biotite quartz schist and garnet biotite quartz schist.

An 18-hole, 4,248-meter drill program carried out in 2012 focused on producing an initial inferred resource for Graphite Creek.

## Graphite One Resources Inc.

GPH: TSX-V  
CHAIRMAN & CEO: Charles Chebry  
PRESIDENT: Anthony Huston  
VICE PRESIDENT, EXPLORATION: Dean Besserer

Properties with mineral(s) explored:  
Graphite: Graphite Creek, Alaska

CASH AND SHORT-TERM DEPOSITS: C\$4.1 million (at June 30, 2012)  
WORKING CAPITAL: C\$4 million (at June 30, 2012)  
MARKET CAPITALIZATION: C\$12.9 million (at Sep. 10, 2012)

1280, 885 West Georgia Street  
Vancouver, B.C. Canada V6C 3E8  
Tel: 604-681-8780 • Fax: 604-681-8775  
www.graphiteoneresources.com



An 18-hole drill program undertaken by Graphite One Resource Inc. in 2012 has cut thick zones of the extensive graphite mineralization observed on the surface of the explorer's Graphite Creek property in western Alaska.

To fund this program, Graphite One (then Cedar Mountain) closed a C\$6.4 million financing in February.

“Our goal for this year is to get enough drilling done to have an inferred resource after this season,” Chebry explained. “Along with that, we want to do a whole lot more mapping and sampling over the whole property, because last year we identified another parallel zone which is just up-mountain from the high-priority zone, and there are other outcrops of high-grade material as well.”

## Large flake graphite

Not all graphite is created equal, and the Graphite Creek deposit is believed to hold vast quantities of a higher value variety of the mineral.

The most abundant form of naturally occurring graphite is the fine-grained amorphous variety. This lowest form of graphite is used traditionally in steelmaking – lending its heat resistance to crucibles and furnace bricks, as well as serving as a carbon-boosting additive in the steel itself.

Lithium-ion batteries and other high-technology applications, however, require a higher order of the carbon polymer known as large flake graphite.

Graphite One Resources' Graphite Creek project has long been regarded as a source of the more desirable large flake graphite, a historical assumption that the company resolved to test.

Laboratory analysis of three 15-kilogram samples collected by Graphite One in 2011 confirms the potential for large flake graphite at the project.

One of the samples taken from a historical stockpile of high-grade material averaged 56.9 percent graphite. The other two samples – one of schist containing disseminated graphite and a second

*continued on next page*

### Agnico-Eagle Mines Ltd.

AEM: TSX

CHAIRMAN: James D. Nasso

PRESIDENT AND CEO: Sean Boyd, C.A.

SENIOR VICE PRESIDENT, EXPLORATION: Alain Blackburn, P. Eng.

Mid-tier gold producer Agnico-Eagle Mines Ltd. is focused on its advanced-stage Meliadine Project and its Meadowbank Gold Mine in central Nunavut. The company picked up the Meliadine project by acquiring Comaplex Minerals in July 2010. The project had proven and probable gold reserves of 2.9 million ounces (12.5 million metric tons grading 7.2 grams per metric ton gold) at Dec. 31, 2011. Agnico-Eagle budgeted C\$40 million for exploration at Meliadine in 2012 comprised of 90,000 meters of drilling in known deposits and 55,000 meters of grassroots exploration drilling, including C\$9.8-million supplementary budget announced in July. The company also earmarked C\$52-million for infrastructure, permitting and feasibility study, including construction of a 24-kilometer permanent all-season road linking the project with the community of Rankin Inlet. Exploration targeted the 5-kilometer-long gold trend that includes the richest parts of the Tiriganiaq zone and new Wesmeg and Normeg zones immedi-



SEAN BOYD

ately to the south. The company evaluated accelerating underground ramp development to facilitate exploration and eventual development of the growing deposit. This study was to be completed in the third quarter. An updated feasibility study also was underway at the mining/milling rate of more than 3,000 metric tons per day. Meliadine has significant potential synergies for development with the Meadowbank mine, which is located 290 kilometers (180 miles) to the northwest. Agnico-Eagle reported a new, optimized mine plan for Meadowbank in February aimed at reducing risk by reducing ore and waste tonnage in the mine's operating budget by 36 percent. The plan shortens Meadowbank's mine life by three years to 2017. The company undertook a mine-site exploration program at Meadowbank in 2012 that consisted of 5,000 meters of conversion drilling at a cost of C\$1.6 million and a 13,000-meter, C\$5.1-million regional exploration program as well as prospecting surrounding the mine site.

**CASH AND SHORT-TERM DEPOSITS:** C\$289.1 million (at June 30, 2012)

**WORKING CAPITAL:** C\$491.0 million (at June 30, 2012; raised C\$200.0 million in July financing)

**MARKET CAPITALIZATION:** C\$ 8.91 billion (at Oct. 3, 2012)

**AGNICO-EAGLE MINES LTD.**

145 King St. East, Suite 400 • Toronto, Ont. Canada M5C 2Y7

Tel: 416-947-1212 • Fax: 416-367-4681

www.agnico-eagle.com

### GRAPHITE ONE *continued from page 33*

sample of mixed schist and massive graphite – returned 8.2 percent and 14.5 percent graphite, respectively.

To qualify as large flake, graphite particles must be larger than 80 mesh. Mesh size refers to the number of openings per linear inch of mesh, so the larger the mesh size the smaller the material.

More than 75 percent of the graphite content of all three of the Graphite Creek samples analyzed by Hazen Laboratories qualified as large flake. The sample of mixed schist and massive graphite, at 93.6 percent, had the highest large flake graphite distribution.

### Vast potential confirmed

Graphite One kicked off its 2012 exploration program with an airborne electro-magnetic survey over the entire land package. This geophysical program lit up the highly conductive graphite layers beyond the bounds of Graphite One's property, prompting the explorer to stake an additional 17 claims.

The drill program revealed that the graphite-rich zones ran deeper than first envisioned.

12GC001 cut 411.7 meters of 2.1 percent graphite. This intercept includes 127.9 meters of 4.1 percent and 41.73 meters of 6.7 percent graphite.

12GC002, drilled about 300 meters to the southwest, cut 353 meters of 2.7 percent graphite. This intercept includes 165.3 meters of 4.23 percent, 46.4 meters of 6.6 percent and 21 meters of 10.1 percent graphite.

12GC003, drilled a further 200 meters southwest, cut 234.8 meters averaging 2.18 percent graphite, including 61.9 meters averaging 3.52 percent graphite.

Stepping out 1,700 meters northeast of hole 3, 12GC004 cut 237.8 meters of 2.66 percent graphite, including 136.58 meters of 4 percent and 40.6 meters of 6.35 percent graphite.

An extensive mapping and rock sampling program bolstered Graphite One's confidence in the property. Focusing on areas where outcrop was exposed along the main trend and the Araujo trend, geologists collected 591 grab samples, 506 of which were mineralized. The best sample, collected along the main trend, returned assays of 63.5 percent graphitic carbon. A sample from Araujo returned 28 percent graphitic carbon.

"These results continue to demonstrate that this will be one of the most significant, coarse flake graphite resources in the world" said Graphite One Resources President Anthony Huston.

A resource calculation is expected by early 2013.



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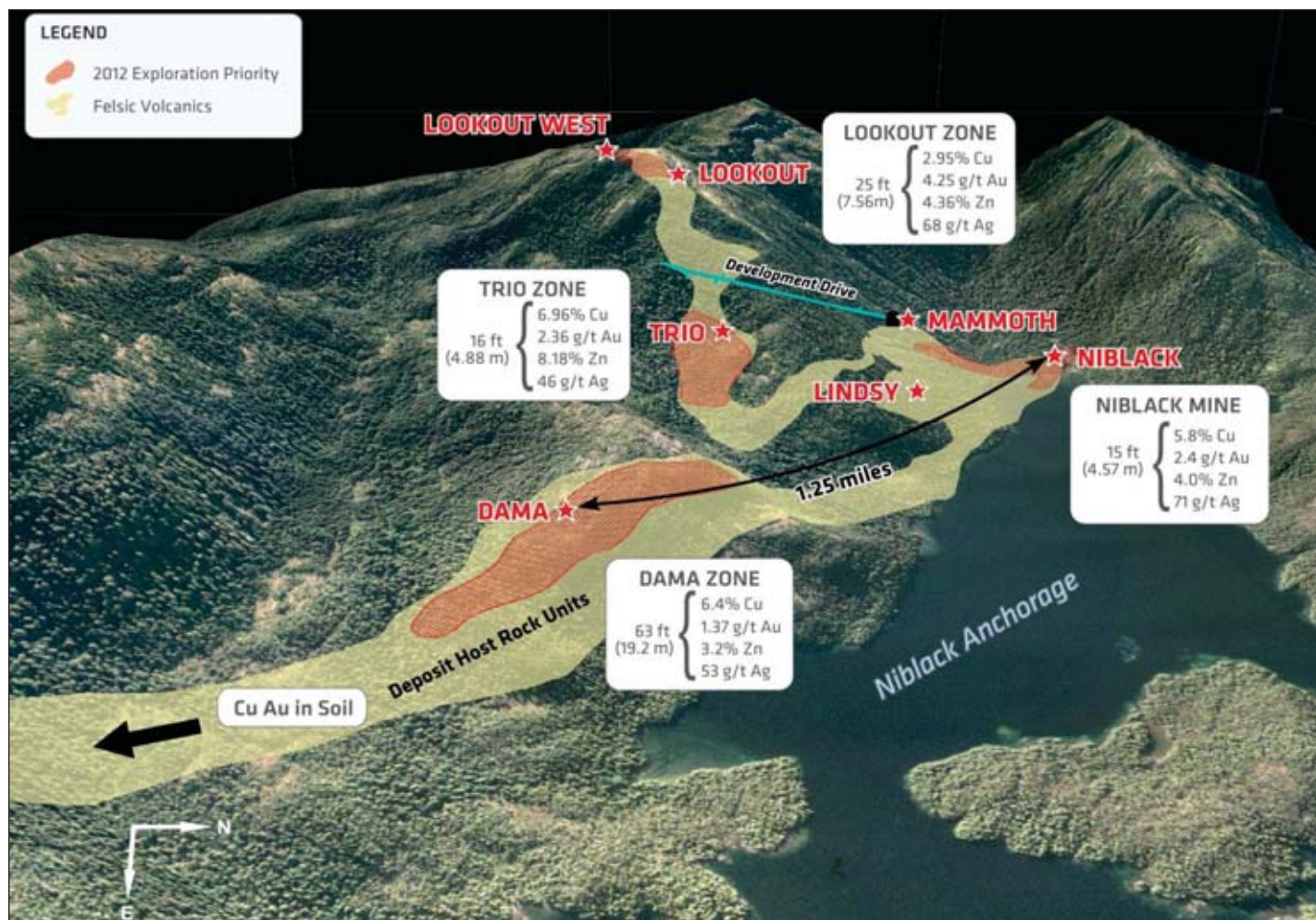
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## Alaska

# Junior advances Niblack in 2012

Securing C\$4.4M, Heatherdale launches exploration at SE Alaska VMS project

BY SHANE LASLEY  
Mining News

Despite owning a Pacific Rim deposit of gold, copper, zinc and silver worth some US\$1.44 billion, Heatherdale Resources Ltd. has not completely escaped the financial paralysis gripping the junior mining sector.

While the value of Heatherdale's stake of the Niblack Project has nearly doubled over the past year, its share price has plummeted more than 70 percent.

Still, the Hunter Dickinson-affiliated junior has successfully pulled together funds to continue to advance the high-grade VMS Niblack project toward pre-feasibility and permitting.

On July 17, Heatherdale raised C\$4.4 million by selling 22 million of its shares at C20 cents per share to Rathdowney Resources Ltd., a fellow Hunter Dickinson company that is focused on zinc deposits in Poland and Ireland.

Rathdowney, which now owns 18.4 percent of the issued voting shares of Heatherdale, said the private placement purchase is for investment purposes only.

With funding from its sister company, Heatherdale launched a 2012 drill program as it continues to complete the environmental baseline and engineering work need to complete a prefeasibility study by mid-2013.

*continued on next page*



## Alexco Resource Corp.

AXR: TSX AXU: NYSE-A

PRESIDENT AND CEO: Clynton R. Nauman

EXECUTIVE VICE PRESIDENT & COO: Brad A. Thrall

VICE PRESIDENT, EXPLORATION: Alan McOnie, FAusIMM

Alexco Resource Corp is a precious metals exploration company with a silver focus and growing environmental consulting and reclamation and mine closure services. Alexco's primary exploration objective currently is to unlock value in the historic silver-rich Keno Hill district, which covers about 23,350 hectares, or 56,274 acres, in central Yukon Territory. Alexco currently operates the Bellekeno Mine, which ramped up production to an estimated 2.2 million to 2.5 million ounces of silver in 2012.

The company's 2012 surface exploration program began in late March with two drill rigs mobilized initially, increasing to four by the end of April. The primary focus of the company's C\$12 million program has been to explore the Flame & Moth and Bermingham properties, as well as targets on the Elsa-Husky trend. As of June 30, about 10,700 meters had been drilled. During the second quarter, Alexco posted initial resource estimates of more than 11 million indicated ounces and 3.8 million inferred ounces of silver for Flame & Moth, which remains open in all directions, and 3.8 million indicated ounces and 1.2 million inferred ounces of silver for the more structurally complex Bermingham that resulted in a 52 percent increase in the company's combined indicated resources at the two properties. Both areas are the subject of ongoing aggressive exploration with planned drilling at Flame & Moth doubled to 9,000 meters. The balance of 29,000 meters of planned drilling in 2012 focused on Bermingham and significant targets on the Elsa-Husky trend. Other targets include the testing of gold mineralization on McQuesten, the westernmost property within Alexco's Keno Hill land holdings. Rehabilitation of the historical Lucky Queen workings is continuing, and Alexco is in the process of developing access to the historical Onek workings, both with the objective of enabling advanced exploration drilling from underground to support mine planning and development decisions. Alexco hoped to further update the estimated resources by early 2013.



### CASH AND SHORT-TERM DEPOSITS:

C\$31.9 million (at June 30, 2012)

WORKING CAPITAL: C\$32.18 million (at June 30, 2012)

MARKET CAPITALIZATION: C\$233.6 million (Sept. 9, 2012)

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Vancouver, BC Canada V6C 1S4

Tel: 604 633-4888 • Fax: 604 633-4887

www.alexcoresource.com

## Expanding the resource

A 1,000-meter exploration drift, which has provided Heatherdale with great positioning for expanding the Lookout and Trio deposits over the past three years, is becoming less advantageous as these zones plunge deeper into Lookout Mountain.

"Upon reviewing all of the results from previous underground drill programs, it became apparent that a surface drill program was the most effective way to offset mineralized drill-hole intercepts and expand the resource," explained Heatherdale President and CEO Patrick Smith.

Based on 373 holes drilled at Niblack through Nov. 4, the Lookout deposit now has an indicated resource of 5.64 million metric tons averaging 1.75 grams per metric ton gold, 0.95 percent copper, 1.73 percent zinc and 29.52 g/t silver.

Lookout and the nearby Trio contain an additional inferred resource of 3.93 million metric tons averaging 1.32 g/t gold, 0.81 percent copper, 1.29 percent zinc and 20.1 g/t silver.

A US\$50 net smelter return cut-off was used to calculate the resources.

Tucked within the lower reaches of the Lookout deposit, there is a zone of continuous high-grade mineralization that, at a US\$150 NSR cut off, contains 1.16 million metric tons averaging 3.21 g/t gold, 1.71 percent copper, 3.83 percent zinc and 62.28 g/t silver.

Expanding Lookout at depth was one of the early targets of the 5,000 meters of drilling carried out at Niblack in 2012. Hole U074, which previously pierced this resource expansion area, cut 1.46 meters averaging 3.3 g/t gold, 2 percent copper, 23 percent zinc and 90 g/t silver.

Encouraged by the mineralized intercepts tapped at Trio early in the season, The majority of the 2012 drilling was directed towards this adjacent deposit.

Heatherdale is hoping the 2012 program will add 1 million to 2 million metric tons of VMS ore to the Niblack resource.

## Key exploration targets

In addition to expanding the Lookout and Trio deposits, the Niblack project has a host of promising targets stretching along a six-mile (10 kilometers) belt of prospective stratigraphy at Niblack.

The mineralization at Niblack is hosted in a felsic horizon that was deposited on the seafloor some 565 million years ago. This metals-rich stratum has been folded and deformed into the geometry that Heatherdale is revealing through its exploration.

The Niblack Mine zone, Dama and Lindsay zones are key exploration targets along this prospective stratum.

From 1905 to 1908, miners extracted some 20,000 tons of ore averaging 4.9 percent copper, 2.2 g/t gold and 30 g/t silver from the historical Niblack Mine. This year, Heatherdale plans to test for additional high-grade VMS mineralization in this area.

Lindsay, another target along the prospective trend, is found between Trio and the historical Niblack Mine.

From the historical mine, the mineralization appears to turn sharply to the



## Heatherdale Resources Ltd.

HTR: TSX-V

CHAIRMAN: Scott Cousens

PRESIDENT AND CEO: Patrick Smith

EXECUTIVE GENERAL MANAGER:  
Lena Brommeland

### PROPERTIES WITH MINERAL(S) EXPLORED:

Polymetallic VMS – Niblack, Alaska

Polymetallic VMS – Delta, Alaska

### CASH AND SHORT TERM DEPOSITS:

US\$4.48 million (July 31, 2012)

### WORKING CAPITAL:

US\$3.56 million (July 31, 2012)

### MARKET CAPITALIZATION:

C\$31.1 million (Sept. 26, 2012)

15th Floor - 1040 West Georgia St.

Vancouver, BC V6E 4H1

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southeast and surface geochemistry suggests it may continue for at least 5,000 meters in this direction. A historical hole drilled in the Dama zone – located about 2,000 meters along this projected path – cut 19.2 meters averaging 6.4 percent copper, 1.37 g/t gold, 53 g/t silver and 3.2 percent zinc.

Smith told Mining News that Dama is a high-priority target.

### Offsite mill

Targeting a mid-2013 to complete a pre-feasibility study for Niblack, engineers are designing a mine and mill to process the gold-copper-zinc-silver ore. Heatherdale anticipates a 1,500- to 2,000-metric-ton-per-day operation – of similar scale to Hecla Mining Co.'s Greens Creek silver mine near Juneau.

With the slopes of Lookout Mountain plunging steeply into the Niblack Anchorage, there is little room for the needed infrastructure.

Instead of attempting to master the challenging topography, Heatherdale is considering barging ore to an offsite location.

Two of the three locations identified for a mill and tailings storage facility are industrial sites near the community of Ketchikan, some 40 miles (65 kilometers) to the northeast.

Gravina Island is particularly desirable due to its proximity to people and power.

Ketchikan, a logging town of some 8,000 people, has been seeking a new source of employment since the demise of the timber in-

HEATHERDALE RESOURCES LTD.



A 1,000-meter exploration drift which provided Heatherdale Resources Ltd. with great positioning for drilling the Lookout and Trio deposits over the past three years is becoming less advantageous as these zones plunge deeper into Lookout Mountain.

dustry in the region.

Located across a narrow passage from Ketchikan, regular ferry service could transport mill workers from the Southeast Alaska town to the proposed mill site. If the processing facilities were positioned at the industrial park, the lower cost hydroelectricity available there is expected to help offset some of the costs of transporting the ore.

Heatherdale has entered talks with Alaska officials regarding financing its energy and infrastructure needs through the Alaska Industrial Development and Export Authority.

The state-owned development corporation has helped build other mining-related infrastructure in the state, including the DeLong Mountain Transportation System (road and port facilities utilized by the Red Dog Mine in Northwest Alaska) and the Skagway Ore Terminal.

Since becoming involved with Niblack in 2009, Heatherdale has built strong bonds

with the residents of Prince of Wales Island and surrounding communities in Southeast Alaska.

A commercial partnership with the Prince of Wales Tribal Enterprise Consortium – owned by the Craig Tribal Association and the Organized Village of Kasaan – is putting local residents to work and supplying Niblack with its manpower needs.

"From the outset, Heatherdale has made it clear that it wants its mineral development activities on Prince of Wales Island to benefit local people and communities through local hire and contracting," said POWTEC CEO Bill Cole.

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# Mining remains key to NWT's future

Industry dates back to 1890s gold claim;  
diverse minerals brightens outlook

BY MIN. DAVID RAMSAY  
Special to Mining News

The Northwest Territories has been closely linked with the mining industry ever since B.A. Blakeney, a prospector on his way to the Klondike, staked the first gold mining claim here in 1898. And although the focus has shifted from gold to diamonds, the industry remains at the forefront of any discussion regarding the NWT's economic well-being: the territory produced over C\$2 billion in total mineral shipments in 2011, a staggering total for a jurisdiction which has a population that barely exceeds 40,000 residents.

Although diamonds remain the backbone of the NWT's economy, the life of the territory's three producing mines – like any non-renewable resource – is finite. However, both government and industry have been proactive on this front, with numerous projects in various stages of exploration and permitting, and the Government of the Northwest Territories developing a Mineral Development Strategy designed to ensure the NWT's mining future remains as bright as the diamonds it has become so famous for producing.

There is no shortage of mining activity in the NWT and the array of projects on the horizon promises a future as vast and diverse as the northern wilderness. From a return to the territory's golden roots to operations as groundbreaking as Blakeney's first discovery over a century ago, there is reason to be excited in the NWT – both with the present, and for the future.

## Today: A diamond-driven economy

Over the past decade, the NWT's mining industry has come to be defined by diamonds. With three currently operating mines – BHP Billiton's EKATI Mine, Rio Tinto's/Harry Winston's Diavik Mine, and De Beers Canada's Snap Lake Mine – the NWT is the third-largest producer of rough diamonds by value in the world, with over 10 million carats produced by the three mines combined in 2011.

And while these three currently operating mines continue to drive the NWT's economy – employing thousands of residents, spending billions in local goods and services, and contributing nearly one third of the territory's total GDP – new diamond projects continue to rise to the fore. A fourth mine, De Beers Canada and Mountain Province Diamonds' Gahcho Kue Project, is currently undergoing environmental impact review and could provide as many as 49 million carats in diamonds over its lifetime.

Diamonds, though, are not the only products currently being

mined in the NWT. The resilient CanTung Mine, operated by North American Tungsten Corporation (NAT), may have been in production since 1962 – longer than the NWT's three diamond mines combined – but its best days are certainly not in the rearview mirror. After a short shutdown in 2009/2010 due to the global economic recession, NAT announced record net income for its first quarter of 2011, and is continuing exploration activity in order to extend the mine's life.

## Tomorrow: A wealth of resources

Although today's NWT mining sector is diamond focused, many potential mines – containing many different potential mineral reserves – lie on the horizon. Chief among these is a potential resurgence of the gold mining industry that first established the NWT as a land filled with mining potential. Two different gold mining projects – Tyhee Development Corporation's Yellowknife Gold Project and Fortune Minerals' Nico Project, which also contains proven cobalt and bismuth reserves – are currently undergoing environmental assessment, and a third, Seabridge Gold Corp.'s Courageous Lake Project, is in the advanced exploration stage. These three projects represent an exciting link to the NWT's colorful past, filling a hole in the NWT's mining economy that had been opened since the closure of Giant Mine in 2004.

A link to the future, though, resides southwest of Yellowknife, at Avalon Rare Metals' proposed Nechalacho Project. Nechalacho is a source of rare earth elements – minerals such as scandium, yttrium, and europium which are vital to the production of "green technologies" such as rechargeable batteries, fuel efficient cars, and wind turbines. Nechalacho is currently undergoing environmental assessment and has both NWT residents and green technicians worldwide excited at the prospect of a world-class deposit of what will prove to be a vital resource in years to come.

And though rare earth elements do serve to diversify the NWT's mineral reserves beyond the anchors of diamonds and gold, they are not the only promising mineral project on the horizon. Located 90 kilometers (56 miles) north of Nahanni Butte – within the Nahanni National Park Reserve – Canadian Zinc Corporation's Prairie Creek Mine is the host to nearly 6 million metric tons of measured and indicated minerals resources, including zinc, lead, copper, and silver. Prairie Creek has undergone environmental assessment and is currently in the regulatory stages, and, once completed, will serve to bring much needed economic activity to the Dehcho Region of the NWT.

## Looking ahead: Mineral Development Strategy

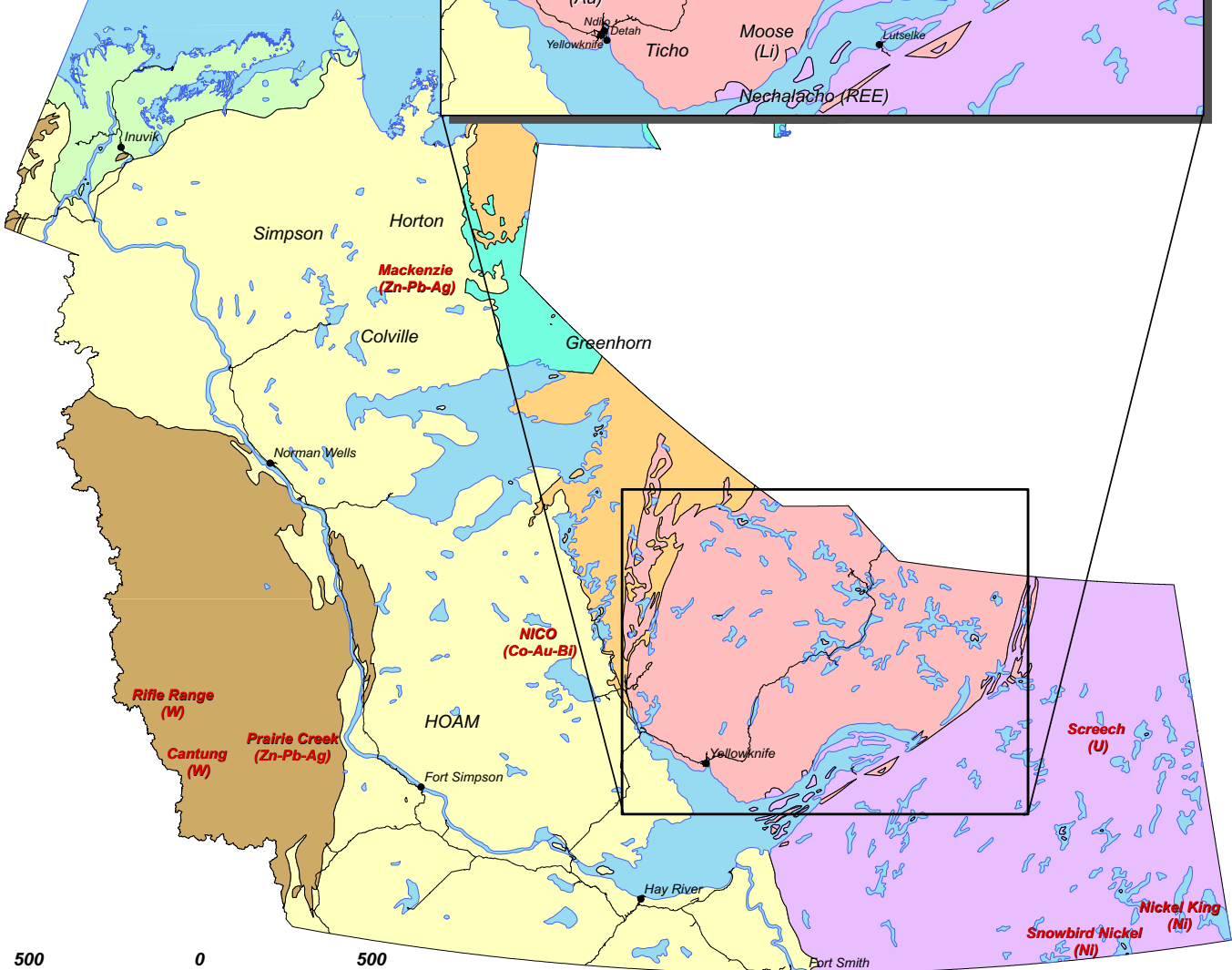
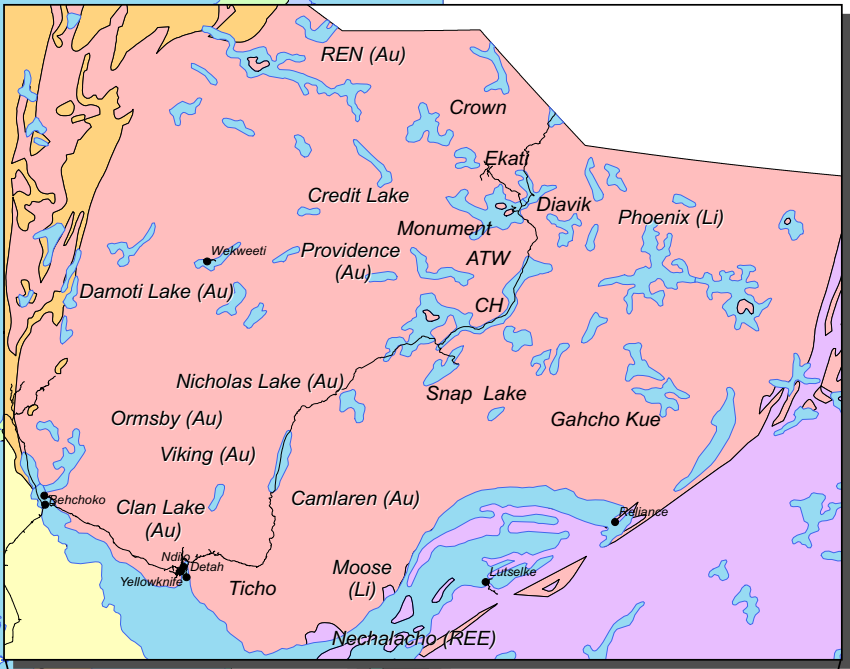
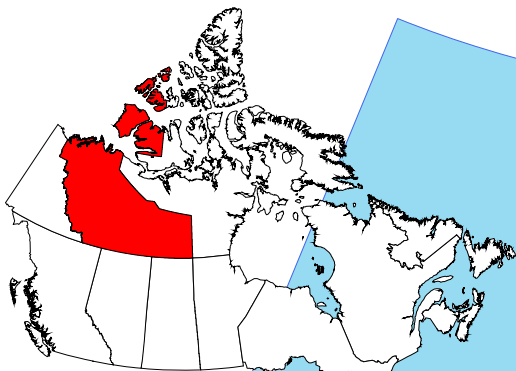
But while the mining industry has been the driving force be-

*continued on page 41*



Hon. David Ramsay







Eagle Plains Resources Ltd.'s MacKenzie zinc project along the Northwest Territories western border. In 2012, the Northwest Territories geoscience office undertook geochemical baseline studies and geological mapping in the Mackenzie Mountains.

## Northwest Territories Exploration 2012

# Slow, steady growth marks 2012

Explorers, others chase mineral resources in vast Arctic jurisdiction

BY ROSE RAGSDALE  
For Mining News

**N**orthwest Territories, a vast expanse of mountains, forests and tundra, has been slower to experience the surge in mineral exploration and development activities that has swept across Yukon Territory and Nunavut in recent years. But the mining industry is turning its attention to the 1.17 million square kilometers (431,162 square miles) Arctic land – roughly two-thirds the size of Alaska – that lies in between.

Permits have been issued for new areas of exploration and claims are being staked in places where such activity has been absent for more than 20 years, while longtime explorers are returning to existing projects and new entrants are picking up prospective ground. Even in regions where large portions of Crown lands are engaged in land claim withdrawals, many option agreements and exchanges of grandfathered claims have occurred in recent months, according to the Northwest Territories Geoscience Office.

“The activity this year is about comparable to that of last year,” said Karen Gochnauer, a district geologist at NTGO. “The advanced projects are going forward with permitting, and grassroots exploration is under way.”

“There are no new plays this year,” said Gochnauer. “Certainly, there’s interest in the Cordilleran mountains, lead-zinc-iron and copper plays branching out from the Selwyn project.”

Gochnauer also observed that Seabridge Gold Corp. expanded

its exploration of the E.A.T. deposit at the Courageous Lake project.

In 2012, the NT geoscience office undertook geochemical baseline studies and geological mapping in the Mackenzie Mountains (Bonnet Plume project) and completed a geochemical survey in the Colville Lake area.

Gochnauer said the work will provide baseline geology and geochemistry for prospective base and precious metal exploration. “Part of this year was spent mapping and assessing volcanic terranes prospective for prospective volcanogenic massive sulphides (zinc-lead-copper +/- precious metals),” she explained. “As part of the selection process, we have input from industry on the projects we carry out.”

A number of advanced exploration projects made progress toward production in 2012, including Avalon Rare Metals Inc.’s Nechalacho rare earth element project at Thor Lake, Fortune Minerals Ltd.’s Nico gold-cobalt-bismuth-copper project, Tamerlane’s Pine Point Project, Tyhee Gold Corp.’s Yellowknife Gold Project, Seabridge’s Courageous Lake project and the Gahcho Kué diamond project being developed in a joint venture by DeBeers Canada (51 percent) and Mountain Province Diamonds Inc. (49 percent).

### A spurt of interest

Tom Hoefer, executive director of the NWT & Nunavut Chamber of Mines said a few companies initiated new exploration programs in 2012, including Copper North Mining Corp., which is



exploring the Redstone property in the Deh Cho region in the west; BFR Copper & Gold Inc., which did some work in the Tl ch region of the Great Slave District.

BFR secured three-year prospecting permits in February for more than 1,465 square kilometers (565 square miles) of claims in the area.

"We've also seen some interest from Platinum Group Metals Ltd. in platinum prospects (west of Lac de Gras, and a bigger gold play from Nighthawk Gold Corp., formerly known as Merc International Minerals Ltd.," Hoefer said. "Peregrine Diamonds Ltd. came in and drilled four targets on their claims and hit three kimberlite pipes, and Tamerlane Ventures Inc. was to do some work east of Great Slave Lake on Diamond Mountain."

PGM purchased the Providence copper-nickel-cobalt-platinum group metals property located 70 kilometers (43 miles) west of the Diavik Diamond Mine from Arctic Star Exploration in September 2011 and planned a step-out drill program to further define the extents of a known copper-nickel-cobalt-PGM mineralized zone in 2012.

Of the four operating mines in Northwest Territories – Ekati, Diavik, Snap Lake and Cantung – only North American Tungsten Mines Corp. Ltd.'s Cantung tungsten mine reported significant exploration activity in 2012.

Natural Resources Canada released a preliminary estimate for 2012 mineral exploration spending in Northwest Territories based on the spending plans of mining companies. NRCAN projected C\$124 million planned spending territory wide, up 18 percent from C\$105.4 million in comparable expenditures in 2011.

By contrast, NRCAN projected a 7 percent decrease in mineral exploration spending in 2012 to C\$285 million in Yukon Territory and a 13.3 percent increase to C\$568.6 million in comparable outlays in Nunavut in 2012.

"NRCAN puts out figures twice a year, in March and in November, so we'll know in a month or so" whether the actual spending met expectations, Hoefer said.

### Chamber, government initiatives

Hoefer also said the relatively flat mining activity in Northwest Territories, despite its rich treasure trove of mineral resources, is a signal that the industry is encountering problems investing in the

territory.

"We use the level of mining activity to help flag issues here in the NWT," Hoefer said. "When we have two northern neighbors doing well, why are we not doing so well?"

Among the reasons: The complexity of regulatory issues and the unsettled land claims in the territory. Hoefer said the Canadian government is expected to approve legislation this fall aimed at improving the environment for mining in Northwest Territories.

"The biggest change is with timelines. We're expecting two-year timelines for the regulatory process," he said.

Hoefer said the chamber also recently signed a memorandum of understanding with Akaitcho Dene First Nations designed to spur economic development and mineral development strategies.

"We found that expectations were mismatched with capabilities. We reached out to them, and found they were reaching out, too, to see if we can address the issues," he explained.

Hoefer said the chamber is now working with the First Nation on an action plan to come up with an innovative approach to bridge the gap to be able to reach out to investors.

"We also urged the new (territorial) government to work with the Akaitcho to get engagement strategies in place to launch next year," he said.

The territorial government, meanwhile, spent 2012 aggressively addressing remaining obstacles to devolution in Northwest Territories, seeing greater autonomy for the northern territory as crucial to spurring economic development activity.

NWT officials also reinstated the Prospectors Grubstake Program in 2012 after a five-year hiatus. The funding encourages grassroots mineral exploration by helping NWT prospectors defray costs for a wide range of prospecting activities. Individual prospectors may be eligible to receive grubstakes up to C\$5,000 over 5 years.

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### RAMSAY *continued from page 38*

hind the NWT's economy, including nation-leading gross domestic product figures, employment, procurement and value-added industries such as manufacturing, mineral exploration has, of late, been decreasing in the NWT. The global recession was part of it, but industry representatives also cite a complex regulatory system, unresolved land claims and the lack of infrastructure as hindrances to investment.

Led by a renewed political focus, (the NWT's 17th Legislative Assembly took office in October, 2011), the Government of the Northwest Territories has responded by partnering with the mining industry and other key stakeholders to advance and develop a Mineral Development Strategy for the future. A necessary and key step, it is felt, in increasing expenditures in the mineral exploration and deposit appraisals with a view to positively impacting the quality of life for NWT residents, government revenues, business retention and expansion and the productive use of resources.

*The Hon. David Ramsay is minister of Industry, Tourism and Investment in the Government of the Northwest Territories. He was re-elected to a third term in October 2011 as MLA representing the Kam Lake riding.*

# Millrock thrives in tough markets

Majors invest C\$11M to explore gold-copper projects generated by junior

BY SHANE LASLEY  
Mining News

**M**illrock Resources Inc.'s skillful execution of the project generator model is allowing it to flourish in an equity market that has not been kind to junior exploration companies.

Capitalizing on its exploration expertise and first-hand geological knowledge of Alaska and southeastern Arizona, Millrock pulled together some C\$11 million for exploration in 2012. Some 93 per cent of this spending was funded by global miners Teck Resources Ltd., Kinross Gold Corp., Vale S.A. and Inmet Mining Corp. — leaving only about C\$800,000 to be shouldered by the project generator.

Some C\$6.5 million of the 2012 budget was invested in an array of Millrock's gold and gold-copper projects in Alaska.

By allowing a third party to do the heavy lifting the project generator is reducing exploration risk, limiting dilution and exposing its shareholders to a large amount of exploration spending for their investment.

An added bonus is the larger portion of the explorer's overhead is covered through the collection of 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," Millrock Resources President and CEO 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.

"They see we are executing our model, 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 a C\$1.65 million financing in June and a C\$1 million financing in August — yet the project generator's properties were subjected to some C\$27 million of exploration in 2011 and 2012. At the end of August, Millrock had about C\$2 million in the bank and won't need to consider going to the market for additional funds until after the Alaska field season.

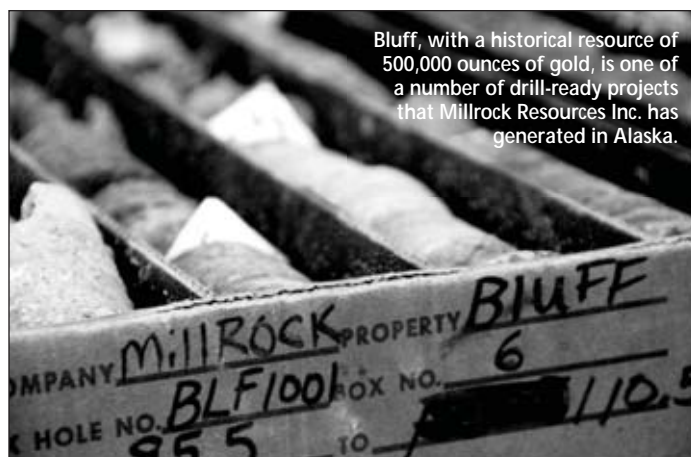
"By the end of the year we will still have a pretty good cushion but it is going to be too thin for real comfort," Beischer said.

## Strategic alliances

In 2011, Millrock further mitigated its risk by entering into a strategic alliance with Vale in which the mining giant agreed to front an initial US\$1 million for the project generator to seek out



GREG BEISCHER



MILLROCK RESOURCES INC.

a world-class porphyry deposit in Alaska.

This deal 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 copper," Beischer explained. "They would love to find another Pebble — as would we."

Millrock co-founder and Chief Exploration Officer Phil St. George has a track record of doing 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 Resource Inc.

In early June Millrock announced that it has 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 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 also 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.

Vale budgeted US\$830,000 for surface surveys of Audn in 2012.



Millrock feels that with US\$830,000 of surface surveys Vale funded for Audn this year is enough to ready the porphyry copper-gold prospect for drilling in 2013.

## Return to Oxide Ridge

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 expansive project situated about 160 kilometers (100 miles) northwest of Anchorage or fully embracing the project generator model. After some deliberation, the Vancouver, B.C.-based junior chose to partner with the diversified miner.

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.

A four-hole, 1,500-meter drill program carried out in 2011 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 the Oxide prospect.

The discovery hole cut 450.7 meters 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," said St. George.

SE12-04, drilled to the southeast of the discovery hole, cut 41.5 meters averaging 1.1 g/t gold, indicating the partners are narrowing in on the higher grade zone they are seeking. A strong geophysical anomaly further southeast is the planned focus of drilling in 2013.

The 2012 program also tested a geochemical anomaly at the RPM showing, located about 25 kilometers (15 miles) south of Oxide.

SE12-008 — the discovery hole at RPM — cut 21.9 meters averaging 2.07 grams per ton gold over 21.94 meters within a 102.1-meter interval averaging 1.04 g/t gold from 26.52 to 128.63 meters. Millrock said this discovery is considered a priority target for follow-up.

Drilling at West Wing, located about midway between Oxide and RPM, also cut promising gold. SE12-007 cut 7 meters averaging 1.01 g/t gold. Elevated copper values are also present in core from this prospect and range between 1,000 and 4,580 ppm copper.

In April, Millrock announced Teck had

## Millrock Resources Inc.

TSX-V: MRO

PRESIDENT AND CEO: Gregory Beischer  
CHIEF EXPLORATION OFFICER: Philip St. George  
CHIEF OPERATING OFFICER: Sarah Whicker

Properties with mineral(s) explored —  
Gold — Estelle, Alaska  
Gold-Copper — Humble, Alaska  
Gold — Council, Alaska  
Gold-Copper — Audn, Alaska  
Gold — Bluff, Alaska  
Gold-Copper — Cristo Claim Group  
Gold — Uncle Sam, Alaska  
Gold — Revelation, Alaska  
Gold — Fortymile, Alaska  
Gold-Copper — Stellar, Alaska  
Copper-Gold — Distin, Alaska  
Copper-Gold — Renegade, Alaska  
Copper-Gold — Galiuro, Arizona  
Copper-Gold — San Jose, Arizona  
Copper-Gold — Dry Mountain, Arizona  
Copper-Gold — Monsoon, Arizona



CASH AND SHORT-TERM DEPOSITS: C\$2.4 million (at June 30, 2012)  
WORKING CAPITAL: C\$2.67 million (at June 30, 2012)  
MARKET CAPITALIZATION: C\$19.4 million (at Sept. 10, 2012)

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earned an initial 55 percent joint venture interest in Estelle.

## Mutually beneficial partnership

While Kinross partners with many junior companies around the globe, Millrock tops a short list of "mutually beneficial partnerships" featured on the Toronto-based miner's website.

In 2012 Kinross spent some 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 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 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.

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

Targeting coincidental geochemical and geophysical anomalies, 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.

Following the Humble program, Kinross and Millrock turned their focus on Council, a 900-square-mile land package that blankets a region that has produced more than 300,000 ounces of

*continued on next page*

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## Andover Mining Corp.

AOX: TSX-V

CEO AND CHAIRMAN: Gordon Blankstein

CHIEF OPERATING OFFICER: Kent Turner

SUN GENERAL MANAGER: Bradley Peek

With a 2012 budget of US\$3.5 million, Andover Mining Corp. set out to establish an inaugural NI 43-101 resource for its Sun copper-silver-lead-zinc-gold project situated at the eastern end of the Ambler Mining District – a region of Northwest Alaska renowned for a 70-mile- (110 kilometers) long belt of world-class volcanogenic massive sulfide deposits. A historical resource calculated for the Main Sun deposit by Anaconda Mining Company outlined 2.4 million tons averaging 2.39 ounces per ton (81.77 grams per metric ton) silver, 1.93 percent copper, 4.51 percent zinc and 1.2 percent lead; and an additional underground resource of 17.89 million tons averaging 2.37 opt silver (81.09 grams per metric ton), 1.91 percent copper, 2.46 percent zinc and 1.18 percent lead. With the dual goal of adding to and bringing this resource to modern standards, Andover and Mine Development Associates – a Reno, Nevada-based geological consultant – poured over the some 15,000 meters of drill results and other information from exploration historically completed at Sun. Utilizing this data, the explorer and consultant modeled the deposit and laid out a program that involves a balance of infill drilling and deposit expansion. One of the primary objectives of the 17-hole program at Main Sun is to ensure that the drill density inside the deposit will support a resource calculation. SUN 12-29, one such hole, cut three zones of mineralization. From a depth of 71.9 meters, hole 29 cut 8.6 meters averaging 1.5 percent copper, 9 percent zinc, 1.6 percent lead, 66.2 grams per metric ton silver and 0.19 g/t gold; at 100.5 meters this hole intersected 6.2 meters averaging 2.7 percent copper, 6.5 percent zinc 1.3 percent lead, 116.4 g/t silver and 0.40 g/t gold; and at 130 meters, this hole cut 2.3 meters averaging 1.7 percent copper, 1 percent zinc, 0.26 percent lead, 48.9 g/t silver and 0.14 g/t



ANDOVER MINING CORP.

gold. SUN 12-35 – expanding the Main Sun deposit to the northeast – cut four mineralized zones including 2 meters (true width) averaging 1.2 percent copper, 1 percent zinc, 0.2 percent lead, 77.3 g/t silver and 0.6 g/t gold. SUN 12-39, drilled at the southwestern edge of Main Sun, cut 10 meters (true width) averaging 3 percent copper, 2.43 percent zinc, 0.54 percent lead, 43.6 g/t silver and 0.43 g/t gold. S.W. Sun, a fault off-set extension of Main Sun, was also targeted in 2012. Early results include SUN 12-34, which cut 3.6 meters (true width) averaging 1.02 percent copper, 80.7 g/t silver, 6.45 percent zinc, 2.13 percent lead and 0.21 g/t gold. Sun 12-38 – a step-out to the northeast of known S.W. Sun mineralization – cut 2.3 meters (true width) averaging 1.2 percent copper, 54.3 grams per metric tons silver, 2.83 percent zinc, 0.49 percent lead and 0.3 g/t gold. While a larger rig focused on the Main Sun and S.W. Sun deposits; a portable rig tested outlying targets. Sal, one such prospect, lies about five miles (eight kilometers) west of Main Sun. Strong alteration and iron staining within the prospective rock package of the region has been mapped for some 200 meters along strike at Sal before being lost beneath cover. The discovery hole at Sal cut 2.1 meters (true width) averaging 0.69 percent copper, 2.99 percent zinc, 0.84 percent lead, 19.9 grams per metric ton silver and 0.13 g/t gold. Stu, located about 500 meters southwest of Sal, also demonstrates strong alteration and gossan. STU12-01, the Stu discovery hole, cut 8.1 meters (true width) averaging 0.49 percent copper, 2.75 percent zinc, 0.71 percent lead, 33.5 grams per metric ton silver and 0.2 g/t gold. Late in 2011, Andover more than doubled its land position in the Ambler District by staking 118 new claims that surround the Sun project; and 57 claims adjacent to Smucker at the opposite end of the Ambler Belt, some 60 miles (95 kilometers) to the west. The company now holds 45,920 acres in this VMS district.

**CASH AND SHORT-TERM DEPOSITS:** C\$2.12 million (at June 30, 2012; US\$1.5 convertible note financing completed Aug. 29, 2012)

**WORKING CAPITAL:** C\$2.24 million (at June 30, 2012)

**MARKET CAPITALIZATION:** C\$23.2 million (at Sept. 10, 2012)

**ANDOVER MINING CORP.**

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## MILLROCK *continued from page 43*

placer gold.

The 1,242-meter program targeted a 7,000-meter-long gold-arsenic soil anomaly that overlies a northwest trending fault at the Elkhorn Creek zone.

COU12-023, the discovery hole at Elkhorn, cut 7.01 meters averaging 2.58 grams per metric ton gold occurring within a 14.02-meter interval averaging 1.45 g/t.

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

While Millrock has been able to secure exploration funds from global firms, partnerships with junior explorers are virtually non-existent this year.

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.

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 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 the Naosi zone of Sumitomo Metal Mining Co. Ltd.'s Stone Boy project located approximately 2,000 meters to the southeast.

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.

Despite these encouraging results, Crescent wasn't able to raise the funds to mount a follow-up program in 2012. In September, Crescent merged with Coventry Resources Ltd., an Australia-based explorer that is advancing the Cameron gold project in Ontario, Canada.

Bluff — located about 22 miles (35 miles) southwest of Council — is another promising gold project in Millrock's portfolio that is suffering from the lack of venture capital.

Based on the drilling completed by BHP Billiton plc in the 1980s, Bluff has a historical resource of 500,000 ounces of gold, with grades of approximately 3.5 g/t gold.

"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."

When Millrock's contemporaries do have money the project generator will be ready.

"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.



# Nunavut sees growth in mining

Leaders prepare for economy rooted in natural resources wealth

BY MIN. PETER TAPTUNA  
Special to Mining News

An underlying motto for Nunavut this year is "Creating a Resourceful Future," a theme that can be interpreted as creating and building a future full of resources. Nunavut and its expansive geology are rich in many natural mineral resources such as gold, iron ore, base metals of lead and zinc, uranium and nickel to name a few. We have one operating mine, several properties that are potential mines under consideration, and several advanced exploration projects that are proceeding with development or feasibility work. These advanced properties could be mines within this decade.

Nunavut is open for business. There are still mineral discoveries to be made, the territory is underexplored and the geology is very prospective. We have the companies and the expertise to find more. This year we released the Government of Nunavut Uranium Policy, which is favorable to mining and development. We listened to, and heard, what people had to say in developing this policy. We



PETER TAPTUNA

did our homework to ensure that we will consider each proposed mining development on a case-by-case basis, and for the good of Nunavut and its citizens.

Typically, the mineral industry experiences "boom and bust" cycles with much volatility in the price for commodities. 2008 was a banner year world-wide followed by a year in 2009 of a global economic downturn and financial instability. Gold in 2011 reached all-time high values of over US\$1,700 per ounce. For 2012, Nunavut's mineral industry is predicting to spend approximately C\$420 million on exploration expenditures. This level of spending

ranks Nunavut again as fourth among Canada's provinces and territories.

Nunavut's mining opportunities have attracted and will continue to attract the attention of the major, global producers. This is a natural progression from exploration to production. However, we also recognize that Nunavut is in a global competition for mineral investment. It is desirable to attract major companies with the fi-

*continued on next page*



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financial strength to build and develop large projects, but we also need to recognize that with this attraction is also the fact that these companies have other choices and options around the world.

In the now classic movie "Field of Dreams", novice farmer Ray Kinsella was walking in his cornfield, hears a voice that whispers, "If you build it, he will come", and sees a vision of a baseball diamond. He builds the baseball diamond, with concerns, but is rewarded with his, and his late father's, dream of people coming to see the final, winning game. We, in Nunavut, also have our own dream – that of Nunavut having an economy rooted in the wealth of our natural resources from mining. We have built a business and regulatory environment in Nunavut that will attract and foster a resourceful future.

As testament to this dream and its successes so far, many encouraging developments are happening. Agnico-Eagle's Meadowbank gold mine has recently had encouraging drill results and record production. Six other projects in Nunavut are progressing well through the regulatory and environmental assessment processes. ArcelorMittal, the largest steel company in the world and the parent company of Baffinland Iron Mines Corporation, is on its way to developing the high-grade Mary River massive iron ore deposits located on northern Baffin Island. It recently received the go-ahead from the territory's environmental review board and now it is waiting the final decision from the Minister of Aboriginal Affairs and Northern Development Canada. De Beers, the pre-eminent diamond producer in the world, is positioned to acquire a majority ownership in Peregrine Diamonds Ltd.'s Chidliak Diamond Project. This expansive diamond property continues to discover kimberlite;

at least seven of the 61 pipes found to date have economic (tonnage) potential.

Cameco Corp.'s Aberdeen and Turqavik uranium deposits are returning significant high-grade results and this represents the first new important uranium discovery in the Thelon Basin. MMG Resources Inc. is advancing its Izok Corridor base metal deposits in western Nunavut. Sabina Gold & Silver Corp.'s Back River gold deposit, also in western Nunavut, continues to return encouraging drill results. The Meliadine gold project, Agnico-Eagle Mines Ltd.'s second gold property in central Nunavut, is intersecting significant gold values. The company is moving forward with plans for development in the next few years.

This year also brought some challenges and setbacks in the mining industry in Nunavut. Newmont, the second-largest gold producer in the world, announced early in 2012 that they were placing the Hope Bay gold project (western Nunavut) on hold and 'care and maintenance' as the company concentrates on other projects. Agnico-Eagle, the operators of the Meadowbank gold mine, also had to revise its operations plan and in February announced a partial write-down on the mine. The mine-life was shortened by three years, although recent drilling and production results have been very encouraging to potentially alter these modified plans.

We believe that Nunavut is a leading mineral investment destination in Canada and perhaps the world. We have worked hard to "Create a Resourceful Future." We are working to "build it so they can continue to come." And we believe this will happen.

*The Hon. Peter Taptuna is minister of Economic Development & Transportation in the Government of Nunavut. He represents the Kugluktuk riding, the most western constituency in Nunavut.*



Photo courtesy of Agnico-Eagle Mines Ltd.

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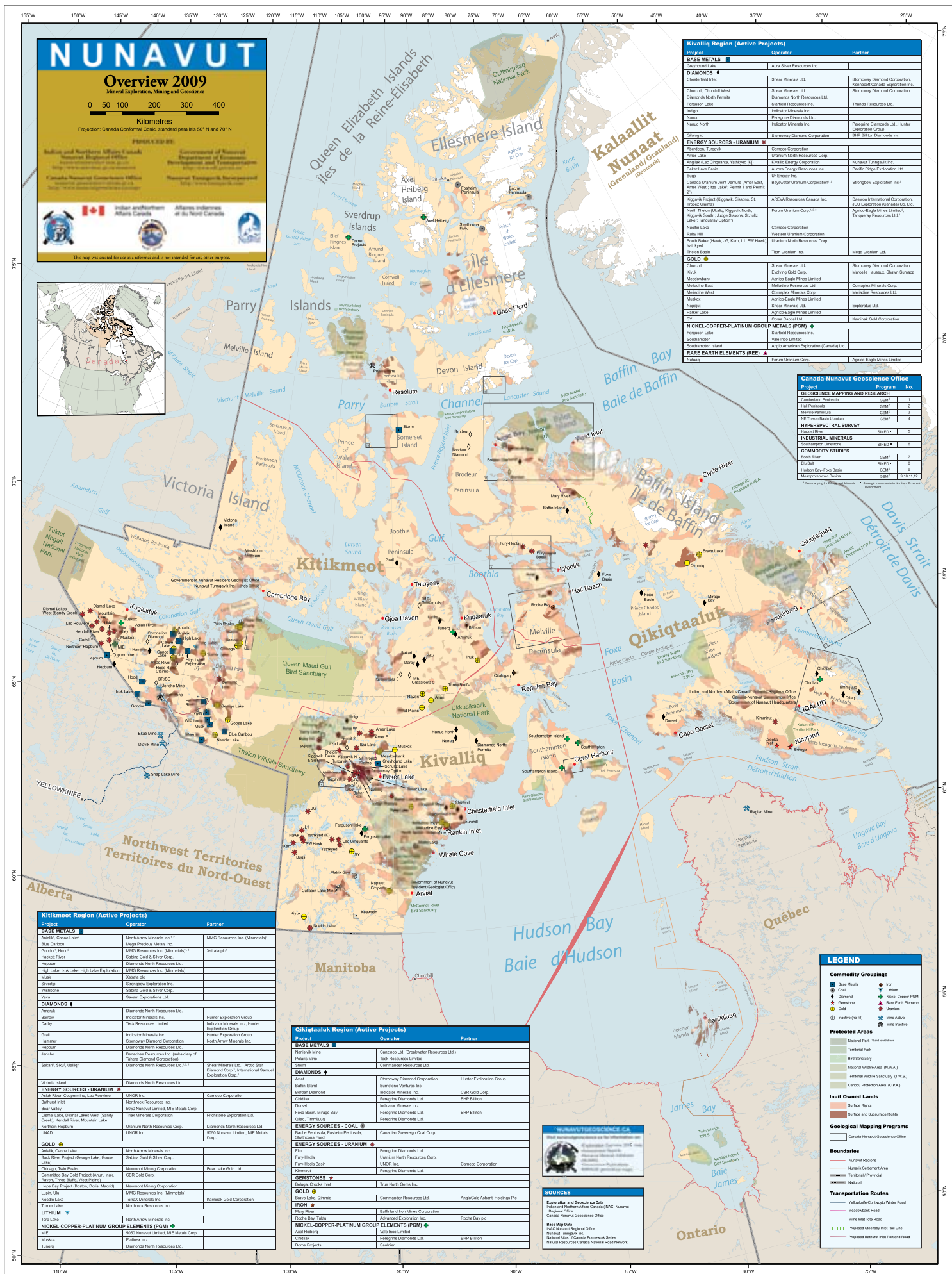
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# Explorers flock to Far North

2012 exploration activity continues upswing across mineral-rich territory

BY ROSE RAGSDALE  
For Mining News

Companies chasing mineral riches in Nunavut in 2012 are expected to meet and surpass the brisk pace of exploration set a year earlier. But the race to discover major deposits of precious and base metals, along with uranium, diamonds and other commodities, in one of Canada's most underexplored and prospective jurisdictions is only just beginning.

At one-fifth the size of Canada, Nunavut covers 1,994,000 square kilometers (770,000 square miles or nearly three times the size of Texas). The Far North territory is Canada's youngest jurisdiction, having been formed in 1999, but Nunavut geology records nearly 3 billion years of Earth history and contains a wide spectrum of economic commodity types, according to geologists at the Canada-Nunavut Geoscience Office.

More than C\$2.6 billion is estimated to have been spent on mineral exploration in Nunavut since the territory's creation.

In 2011, the industry delivered a year of robust mineral exploration to Nunavut with investment nearly doubling to C\$502.3 million from the C\$256 million reported in 2010. Comparable expenditures in 2012 are expected to climb another 10 percent to C\$568.6 million by year's end, according to NRCan's industry-based survey in March. The department will release revised figures in November.

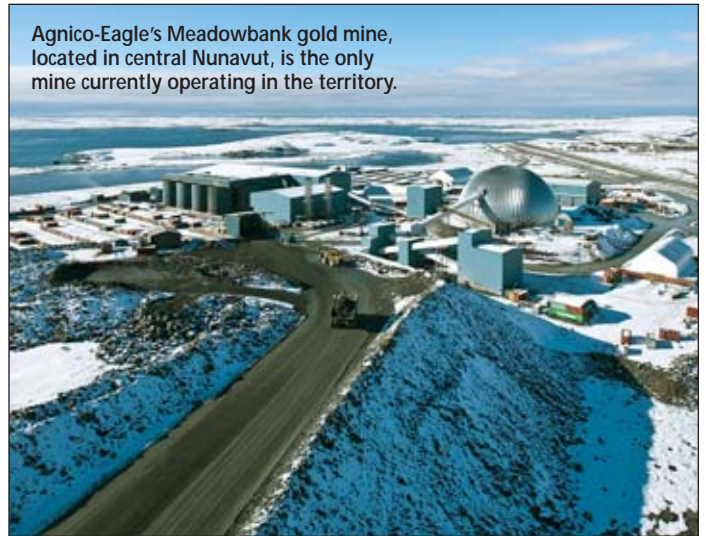
Mineral exploration spending in Nunavut in 2011 reflected significant increases in investment by both junior and senior companies, although the majors accounted for the bulk of the outlays. In 2012, spending in Nunavut by junior companies was predicted to increase significantly, while expenditures by the majors was expected to remain relatively flat.

"Nunavut is doing very well with projected record investment this year of about C\$570 million," Tom Hoefer, executive director of the NWT & Nunavut Chamber of Mines, said in a recent interview. "The territory has a lot more advanced projects. Sabina Gold & Silver Corp., for example, is doing very well at its Back River gold project."

However, the territory appears to be "a bit weak on the grassroots end" of mineral investment, Hoefer added.

Most Nunavut projects focused in 2012 on exploration for precious metals, primarily gold, even though outlays on iron projects are expected to outstrip the level of gold spending. Base metal expenditures are expected to triple and diamond spending to double from 2011 levels. In all, explorers are projected to spend C\$220.4 million on precious metals projects, C\$174.4 million on iron projects, C\$44.2 million on uranium, C\$54.8 million on diamonds and C\$74.4 million on base metals.

Agnico-Eagle's Meadowbank gold mine, located in central Nunavut, is the only mine currently operating in the territory.



AGNICO-EAGLE MINES LTD.

## Early setbacks, key milestones

While 2011 saw more projects advance towards production in Nunavut, 2012 got off to a rocky start with Newmont Gold Mining Corp. putting its huge Hope Bay gold project on care and maintenance indefinitely; Agnico-Eagle Mining Ltd. shortening the projected mine life of the Meadowbank Gold Mine – Nunavut's only operating mine – by three years to 2017; BHP Billiton opting out of its multiyear joint venture with Peregrine Diamonds Ltd. at the Chidliak diamond project; and Anglo Ashanti withdrew from its joint venture agreement signed in 2009 with Commander Resources Ltd. to explore the Baffin Island gold project.

Yet the first quarter of 2012 saw a flurry of NI 43-101 resource estimates based on 2011 work published for several projects, some for the first time, according to Nunavut officials. In addition to Sabina's Back River gold project, the list includes Canadian Orebodies Inc.'s Haig Inlet iron project near Sanikiluaq, Kivalliq Energy Corp.'s Lac Cinquante uranium deposit and Advanced Explorations Inc.'s Roche Bay and Tuktu iron projects.

Sabina also released an encouraging preliminary economic assessment on Back River in May, and Advanced Explorations reported a positive feasibility study of Roche Bay in August. Agnico-Eagle undertook construction of a road from Rankin Inlet to its Meliadine gold project located about 190 kilometers northeast of Meadowbank after receiving approval from the Nunavut Impact Review Board for this pre-development work. North Country Gold also built a road from Hayes Camp to the Three Bluffs deposit to support its exploration program and reduce the company's reliance on helicopter support.



## Anthill Resources Ltd.

**PRESIDENT:** Ming An Fu  
**CHIEF GEOLOGIST:** John Li, Ph.D.  
**PROJECT MANAGER:** Carl Schulze, P.Geo

Founded in 2009, Anthill Resources Ltd. is a privately held mining investment company focused on the Einarson Project located in east-central Yukon Territory adjacent to the Rackla Project being explored by Atac Resources Ltd. Multiple Carlin pathfinder anomalies are found here in a Carlin-favorable geological setting. Anthill optioned Einarson, a package of 11,597 claims covering more than 2,400 square kilometers (926 square miles) from Yukon prospector Ron Berdahl who staked it on the premise that the mineralized horizon observed by Atac would extend farther east. In 2012 Anthill followed up its first season in 2011 where it identified 10 exploration targets with test results from rock, silt and soil samples as high as 750 parts-per-billion gold. In early August, Anthill had identified a strong gold-in-soil anomaly

with values as high as 87.2 grams per metric ton gold in rock samples in Target D2; a gold zone (Bachelor Zone) found in Target A with values as high as 9.27 g/t gold; a strong gold-in-soil anomaly in Target D1; and significant values of silver, zinc and copper in several of the targets. In all, Anthill said it found values in 911 of 1,200 rock samples, 2,997 of 6,425 soil samples, and 89 of 1,100 silt samples. Like the Osiris and Conrad zones at Rackla, the D-2 prospect has orpiment and realgar in gold-rich mineralization that appears to be hosted in dolostone with a lot of sphalerite and galena in veining with calcite. Anthill also planned to drill holes on Targets A, D and E in 2012, spending C\$5 million on exploration at Einarson in 2012, after sinking C\$2 million into staking the property in 2011.

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Anthill Resources Ltd.'s Einarson Project in east-central Yukon Territory demonstrates geochemical and geologic characteristics favorable for Carlin-style gold deposits.

YUKON ENERGY, MINES & RESOURCES

New owners of projects that changed hands in 2011 mounted vigorous exploration and development campaigns this year. These include Baffinland Iron Mines Corp.'s high-grade Mary River iron deposits, Xstrata Zinc Canada's Hackett River silver-rich volcanogenic massive sulphide deposit and Elgin Mining Inc.'s past-producing Lupin gold mine and the Ulu gold project.

### Exploration in three regions

The breakdown of mineral exploration and deposit appraisal spending anticipated in 2012 indicates expenditures will reach C\$216 million in the central Kivalliq Region, C\$194 million in the eastern Qikiqtaaluk Region and C\$158 million in the western Kitikmeot Region.

Gold exploration was a key focus of work in the Kitikmeot in 2011, and this trend continued in 2012. Most of the activity in the western Kitikmeot this year was focused on exploration for gold, base metals and diamond exploration with Back River, Hackett River, and the Lupin Mine and Ulu drawing a surge in spending. In the eastern Kitikmeot, exploration, led by North Country Gold at Committee Bay, was conducted for gold, diamonds and platinum group metals.

Several significant base metal projects were active in the Kitikmeot in 2011, and are expected to be again in 2012. MMG Resources conducted drilling and surface exploration programs at its High Lake, Izok Lake and Hood projects in 2011 and focused in 2012 on developing an overland corridor to transport potential base metals products from its inland projects to market. A number of properties in the Kitikmeot are being explored for diamonds, including Shear Diamonds Ltd.'s Jericho Mine property, Stornoway Diamond Corp.'s Hammer kimberlite.

In the Kivalliq region, companies are primarily seeking gold and uranium, though some exploration is underway for base metals, platinum group metals, rare earth elements and diamonds.

The two largest gold projects in the Kivalliq region are Agnico-Eagle's Meadowbank gold mine and Meliadine project. The company's plans for 2012 included 110,000 meters of drilling at Meliadine. Other companies explored for gold in the Kivalliq in-

clude Uranium North Resources, Prosperity Goldfields, Anconia Resources, Northquest Ltd. and Diamonds North Resources.

All uranium exploration in Nunavut in 2011 took place in the Kivalliq, most in and around the Thelon Basin, and that trend continued in 2012. Substantial drilling programs were completed at Lac Cinquante, Aberdeen, Turqavik and Kiggavik in 2011 and 2012, with programs also completed on the North Thelon project and at Amer Lake. Kiggavik, owned by AREVA, is the most advanced uranium project in the territory. The Final Environmental Impact Statement for that project was expected to be submitted to the NIRB in 2012.

Exploration in the Kivalliq is ongoing for a number of other commodities, including lead, zinc, copper, gold and silver.

Most iron projects in Nunavut are located in the Qikiqtaaluk region, on Baffin Island, the Melville Peninsula and the Belcher Islands. Diamond, gold and base metal projects also are active in the region.

Most exploration spending in the Qikiqtaaluk is devoted to iron. In addition to the Mary River, Roche Bay and Tuktu projects, other iron projects are attracting interest. Canadian Ore-bodies conducted its first exploration program at the Haig Inlet project near Sanikiluaq in 2011 and based on the work done, the company was able to publish a resource estimate for the project, and follow up the work in 2012. West Melville Iron Company completed ground geophysics and channel sampling on the Fraser Bay deposit in 2011 to prepare for a planned drill program in 2012.

Peregrine Diamonds acquired BHP Billiton's interest in the Chidliak project and conducted a 2012 exploration program to pave the way for bulk sampling in 2013 and 2014.

Several companies have begun exploring the Melville Peninsula and the High Arctic for base metals. Advanced Explorations discovered five new occurrences of nickel-copper mineralization in 2011 at its Western Permits project on western Melville Peninsula, and returned for further evaluation of the property in 2012. Canada Coal acquired 75 coal licenses on Ellesmere and Axel Heiberg Islands in 2011 and in June commenced mapping and sampling programs that focused on the West Fosheim license areas.

# High-grade copper abounds at Ambler

NovaCopper adds 1B pounds to resource, 2012 drilling taps third deposit

BY SHANE LASLEY  
Mining News

**N**ovaCopper Inc. – formed as a 2012 spinout of NovaGold Resources Inc.'s Ambler project in Northwest Alaska – already boasts some 3.6 billion pounds of high-grade copper resources plus appreciable quantities of gold, silver, lead and zinc.

"This is an excellent start to NovaCopper's life as a public company," said NovaCopper President and CEO Rick Van Nieuwenhuyse.

In addition to some 90,624 acres of state, federal and patented mining claims blanketing the Ambler Mining District, NovaCopper received US\$40 million in cash and NovaGold founder Van Nieuwenhuyse.

Continuing the work started by its predecessor, NovaCopper and NANA Regional Corp. are joined in a partnership designed to explore and develop Arctic and Bornite, two of the highest grade copper projects left on the planet, and seek similar deposits across 331,000 acres (134,000 hectares) of the Ambler District.

"Both parties are contributing resources to create the opportunity to take a consolidated and cost-effective approach to exploring and developing one of the richest and most-prospective copper districts in the world," NovaCopper CEO Rick Van Nieuwenhuyse expounds on the alliance known as the Upper Kobuk Mineral Project.

The alliance partnership provides the Alaska Native regional corporation with the opportunity to benefit from the exploration and eventual development of the world-class Arctic deposit and other similar prospects across the 70-mile (110 kilometers) Ambler volcanogenic massive sulfide belt blanketed by NovaCopper's 90,624 acres of state, federal and patented mining claims.

Arctic – the most advanced deposit of the Upper Kobuk Mineral Project – has an indicated resource of 19.45 million metric tons averaging 4.05 percent copper, 5.8 percent zinc, 59.55 grams per metric ton silver and 0.97 g/t gold. Additionally, the deposit has an inferred resource of 11.41 million metric tons averaging 3.47 percent copper, 4.84 percent zinc, 46.75 g/t silver and 0.80 g/t gold.

In return, NovaCopper is afforded the opportunity to investigate Bornite, a copper-rich deposit situated about 17 miles (27 kilometers) southwest of Arctic, and explore other mineral prospects across a carbonate-hosted copper-cobalt belt that is hosted primarily on the lands owned by NANA.

Ruby Creek zone at Bornite contains an indicated resource of



RICK VAN  
NIEUWENHUYSE



RC11-187, NovaCopper Inc.'s discovery hole at South Reef, cut a continuous 178 meters averaging 4 percent copper, including 34.7 meters at 12 percent copper.

SHANE LASLEY

6.8 million metric tons averaging 1.19 percent (178.7 million pounds) copper and an inferred resource of 47 million metric tons of 0.84 percent (883.2 million pounds) copper.

"You have both volcanism associated with the volcanogenic massive sulfide deposits like Arctic and you have the situation at Bornite, which is copper replacement in limestone," explains the NovaCopper leader. "You are talking about a whole district here at Ambler and the exploration has only scratched the surface and it has already been very successful."

To dig a bit deeper into the Upper Kobuk Mineral Project, NovaCopper launched a 17,209-meter drill program focused primarily on South Reef, a deeper target at Bornite about 250 meters west of the 1-billion-pound copper resource at Ruby Creek.

"Management believes that South Reef has the potential to become another world-class copper deposit, and that it complements very well our multi-billion-pound 7-percent-copper-equivalent endowment at the Arctic deposit. These deposits are unfolding in a way that makes the Ambler district one of the most exciting copper plays in the world," said Van Nieuwenhuyse.

## Advancing Bornite

An early priority of NovaCopper and NANA's strategy at the Upper Kobuk Mineral Project is to advance the Bornite project to a stage that is on par with Arctic.



This began with a 5,900-meter program carried out by NovaGold in 2011. The first priority of this work was to confirm a historical resource calculated for the Ruby Creek zone at Bornite based on exploration completed by Kennecott Exploration Co. nearly half a century ago.

"Kennecott was looking for high-grade mineralization when they did most of this work back in the 1960s and 1970s, but they intersected a lot of 1 percent grades," Van Nieuwenhuyse told Mining News.

Six holes drilled by NovaGold last year validated the historical work completed by Kennecott, including RC11-181, which cut 17.6 meters grading 8.4 percent copper. Overall this hole intersected four mineralized intervals totaling 122.3 meters averaging 2.3 percent copper. RC11-185 – more typical of the average grades in the Ruby Creek zone – cut 121.3 meters averaging 1.4 percent copper.

While the six holes drilled served the purpose of calculating the inaugural NI

43-101-compliant resource of 1.06 billion pounds of copper, the most exciting results of the 2011 program came in two exploration holes drilled into the nearby South Reef zone.

RC11-187, the first hole to target South Reef, cut a continuous 178 meters averaging 4 percent copper, including 34.7 meters at 12 percent copper.

"It is one of the best copper holes drilled in the world, ever!" said a beaming Van Nieuwenhuyse. "The fact that it is on a new target that we now call the South Reef, makes it even more encouraging."

South Reef – which is separated from Ruby Creek by a major northeast-trending fault known as Iron Mountain – starts at about 300 meters below surface, making it substantially deeper than the 1-billion-pound copper resource.

After losing several holes before reaching target depth, NovaGold tapped the zone with a second hole.

RC11-194, drilled 500 meters along strike to the north of hole 187, cut 110.6 meters of 2.6 percent copper.

Given the grades, thicknesses and apparent strike-extent, South Reef is shaping up to be a substantial addition to the Bornite and is the primary focus of NovaCopper's 2012 drill program.

Results from the first six holes of 2012 continue to demonstrate the high-grade tenor of the new zone:

- RC12-202 intersected three mineralized intervals with a composite total of 50.1 meters averaging 3 percent copper, including a higher grade interval of 7.8 meters grading 12 percent copper;

- RC12-201 intersected four mineralized intervals with a composite total of 112.5 meters averaging 2.4 percent copper, in-

## NovaCopper Inc.

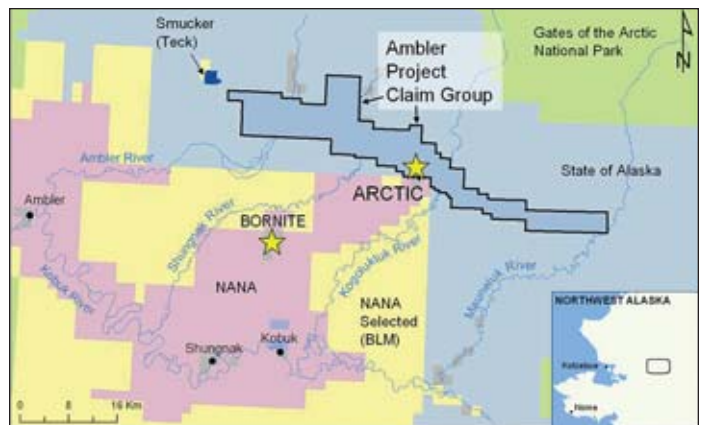
NCQ: NYSE/TSX

CHAIRMAN: Thomas Kaplan  
PRESIDENT AND CEO: Rick Van Nieuwenhuyse  
PROJECT MANAGER, UKMP: Scott Petsel

Copper: Bornite  
Polymetallic VMS: Arctic  
Polymetallic VMS: Sunshine

CASH AND SHORT-TERM DEPOSITS: US\$38.7 million (at May 31, 2012)  
WORKING CAPITAL: US\$37.57 million (at May 31, 2012)  
MARKET CAPITALIZATION: US\$122.7 million (at Aug. 26, 2012)

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cluding a higher grade interval of 12.6 meters grading 9.5 percent copper;

- RC12-198 intersected four mineralized intervals with a composite total of 84.7 meters averaging 2 percent copper, including a higher grade interval of 8.5 meters grading 6.4 percent copper;

- RC12-195 intersected three mineralized intervals with a composite total of 74.5 meters averaging 1.2 percent copper, including a higher grade interval of 22.1 meters grading 3.1 percent copper;

- RC12-197 intersected two mineralized intervals with a composite total of 83.7 meters averaging 2.1 percent copper, including a higher grade zone of 46.6 meters grading 2.7 percent copper; and

- RC12-196 intersected three mineralized intervals with a composite total of 86.8 meters averaging 1.5 percent copper, including a higher grade interval of 64.8 meters grading 1.7 percent copper.

Drilling at South Reef has outlined a 300-meter-by-700-meter northeast trending zone of copper mineralization that remains open to the north and east and is partially open to the south.

## Developing the district

Some 1,750 meters of the 2012 program tested Sunshine, a VMS prospect about 12 kilometers (7.5 miles) west of Arctic. NovaCopper said historic drilling at Sunshine has identified substantial widths of massive sulfide mineralization in the same stratigraphic horizon as Arctic.

"Sunshine is not too far from Arctic, and there are some obvious synergies there. But there are literally a dozen other identified massive sulfide targets in the belt," Van Nieuwenhuyse said.

Seeking other drill targets similar to those NovaCopper is drilling at Bornite, the 2012 program consists of extensive sur-

*continued on next page*



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## Atac Resources Ltd.

ATC: TSX-V

**PRESIDENT:** Robert C. Carne, M.Sc., P.Geo.

**CHIEF EXECUTIVE OFFICER:** Graham N. Downs

**CHIEF OPERATING OFFICER:** Ian J. Talbot



Atac Resources Ltd., a member of the Strategic Exploration Group, concentrated again in 2012 on the Rackla Gold Project located in the Mayo Mining District of east-central Yukon Territory. The project encompasses more than 8,000 mineral claims and covers 1,600 square kilometers (about 618 square miles) in an east-west extending land package about 185 kilometers (114 miles) long by 15 kilometers (10 miles) wide. Atac began phase 1 of a 30,000-meter two-phase 2012 exploration and drilling program in May that included 15,000 meters of diamond drilling, with the majority of drilling to be focused on the Nadaleen Trend where four priority zones of Carlin-Type gold mineralization – Conrad, Osiris, Isis and Isis East – have been confirmed, along with scout drill testing of structural targets along the Nadaleen feeder fault and other structures that exhibit surface pathfinder element signatures and continued auger drilling at the Pyramid target to identify the bedrock source of a 500-meter by 200-meter gold pathfinder arsenic/thallium soil geochemical anomaly coincident with abundant orpiment and realgar cobbles and boulders in glacial till. The company also planned geophysical



ROBERT CARNE

surveys on the Ocelot silver-lead-zinc discovery within the Rau Trend and follow-up prospecting, geological mapping and detailed soil sampling of 15 high-priority gold and pathfinder geochemical anomalies identified in 2011 along the Rackla claim block. In July and August, Atac reported multiple intersections in the Conrad and Isis East zones, including its most significant gold intersection to date – 42.93 meters grading 18.44 grams per metric ton gold in hole OS-12-114. In September, Atac reported the discovery of Anubis, a major new Carlin-type zone about 10 kilometers (six miles) west of the Conrad, Osiris and Isis gold zones. AN-12-01, the discovery hole at Anubis, cut 8.51 meters averaging 19.85 g/t gold. In May, Atac also reported acquisition of the 50 percent interest in the Connaught silver property held by Klondike Silver Corp. in west-central Yukon for 75,000 of its shares. The deal brought to 100 percent Atac's ownership of the property, which is prospective for silver, gold and lead. Connaught is located immediately south of the Sixtymile placer gold camp, about 65 kilometers (40 miles) west of Dawson City.

**CASH AND SHORT-TERM DEPOSITS:** C\$14.24 million (at June 30, 2012)

**WORKING CAPITAL:** C\$13.15 million (at June 30, 2012) (raised C\$15.66 million in private placement in July 2012)

**MARKET CAPITALIZATION:** C\$244.53 million (at Sept. 9, 2012)

### ATAC RESOURCES LTD.

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## NOVACOPPER *continued from page 51*

face exploration of the roughly 11-mile (18 kilometers) belt of prospective stratigraphy associated to the carbonate replacement deposits.

Two known mineralized occurrences west of Bornite – Aurora



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Mountain and Pardner Hill – along with broad areas of hydrothermal dolomite and anomalous soil geochemistry occur along the belt. NovaCopper said surface exploration will utilize surface and down-hole induced polarization geophysics to identify new targets and further delineate extensions of known mineralization.

An initial 60 line-kilometers of IP, 25 line-kilometers of soil sampling and geologic mapping were carried out to gain a better handle on the geologic controls to mineralization and target generation in the district.

Though primarily focused on exploration, NovaCopper's US\$16.5-million program at the Upper Kobuk Mineral project in 2012 continued the engineering and metallurgical work at Arctic as well as initial metallurgical testing of Bornite ore.

A preliminary economic assessment completed by SRK Consulting in April 2011 and updated for NovaCopper in 2012 investigates a 4,000-metric-ton-per-day underground operation at Arctic producing 1.7 billion pounds of copper, 2 billion lbs. zinc, 291 million lbs. lead, 266,000 ounces gold and 22 million ounces silver over a 25-year mine life.

According to the revised PEA, Arctic demonstrates a base case post-tax net present value (8 percent discount) of C\$533 million with an internal rate of return of 26 percent. This scenario assumes US\$2.50/lb. copper, US\$1.05/lb. zinc, US\$1.00/lb. lead, US\$20 per ounce silver and US\$1,100/oz gold.

Plugging in May 9 metals prices (US\$3.83/lb. copper, US90 cents/lb., US95 cents/lb. zinc, US\$1,600/oz. gold and US\$32/oz. silver) the base case post-tax net present value (8 percent discount) nearly doubles to C\$1 billion with an internal rate of return of 37 percent.

While the PEA contemplates an underground mine at Arctic, NovaCopper is investigating the potential of an open-pit operation at the VMS deposit.

Van Nieuwenhuyse said the examination of various mining scenarios at Arctic is one component of NovaCopper's broader evaluation of the entire Upper Kobuk Mineral Project.

"We are looking at a variety of opportunities with the concept of developing the district," he said.



# Pebble prepares for permitting

With US\$107M budget, partners advance toward project description in 2012

BY SHANE LASLEY  
Mining News

**T**he Pebble Limited Partnership is spending some US\$107 million to advance the enormous Pebble copper-gold-molybdenum project in 2012, with the objective of initiating permitting under the National Environmental Policy Act in 2013.

Work programs include environmental studies focused on fish and marine resources, water quality and groundwater hydrology; continued engineering analysis to finalize a project description; geotechnical and exploration drilling; and workforce and business development initiatives.

Pebble Partnership CEO John Shively underscored the employment opportunities these ongoing work programs bring to Southwest Alaska.

"Our site work program is where our local and regional opportunities are realized. This is all about putting people to work and potentially the significant socioeconomic benefits this project could bring to the region, which struggles with elevated unemployment numbers, a lack of year-round jobs and outmigration to urban areas" said Shively.

The Pebble Partnership was established in July 2007 as a 50-50 partnership between Vancouver B.C.-based Northern Dynasty and London-based Anglo American plc.

Under the terms of the Pebble Limited Partnership Agreement, Anglo American is required to invest US\$1.5 billion in order to retain its 50 percent interest in the Pebble project. These funds are being spent on the comprehensive exploration, engineering, environmental and socioeconomic programs toward the future development of Pebble.

From the time that the Pebble Partnership was established through the end of 2012, the London-based global miner will have invested some US\$500 million to advance engineering, environmental and socioeconomic studies at Pebble.

"We will continue our work to develop a responsible plan for Pebble that meets our commitment to co-existing with the fish resources," said Shively.

During a meeting with legislators in Juneau, Pebble Partnership Vice President of Environment Ken Taylor said engineers are putting the finishing touches on the project design. He indicated to the lawmakers that the engineering and environmental teams may be ready to submit permit applications for Pebble by mid-2013.

"We are working on trying to get the last pieces of a mine plan put together right now – that is what the engineers are focused on. On the environmental side we are looking at putting together a project description and I think our goal is that within the state's next fiscal year we would be ready to go into a permitting process," he said.

Prior to initiating project permitting, the Pebble Partnership plans to undertake a broad-based public engagement program to

*continued on next page*



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## Avalon Rare Metals Inc.

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SENIOR VICE PRESIDENT AND COO: Brian Chandler, P.Eng

VICE-PRESIDENT, EXPLORATION: William Mercer, Ph.D., P. Geo.

Avalon Rare Metals focused in 2012 on advancing its Thor Lake Rare Earth Metals Project located in the Mackenzie Mining District of the Northwest Territories, about 100 kilometers southeast of the city of Yellowknife. Avalon completed a total of 10,725.4 meters of drilling in 47 holes using two drills during its 2012 winter drilling program that ended April 26. The main objective of the program was to better define the geometry and continuity of the Nechalacho deposit at Thor Lake in the areas to be mined in the first three years of production. A summer drilling program commenced in July with about 12,000 meters of additional definition drilling with one HQ core drill focused on the southern margin of the deposit in the Long Lake area, where some of the highest grade resources in the Nechalacho Deposit are situated. Avalon also reported an updated resource estimate in July highlighted by initial definition of mineral resources in the Nechalacho deposit at the measured level of confidence. Measured and indi-



cated mineral resources totaled 72.66 million metric tons grading 1.53 percent total rare earth oxides of which 21.5 percent are heavy rare earth oxides, using the base case US\$260/metric ton net metallurgical return cut-off for the key Basal Zone. This compares with indicated mineral resources of 57.49 million metric tons grading 1.56 percent TREO of which 20.72 percent are HREO reported for the Basal Zone in January 2011. In late August, Avalon reported that it chose a site in Louisiana for a heavy rare earth separation plant and refinery for the project. A bankable feasibility study for the Thor Lake project is due in late 2012 with production startup anticipated in 2015.



DONALD BUBAR

CASH AND SHORT-TERM DEPOSITS: C\$45.97 million (May 31, 2012)

WORKING CAPITAL: C\$45.62 million (May 31, 2012)

MARKET CAPITALIZATION: C\$199.99 million (Sept. 28, 2012)

AVALON RARE METALS INC.

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Toronto, ON Canada M5H 3P5

Tel: 416 364-4938 • Fax: 416 364-5162

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## PEBBLE continued from page 53

consult Alaskans and other project stakeholders about the current status of project planning. This public consultation initiative is scheduled to begin in the fall of 2012.

"As part of the process of developing a proposed project description, the Pebble Partnership will be meeting and consulting with the people and communities of Southwest Alaska and throughout the state to allow Alaskans and all interested stakeholders to gain a better understanding of how this project will be built and

operated to provide significant benefits to the state and country, while protecting fish, water and other important natural resources," said Northern Dynasty Minerals Ltd. President and CEO Ron Thiessen.

The project description is expected to include details of the Pebble mine plan, transportation corridor linking the deposit and Cook Inlet some 85 miles (137 kilometers) to the east, deep-water port-site at Cook Inlet; and power generation for the some 400 megawatts of electricity expected to be needed to power the mill and other facilities at the enormous copper project.

According to the most recent resource calculation, the Pebble deposit contains 80.6 billion pounds of copper, 107.4 million ounces of gold and 5.6 billion pounds of molybdenum. That is enough copper to supply the United States' current total consumption for about 15 years and as much gold as held by Germany, which has the world's second-largest national gold reserve.

## EPA weighs Pebble's fate

In the meantime, U.S. Environmental Protection Agency is fast-tracking its Bristol Bay Watershed Assessment – a study intended to determine whether

to ban the development of Pebble – one of the largest accumulations of copper, gold and molybdenum on the planet.

Under Section 404 of the Act, the Army Corps of Engineers is charged with issuing permits for dredge and fill discharge into navigable waters, including wetlands. EPA was granted veto authority to prohibit, restrict, or deny a discharge that poses an unacceptable adverse impact to fisheries or other water uses.

EPA initiated the Bristol Bay Watershed Assessment in response to concerns from Alaska Native groups, fishing organizations and others who petitioned the agency to exercise its Section 404(c) authority to pre-emptively deny the Pebble Partnership discharge permits that would be needed to build a mine at the world-class copper-gold-molybdenum deposit located in the study area.

Though EPA emphatically denies it has predetermined whether to exercise this authority, a draft assessment published by the regulatory agency in May surmises that development of Pebble and other promising copper deposits in this vast expanse of state-owned land in Southwest Alaska may pose a threat to a world-class salmon fishery

found there.

Despite widespread calls to slow down the assessment process, the environmental agency is holding to a timeline aimed at making a determination on the fate of Pebble by the end of 2012. This has many speculating on the rationale for the rushed study. Some propose EPA wants to finalize the process under the current Obama Administration.

Alaska officials say they believe the EPA's insistence on completing the assessment "in a timely fashion" is a race to finalize a CWA 404(c) determination before the Pebble Partnership has an opportunity to apply for permits under NEPA. By doing so, the federal agency would circumvent any need to consider the state's management plan for the Bristol Bay region.

The 2005 Bristol Bay Area Plan – which lays out the state's vision for some 17.5 million acres of Alaska-owned lands in the region, an area larger than West Virginia – sets aside the area around Pebble for mineral development.

EPA has exercised its CWA 404(c) veto authority only a handful of times in the past and never before a project permit was filed.

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# Local resources, global reach

Underexplored Yukon ranks among world's top 10 mining jurisdictions

BY BRAD CATHERS  
Special to Mining News

**M**ining continues to be a cornerstone of Yukon's economy, with extraordinary mineral deposits, including both precious and non-precious metals.

The Government of Yukon is committed to providing an internationally competitive investment climate. To this end, we continue to provide regulatory certainty around environmental assessment, permitting and licensing of projects.

Yukon's exploration and mining industries are settling in for the long term. After a record-breaking year for claim staking and exploration spending in 2011, we are seeing companies work hard to further explore and develop their properties this year within the constraints of a challenging global economy.

Mineral exploration remains strong in Yukon, despite this downturn in global financial markets. Several companies with promising exploration results are continuing to invest significantly in their



BRAD CATTERS

properties. This indicates that Yukon's mineral industry is weathering the storm and is proving to be sustainable for the long term. This is due in no small part to Yukon's proven mineral wealth and the confidence industry has shown by their investments in the territory.

## Exploration highlights

In 2012, companies are evaluating and consolidating their exploration properties that were staked during 2011 and earlier years. The primary commodity of interest for exploration remains gold. Many companies used extensive drilling to evaluate advanced targets while continuing with soil sampling, trenching, prospecting and geologic mapping in less advanced areas of their properties.

The White Gold area and the Selwyn basin saw continued work on the extensive exploration holdings. Kaminak Gold Resources has an extensive drill program to connect their previously discovered mineralized showings. Pacific Ridge Exploration Ltd. and Kinross

*continued on page 59*



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# Yukon Exploration Projects 2012

## MAP FEATURES

communities	generating station
capital city	diesel
deep water port	hydroelectric
producing mines	<b>Transmission line</b>
primary highway	<138 kv
secondary highway	138 kv
mineral claims staked in 2012	<b>Proposed infrastructures</b>
mineral claims	1942 surveyed railway route
parks - withdrawn areas	pipeline route

## COMMODITY

silver
gold
copper
iron
nickel +/- PGE
lead/zinc
molybdenum
tungsten

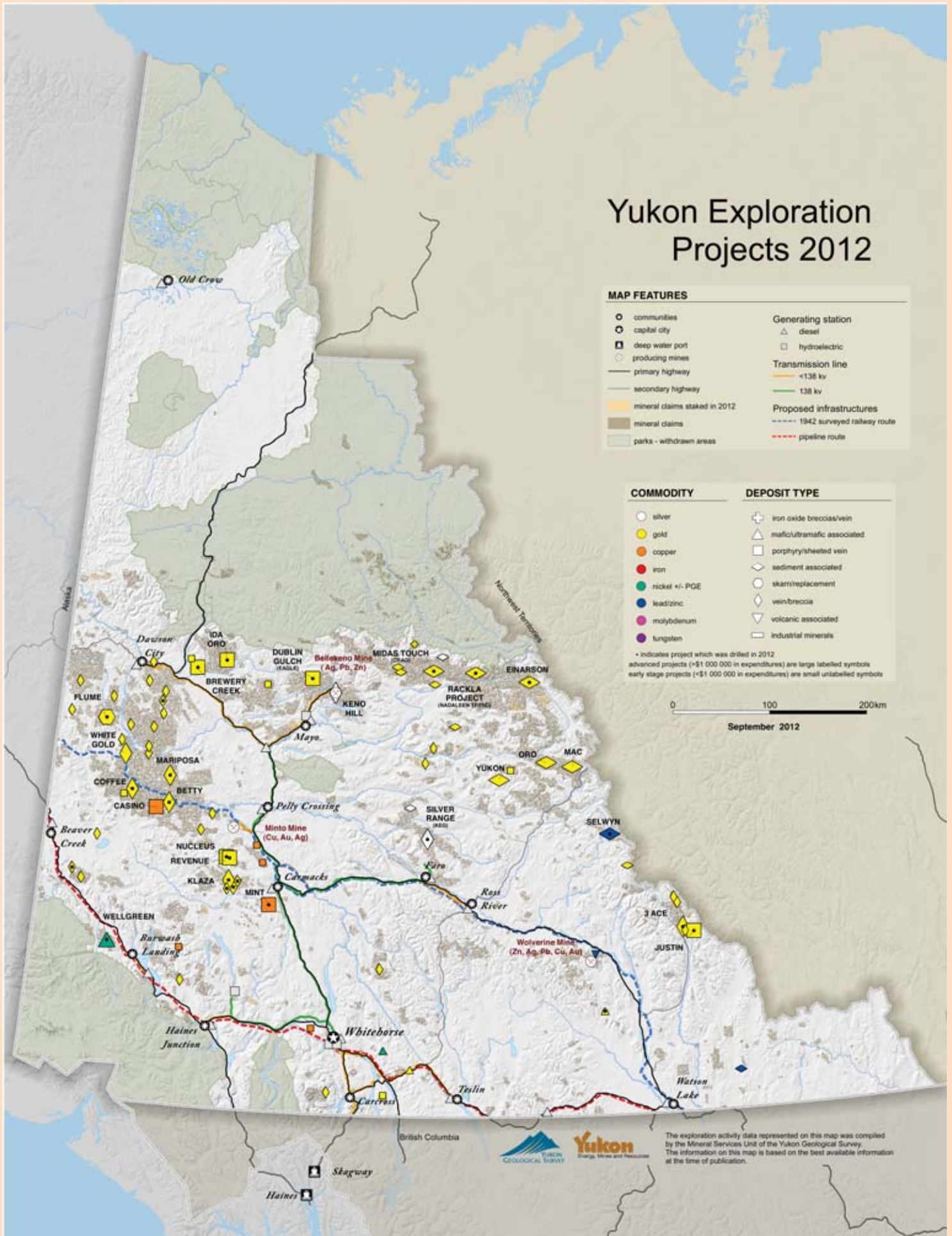
## DEPOSIT TYPE

iron oxide breccias/vein
mafic/ultramafic associated
porphyry/sheeted vein
sediment associated
skarn/replacement
vein/breccia
volcanic associated
industrial minerals

\* indicates project which was drilled in 2012  
 advanced projects (>\$1 000 000 in expenditures) are large labelled symbols  
 early stage projects (<\$1 000 000 in expenditures) are small unlabelled symbols

0 100 200km

September 2012




Yukon  
GEOLOGICAL SURVEY

Yukon  
Energy, Mines and Resources

The exploration activity data represented on this map was compiled by the Mineral Services Unit of the Yukon Geological Survey. The information on this map is based on the best available information at the time of publication.





After setting up camp in May and June 2012 on the 11,597-claim, 2,400-square-kilometer (926.4 square miles) Einarson Property in east-central Yukon Territory, Anthill Resources Ltd. identified gold, silver, copper and/or zinc mineralization in rock samples collected in its summer exploration.

## Yukon Exploration 2012

# Exploration rush slows in 2012

Juniors battled to advance projects, survive dismal capital markets

BY ROSE RAGSDALE  
For Mining News

**W**hile the frenzy of activity that engulfed the Yukon Territory in 2011 did not re-emerge this season, scores of players, from upstart juniors to global mining firms mounted impressive mineral exploration campaigns throughout the territory.

Gold was the primary metal sought in the Yukon in 2012, but some explorers chased silver, copper, zinc-lead, iron and other minerals.

Based on the spending plans of mining companies in March, Natural Resources Canada projected C\$285 million planned spending across the Yukon, a decrease of 7.6 percent from the record C\$306.6 million in exploration expenditures reported for 2011.

By contrast, NRCAN projected a 17.6 percent increase in mineral exploration spending in 2012 to C\$124 million in Northwest Territories and a 13.3 percent increase to C\$568.6 million in comparable outlays in Nunavut in 2012.

While the decrease in mineral exploration spending for 2012 is relatively minor in actual dollars invested, the difference is much more marked in the number of juniors who carried out exploration programs this year, according to some observers who said drilling equipment was stacked like cordwood alongside the roads in the Dawson City area this field season.

One reason the depth of the downturn is not reflected in in-

vestment is that a number of explorers with more advanced projects in the Yukon actually increased their spending levels in 2012.

Patrick Sack, an economic geologist at the Yukon Geological Survey, said companies at only 20 mineral projects this spring reported plans to spend more than C\$1 million on exploration in 2012. That compares with at least twice that number that conducted exploration campaigns in 2011 with C\$1 million or greater budgets.

Among initiatives to encourage mining activity, the Government of Yukon again funded its successful Yukon Mining Incentives Program for 2011-2012, committing C\$570,000 and attracting 33 successful applicants ranging from individuals doing grassroots prospecting to active juniors conducting focused regional exploration and target evaluations.

Operators of two of the three operating mines in the Yukon – Capstone Mining Corp. and Alexco Resource Corp. – conducted significant exploration programs in 2012, as did several advanced exploration projects, including Victoria Gold Corp. at the Eagle Gold project north of Mayo; Golden Predator Corp. at its Brewery Creek gold project near Dawson; and Prophecy Platinum Corp. at the Wellgreen nickel-copper-PGM project in southwestern Yukon.

Unrelentingly tight financial markets, however, forced many companies to cancel, postpone or defer plans to follow up on 2011 exploration.

“It was a rough market in 2012. The company put out a release

*continued on next page*

## YUKON OVERVIEW *continued from page 57*

reporting strong (gold) intercepts and one of the new targets at Dublin Gulch, and its stock hit a 52-week low," Victoria Gold President and CEO John McConnell told Mining News in August.

Some companies sold or divested their Yukon properties, focusing their attention elsewhere, while others dropped some of their claims. A number of explorers also terminated options to explore Yukon properties. Among companies that did not return to their Yukon projects in 2012: Overland Resources Ltd. deferred work on its Yukon Base Metal Project; Mill City Gold Corp. terminated its option on the Mount Hinton gold-silver property; Constantine Metal Resources Ltd. and Carlin Gold Corp. attempted unsuccessfully to sell its joint venture at the Tut gold property to Urban Select; Argus Metals Corp. signed a letter of intent in September with Banyan Coast Capital Corp. for the sale of the Hyland Gold project located 68 kilometers (42 miles) northeast of Watson Lake; and Endurance Gold Corp., which had identified two new nickel-copper soil anomalies on its Bandito nickel-copper-rare earth element project in 2011, focused in 2012 on its Alaska projects. Endurance has outlined a 1,800-meter-long syenite-hosted REE-niobium-tantalum anomaly on the property. Largo Resources Ltd., a junior that returned to its Northern Dancer tungsten-molybdenum property in southern Yukon after a multiyear absence with an exploration program in 2011, focused exclusively on its vanadium project in Brazil in 2012.

Some companies spent 2012 working on creative strategies to advance their Yukon properties. AM Gold Inc., for example, recently entered into an option and joint venture agreement at its Pinaya copper-gold property in Peru, partly to free up capital and assets to advance the company's Red Mountain property northwest of Mayo. In March, the company released an NI 43-101 com-

pliant inferred resource estimate for Red Mountain of 127 million metric tons grading 0.48 grams per metric ton gold for about 1.95 million ounces of contained gold using a cut-off grade of 0.3 g/t gold.

## Carlin-style gold

Most of the recent gold exploration across the Yukon can be divided roughly into four areas: the Selwyn basin gold district in central and east Yukon; the Dawson Range-White Gold area of western Yukon; southwestern Yukon; and southcentral Yukon.

The Selwyn basin gold district extends from east of Tombstone Park down to northeast of Watson Lake in a broadly curvilinear trend. Exploration in this area, initially driven by Atac Resources Ltd.'s discovery of Carlin-style gold mineralization at its Rackla gold project north of Mayo has fanned out across the region. Extensive staking in Selwyn basin in 2011 laid the framework for numerous ongoing programs of low impact exploration consisting of geological mapping, prospecting, soil sampling and trenching over broad areas.

A score of companies staked upwards of 30,000 claims in 2010 and 2011 to cover potential Carlin-style targets, drawing on clues provided by the Geological Survey of Canada's Regional Geochemical Database which identified prospective areas for Carlin-type occurrences with elevated values for gold-arsenic-antimony-mercury in stream sediment samples.

Companies that returned to pursue Carlin-style gold in 2012 include Strategic Metals Ltd. at its prospective Midas Touch project which adjoins the south side of the Rackla gold project; Colorado Resources Ltd. at the Oro Property near MacMillan Pass; Goldstrike Resources Ltd. at its 14 claim blocks in the Selwyn

*continued on page 60*

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## CATHERS *continued from page 55*

Gold Resources are evaluating extensions of previously discovered mineralization. Ethos Capital Corp. is evaluating soil anomalies in the White Gold area. Tarsis and Klondike Gold Corp are also evaluating previously defined targets. Ryan Gold is drilling on its Flume and Ida Oro properties while refining drill targets on several other properties in Yukon. Golden Predator continues to upgrade resources at Brewery Creek. Victoria Gold also is upgrading resources on their Eagle Gold property.

Atac Resources is extending its exploration success on the Nadaleen gold trend along the northern margin of Selwyn basin. Excellent drill intersections support use of the Carlin style gold mineralization occurring along the Nadaleen trend. Strategic Metals, Ryan Gold, Colorado Resources and Anthill are also evaluating targets along trend with ATAC's ground.

In eastern Yukon, Northern Tiger Resources continues exploration drilling on their 3Ace property. Aben Resources continues drilling on the Justin property.

Although gold is in the limelight, 2012 also saw exploration spending for other commodities. Prophecy Platinum drilled to refine platinum, nickel and copper mineralization on the Wellgreen property. Silver Range Resources continued drilling north of Faro on a series of lead, zinc and silver occurrences.

### Mining and development

Yukon has three operating mines: Capstone Resources Minto copper-gold mine, Alexco Resources' Bellekeno silver mine, and Yukon Zinc's polymetallic Wolverine mine. The Minto mine has been in continuous production since 2007. Minto completed pre-stripping of the area 2 open pit, and commenced production from the new pit in the summer of 2012. Plans are underway for a combination of open pit and underground production in the future. Ex-

ploration drilling is ongoing to replace mined reserves.

Alexco Resource Corp. has two mines in development to augment production from the Bellekeno mine; production from these other mines is targeted to commence by the end of 2012. Yukon Zinc's Wolverine mine is currently focused on ramping up to sustained full production.

Drilling by Victoria Gold on the Eagle deposit and Golden Predator on the Brewery Creek property is providing for increased resource information on previously identified mineralization. Victoria Gold continues to advance in the permitting process with the Yukon government, looking forward to development on site in 2013.

The future looks bright for mine development, as many exploration projects continue to make exciting discoveries year after year.

### On the world stage

Yukon will continue to be one of the fastest growing and best jurisdictions to do business in when it comes to mineral development because of our legislation that is designed to protect investments; our well-defined steps to mining development; and our stable political environment.

In 2012, Yukon ranked in the top 10 worldwide as a mining friendly jurisdiction. Mining companies invest here because they know they are working with a modern and progressive jurisdiction with authority over their resources.

The potential in Yukon remains enormous. Yukon still remains underexplored and our existing infrastructure and regulatory regime provides great opportunities for companies to do business here. We will continue to be successful for the long-term.

*The Hon. Brad Cathers is minister of Energy, Mines and Resources and Government House Leader for the Government of Yukon. He was re-elected to a third term as MLA for Lake Laberge in October 2011.*



# YUKON

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- ▶ **Mineral Exploration Roundup 2013** in Vancouver, British Columbia  
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- ▶ **PDAC 2013 International Convention, Trade Show & Investors Exchange** in Toronto, Ontario  
March 3 to 6, 2013

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basin; Expedition Mining at the Joy and Mt. Mervyn projects; and Cantex Mine Development at the Car and Lin claim groups east and southeast of Rackla.

In September Cantex said it has collected samples with highly anomalous in gold and key pathfinder elements for Carlin-style mineralization on its 30,000-square-kilometer (11,580 square miles) regional exploration program. Cantex has now staked eight claim blocks totaling 1,380 claims covering the anomalous samples.

Strategic Metals also optioned the Scarlet East Property from Rackla Metals Ltd. Strategic can earn a 60 percent interest in the project by completing at least 1,000 meters of drilling in 2012 and incurring C\$5 million in exploration expenditures by year's end 2016.

Other companies who resumed exploration at projects in central Yukon in 2012 include Ryan Gold Corp at its Ida Oro Project; Great Bear Resources, Monster Mining Corp.

In southeast Yukon, Northern Tiger Resources advanced exploration at the 3Ace gold property and its adjacent Sprogge property with a program budgeted at C\$3 million of 3,000 meters of drilling along with channel and chip sampling. The junior did not, however, pursue 2011 exploration at its Sonora Gulch property in central Yukon where it has identified extensive porphyry copper-gold mineralization.

Several other companies that explored properties in southeastern Yukon for orogenic gold in 2011, returned in 2012 with everything from mapping and sampling to substantial drilling programs. Among them: Aben Resources at its Justin project; Bearing Resources on its Jay-VM-VF claims; Commander Resources on its Glenmorangie property; and Ryan Gold at its Cantung project.

Commander, for example, said it would collect in-fill geochemical data within the Camp and Hidden Valley zones on Glenmorangie, which were identified as anomalous, and to continue geological mapping of the area.

## Silver and other metals

With Alexco's Keno Hill properties which include the Bellekeno Mine being the notable exception, most of the explorers pursuing silver projects in east-central Yukon put their programs on hold or carried out modest mapping and sampling programs in 2012. Among them: Habanero Resources reported a one-year extension on its option to acquire the Mt. Haldane silver property, which adjoins Alexco's Keno Hill silver claims to the east; and Silver Predator Corp., which cut significant silver-zinc mineralization on the Plata property with drilling in 2011, restricted its activities to mapping and sampling in 2012. The company optioned Plata from Rockhaven Resources Ltd. in 2011.

Atac Resources followed up its 2011 discovery of the Ocelot silver-lead-zinc zone with geophysical surveys over the entire Ocelot area. The Ocelot discovery hole cut 63.44 meters of 73.81 g/t silver, 2.44 percent lead and 8.18 percent zinc.

Manson Creek Resources returned to its Tell property located immediately south of Atac's Rau claim block, where seven natural spring gossan zones have been identified that returned anomalous zinc (up to 27,500 parts per million), nickel (over 1,000 ppm), arsenic (over 1,100 ppm) and silver (up to 800 parts per billion) in 2011. With an induced polarization ground geophysical survey of the 2,200-hectare (5,432 acres) property, the explorer identified a potentially sulfide bearing anomalous area that strengthened its conviction that the seven gossans are significant.

To the east, the Selwyn-Chihong joint venture formed between Selwyn Resources Ltd. and Canada Chihong Mining continued to advance its extensive Selwyn zinc-lead Sedex property at Howards Pass with an ongoing drilling program. The property is located 75 kilometers (46.5 miles) southeast of MacMillan Pass and straddles the Yukon-Northwest Territories border. In September, the JV completed an updated NI 43-101-compliant mineral resource estimate, including drill results from exploration drilling on the Don deposit in April that increased the project's indicated resources by 2.60 percent and inferred resources by 4.84 percent.

Hudbay Minerals Inc. and Newmont Mining Corp. also returned to Yukon projects in 2012, Hudbay to explore its Tom and Jason Sedex deposits at MacMillan Pass and Newmont to continue reconnaissance with spur and ridge sampling on its Carlin-Style gold prospects to the west.

## White Gold

The Dawson Range-White Gold area of western Yukon continued to attract many explorers that carried out extensive claim staking, soil sampling, trenching and drilling. Exploration mainly targeted the White Gold-style mineralization which can be broadly defined as structurally-hosted gold. Work by Kaminak Gold Corp. at the Coffee property and Kinross Gold Corp.'s White Gold property has shown the gold to be very fine-grained, occurring in steeply dipping, brecciated and oxidized structures. Only two NI 43-101-compliant resource estimates have been completed for this area, but several properties, including Coffee, are expected to complete resource estimates in 2012.

Other companies active in the region in 2011 include Stina Resources Ltd. at its Dime property located 67 kilometers (41.5 miles) southwest of Dawson City which followed up with additional exploration in 2012; Independence Gold Corp., formerly Silver Quest Resources Ltd., on its Boulevard property which adjoins



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the western margin of Kaminak's Coffee property, Pacific Ridge Exploration Ltd. at its Mariposa property where it continued drilling in 2012; Smash Minerals, which did not return to explore its Whiskey property this season; and Ethos Capital Corp., which mounted an aggressive 2012 drilling program at its Betty, Wolf and Bridget properties; and Radius Gold Inc. at its Sixty Mile property located about 75 kilometers (46.5 miles) due west of Dawson, adjacent to the Yukon/Alaska border.

Independence Gold returned to the region in 2012 with exploration focused on its YCS Property, which is adjacent to the Coffee Property to the west and contiguous to and north of Boulevard. In September, the company reported discovery of a new 700-meter-long gold-in-soil anomaly at YCS with assay values up to 4.53 g/t gold, which it intended to follow up with a trenching program.

Farther south and southeast, Taku Gold Corp. at its Aussie-Melba, Bishop, Burnham, Dan, Sulphur, Montana, Rosebute and Wounded Moose properties in the Dawson City area; Arcus Development Group Inc. at its Dan Man property; Rockhaven Resources, Ltd. at its Klaza property; Ansell Capital Corp. at its Charlotte and adjoining Discovery Creek properties; Comstock Metals Ltd. at its QV gold project; Castillian Resources Corp. on its Canadian Creek property; Independence Gold at its Prospector Mountain property located 90 kilometers (56 miles) northeast of Carmacks; Northern Freegold Resources Ltd. at its Freegold Mountain property; Dawson Gold Corp. at its Toro property.

Ryan Gold Corp., which boasts White Gold prospector Shawn Ryan as its president, launched an aggressive C\$12 million to C\$15 million exploration program for 2012 that canvassed some 80 properties across the breadth of the Yukon. The work included following up on property-scale mapping, trenching and soil sampling in 2011 at its Fifty Mile project located about 75 kilometers (46.5 miles) west of Dawson City, along with early stage exploration as a number of other properties in western and southwestern Yukon.

"I call 2012 the mineral inventory year because we have so many teams out exploring," said Ryan Gold Chief Geologist Andy Randell. "We're hitting everything this year to determine what's good and what we want to pursue. We're trying to develop a pipeline of projects."

## Polymetallic potential

Mining companies continued to pursue prospects in southwest Yukon in 2012 where more than 12,000 claims were staked in 2011. The surge of interest in this corner of the territory was spurred by work carried out by Yukon Geological Survey geologists, led by Steve Israel, that draws parallels between the geological setting and mineralization potential of the Coast Belt in this area and the Juneau Gold Belt in Southeast Alaska. Epithermal and porphyry-style mineralization potential is also believed to be high in the region. Companies active in the area include Ryan Gold on 17 gold properties within the Kluane Range.

The porphyry and orogenic gold potential of the region attracted several companies in 2011, including Bonaparte Resources Inc. to its porphyry copper-gold Hopper property.

Solomon Resources Ltd. focused in 2011 on its Seamus, Jenn and Tyke claim blocks within a 60 kilometer-long orthogneiss unit adjacent to the Kluane Schist and the highly productive Ruby Range placer gold district and staked the Rosie, Nis, Sek, Outpost and Pacer claims.

In June, Solomon Resources reported that, due to adverse market conditions, it abandoned an option to acquire a 51 percent interest in the 10 Mile Creek project and intended to focus in the short term on its 100 percent-owned Yukon projects. Driven Capital Corp. carried out a seven-hole, 1,327-meter drill



Atac Resources Ltd.'s discovery of Carlin-style gold mineralization at its Rackla gold project in east-central Yukon has fanned out across the Selwyn basin gold district.

SHANE LASLEY

program in 2012 on the White River property where it has optioned a 60 percent interest from Tarsis Resources Ltd. White River is located 30 kilometers (19 miles) southeast of Beaver Creek, Yukon and covers an area of hydrothermal alteration and mineralization with potential for both porphyry copper-gold and epithermal gold-silver mineralization. Hampered by poor drill recovery due to significant fracturing, strong surface oxidation/weathering and the presence of clay-rich gouge, Driven still reported moderately elevated gold values were identified in all holes with assays ranging from 0.42 to 2.78 g/t gold over intervals ranging from 0.76 to 1.47 meters.

Southcentral Yukon projects in 2011 ranged from staking in the Livingstone area through to submittal of a Yukon Environmental and Socioeconomic Assessment Board application by Yukon-Nevada Gold Corp. for the re-opening of the Ketza River Mine. In 2012, New Pacific Metals Corp. also worked to advance its Tagish Lake Gold Project where the past-producing Mount Skukum mine is located south of Whitehorse, while Gold World Resources followed up on a sampling and trenching program at its Mount Anderson gold-silver property next door.

Eagle Industrial Minerals continued its quest in 2012 to mine magnetite from historic tailings in the Whitehorse Copper Belt. There are an estimated 10.4 million metric tons of tailings containing 18-20 percent magnetite from open pit and underground operations. Eagle has completed a land lease with the Yukon government and has completed the Yukon Environmental and Socio-economic Assessment Board portion of the permitting process, with the water license portion pending. Eagle said the project currently expects to begin producing magnetite in the second quarter of 2013. The magnetite will be shipped as iron ore to Far East steel makers through the existing ore terminal in Skagway, Alaska.



## British Columbia



Surface samples collected at Brixton Metals Corp.'s Thorn project in northwest British Columbia have returned up to 6,149 grams per metric ton silver.

BRIXTON METALS CORP.

### Brixton Metals Corp.

BBB: TSX

CHAIRMAN AND CEO: Gary Thompson, P.Geo, P.Geol.

DIRECTOR: George Salamis, Geologist

DIRECTOR: Jim Defer, CA CBV

Brixton Metals Corp. is exploring its flagship 25,000-hectare (61,775 acres) Thorn Property which is located in northwestern British Columbia about 130 kilometers (81 miles) southwest of Atlin, B.C. Brixton has found substantial near-surface, high-grade mineralization at the largely untested Oban Breccia Zone, which is located in the heart of a 6-kilometer mineralized corridor within Thorn. Drill results have included 95.08 meters of 904 grams per metric ton silver-equivalent and surface samples have returned 6,149 g/t silver. The junior completed a 2012 phase 1 program including 13 NQ-size core holes ranging in depth from 30 meters to 153 meters, for a total of 1,151 meters. The objectives of the program were to confirm the results from hole THN11-60 which returned 1.71 g/t gold, 628.30 g/t silver, 3.31 percent lead and 2.39 percent zinc, 0.12 percent copper and to obtain further information regarding the mineralization, geometry, true width and extent potential. All core holes from the phase 1, 2012 program encountered mineralization described as phases of up to semi-massive sulphides and sulphosalts as breccia matrix infill mixed between fragments of disseminated and veinlet to crackle breccia style mineralization. THN12-65 cut 12.9 meters averaging 512.66 g/t silver, 1.72 g/t gold, 4.24 percent lead and 1.54 percent zinc; within 83.9 meters grading 161.81 g/t silver, 1.03 g/t gold, 1.29 percent lead and 1.49 percent zinc. In early October, Brixton began a phase-2 exploration program, including 1,500 to 2,000 meters of drilling to test the extension of high-grade mineralization tapped at Oban. Brixton geologists are also investigating an area about 2,000 meters northwest of Oban where a float boulder was discovered in 2005 that returned assay results of 265 g/t gold and 631 g/t silver. Guided by recently acquired multispectral Aster data, this search is focused on the headwaters of Amarillo Creek where the barite-rich rock was found.



#### CASH AND SHORT-TERM DEPOSITS:

C\$1.07 million (June 30, 2012)

WORKING CAPITAL: C\$836,000 (June 30, 2012; C\$1.42 million financing in September)

MARKET CAPITALIZATION: C\$6.56 million (Aug. 30, 2012)

#### BRIXTON METALS CORP.

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Vancouver, B.C. Canada V6C 1T2

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www.brixtonmetals.com

## Alaska



JUDY PATRICK PHOTOGRAPHY

Refinery operators July 31 pour the two-millionth ounce of gold produced at the Pogo Mine. The 2,500-metric-ton-per-day mill at this high-grade operation recovers some 1,000 ounces of gold daily, making it the most prolific aurum producer in Alaska.

# Pogo gold discovery within sight

## Deep Trench adds 2M oz. of high-grade gold to Sumitomo's Alaska mine

BY SHANE LASLEY

Mining News

**T**he best place to find a new mine is in the shadow of a headframe" is an adage that has served geologists well in their search for new deposits of metals that the world needs and desires. This proverb has once again proven its worth at Pogo, Alaska's highest producing gold mine.

Though Pogo does not boast an iconic headframe towering over its underground operations, new gold-rich zones discovered "within eyesight of the mill" are rapidly adding high-grade ore to the reserves at the Interior Alaska mine.

Sumitomo Metal Mining Pogo LLC – a joint venture between Japanese firms Sumitomo Metal Mining Company (85 percent) and Sumitomo Corp. (15 percent) to operate Pogo – celebrated the first 2 million ounces produced at the mine in July.

The 2,500-metric-ton-per-day mill at Pogo churns out around 1,000 ounces of gold per day. At this rate, the 2.9 million ounces of gold reserves at Pogo will carry the underground operation through 2019. With an additional 2.1 million ounces of gold in resources and exciting discoveries made in the shadow of the mill, there is no end in sight for the Interior Alaska operation.

"We are not as small as originally thought, and we are not going any-



where yet,” according to Dave Larimer, senior mine geologist at Pogo.

To ensure Pogo continues to churn out some 380,000 ounces annually for years to come, Sumitomo invested in some 27,000 meters of exploration drilling and 30,000 meters of definition drilling in 2012.

### East Deep discovered

The first 2 million ounces of gold produced at Pogo were mined from the Liese zone – three flat-lying, parallel quartz veins that carry high-grade gold. These gold-rich shear zones are dubbed L1, L2 and L3.

Although the 2012 drill program continues to expand Liese to the northwest, Sumitomo’s hope of continuing to mine high-grade gold at Pogo does not rest entirely on adding ore to this deposit.

The gold-rich veins of the Liese zone end abruptly where they come in contact with a gold-barren body of diorite to the northeast.

“We actually mine right up to the diorite and stop, that’s it,” explained Larimer.

Two years ago, the Pogo exploration team set out to see if it could find additional gold mineralization on the opposite side of the intrusive body.

Some road-based drilling just north of the diorite tapped a zone with quartz-vein structures with grades and thicknesses similar to those that have provided feedstock for the mill over the past six years.

The Pogo geological team now believes that the Liese and East Deep zones are actually the same ore body that became separated when the diorite split the two zones as it intruded along the Liese Creek fault about 95 million years ago, or about 12 million years after the zones were mineralized.

Two vein systems, E0.5 and E1, have been intersected at East Deep.

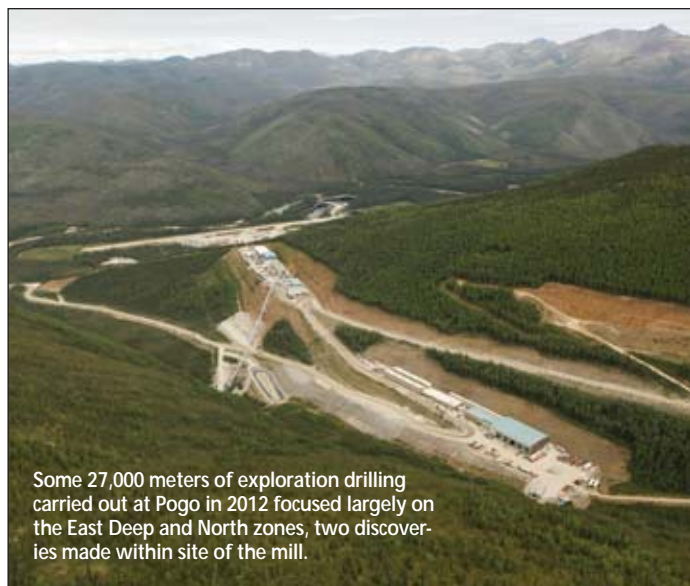
Larimer hypothesizes that E0.5 surfaces at Liese, leaving only scattered gold-veined rubble as an indicator of its existence and E1 is continuation of L1.

Through the end of 2011, Sumitomo had outlined 2 million ounces of indicated and inferred gold resource at East Deep. The US\$4.80 per ounce discovery cost of this gold is a fraction of the US\$30-US\$40 dollar industry average for each ounce of gold found.

This initial resource, according to Pogo General Manager Chris Kennedy, could be the tip of the iceberg when it comes to East Deep. The total extent of this zone is unknown and the deposit remains open to the west, north and northeast.

If Larimer’s theory of a continuation of Liese holds true then two deeper vein systems could add to the richness of this Pogo discovery.

Sumitomo has driven two drifts through the some 300 meters of diorite that separate Liese from East Deep. From this deeper vantage point, drills are able to test for the hypothesized E2 and E3 veins. These access drives linking the East Deep zone



JUDY PATRICK PHOTOGRAPHY

to the established underground workings at Pogo are also accelerating Sumitomo’s ability to mill the gold-rich ore found here.

### More deposit within sight

East Deep is not the only discovery Sumitomo has made within eye sight of the mill. North Zone, located just on an adjacent ridge immediately north of Liese, is another deposit adding to the longevity of Pogo.

“We went back and took a look at some of the condemnation drilling that was done for the mill. We had some vein intercepts,” Larimer explains. “To test this out we decided to drill off the road right below the mill and sure enough we hit a continuous quartz-vein body. We call this our North Zone vein-system. There is not just one, but two North Zone veins.”

With mineralogy that is remarkably similar to Liese, Pogo geologists believe the nearly vertical North Zone veins may represent a feeder for the flat-lying zones of Liese.

South Pogo, situated about 600 meters south of the Liese zone, is another promising near-mine target Pogo geologists are investigating in 2012.

Focused on finding the full extent and understanding the relationship of the gold-rich ore bodies lying within sight of the mill, Pogo geologists are ensuring Pogo continues to mine high-grade gold from within sight of the mill for years to come.

At the end of 2011, Sumitomo reported resources and reserves of 12.32 million metric tons of ore averaging 12.5 g/t gold for 4.95 million ounces of the precious metal.



JUDY PATRICK PHOTOGRAPHY

This 744-troy-ounce gold bar poured July 31 contains the two-million ounce of gold produced at Pogo.

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# Teck hunts in Alaska, NW Canada

From Yukon gold to Red Dog zinc, B.C. miner continues century of discovery

BY SHANE LASLEY  
Mining News

From investigating grassroots gold prospects in the Yukon Territory to ensuring the Red Dog Mine has sufficient stores of high-grade ore to remain a top global zinc producer for decades to come, Teck Resources Ltd. 2012 is continuing a century of discovery in Alaska and Canada's Northwest.

This broad spectrum of exploration across Alaska, British Columbia and Yukon Territory exemplifies the Vancouver, B.C.-based major's objective of accessing "high-quality, sustainable growth opportunities through the discovery or acquisition of top-tier mineral deposits."

To reach this goal, Teck extends an open invitation to prospectors and explorers.

"Teck has a team of exploration professionals focused on finding new mines and who will assess the potential of every opportunity presented, regardless of the stage of exploration. If you are interested in partnering with us, we are interested in hearing from you," reads the miner's website.

## B.C. copper

From grassroots exploration to studying the feasibility of building a mine at the colossal Galore Creek deposit, Teck's exploration in northern British Columbia is focused largely on porphyry copper-gold systems.

One of the primary targets of Teck's search in this region in 2012 is GJ, a porphyry copper-gold project about 10 kilometers (6 miles) west of Highway 37. The senior miner, which optioned GJ from junior explorer NGEx Resources Inc. in 2010, can earn a 51 percent interest in the project by spending C\$12 million by the end of 2014, a stake that can be raised to 75 percent with an additional C\$32 million in expenditures by the close of 2020.

GJ has a measured and indicated resource of 153.3 million metric tons grading 0.321 percent (1.09 billion pounds) copper and 0.369 grams per metric ton (1.82 million ounces) gold. An additional inferred resource is 23 million metric tons grading 0.26 percent (132 million pounds) copper and 0.31 g/t (230,000 ounces) gold.

Teck, as both operator and funder of the project, budgeted C\$4.7 million for exploration at GJ in 2012. This program and the some C\$4.5 million of exploration carried out in 2011 did not focus on the resource area but investigated adjacent zones with the potential to expand the porphyry potential of the project.

The 2012 exploration campaign included some 4,000 meters of drilling, a 684-line-kilometer ZTEM airborne geophysical survey, geological mapping, surface geochemical sampling and re-logging of historic drill core. Wolf – a 900-meter-long



Geologists examine core at GJ, a porphyry copper-gold project some 10 kilometers (6 miles) west of Highway 37 in north-western British Columbia.

TECK RESOURCES LTD.

## Teck Resources Ltd.

NYSE: TCK, TSX: TCK.B

CHAIRMAN: Norman Keevil  
PRESIDENT AND CEO: Don Lindsay  
VICE PRESIDENT OF EXPLORATION: Alex Christopher

Properties with mineral(s) explored:  
Zinc-Lead-Silver – Red Dog District, Alaska  
Copper-Gold – Galore Creek, B.C.  
Copper-Gold – GJ, B.C.  
Gold – Estelle, Alaska  
Gold – Wolf, Yukon Territory

CASH AND CASH-EQUIVALENTS: C\$3.6 billion (June 30, 2012)  
WORKING CAPITAL: C\$4.8 billion (June 30, 2012)  
MARKET CAPITALIZATION: C\$17 billion (Oct. 1, 2012)

TECK RESOURCES LTD.  
Suite 3300, 550 Burrard Street  
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www.teck.com

# Teck

geophysical and geochemical target located northeast of the main resource – was an initial target of the drilling. Three holes drilled at Wolf in 2011 cut distal porphyry-style alteration. Subsequent deep penetrating geophysical surveys suggest that these holes did not reach the primary target.

Teck also has an indirect interest in the Schaft Creek copper-gold-silver project about 110 kilometers (70 miles) southwest of GJ. Teck optioned Schaft Creek to Copper Fox Metals Inc. in 2002, and has the right to buy back a 75 percent stake in this project by funding additional work there.



### Canadian Orebodies Inc.

CO: TSX-V

PRESIDENT AND CEO: Gordon McKinnon

RESOURCE CONSULTANT: George Wahl, P. Geo

PROJECT MANAGER, HAIG INLET: Henry Hutteri, P. Geo

Canadian Orebodies Inc. focused in 2012 on its Belcher Islands Project in Nunavut. In June the company began evaluating high-priority exploration targets in areas around Haig Inlet and Belcher Islands, and selected three large untested targets thought to have the highest potential for near-surface iron mineralization that may be amenable to open pit mining. In two phases of exploration, the company drilled widespread holes on three separate targets – Haig West, Kihl Bay Anticline, Haig North Extension – followed by infill drilling in the most favorable areas. By Sept. 20, Canadian Orebodies had drilled 12 holes at Haig West, two holes at Kihl Bay Anticline and four holes at Haig North Extension, with a total of 4,269 meters in 24 drill holes and one rig operating on the property. The company also collected of 1,128 samples. Canadian Orebodies said it has successfully expanded its knowledge of the extent of the iron formation; confirmed a magnetite trend on

Haig West; acquired three highly prospective targets, increasing its land position by 57 percent; intersected iron mineralization 17 kilometers north of Haig Inlet Deposit; and upgraded the existing Haig South mineral resource category. "We have intersected both magnetite and hematite dominant mineralization over very long strike lengths in two new areas thus far," said Canadian Orebodies President and CEO Gordon McKinnon. "The success of this program to date combined with the identification and acquisition of three new target areas reinforces management's belief that the Belcher Islands could represent a new iron ore district in Canada." Drilling is expected to continue well into October with the intent of outlining additional inferred mineral resources.

CASH AND SHORT-TERM DEPOSITS: C\$2.74 million (July 31, 2012)

WORKING CAPITAL: (at July 31, 2012; raised C\$1 million in financing in August)

MARKET CAPITALIZATION: C\$20.23 million (Oct. 5, 2012)

#### CANADIAN OREBODIES INC.

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[www.canadianorebodies.com](http://www.canadianorebodies.com)

A prefeasibility study completed for Schaft Creek in 2008 outlines a mine producing 4.76 billion pounds of copper, 4.5 million troy ounces of gold, 32.5 million troy ounces of silver, and 255.2 million pounds of molybdenum over a projected mine-life of 22.6 years.

Copper Fox anticipate the completion of a feasibility study for Schaft Creek by year's end.

About 70 kilometers (45 miles) further southwest, Galore Creek Mining Co. – a partnership held equally by Teck and NovaGold Resources Inc. – budgeted C\$35.4 million for 2012. This work program includes 20,000 meters of exploration drilling and 5,000 meters of geotechnical drilling. The partners also continued environmental and engineering work.

According to a prefeasibility study completed in 2011, Galore Creek has proven and probable reserves of 528 million metric tons averaging 0.6 percent copper, 0.32 grams per metric ton gold and 6.02 g/t silver.

The PFS includes an enhanced plan that envisions adding some 200 million metric tons to these reserves by upgrading resources and expanding the pit to encompass the adjacent Bountiful zone. This work began with an 18-hole program carried out in 2011. Highlights include:

- GC11-0824 cut 185 meters grading 1.29 percent copper, 0.51 g/t gold and 9.5 g/t silver;

- GC11-0835 intersected 108 meters grading 1.25 percent copper, 0.81g/t gold and 10 g/t silver;

- GC11-0833 intersected 162 meters grading 1.09 percent copper, 0.54 g/t gold and 8.1 g/t silver; and

- GC11-0831 intersected 176 meters grading 0.90 percent copper, 0.42 g/t gold and 7.7 g/t silver.

If put into operation as contemplated by the partnership Galore Creek is on track to be Canada's largest producer of both copper and silver.

### Golden opportunities

Though industrial minerals are its mainstay, Teck is back in the business of finding gold in the Yukon Territory and Alaska.

Teck can trace its Yukon heritage back more than a century. This long lineage in the territory provides the company with an extensive in-house database to guide its search for gold in the territory.

Wolf – a series of four claim blocks that stretch some 55 kilometers (35 miles) east from the White River in southwestern Yukon – is one such gold prospect the company is investigating.

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 in three areas of its Wolf property over the next five years. According to the application, two of the areas Teck proposes to drill are on the two westernmost claim blocks. The diversified miner has identified an area about 45 kilometers (25 miles) farther east as a third drill area and site for a 35-man camp.

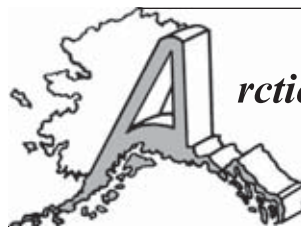
The application – which includes permissions for trenching and geophysical surveys – indicates a 2,500-meter drill program will start in 2013.

In its search for gold in Alaska, Teck has forged an exploration alliance with Millrock Resources Inc. on the Estelle project about 170 kilometers (105 miles) northwest of Anchorage.

Though Estelle lies in the heart of the Kahlitna Terrane – an assemblage that hosts enormous copper-gold deposits such as Northern Dynasty Ltd. and Anglo American plc's Pebble project and Kiska Metal Corp.'s Whistler property – the primary metal here is gold.

Since forging the partnership in 2010, Teck has advanced Estelle at a rapid rate – earning a 55 percent stake in the gold project by the end of 2011.

*continued on next page*



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**TECK** *continued from page 65*

A 1,500-meter reconnaissance drill program carried out across the 77,300-acre (31,300 hectares) property in 2011 narrowed the focus to Oxide, a prospect area discovered by Millrock geologists in the northern portion of Estelle project.

SE11-01 cut 450.7 meters averaging 0.38 g/t gold at Oxide Ridge.

The 1,500-meter drill program carried out at Estelle in 2012 included five shallow holes seeking the heart of gold mineralization at Oxide Ridge.

SE12-04, drilled to the southeast of the discovery hole, cut 41.5 meters averaging

1.1 g/t gold, indicating the partners are narrowing in on the higher grade zone they are seeking. A strong geophysical anomaly further southeast is the planned focus of drilling in 2013.

The 2012 program also tested a geochemical anomaly at the RPM showing located at the south end of the Estelle claim block.

SE12-008, the RPM discovery hole, cut 102.1 meters averaging 1.02 g/t gold, including 2.07 g/t gold over 21.9 meters.

### **Zinc discoveries**

While many of the other large zinc

mines around the globe may be nearing the end of their reserves, Teck's Red Dog Mine in Northwest Alaska has enough ore to continue supplying the industrial metal to global markets for at least another 20 years, and the miner is actively seeking other SEDEX ore-bodies in the region.

Exemplified by Main, a deposit that averaged some 20 percent zinc over the two decades it provided ore to the mills at Red Dog, the SEDEX deposits in this distant corner of Alaska are renowned for their fantastically high zinc grades.

Mopping up the last of the Main Pit, Teck and its Red Dog partner, NANA Regional Native Corp., are now mining Aqqaluk, an adjacent deposit that is anticipated to provide feedstock for the mills until 2031.

Though slightly lower grade, the 51.6-million-metric-ton Aqqaluk deposit still averages 16.7 percent zinc and 4.4 percent lead, or 8.6 million metric tons of contained zinc and 2.3 million metric tons of contained lead.

Anarraaq-Aktigiruaq, a deep zinc-rich prospect that lies about 11 kilometers (eight miles) northwest of Red Dog, is shaping up to be another massive zinc deposit with grades comparable to those currently being mined.

According to a 2004 report written for the Society of Economic Geologists, Anarraaq consists of a barite body, estimated to be as big as 1 billion metric tons, hosting a zone of massive sulfide zinc-lead-silver mineralization.

Teck discovered the deposit in 1999, subsequently establishing an inferred resource of about 17.2 million metric tons grading 15.8 percent zinc, 4.8 percent lead, and 71 g/t silver.

Hole 1109, drilled at the north end of a 9,000-meter-long geophysical target, intersected 4 meters averaging 29 percent zinc. Hole 1114 – drilled about 3,000 meters southeast – cut 14 meters grading 17 percent zinc, including five meters at 46 percent zinc. Another 4,000 meters south, hole 1150C cut 32 meters averaging 11 percent zinc, including 3.4 meters at 32 percent zinc.

In addition to continuing to expand Anarraaq, Teck is drilling a new region to the west of Red Dog called Noatak. Integrating modern geophysics, stream sediment sampling and detailed geological mapping – Teck has produced around 20 drill targets on these state of Alaska mining claims.

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Capstone Mining Corp. subsidiary Minto Explorations Ltd. is now mining the Area 2 deposit at Minto Mine after five years of commercial production. Minto, the only operating mine in Yukon Territory, has been expanded twice, a C\$76 million underground mine project initiated and nine new deposits have been discovered on the property.



ROSE RAGSDALE

## Mining explorers continued

### BRITISH COLUMBIA & YUKON TERRITORY

#### Capstone Mining Corp.

CS: TSX

**PRESIDENT AND CEO:** Darren Pylot

**SENIOR VICE PRESIDENT AND COO:** Gregg B. Bush, B.Sc. (Metallurgical Eng.)

**VICE PRESIDENT, EXPLORATION:** Brad Mercer, P. Geol.



Capstone Mining Corp. is focused on operating, expanding and exploring its assets, including mines or mine projects in Yukon Territory, British Columbia, Mexico and Chile. The Minto copper-gold-silver mine in central Yukon Territory and the high-grade Kutcho copper-zinc-gold-silver deposit in northwestern British Columbia are Capstone's only northern Canada properties. In May, the company added 219 million pounds of copper, nearly 108,000 ounces gold and 976,000 ounces silver to measured and indicated resources at Minto, bringing total measured and indicated resources outside the Main pit at Minto to 1.16 billion pounds copper, 553,000 ounces gold and 5.2 million ounces silver at a 0.5 percent copper cut-off grade. Capstone completed its 2012 exploration program at Minto on budget at C\$4.8 million, drilling 10,802 meters during the three months ended June 30 and bringing year-to-date total drilling to 29,539 meters, which was 6,039 meters more than planned due to higher than expected productivity. The program initially focused on in-fill drilling the relatively shallow gap between the MSD and the Ridgetop deposits. After that, Capstone followed up on exploration at Fireweed and on the potential for further high-grade mineralization at depth in the Minto system. The company decided to further infill the Fireweed prospect in preparation for the first mineral resource estimate on that prospect expected in 2012. Kutcho currently has 10.44 million metric tons of probable reserves grading 2.01 percent copper, 3.19 percent zinc, 34.61 grams per metric ton silver and 0.37 g/t gold as well as 11.28 million metric tons of measured



DARREN PYLOT

and indicated resources averaging 2.19 percent copper, 3.28 percent zinc, 36.7 g/t silver and 0.39 g/t gold and 1.09 million metric tons of inferred resources averaging 1.74 percent copper, 2.04 percent zinc, 30.7 g/t silver and 0.35 g/t gold at a 1.5 percent copper cut-off grade. With a 2011 pre-feasibility study in hand at the Kutcho project, Capstone subsidiary Kutcho Copper Corp. moved in 2012 towards submission of an environmental assessment certificate application and beginning discussions with First Nations and other stakeholders. Should the permitting process, First Nations discussions and detailed engineering attain corporate objectives in a timely fashion, Capstone said it is feasible that a production decision could be made for Kutcho in the fourth quarter of 2012, and assuming a positive decision, this could enable construction to begin in the second half of 2013.

**CASH AND SHORT-TERM DEPOSITS:** C\$489.3 million (at June 30, 2012)

**WORKING CAPITAL:** C\$543.0 million (at June 30, 2012)

**MARKET CAPITALIZATION:** C\$975.92 million (Sept. 9, 2012)

9th floor, 999 West Hastings Street  
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Tel: 604 637-8155 • Fax: 604 688-2180  
[www.capstonemining.com](http://www.capstonemining.com)

### BRITISH COLUMBIA

#### China Minerals Mining Corp.

CMV: TSX-V/HWTHF: US

**CEO:** Ling Zhu (Beijing)

**ADVISOR:** David Rhys, M.Sc., P.Geo.

**ADVISOR:** Jack McClintock

China Minerals Mining Corp., formerly Hawthorne Gold Corp., focused on a C\$3 million, 10,000-meter drill program in 2012 at its Cassiar-area properties in northern British Columbia with an exploration budget divided evenly between the Table Mountain and Taurus gold properties. Ex-



Coeur d'Alene Mines Corp. spent the first half of 2012 revamping its Kensington gold mine in Southeast Alaska. The company anticipates full-year gold production at Kensington to total about 85,000 ounces.

ploration was implemented by Equity Exploration Consultants Ltd. of Vancouver, B.C. The Cassiar Gold project, including the Taurus gold deposit, the Table Mountain gold mine and the 23-kilometer-long (14 miles) Cassiar greenstone belt, encompasses nearly 60,000 hectares (148,260 acres) of contiguous prospective exploration properties. In addition to drilling at several target areas, China Minerals aims to continue ongoing target evaluation through re-evaluation of historical drill core, outcrops, and previous geophysical and geochemical data. The Taurus deposit hosts an inferred resource of 1.06 million ounces of gold in 33.1 million metric tons at an average capped grade of 0.99 grams per metric ton gold using a cut-off grade of 0.50 g/t gold. At Table Mountain, the junior planned to further test known resource areas through a combination of infill drilling in areas of inferred resources, and testing for extensions and parallel adjacent veins that have been intersected by isolated previous drilling intercepts. Drilling began with the first of two rigs June 15, followed by a second drill a week later. Ongoing geological evaluation and modeling will help refine and identify additional targets. China Minerals said it also would consider underground drilling at Table Mountain and using reverse circulation drilling for some Taurus infill drilling to increase overall meters drilled at lower cost.

**CASH AND SHORT-TERM DEPOSITS:** C\$4.89 million (May 31, 2012)

**WORKING CAPITAL:** C\$5.22 million (May 31, 2012)

**MARKET CAPITALIZATION:** C\$9.5 million (Aug. 28, 2012)

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Vancouver, B.C. Canada V6E 2Y3  
Ph: 604-629-1505 • Fax: 604-629-0923  
www.chinamineralsmining.com

## ALASKA

### Coeur d'Alene Mines Corp.

**COEUR**  
COEUR D'ALENE MINES CORPORATION

**CDE:** NYSE - CDM: TSX

**CHAIRMAN:** Robert Mellor

**PRESIDENT AND CEO:** Mitchell Krebs

**SENIOR VICE PRESIDENT, EXPLORATION:** Donald Birak

Coeur d'Alene Mines Corp., an Idaho-based miner with silver and gold operations in the United States, Mexico, Bolivia, Argentina and Australia, spent the first half of 2012 revamping its Kensington gold mine in Southeast Alaska. During 2011, the first full year of production at Kensington, the underground operation produced 88,420 ounces of gold at cash operating costs of US\$1,088 per ounce. Late in 2011, Coeur cut processing rates in half to provide an opportunity to undertake several key initiatives aimed at improving the mine's production profile. To accomplish this, Coeur completed construction of a backfill plant and related distribution system; upgraded several underground and surface facilities; and improved the overall safety of the operation. Due to the fall in production, Kensington produced 7,444 ounces of gold at cash operating costs of US\$2,709 per ounce during the first quarter. Returning to full-scale production of about 1,500 tons per day in the second quarter, the Southeast Alaska operation recovered 21,572 ounces of gold at cash costs of US\$1,348 per ounce. Operating costs per gold-ounce are expected to drop to roughly US\$900 by year-end. Coeur anticipates full year gold production at Kensington to be around 85,000 ounces. In addition to improving oper-



**DONALD BIRAK**



ations, the Idaho-based miner spent some US\$4 million on defining and expanding the current mineral reserves and resource at Kensington. During the first half of 2012, the company completed 7,548 meters of exploratory drilling primarily focused on the Raven deposit – a gold-bearing quartz vein system about 670 meters west of the current mining area. Kensington South was another target of the exploration program. Coeur said drilling here has encountered veining and alteration similar to that of the main Kensington mine with encouraging gold grades. A helicopter-borne geophysical (magnetics) survey was conducted to help identify future drill targets. Additionally, Coeur completed 10,187 meters of definition drilling at Zone 10, which is expected to constitute a major part of the mine plan for the next three years. The company said results from 85 new holes show multiple gold-mineralized intervals, ranging from 0.3 meters to 10.3 meters true widths and gold grades from a cutoff grade of 0.1 to over 6 ounces per ton. The company plans to use this data to update the mineral resources and reserves. At the end of 2011, Kensington's proven and probable reserves were 1.3 million ounces of gold; measured and indicated resources totaled 587,320 ounces of gold; and inferred resources were at 169,680 ounces of gold.

**CASH AND SHORT-TERM DEPOSITS:** US\$200.3 million (at June 30, 2012)

**WORKING CAPITAL:** US\$201.6 million (at June 30, 2012)

**MARKET CAPITALIZATION:** US\$2.6 billion (at Sept. 20, 2012)

505 Front Avenue

Coeur d'Alene, Idaho 83815

Ph: 208-667-3511 • Fax: 208-667-2213

www.coeur.com

## BRITISH COLUMBIA

### Colorado Resources Ltd.

**CXO:** TSX-V

**PRESIDENT AND CEO:** Adam Travis, B.Sc. Geology,

**EXPLORATION MANAGER – B.C. & YUKON:** Linda Dandy, P.Geo.

**VICE PRESIDENT, EXPLORATION:** Greg Dawson, MSc

**CHIEF GEOSCIENTIST:** Jim Oliver, Ph.D., P.Geo

In 2012 Colorado Resources said its primary focus for the foreseeable future will be on advancing the Hit Property and following up work on the Hearts Peak Property in northwestern British Columbia, extensively exploring the Oro and Selwyn properties in Yukon Territory and pursuing a joint venture with Kinross Gold Corp. on the Red Skye Property. The junior planned to spend C\$2.5 million on exploration in 2012, averaging about C\$500,000 for work at four major projects, continue to acquire property in Yukon, B.C. and Latin America through options to purchase, joint ventures and strategic alliances, and use its strong cash position to maximum advantage. At the road-accessible Hit Property, located about 27 kilometers (17 miles) north of Princeton, B.C., Colorado Resources has increased its holdings to more than 16,594 hectares and by July 27, had collected has 3,282 soil and till samples at 50-meter intervals throughout the entire claim group from logging road cut banks. Using a portable Niton XRF analyzer, the company found that the samples show evidence of several new and previously known areas of anomalous copper which require further investigation. At Heart Peaks located about 45 kilometers (28 miles) northeast of the past-producing Golden Bear Mine, Colorado aimed to follow up known areas of high-grade epithermal gold mineralization in 2012 as well as prospect the rest of the 14,400-hectare (35,582 acres) property for additional areas of gold mineralization by collecting 2,000-plus soil samples and completing geological mapping in anticipation of future drilling. The junior also won conditional approval from the B.C. Ministry of Energy and Mines for a permit to drill up to 10 holes. At the Oro Property located about 165 kilometers northeast of Ross River, Yukon, the junior completed infill soil sampling (5,000 samples collected over the entire property) and geological mapping to follow up significant soil anomalies reported in January. In July Colorado said it was excited about the exploration potential of the 360-square-kilometer (139 square miles) Oro Property and was reviewing joint venture opportunities with major companies as it contemplated multimillion-dollar drill programs. At the Red Sky property located south of the community of Redstone about 150 kilometers (93 miles) by road west of Williams Lake, BC., Colorado entered a joint venture agreement with Kinross Gold Corp. in February. The property has the potential to host copper-gold porphyry style mineralization similar to Taseko's Prosperity deposit as well as bulk tonnage gold mineralization similar to that found on Amarc's Newton property located about 30 kilometers (19 miles)



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southeast of Red Sky, Colorado, as the operator, completed a 26-kilometer induced polarization and magnetometer survey along with the collection of 288 soil samples. This work included the expansion of previous grids and new grids and outlined a number of geophysical targets including a cohesive 1 kilometer by 1.5 kilometer northwest trending anomaly defined by a strong (>25 mv) chargeability zone flanked by zones of decreased resistivity. In late July, Kinross and Colorado were evaluating the geophysical and geochemical data in more detail in order to determine if high-priority drill targets can be defined for testing later in 2012.

**CASH AND SHORT-TERM DEPOSITS:** C\$11.53 million (March 31, 2012)

**WORKING CAPITAL:** C\$11.18 million (March 31, 2012)

**MARKET CAPITALIZATION:** C\$8.46 million (Aug. 29, 2012)

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## BRITISH COLUMBIA

### Consolidated Woodjam Copper Corp.

**WCC:** TSX

**PRESIDENT AND CEO:** William (Bill) Morton, M.Sc., B.Sc., P.Geo.

**VICE PRESIDENT:** Glen Garratt, B.Sc., P.Geo.

**SENIOR TECHNICAL ADVISOR:** Tom Schroeter, P.Eng/P.Geo.

Consolidated Woodjam Copper Corp. and its funding partner, Gold Fields Horsefly Exploration Corp., focused in 2012 on exploring the 56,500-hectare (139,612 acres) logging roads-accessible Woodjam North and Woodjam South copper-gold-molybdenum properties located 50 kilometers (31 miles) east of Williams Lake in central British Columbia. Gold Fields Horsefly is a unit of South Africa-based Gold Fields Ltd., one of the world's largest producers of gold with yearly output of about 3.5 million gold-equivalent ounces from eight operating mines in Australia, Africa and South America. Since optioning the Woodjam properties in 2009, Gold Fields has completed various geological, geophysical and geochemical sur-

veys and extensive diamond drilling. At least four centers of significant copper-gold mineralization are recognized within a north-east-trending corridor of airborne geophysical anomalies. Gold Fields has earned a 51 percent interest in the Woodjam properties. In early 2012, the major said it will exercise its right to earn a further 19 percent interest in the two properties. In March, it announced a C\$5.5 million, 20,000-meter drilling campaign and by August had discovered the Three Firs Zone, a significant copper-gold mineralized area. Gold Fields also completed drilling extensions to the Southeast zone on the Woodjam South property, which hosts a NI 43-101-compliant inferred resource of 146.5 million metric tons grading 0.33 percent copper for 1.06 billion pounds of copper. Following up on this drilling success, Woodjam Copper said Gold Fields planned to add a third rig in September with C\$4.4 million in additional spending for 15,000 meters more in the 2012 program.

**CASH AND SHORT-TERM DEPOSITS:** C\$99,950 (May 31, 2012)

**WORKING CAPITAL:** C\$99,950 (May 31, 2012)

**MARKET CAPITALIZATION:** C\$9.25 million (Sept. 1, 2012)

110 - 325 Howe Street  
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Tel: 604-681-7913 • Fax: 604-681-9855  
www.woodjamcopper.com

## ALASKA

### Corvus Gold Inc.

**KOR:** TSX/CORVF: OTCQX

**CEO:** Jeffrey Pontius

**PRESIDENT:** Russell Myers

**EXPLORATION MANAGER, ALASKA:** Chris Brown



Formed in 2010 to explore International Tower Hill Mines Ltd.'s non-Livengood assets, Corvus Gold Inc. has set out on a path to become a gold producer with significant interest and royalty exposure. While Corvus focuses its in-house efforts on advancing a preliminary economic assessment for North Bullfrog – a southern Nevada bulk tonnage gold project the



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WestMountain Gold Inc., Corvus Gold Inc.'s partner at the Terra project in Alaska, fired up a bulk sample gold mill at the high-grade gold property in August.

company plans to put into production by 2015 – the junior has brought on partners to fund exploration and development of its Alaska portfolio. Terra – a high-grade gold project located about 130 miles (210 kilometers) northwest of Anchorage – is the most advanced of Corvus' Alaska projects. WestMountain Gold Inc., which has an option to earn up to an 80 percent interest in Terra, fired up a bulk sample mill at the high-grade Alaska gold project in August. The feed for the small scale gravity operation came from Ben, a high-grade vein-system with an inferred resource of 428,000 metric tons averaging 12.2 g/t (168,000 ounces) gold and 23.11 g/t (318,000 ounces) silver. Building on this resource, WestMountain completed some 1,200 meters of drilling to further extend the Ben Vein gold structure. A resource update and technical report are expected in the fourth quarter. WestMountain anticipates the completion of a scoping study on underground mining at Terra to be completed in mid-2013. In addition to its work on the high-grade vein system, WestMountain is investigating Camp Creek Midway, a porphyry target located on the Terra property. Corvus currently receives half the gold mined at Terra plus a sliding-scale net smelter return royalty of between 0.5 percent and 5 percent, dependent upon the gold price, on all precious metal production from the property. Under this metric, Corvus is currently entitled to 53 percent of the gold produced at Terra. "The potential to see initial gold production from the Terra project is an exciting step for Corvus Gold in leveraging its non-core assets to support the development of our 100 percent wholly owned North Bullfrog, Nevada project toward anticipated production," said Corvus CEO Jeff Pontius. WestMountain expects to complete the US\$6 million of spending need to earn an initial 51 percent interest in Terra by the end of 2013, a stake the company can increase to 80 percent by spending an additional US\$3.05 million.

At the West Pogo gold project – situated about two miles (3.5 kilometers) west of Sumitomo Metal Mining's Pogo Mine – Alix Resources Corp. drilled two holes in 2012. This work follows up on untested structurally related gold targets developed by Alix geologists from work on the adjacent Money Rock project, which is part of the joint venture. Ocean Park Ventures Corp. – Corvus' partner on the Chisna project in the eastern Alaska Range – limited its work on the gold-copper property to what is necessary to fulfill its 2012 work commitment. LMS, located about 40 kilometers (25 miles) southwest of Pogo, did not see any work in 2012 and Corvus is seeking a partner to continue the exploration of this enticing gold prospect.



RUSSELL MYERS



JEFF PONTIUS

SHANE LASLEY

**CASH AND SHORT-TERM DEPOSITS:** C\$6.95 million (at May 31, 2012)  
**WORKING CAPITAL:** C\$6.43 million (at May 31, 2012)  
**MARKET CAPITALIZATION:** C\$52 million (at Sept. 20, 2012)

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## BRITISH COLUMBIA

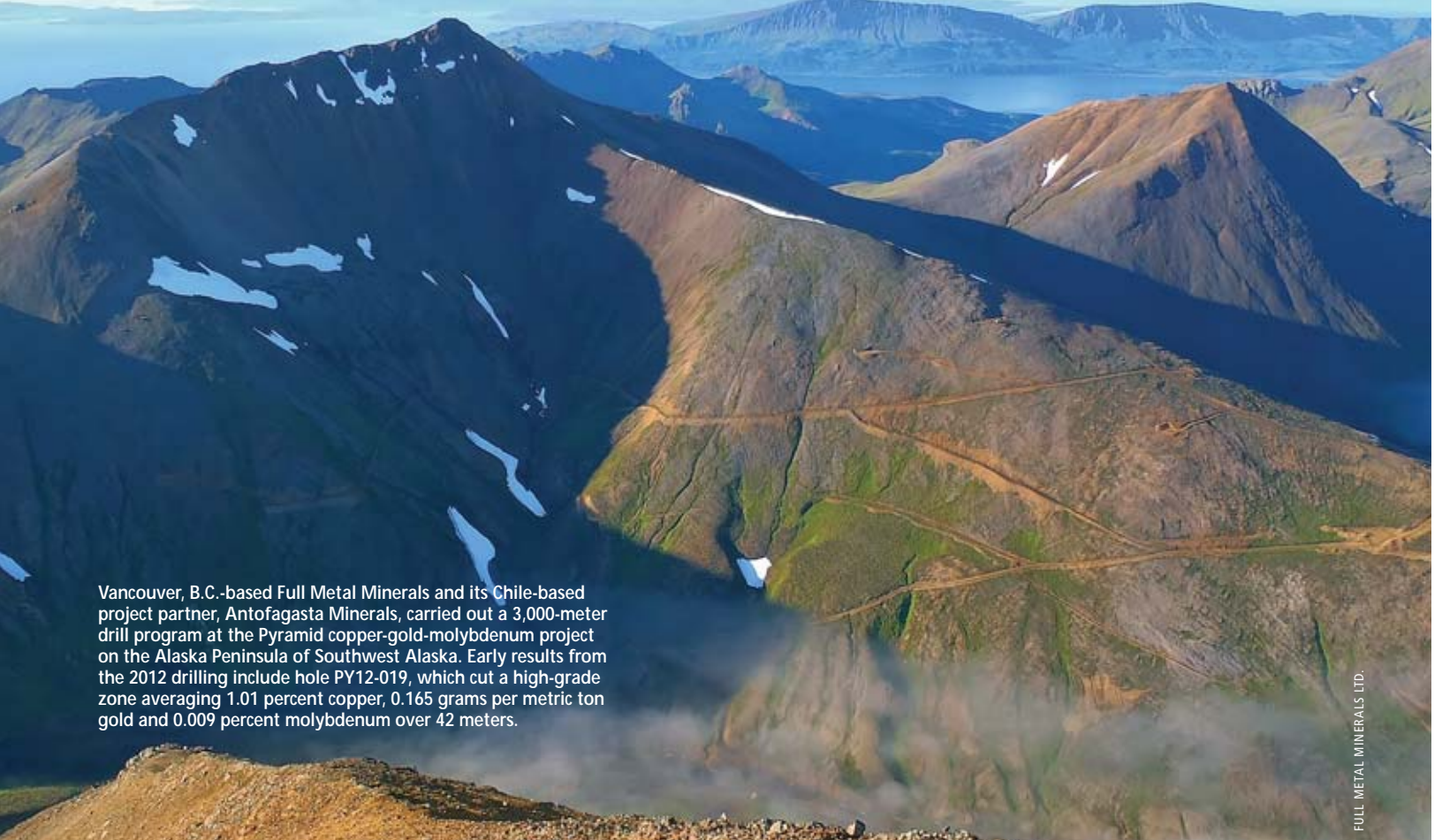
### Decade Resources Ltd.

**DEC:** TSX  
**PRESIDENT:** Ed Kruchkowski,  
**DIRECTOR:** Ron Nichols  
**DIRECTOR:** Randy Kasum

Decade Resources Ltd. and its 35-percent partner Mountain Boy Minerals Ltd. was focused in 2012 on exploring the Red Cliff project in north-western British Columbia. Red Cliff is a gold-copper property consisting of eight Crown-granted mineral claims located 40 kilometers (25 miles) north of Stewart, B.C. High gold values are contained within stockwork zones that are composed of stringers of quartz-chalcopyrite-pyrite plus local coarse visible gold. These stringers have an envelope of galena-sphalerite-chalcopyrite stringers that contain local fine grained visible gold. Decade has identified three separate gold-bearing zones at Red Cliff – Upper Montrose, Lower Montrose and Waterpump – with strike lengths of at least 500 meters, 100 meters and 300 meters, respectively. Drill exploration has tested only 300 meters on the Upper Montrose. Assays for the first nine holes of 21 holes drilled by June 5 to test the Lower Montrose and Upper Montrose zones, returned values ranging from 1.02 grams per metric ton gold over 1.52 meters to 12.80 grams per metric ton gold over 3.65 meters. To assist in preparation of a NI 43-101 report, Decade in June said it was arranging a financing with management participation that would allow for the mobilization of a second drill to expedite testing of mineralization on the property. Decade also owns several other properties in British Columbia in various stages of development, including the 158-claim Wedeene property, which is underlain by Kuroko-type VMS copper-gold mineralization and located northwest of Kitimat.

**CASH AND SHORT-TERM DEPOSITS:** C\$1.62 million (Jan. 31, 2012)  
**WORKING CAPITAL:** C\$1.06 million (Jan. 31, 2012; raised C\$1.2 million in private placement at July 10, 2012)  
**MARKET CAPITALIZATION:** C\$7.08 million (Aug. 28, 2012)





Vancouver, B.C.-based Full Metal Minerals and its Chile-based project partner, Antofagasta Minerals, carried out a 3,000-meter drill program at the Pyramid copper-gold-molybdenum project on the Alaska Peninsula of Southwest Alaska. Early results from the 2012 drilling include hole PY12-019, which cut a high-grade zone averaging 1.01 percent copper, 0.165 grams per metric ton gold and 0.009 percent molybdenum over 42 meters.

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## NUNAVUT

### Elgin Mining Inc.

ELG: TSX

**PRESIDENT AND CEO:** Patrick Downey

**CHIEF OPERATING OFFICER:** James A. (Jim) Currie

**MANAGER, EXPLORATION:** Vivian Park

Elgin Mining Inc. focused on exploring its Lupin and the Ulu gold properties in Nunavut in 2012. Through a merger with Gold-Ore Resources Ltd. in May, Elgin gained ownership of the producing Bjorkdal gold mine in Sweden. Ongoing exploration included an airborne geophysics survey to identify drill targets at the past-producing Lupin gold mine located about 400 kilometers north of Yellowknife, Northwest Territories along with follow-up drilling. Elgin is advancing Lupin toward a production decision in 2013. The company had two drills testing targets within the mine's surface leases to identify potential sources of ore grade feed for Lupin's mill. Elgin expects to drill 13,000 meters over the course of the summer/fall drilling season. This regional exploration program, along with planned exploration at the 947-hectare (2,340 acres) Ulu property, will help the company meet an obligation to incur C\$9 million in flow-through eligible expenditures in 2012. Elgin is also advancing the Ulu gold project located 155 kilometers north of Lupin where a high-grade gold vein system is hosted within an Archean greenstone belt. The Flood Zone, one of 15 gold occurrences on the property, hosts an estimated indicated resource of 274,500 ounces gold (751,000 metric tons grading 11.37 grams per metric ton gold), and an inferred resource of 142,500 ounces gold (418,000 metric tons grading 10.61 g/t gold), using a 2.5 g/t gold cut-off grade. It remains open along strike and at depth. Elgin hopes to define sufficient resources for a standalone operation at Ulu. In June Elgin optioned from North Arrow Minerals Inc. the Conwayto gold properties located adjacent to Lupin, agreeing to spend C\$6 million over six years to earn a 60 percent interest.

**CASH AND SHORT-TERM DEPOSITS:** C\$16.5 million (at June 30, 2012; plus C\$29.3 million restricted cash held as financial security for reclamation obligations)

**WORKING CAPITAL:** n/a

**MARKET CAPITALIZATION:** C\$107.94 million (at Oct. 4, 2012)

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www.elginmining.com

## YUKON TERRITORY

### Ethos Gold Corp.



**ECC:** TSX/ETHOF: OTCQX/1ET: FRANKFURT

**PRESIDENT AND CEO:** Gary Freeman

**CHIEF OPERATING OFFICER:** Peter Tallman, P.Geo.

**CHIEF FINANCIAL OFFICER:** Peter Wong, C.A.

Ethos Gold Corp., formerly Ethos Capital Corp., focused in 2012 on exploring its Betty, Wolf and Bridget properties south of Dawson City, Yukon. A two-phase 2012 exploration program, originally budgeted for C\$7.3 million, was revised downward to C\$5 million by mid-season. Targeting the Mascot Creek soil anomaly identified in 2011 at the 15-square-kilometer Betty Property, Ethos completed 60 reverse circulation drill holes totaling 6,900 meters by late August. Among results of assays for 22 holes, hole BETR-022 intersected 7.1 grams per metric ton gold and 209 g/t silver over 13.7 meters (Marshall target) and hole BETR-012 intersected 29.8 g/t gold over 3.1 meters (Perrault target). Ethos also collected 8,700 new soil samples north of the Mascot Creek soil anomaly from which targets were identified along the prospective Coffee fault. Prospecting, mapping and evaluation of new anomalous areas associated with the Coffee fault structure are ongoing to identify and qualify priority drill targets for 2013. A program aimed at fully documenting the history of placer gold workings on the property is also ongoing. An extensive network of recently located old equipment roads may assist future exploration. At the 238-claim Wolf property, a 2012 exploration program consisting of prospecting and map-



ping to evaluate the source of the gold soil anomaly was planned to begin in late August or early September. At Bridget which is adjacent to Betty to the north, Ethos completed a program of prospecting and trench pit sampling in early August targeting a prospective copper-gold porphyry. Assays are pending from 46 rock samples.

**CASH AND SHORT-TERM DEPOSITS:** C\$11.79 million (June 30, 2012)

**WORKING CAPITAL:** C\$11.52 million (at June 30, 2012)

**MARKET CAPITALIZATION:** C\$23.19 million (Sept. 2, 2012)

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Ph: 604 682-4750 • Fax: 604 682-4809  
www.ethoscapitalcorp.com

## ALASKA

### Full Metal Minerals Ltd.

FMM: TSX-V

**PRESIDENT:** Michael Williams

**CEO & VICE PRESIDENT, EXPLORATION:** Rob McLeod



Pyramid, a copper-gold-molybdenum porphyry project situated on the Alaska Peninsula of Southwest Alaska, was the primary target of Full Metal Minerals Ltd.'s 2012 exploration. The Vancouver, B.C.-based junior (49 percent) and its Chile-based project partner, Antofagasta Minerals S.A. (51 percent), carried out a 3,000-meter drill program to follow-up on copper-gold-molybdenum mineralization outlined by 17 holes drilled by the partners in 2010 and 2011. Early results from the 2012 drilling include hole PY12-019, which cut a high-grade zone averaging 1.01 percent copper, 0.165 grams per metric ton gold and 0.009 percent molybdenum over 42 meters, from 24 meters down-hole. This zone occurs within a 70-meter interval averaging 0.7 percent copper, 0.115 g/t gold and 0.008 percent molybdenum. Hole 19 was collared approximately 250 meters southwest of PY11-016, which, intersected 155.9 meters averaging 0.71 percent copper, 0.179 g/t gold and 0.018 percent molybdenum. Drilled in the potassic

center of Pyramid, PY12-018 cut 344 meters averaging 0.036 percent molybdenum, 0.11 copper and 0.035 g/t gold from a depth of 154 meters. Drilling at Pyramid has outlined an area measuring some 1,800 meters east-west and 1,050 meters north-south. Full Metal has an exploration agreement with option to lease a 100 percent interest in mineral rights from the Aleut Corp., an Alaska Native regional corporation, and has been granted the surface rights from two Alaska Native village corporations.

Pyramid is but one prospect on 1.4 million acres of prospective Native-owned lands covered under an exploration agreement Full Metal has with Aleut Corp. Unga-Popov – an epithermal gold project on an island about 40 kilometers (25 miles) south of Pyramid is another. This property hosts two historical resources – Apollo with 280,000 metric tons averaging 27.7 g/t gold and 92.6 g/t silver; and Centennial, which has some 6 million metric tons at 1.5 g/t. Redstar Gold Corp. – which can earn a 60 percent interest in Unga-Popov by completing 5 million of exploration by August, 2015 – confirmed and expanded on the historical high-grade gold mineralization at Apollo with a drill program carried out in 2011.

Full Metal's 85,750-acre Pebble South property is under an option agreement to the Pebble Partnership, co-owned by Northern Dynasty Minerals Ltd. and Anglo American plc. The Pebble owners can earn a 60 percent interest in Pebble South by spending US\$3 million on exploration over three years. Full Metal believes Pebble-style mineralization trends to the southwest from the Pebble Partnership's massive deposit onto its property. Geochemical and geophysical surveys have delineated 11 promising prospects at Pebble South.

Full Metal is also seeking the lode source of two prolific placer mining districts in the Tintina Gold Belt, Circle and Fortymile. Unlike similar placer camps in the Tintina Gold Belt, no significant lode source has been identified in these two Alaska gold districts. In 2011, the junior staked 23,747 hectares (56,680 acres) of state mining claims within the Circle placer mining district, located about 130 kilometers (80 miles) northeast of Fairbanks. To locate the source of more than 1 million ounces of placer gold recovered here geologists carried out extensive reconnaissance mapping and soil sampling program on the company's four large claim blocks in the district. The junior has carried out similar programs at its Rolling Thunder project in the Fortymile, a district that has produced more 500,000 ounces of placer gold. The Fortymile property – a separate zinc-rich carbonate replacement-style massive sulfide deposit found in the same region as

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Rolling Thunder – was transferred to Full Metal Zinc in 2011.

**CASH AND SHORT-TERM DEPOSITS:** C\$129,953 (Feb. 29, 2012)

**WORKING CAPITAL:** C\$744,578 (Feb. 29, 2012) (Completes C\$1.5 million financing on June 18, 2012; completes C\$467,520 financing on Sept. 4, 2012)

**MARKET CAPITALIZATION:** C\$9.5 million (Sept. 12, 2012)

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[www.fullmetalminerals.com](http://www.fullmetalminerals.com)

## YUKON TERRITORY

### Golden Predator Corp.

**GPD:** TSX-V

**CHAIRMAN AND CEO:** William M. Sheriff, B.Sc.

**PRESIDENT:** John Legg, B.A., LLB

**CHIEF OPERATING OFFICER:** Michael G. Maslowski



**WILLIAM  
SHERIFF**

Golden Predator Corp. focused the lion's share of its efforts in 2012 on its flagship Brewery Creek Project near Dawson City in central Yukon Territory, ratcheting down from much larger and more diverse exploration programs in 2010 and 2011 due to dismal market conditions. Though Golden Predator controls more than 1 million acres of mining claims in the Yukon – down from 1.2 million acres in 2011 – the junior has narrowed its sight to drilling at Brewery Creek, a past-producing heap leach gold mining operation where more than 278,000 ounces of gold was produced from seven near-surface oxide deposits between 1996 and 2002. Golden Predator planned to spend C\$10 million of the C\$12 million that it raised in the markets last spring at Brewery Creek in preparation for re-starting gold production in 2013. The company also secured 100 percent ownership of the property, subject to a 2 percent net smelter royalty. Drilling designed to expand current resources including extending and defining several newly discovered zones on the property began in

February. Geologists targeted multiple zones, returning numerous intersections of significant gold mineralization through July. In May, Golden Predator reported an independent resource estimate for Brewery Creek of 20.4 million metric tons of indicated resource grading 0.89 grams per metric ton gold for 580,000 ounces of contained gold and 13.0 million metric tons of inferred resource, with 345,000 ounces of contained gold using cut-off values of 0.20 g/t gold for oxide material and 0.70 g/t gold for sulfide material. The company planned to incorporate 2012 drilling in an updated resource estimate later in the year. The remaining C\$2 million was budgeted for geochemical sampling on other Yukon properties to meet legal requirements to keep them active. These include the Grew Creek, Cache Creek and Clear Creek projects.

**CASH AND SHORT-TERM DEPOSITS:** C\$9.25 million (May 31, 2012)

**WORKING CAPITAL:** C\$13.59 million (May 31, 2011)

**MARKET CAPITALIZATION:** C\$44.78 million (Sept. 11, 2012)

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## YUKON TERRITORY, BRITISH COLUMBIA & ALASKA

### Goldstrike Resources Ltd.

**GSR:** TSX-V

**CHAIRMAN, CEO AND PRESIDENT:** Terrence E. "Terry" King

**DIRECTOR:** Lawrence (Larry) Dick, Ph.D., P.Geo

**CHIEF OPERATING OFFICER:** William S. Chornobay

Goldstrike Resources Ltd. aggressively explored some 31 properties in Yukon Territory during the first half of 2012, spending C\$16.96 million on exploration. Goldstrike had two teams manage concurrent exploration programs this season. Following up on nine new gold discoveries made in 2011, including Plateau, Summit, Big One, Livingston, and Lucky Strike, one team targeted the Plateau area, while the other one focused on expanding the discoveries on the Summit, Big One, Cando 2, Livingstone,

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Speckled with visible gold, this section of core is from the Deep Trench vein at Grande Portage Resources' Herbert Glacier project in Southeast Alaska. The hole, 11E-2, cut 8.76 meters averaging 33.7 grams (1.08 ounces) per metric ton gold.

Lucky Strike, and other lower priority properties. In August, Goldstrike described the Plateau area northwest of Mayo, Yukon as potentially an emerging gold district, and reported positive results from early-stage exploration in the area, including the discovery of another zone of gold mineralization in a newly staked extension to the Plateau South property. Goldstrike said the showing confirms the significant gold potential within a west-northwest to east-southeast corridor referred to as the Yellow Giant Trend. This trend extends for at least 25 kilometers (16 miles), and is largely unexplored along its entire length and remains open. No historical work has ever been documented on the Plateau properties. All gold mineralization discovered to date is original. At the Plateau North Gold Rush Zone, Goldstrike was preparing a trenching program in late August in anticipation of subsequent diamond drilling. The Plateau-area properties now consist of about 1,768 claims. At Summit, Goldstrike also reported new results from 2012 sampling that outlined a strong 2.5 kilometer by 1.6 kilometer multi-element gold soil anomaly with 14 of 235 samples (6 percent) between 100 and 508 parts-per-billion gold, within a large halo of 69 anomalous samples (29 percent) ranging from 25 to 99.9 parts per billion gold.

**CASH AND SHORT-TERM DEPOSITS:** C\$2.70 million (June 30, 2012)

**WORKING CAPITAL:** C\$2.641 million (June 30, 2012)

**MARKET CAPITALIZATION:** C\$22.71 million (Sept. 11, 2012)

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## ALASKA

### Grande Portage Resources Ltd.

**CPG:** TSX-V

**CHAIRMAN:** Paul Bowes

**PRESIDENT:** Ian Klassen

**VICE PRESIDENT, EXPLORATION:** Wesley Raven



Drilling completed by Grande Portage Resources Ltd. over the past three years has outlined a high-grade gold deposit at Herbert Glacier that is shaping up to be on par to its neighbors in the

Juneau Gold Belt of Southeast Alaska. Located about 35 kilometers northwest of the historical Treadwell Mine and about the same distance southeast of Coeur d'Alene Mines' Kensington operation, Herbert Glacier lies along a trend legendary for giving up high-grade mesothermal gold deposits. Since signing a joint venture agreement with Quaterra Resources Inc. in 2010, Grande Portage has set out to confirm and expand on high gold grades drilled by Echo Bay Resources during the 1980s. Earning a 65 percent stake in the project in 2011, Grande Portage released an inaugural resource for Herbert Glacier. Based on 65 core holes (9,386 meters) and four trenches (19.7 meters) along the Main and Deep Trench veins, the estimate outlines an inferred resource of 245,145 ounces of gold at an average grade of 4.86 grams per metric ton in 1.57 million metric tons of ore. The resource areas of Deep Trench and Main represent about 30 percent of the some 3,700 meters of strike extent of five vein systems mapped at Herbert Glacier and the depth of these mesothermal veins is only limited by drilling. In July, Grande Portage launched a 15,000-meter drill program at Herbert Glacier. About 12,000 meters of this program is designated to upgrade and expand the resource through infill drilling. The balance of the program tested the strike extent of Deep Trench and Main as well as testing other parallel vein targets such as Goat. Highlights from initial drilling at Deep Trench include hole 12E-1, which intersected 3.34 meters (true thickness 2.47 meters) averaging 17.79 grams per metric ton gold; hole 12G-5, which intersected 5.73 meters (true thickness 3.55 meters) averaging 20.3 g/t gold; hole 12G-3, which cut 3.15 meters (true thickness of 2.05 meters) averaging 15.6 g/t gold; and hole 309B, which cut 4.07 meters (true thickness 2.60 meters) averaging 11.3 g/t gold. Drilling at the eastern edge of the Deep Trench resource area encountered a new high-grade zone. Hole DDH 311A, drilled into this shoot, cut 8.08 meters (true thickness of 5.66 meters) averaging 59.91 g/t gold starting at a depth of 36 meters, including 3.58 meters of 117.54 g/t gold. Grande Portage said Deep Trench can be traced at surface over a strike length of 1,000 meters and is open at depth. DDH 120-1, the first hole drilled at Main in 2012, cut 13.85 g/t gold over 3.12 meters. DDH 120-1 is a 50-meter eastward step-out on Main, indicating the vein remains open in this direction. The Goat Creek vein, which runs parallel to the north of the Main vein, is another target of 2012 drilling. Though assay results from the Goat Creek drilling are pending at the time of this report, visible gold observed in one of the initial holes indicates the high-grade tenor of the gold mineralization of this vein system.

**CASH AND SHORT-TERM DEPOSITS:** C\$2.17 million (at Apr. 30, 2012)

**WORKING CAPITAL:** C\$3.5 million (at Apr. 30, 2012)

**MARKET CAPITALIZATION:** C\$11.7 million (at Sept. 20, 2012)



Going into 2012, Greens Creek had about 98 million ounces of silver in reserves – enough to keep the Southeast Alaska mine in production for about another 10 years, and Hecla Mining Co. sees plenty of potential to continue replenishing these stores of silver in the foreseeable future.

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## ALASKA

### Hecla Mining Co.

HL: NYSE  
**CHAIRMAN: TED CRUMLEY**  
**PRESIDENT AND CEO: Phillips Baker, Jr.**  
**VICE PRESIDENT, EXPLORATION: Dean McDonald**



Plagued with a series of accidents that ultimately resulted in a year-long hiatus of operations at its Lucky Friday Mine in Idaho, Hecla Mining Company is leaning on Greens Creek Mine in Southeast Alaska to sustain its strong financial position and fund a series of growth initiatives aimed at catapulting the 120-year-old mining company to a 15-million-ounce-per-year silver producer by 2017.

"We will spend US\$140 million in capital, US\$28 million in exploration, US\$11 million in predevelopment – and we think we can do all of those things plus some other expenditures that we have within the cash-flow we generate in 2012," Hecla President and CEO Phillips S. Baker, Jr. informed participants in the 2012 BMO Capital Markets in February. That cash-flow primarily came from Greens Creek. During the first half of 2012, the mine produced 2.7 million ounces of silver at about US\$1.63 per ounce after being credited for the gold, zinc and lead recovered at the underground operation. Going into 2012, Greens Creek had about 98 million ounces of silver in reserves – enough to keep the Southeast Alaska mine in production for about another 10 years, and Hecla sees plenty of potential to continue replenishing these stores of silver in the foreseeable future.

Underground drilling at Greens Creek in 2012 has extended mineralization



**PHILLIPS  
BAKER JR.**

along trend of the Southwest Bench, Gallagher, 200 South, 5250 and 9a zones. Drilling at the Southwest Bench has defined high-grade extensions beyond the current resources; connected isolated mineralized bodies into continuous zones; and defined a new lens of mineralization. Highlights include intercepts of 0.39 ounce per ton gold, 14.83 opt silver, 10.5 percent lead and 22.4 percent zinc over 17.8 meters; 0.14 opt gold, 56.2 opt silver, 8.8 percent lead and 16.6 percent zinc over 13 meters; and 0.11 opt gold, 3.9 opt silver, 6.5 percent lead and 38.1 percent zinc over 7.5 meters. Drilling of the Gallagher Zone extended mineralization further to the southeast beyond the current resource boundaries. High-grade mineralization at both the 5250 and 9a Zones has been defined beyond the current resources and is open further to the south. Much of the focus of drilling at Greens Creek during the second half of 2012 was on 200 South, where in-fill drilling has confirmed and extended an upper limb that averages 7.6 meters of white baritic ore and a lower limb that averages 5.5 meters of massive base metal and baritic ore types. Hecla said drilling along the southern-most development has intersected massive base metal and white baritic ore types and is expected to extend 200 South some 60 meters south. The Idaho-based miner believes this area of the mine has the potential to be a significant contributor to current and future life-of-mine plans. Hecla also had three drills turning on the surface at Greens Creek from mid-June through mid-October.

Beyond exploration, Hecla allocated some US\$90 million of capital to be spent on Greens Creek in 2012, the largest investment in the history of the Southeast Alaska mine. Some of the key capital expenditures include Deep 200 South access development (US\$18 million); mining fleet replacement and additions (US\$14 million); tailings dam expansion (US\$10 million); East Ore access and ventilation rehabilitation (US\$6 million); definition drilling (US\$5 million); and the construction of expanded and upgraded camp facilities (US\$5 million). Production at the Lucky Friday Mine is expected to resume early in 2013.

**CASH AND SHORT-TERM DEPOSITS:** US\$233 million (June 30, 2012)  
**WORKING CAPITAL:** US\$248 million (June 30, 2012)  
**MARKET CAPITALIZATION:** US\$1.9 billion (Sept. 20, 2012)

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## BRITISH COLUMBIA

### Homestake Resource Corp.

HSR: TSX

**PRESIDENT:** Joseph A. Kizis, Jr., M.S., B.S., P.Geo.

**CHAIRMAN:** Lawrence Page, Q.C., B.A., LL.B.

**VICE PRESIDENT, EXPLORATION:** Robert Macdonald, MSc., P.Geo.



Homestake Resource Corp., formerly Bravo Gold Corp., focused in 2012 on its Homestake Ridge and Kinskuch properties in northwestern British Columbia. This work included drill delineation of the South Reef deposit at Homestake Ridge and follow up drilling of a potential mineral deposit at Kinskuch. The program also included additional exploration drilling, ground geophysics and further evaluation of several other encouraging exploration targets. South Reef, the third high-grade gold/silver deposit identified by Homestake in the district, and possibly Kinskuch, plus any new discoveries, will be accretive to the NI 43-101-compliant resource estimates for the two deposits already discovered and delineated by Bravo at Homestake Ridge. The project is being advanced as a potential high-grade underground mining operation with current NI 43-101-compliant indicated resources, at a 3.0 grams per metric ton gold-equivalent cut-off, of 191,000 ounces gold and 1.35 million ounces silver (215,500 oz gold-equivalent), plus inferred resources of 530,000 oz gold and 13.47 million oz silver (775,900 oz gold-equivalent). Mineralization is open at depth and along the full 3.4-kilometer (2.1 miles) strike length of the target horizon at South Reef, or nearly twice the cumulative length of previously delineated strike lengths of the Main Homestake and Homestake Silver deposits. In September, Homestake reported a C\$1.8 million phase 2 drilling program, funded by partner Agnico Eagle Mines Ltd., was underway and would continue into mid-October at the South Reef property. Six to eight holes were planned to test the 600-meter strike length of the South Reef trend, including several hangingwall and geophysical targets. The 2012 phase 1 and phase 2 budgets totaled C\$2.5 million. Homestake also added another 2,964 hectares (7,324 acres) in two claim groups to the Kinskuch property, bringing the claim package to 623 square kilometers (240 square miles).

**CASH AND SHORT-TERM DEPOSITS:** C\$151,793 (April 30, 2012)

**WORKING CAPITAL:** (C\$46,111) (April 30, 2012; raised C\$1.26 million public offerings in July-August 2012)

**MARKET CAPITALIZATION:** C\$11.07 million (Sep. 21, 2012)

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## BRITISH COLUMBIA

### Imperial Metals Corp.



III: TSX

**CHAIRMAN:** Pierre Lebel (mug)

**PRESIDENT AND COO:** J. Brian Kynoch, P.Eng.

**VICE PRESIDENT, EXPLORATION:** Patrick M. McAndless, P.Geo.

Imperial Metals Corp. focused in 2012 on expanding resources at its Mount Polley open-pit copper-gold mine located 56 kilometers northeast of Williams Lake in central British Columbia and developing the Red Chris copper-gold property in northwest British Columbia. The mid-tier producer also owns 50 percent interest in the Huckleberry open pit copper-molybdenum mine in central British Columbia and 65 percent interest in the Ruddock Creek lead-zinc property in southern B.C. In the second quarter, Imperial spent C\$4.3 million on exploration at Mount Polley, completing 9,405 meters of diamond drilling in 19 drill holes with two rigs. The company reported Aug. 21 that copper-gold mineralization extends to at least 500 meters depth below the bottom of the proposed phase 5



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Springer pit, and the exploration area had been expanded to include drilling beneath the Cariboo pit and on the North Block, about 4 kilometers (2.5 miles) north of the current mining area. The deep mineralization is strongly dominated by sulphide minerals with an average ratio of 12.68 percent oxide copper to total copper in reported intervals. The successful drilling below the Springer pit indicates high potential to extend known mineralization at depth below the adjacent Cariboo pit. In May, Imperial reported a 73 percent increase in an updated measured and indicated resource estimate for Mount Polley to 361 million metric tons grading 0.284 percent copper, 0.297 grams per metric ton gold and 0.846 g/t silver. At Red Chris, Imperial reported in May that the Province of British Columbia issued a Mines Act permit for the project authorizing development of a 30,000-metric-tons-per-day milling operation and related open-pit mine with reserves of 301.5 million metric tons grading 0.359 percent copper and 0.274 g/t gold. Electrical power will be supplied by a connection to the Northwest Transmission Line at Bob Quinn. The transmission line is expected to be complete by May 2014. Red Chris exploration expenditures, primarily drilling, totaled C\$1.4 million in the second quarter with 2,572 meters drilled in a five-hole program. Exploration drilling at Red Chris was suspended in May in anticipation of the start of mine construction.

**CASH FLOW:** C\$28.58 million (June 30, 2012)

**WORKING CAPITAL:** C\$ \$46.4 million (June 30, 2012)

**MARKET CAPITALIZATION:** C\$848.49million (Aug. 25, 2012)

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## BRITISH COLUMBIA & YUKON TERRITORY

### Independence Gold Corp.

IGO: TSX-V

**PRESIDENT AND CEO:** Randy Turner, B.Sc., P.Geo

**CFO:** Christopher Mitchell, P.Eng., MBA

**VICE PRESIDENT, EXPLORATION:** David Pawliuk, B.Sc., P.Geo

Independence Gold Corp., formerly Silver Quest Resources Ltd., is focused on exploring for silver and gold on numerous property holdings, ranging from early stage grassroots to advanced stage resource delineation and expansion projects scattered across central British Columbia and Yukon Territory. In 2012, the company launched a C\$2.2 million exploration program in April at its 4,272-hectare (10,556 acres) 3Ts Project located in the Nechako Plateau region some 120 kilometers southwest of Vanderhoof, B.C. The work included 5,000 meters of diamond drilling, prospecting, geological mapping, geophysical surveying and trenching targeting the Mint and Ted veins with the objective to increase the project's inferred resource. The drilling also tested for new mineralized veins in the epithermal quartz-carbonate vein system on the property. In 2012, Independence Gold also explored its Boulevard and Henderson project areas in the White Gold District of Yukon Territory with a program of geochemical soil sampling, geological mapping and diamond drilling budgeted at C\$3.7 million. Comprised of five properties with 1,763 contiguous mineral claims covering about 36,840 hectares (91,032 acres), Boulevard hosts a 20-kilometer- (21.4 miles) long geochemical gold-in-soil anomaly, the Boulevard Trend, has been identified within the southern portion of the Boulevard project area adjoining the western side of Kaminak Gold Corp.'s Coffee Gold project 135 kilometers (80 miles) south of Dawson City. The company collected about 3,500 in-fill soil samples at Boulevard to better-define previously identified gold-in-soil geochemical anomalies within the Boulevard Trend and generate additional diamond drill targets. At the 742-claim, 15,500-hectare (38,301 acres) Henderson property located 60 kilometers (37 miles) south of Dawson City and about 30 kilometers (19 miles) north of Kinross Gold Corp.'s Golden Saddle deposit, geological mapping focused on identifying mineralized structures, with follow-up diamond drilling planned for late August. Independence Gold has about 5,200 mineral claims covering some 944 square kilometers (364.5 square miles) within the White Gold District.

**CASH AND SHORT-TERM DEPOSITS:** C\$13.36 million (June 30, 2012)

**WORKING CAPITAL:** C\$ 14.42 million (June 30, 2012)

**MARKET CAPITALIZATION:** C\$7.41 million (Sept. 4, 2012)

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## ALASKA

### International Tower Hill Mines Ltd.

ITH: TSX / THM: NYSE-A  
**CHAIRMAN:** Daniel Carriere  
**PRESIDENT AND CEO:** Don Ewigleben  
**VICE PRESIDENT, ALASKA:** Tom Irwin  
**ALASKA GENERAL MANAGER:** Karl Hanneman



With the goal of advancing the world-class Money Knob deposit to production by 2018, International Tower Hill Mines Ltd. is crunching the numbers on the feasibility of building a mine at Livengood. With an all-in resource of 20.6 million ounces of gold, the Money Knob deposit at Livengood ranks as the 14th largest undeveloped deposit of gold on the planet, according to a research report published by Natural Resource Holdings in July. A preliminary economic assessment completed in 2011 determined a 91,000-metric-ton-per-day mill at Livengood would churn out 12.9 million ounces of gold over 23 years. As part of Tower Hill's current feasibility-level work, the company is studying different scenarios seeking the appropriate balance of capital expenditures and operating costs. Tower Hill President and CEO Don Ewigleben said the 560,000-ounce-per-year operation anticipated in the PEA is at the low end of various scenarios being contemplated. While the scope of the operation at Livengood appears to be growing, Ewigleben said the goal is not to build the biggest mine; instead, return on investment is driving the size of the operation that will ultimately be built. The feasibility study is due to be ready for internal review by Tower Hill management and peer review early in 2013 and made public by mid-year, marking the official launch of permitting.



DON EWIGLEBEN

At a 0.22 g/t gold cut-off grade, currently seen as an economic cut-off for Livengood, the Money Knob deposit contains a measured and indicated resource of 933 million metric tons averaging 0.55 grams per metric ton gold (16.5 million ounces), plus an inferred resource of 257 million metric tons averaging 0.50 g/t gold (4.1 million ounces). Focused on developing this world-class gold deposit, Tower Hill is spending minimal time and money on exploring the upside potential of the 56-square-mile (145 square kilometers) Livengood land package. "When you have 15-plus-million-ounces, you have a shareholder base that says 'get on with it' and that's what we are doing in our feasibility study work," said Ewigleben. Tower Hill plans to spend US\$1 million to US\$2 million per year on reconnaissance drilling on four exploration targets surrounding Money Knob – Southwest, Scrapper Ridge, Gertrude Basin and Moose Gulch. Much of the drilling completed at Money Knob has bottomed out in gold mineralization, leaving the floor of the proposed pit as a fifth exploration target. Though Tower Hill is putting little effort into seeking more gold, its geotechnical and condemnation drilling continues to find the precious metal well beyond the confines of the current resource – including one hole that cut 3.8 meters grading 6.9 g/t gold some 1,600 meters northeast of the deposit. MK-12-281, drilled nearly 3,000 meters southwest of Money Knob, cut 2.76 meters averaging 2.75 grams per metric ton gold; MK-12-285, drilled about 1,500 meters east of the deposit, cut 2.01 meters averaging 3.47 g/t gold; MK-12-288, drilled some 1,500 meters west of Money Knob, cut 3.05 meters averaging 2.48 g/t gold; and MK-12-290, drilled about 1,600 meters northeast of the deposit, cut 3.81 meters averaging 6.91 g/t gold. Tower Hill said the locations of these new gold intercepts do not impact the conceptual plan for developing the mining-related infrastructure contemplated in the feasibility work, the current focus of the company.

**CASH AND SHORT-TERM DEPOSITS:** C\$29.88 million (June 30, 2012) (Closed C\$24.6 million financing on Aug. 3, 2012)  
**WORKING CAPITAL:** C\$22.34 million (June 30, 2012)  
**MARKET CAPITALIZATION:** C\$261.5million (Oct. 1, 2012)



Much of the drilling completed at the 20-million-ounce Money Knob gold deposit at International Tower Hill Mines' Livengood project has bottomed out in gold mineralization, leaving the floor of the proposed pit open at depth.

SHANE LASLEY

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Englewood, CO 80112  
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www.ithmines.com

## YUKON TERRITORY

### Kaminak Gold Corp.



**KAM:** TSX-V  
**PRESIDENT AND CEO:** Rob Carpenter, Ph.D., P. Geo.  
**CHAIRMAN:** John Robins, P. Geo.  
**VICE PRESIDENT, EXPLORATION:** Tim Smith, M.Sc.

Kaminak Gold Corp., a project generator with a dozen properties in Canada, planned a C\$17 million 50,000-meter first-phase exploration drill program for 2012 on its Coffee Gold Project located in the White Gold District of Yukon Territory, but by mid-season had added at least C\$2 million and more than 10,000 meters of additional drilling to the program. The company aimed to build upon the 65,000 meters of drilling it completed during the 2010-2011 seasons that resulted in discovery of 10 new zones of bedrock gold mineralization over 15 kilometers-by-5-kilometers (9 miles by 3 miles) area near Coffee Creek in the Dawson Mountain Range. Kaminak focused on expanding the Supremo-Connector-Double Double-Latte gold trends with the objective of producing a maiden NI 43-101-compliant inferred mineral resource estimate at the end of 2012. In July, the company said it had extended mineralization in Supremo and Latte, effectively connecting the two zones: by September, it reported numerous additional high-grade



TIM SMITH

Kivalliq Energy Corp.'s Nutaq camp is situated in the eastern portion of the Angilak Property in Nunavut, where Lac Cinquante, Canada's highest grade uranium deposit outside of the Athabasca Basin, is located.



KIVALLIQ ENERGY CORP.

gold intercepts in the zones, including a new gold discovery at Supremo. At the Sugar Zone gold-in-soil anomaly located 20 kilometers (12.4 miles) east of the Coffee Gold Project, the company reported identifying near-vertical gold-bearing structures beneath gold-in-soil trends in initial drilling. Currently, more than 20 kilometers of untested anomalies identified through soil sampling on the property warrant drill testing, while just 15 percent of the 60,704-hectare (150,000 acres) Coffee property has experienced systematic grid soil sampling. In May, Kaminak raised gross proceeds of C\$6.3 million in a private placement to conduct exploration activities, including adding a fifth drill, on the Coffee project. In April, the company also reported 90.4 percent gold recoveries obtained over 80 days, including 83.2 percent recoveries over the first 15 days, from simulated heap leach testing of a 30-kilogram sample of drill core from the Supremo and Latte zones.

**CASH AND SHORT-TERM DEPOSITS:** C\$ 17.17 million (June 30, 2012)  
**WORKING CAPITAL:** C\$15.41 million (June 30, 2012)  
**MARKET CAPITALIZATION:** C\$140.61 million (Sept. 11, 2012)

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 Tel: 604 646-4534 • Fax: 604 646-4526  
 www.kaminak.com

## NUNAVUT

### Kivalliq Energy Corp.

**KIV:** TSX-V  
**CHAIRMAN:** John Robins  
**CEO:** James R. (Jim) Paterson  
**PRESIDENT:** Jeff Ward



In late September, Kivalliq Energy Corp. completed the field component of an aggressive C\$20 million exploration program for 2012 at the 102,319-hectare (252,830 acres) Angilak Property in Nunavut, where Lac Cinquante, Canada's highest grade uranium deposit outside of the Athabasca Basin, is located. Lac Cinquante has an NI 43-101 inferred resource of 27.13 million pounds in 1.78 million metric tons averaging 0.69 percent U3O8 (at 0.2 percent cut-off grade). Highlights of the 2012 work program include discovery of the J4, Ray, Flare and Southwest zones; 38,856 meters of core and reverse circulation drilling which tested

new mineralized target areas within the Lac 50 Trend; 930 line-kilometers of ground magnetic, VLF electromagnetic, gravity and seismic surveys; and prospecting, mapping and RC drilling to test new target areas property-wide. The explorer also continued to advance geological, metallurgical, environmental and archeological studies and emphasize community consultation including property visits by community leaders. Lac 50 is a three-by-15-kilometre (2 miles by 9 miles) southeast striking structural trend encompassing the Lac Cinquante uranium deposit and nine other significant uranium occurrences discovered by Kivalliq since 2010. The company drilled 33,583 meters of NQ core in 173 holes with three diamond drill rigs, testing the extent of uranium mineralization at Lac Cinquante down-dip and along the Lac 50 trend. Drilling has extended the strike length of the newly discovered J4 zone to 800 meters and the Ray zone to 310 meters. Mineralization at J4 was intersected at a vertical depth of 383 meters, the deepest intercept on the Angilak Property to date, and the zone remains open along strike and at depth. Assays from 93 drill holes were still pending in late September. Kivalliq said it will incorporate results from 2012 drilling, specifically the J4 and Ray zones, into a NI 43-101 inferred resource estimate in early 2013. The explorer also drilled 5,273 meters in 38 exploratory RC holes, of which 22 generated samples with anomalous radioactivity greater than 500 counts per second, and prioritized target areas for subsequent diamond drilling. This resulted in the discovery of the Flare Zone. Additional targets advanced by the RC rig will be tested by diamond drilling in 2013.

**CASH AND SHORT-TERM DEPOSITS:** C\$15.01 million (at June 30, 2012)  
**WORKING CAPITAL:** C\$13.56 million (at June 30, 2012)  
**MARKET CAPITALIZATION:** C\$56.79 million (Oct. 4, 2012)

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## NORTHWEST TERRITORIES

### Mountain Province Diamonds Inc.

**MPV:** TSX  
**CHAIRMAN:** Jonathan Christopher  
 James Comerford, B.A. (Econ.), M.B.S. (Finance)  
**PRESIDENT AND CEO:** Patrick C. Evans, B.A., B.Sc.

Mountain Province Diamonds Inc. focused in 2012 on exploration and development of its diamond projects in Northwest Territories. The company and De Beers Canada, its 51 percent partner and operator of the Gahcho Kué Joint Venture, reported a 78.5 percent increase in the volume estimate of the Tuzo kimberlite pipe, one of three diamondiferous kimberlites at the Kennady Diamond Project that the companies hope to develop into what could become the world's largest and richest diamond mine. A 24-month environmental impact review for the proposed mine, estimated to produce 4.5 million carats annually over 11 years, is nearing completion with a final hearing schedule for December. The project is located about 300 kilometers (186 miles) northeast of Yellowknife and 90 kilometers (56 miles) east of De Beers' Snap Lake diamond mine. Mountain Province also identified 106 geophysical targets at the adjacent Kennady North Diamond Project and mounted a minimum 2,500-meter summer drill program with two drill rigs. The first rig focused on in-fill drilling along the Kelvin-Faraday kimberlite corridor where a number of high-priority drill targets have been identified, and the second rig drilled 12 newly discovered kimberlite targets that are accessible in the summer. The company also completed a spin-out of the Kennady North property in July into a separate company, Kennady Diamonds Inc., along with C\$3 million in working capital to be used for exploration. Mountain Province said its exploration and evaluation expenses for the six months ended June 30 totaled C\$6,072,667, reflecting increased exploration and evaluation expenditures for the Kennady and Kennady North projects.

**CASH AND SHORT-TERM DEPOSITS:** C\$13.24 million (June 30, 2012)  
**WORKING CAPITAL:** C\$7.03 million (June 30, 2012)  
**MARKET CAPITALIZATION:** C\$330.93 million (Oct. 4, 2012)

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 www.mountainprovince.com



## BRITISH COLUMBIA

### New Gold Inc.

NGD: TSX/NGD: AMEX

EXECUTIVE CHAIRMAN: Randall Oliphant

PRESIDENT AND CEO: Robert Gallagher

VICE PRESIDENT, EXPLORATION: Mark Petersen

Mid-tier gold producer New Gold said it achieved commercial production Aug. 1 at the New Afton Mine in southern British Columbia. Over its estimated 12-year mine life, New Afton is expected to produce an average of 85,000 ounces gold, 214,000 ounces silver and 75 million pounds copper annually at total co-product cash costs of about US\$525 per ounce of gold and US\$1.15 per pound of copper, or a total cash cost, net of by-product credits, of about (US\$1,750) per ounce. New Gold explorers planned to continue drilling the C-zone block of mineralization that lies below and to the side of the New Afton reserve block, using the US\$5.0 million budgeted for exploration at New Afton during the second half of 2012 to work towards further exploring and delineating the C-zone. New Gold also owns the Blackwater Project in central British Columbia where it released a further update July 18 to the project's NI 43-101-compliant mineral resource estimate, reflecting an indicated gold resource of 230 million metric tons at an average grade of 0.96 g/t containing 7.1 million ounces of gold at a 0.4 g/t gold-equivalent cut-off grade, and an inferred gold resource of 98 million metric tons at an average grade of 0.77 g/t containing 2.5 million ounces of gold at a 0.4 g/t gold-equivalent cut-off grade. Exploration activity at Blackwater continues to accelerate with the completion of 177 holes totaling 56,411 meters during the second quarter of 2012. At the end of June, there were 13 drills actively conducting delineation and infill drilling to expand and upgrade the Blackwater mineral resource toward measured and indicated classification. Additionally, three drills are exploring the mineral potential of areas selected for possible future infrastructure and operations facilities, and one drill has commenced a reconnaissance exploration drilling at the Capoose prospect located about 25 kilometers (16 miles) to the northwest of Blackwater. After June 30, three drills were added to the project, one of which is assigned to Capoose. Proj-

ect spending at Blackwater, including exploration and infrastructure-related expenditures, in the 2012 second quarter totaled US\$29.6 million, while total capital spending for the six months ended June 30 was US\$57.1 million. With continued exploration success, New Gold boosted to more than 250,000 meters its 2012 goal for drilling in the Blackwater area. That's up significantly from a previous target of 210,000 meters. Forecasted capital spending for 2012 at Blackwater also increased by US\$20 million as a result of this more robust exploration program.

CASH AND SHORT-TERM DEPOSITS: US\$230.4 million (June 30, 2012)

WORKING CAPITAL: US\$170.0 million (June 30, 2012)

MARKET CAPITALIZATION: C\$5.02 billion (Aug. 28, 2012)

Suite 1800, Two Bentall Centre  
555 Burrard Street, Box 212  
Vancouver, B. C. Canada V7X 1M9  
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www.newgold.com

## NORTHWEST TERRITORIES

### Nighthawk Gold Corp.

(formerly Merc International Minerals Inc.)

MRK: TSX-V

CHAIRMAN: John McBride

PRESIDENT AND CEO: David A. Wiley

CHIEF GEOLOGIST: Michael J. Byron, Ph.D.

Nighthawk Gold Corp. is focused on exploring its 900-square-kilometer (222,203 acres) Colomac Gold Property, which comprises more than 90 percent of the Indin Lake Greenstone Belt including the Indin Lake Gold Camp located about 200 kilometers (124 miles) north of Yellowknife, Northwest Territories. The property, which includes the former producing Colomac Gold Mine, has an inferred mineral resource estimate of 42.65 million metric tons with an average grade of 1.05 grams-per-metric-ton gold for 1.446 million ounces gold using a cut-off grade of 0.6 g/t gold. The Colomac

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Gold Project contains at least five separate gold deposits open in all dimensions (Colomac Dyke, Grizzly Bear, Goldcrest, Dyke Lake, and 24/27), only one of which, the Colomac Dyke Deposit, was historically mined. The 2012 drilling program ran from March 19 to August 21, with two drills completing 30 holes (11,235 meters). In September, Nighthawk said drilling continues to confirm the presence of higher grade gold shoots, including one with 128 meters of 1.36 g/t gold, containing 71.85 meters of 2.04 g/t gold, 46.15 meters of 2.81 g/t gold, and 8.65 meters of 6.83 g/t gold – all of which remain open to depth and laterally. The shoots discovered to date indicate the potential for similar mineralized gold shoots along the intrusion's seven-kilometer strike length. Nighthawk is currently compiling and reviewing all results to date in preparation for a winter 2013 drill program.

**CASH AND SHORT-TERM DEPOSITS:** C\$11.93 (April 30, 2012)

**WORKING CAPITAL:** C\$10.04 million (April 30, 2012)

**MARKET CAPITALIZATION:** C\$20.46 million (Sept. 28, 2012)

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Website: [www.nighthawkgold.com](http://www.nighthawkgold.com)

## NORTHWEST TERRITORIES & YUKON TERRITORY

### North American Tungsten Corp. Ltd.

**NTC:** TSX

**CHAIRMAN AND CEO:** Stephen M. Leahy,  
**CHIEF FINANCIAL OFFICER:** Harold Schwenk  
**CHIEF GEOLOGIST:** Finlay Bakker, P. Geo



North American Tungsten Corporation Ltd. focused in 2012 on optimizing production at the CanTung Mine, a longtime producer of tungsten concentrates from underground operations located in the Nahanni area of western Northwest Territories. Underground and surface diamond drilling is progressing with the objective of adding to minable resources. Various underground targets have been identified of which the principal is the Amber Zone, which was discovered early in 2012. Drilling also is proceeding on targets in the PUG Zone. The company conducted a 4,000-foot underground diamond drill exploration program from existing workings in the Amber Zone on the 3680 level, and about 450 feet east and 200 feet up-dip elevation. Significant results include 26.4 feet averaging 3.02 percent tungsten oxide (hole U1983) and 34.0 feet averaging 1.29 percent WO<sub>3</sub> (U1981). Higher grade intercepts included 18.4 feet averaging 4.09 percent WO<sub>3</sub> (hole U1981), 13.0 feet averaging 2.60 percent WO<sub>3</sub> (hole U1983), and 9.9 feet averaging 2.50 percent (hole U1984). N.A. Tungsten Chairman Stephen Leahy said the results include some of the highest grade intersections encountered outside of the known ore body over the past few years at CanTung and are especially important because of their close proximity to accessible workings at the mine. "Our focus will be on determining the size of this new zone, and how quickly we can place it into our production cycle," Leahy added. N.A. Tungsten also secured a class IV mining land use permit from the Government of Yukon that allows continuing exploration and development of its Mactung property. The permit includes road construction and underground development.

**CASH AND SHORT-TERM DEPOSITS:** C\$1.2 million (at June 30, 2012)

**WORKING CAPITAL (DEFICIENCY):** (C\$25.4 million) (at June 30, 2012)

**MARKET CAPITALIZATION:** C\$48.61 million (at Oct. 5, 2012)

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Tel: 604-684-5300 • Fax: 604-684-2992  
[www.natungsten.com](http://www.natungsten.com)

## NUNAVUT

### North Country Gold Corp.

**NCG:** TSX-V

**PRESIDENT AND CEO:** John Williamson, P. Geol.  
**VICE PRESIDENT AND CFO:** Sean Mager, B.Comm.

**VICE PRESIDENT, EXPLORATION:** Peter Kleespies, M.Sc, P.Geol.

North Country Gold Corp. focused in 2012 on advancing exploration at its Committee Bay Project, which hosts the Three Bluffs gold deposit in the 300-kilometer- (186 miles) long Committee Bay Greenstone Belt in central Nunavut. North Country has identified five distinct mineral development centers in its 2,147-square-kilometer (829 square miles) land package located 180 kilometers (112 miles) northeast of the Agnico Eagle Mining Ltd.'s Meadowbank gold mine. Three Bluffs is part of a structurally controlled lode gold system hosted within oxide facies iron formation and greywackes. The company planned to test the potential beneath the current resource area at the deposit. The drilling targeted high-grade gold mineralization over a strike length of 1,200 meters and a vertical extent of 300 meters, in the interval between 300 meters and 600 meters below surface. During the three months ended May 31, North Count spent about C\$7 million on its 2012 exploration program, reporting a significant increase in its resource estimate for the property, including an indicated resource of 4.30 million metric tons grading 4.90 grams per metric ton gold for 678,000 ounces and inferred resource of 4.53 million metric tons grading 5.69 g/t for 829,000 ounces. Later in the season North Country said it expanded and improved the Committee Bay gold resource from data collected on wide-spaced exploration drilling. The company also reported the sale of an Australia-based subsidiary, Toro Drilling Services Pty Ltd., for A\$752,000 cash.

**CASH AND SHORT-TERM DEPOSITS:** C\$3.62 million (at July 20, 2012)

**WORKING CAPITAL:** C\$3.57 million (at July 20, 2012)

**MARKET CAPITALIZATION:** C\$44.72 million (at Oct. 5, 2012)

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## YUKON TERRITORY

### Northern Freegold Resources Ltd.

**NFR:** TSX

**PRESIDENT AND CEO:** John Burges, B.Sc., P.Geol.

**CHAIRMAN:** John Anderson

**VICE PRESIDENT, EXPLORATION:** Paul Reynolds B. Sc., P. Geo.

Constrained by the tight financial markets, Northern Freegold Resources Ltd. explored its road-accessible Freegold Mountain gold and copper project located in central Yukon Territory with limited programs in 2012, after delivering an initial NI 43-101 resource estimate in January of 3.7 million ounces gold-equivalent at a 0.5 grams-per-metric-ton cut-off grade for the property's giant Revenue Zone. Freegold Mountain, located in the Whitehorse Mining District about 70 kilometers (43 miles) northwest of Carmacks, has a district-scale land package that exceeds 200 square kilometers (77 square miles) and more than 20 mineralized zones. The Revenue zone hosts a huge deposit that is rich in copper, gold, molybdenum and silver. It is adjacent to the Nucleus Zone, which also has an NI 43-101-compliant resource estimated 1.4 million ounces gold-equivalent in indicated resource and 898,000 ounces gold-equivalent in inferred resource at a 0.4 g/t cut-off grade. Northern Freegold believes both deposits, which remain open in all directions and at depth, along with the Stoddart Zone just to the east are part of a large-scale gold-rich porphyry system that extends in an east-west direction for more than 8 kilometers (5 miles). In May, the company raised more than C\$700,000, and used the money to help finance a 2,453-meter, five-hole diamond drill program at Nucleus that began in late May aimed expanding the existing gold resource at depth and to better understand the structural controls to mineralization. In late August, the company raised another C\$1 million in gross proceeds from an expedited private placement, designating the money to finance additional work at Freegold Mountain. Northern Freegold also owns other Yukon properties and the 2,000-acre Burro Creek gold-silver property in Arizona where it has estimated 122,000-ounce indicated and 82,000-ounce inferred gold-equivalent resources.



**CASH AND SHORT-TERM DEPOSITS:** C\$ \$1.23 million (at June 30, 2012)



**WORKING CAPITAL:** C\$1.50 million (at June 30, 2012; raised C\$1 million in financing in August 2012)

**MARKET CAPITALIZATION:** C\$18.92 million (Sept. 11, 2012)

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## YUKON TERRITORY

### Northern Tiger Resources Inc.

**NTR:** TSX-V

**PRESIDENT AND CEO:** Greg Hayes, CA

**DIRECTOR:** Lori Walton, M.Sc., G.G., P.Geol.

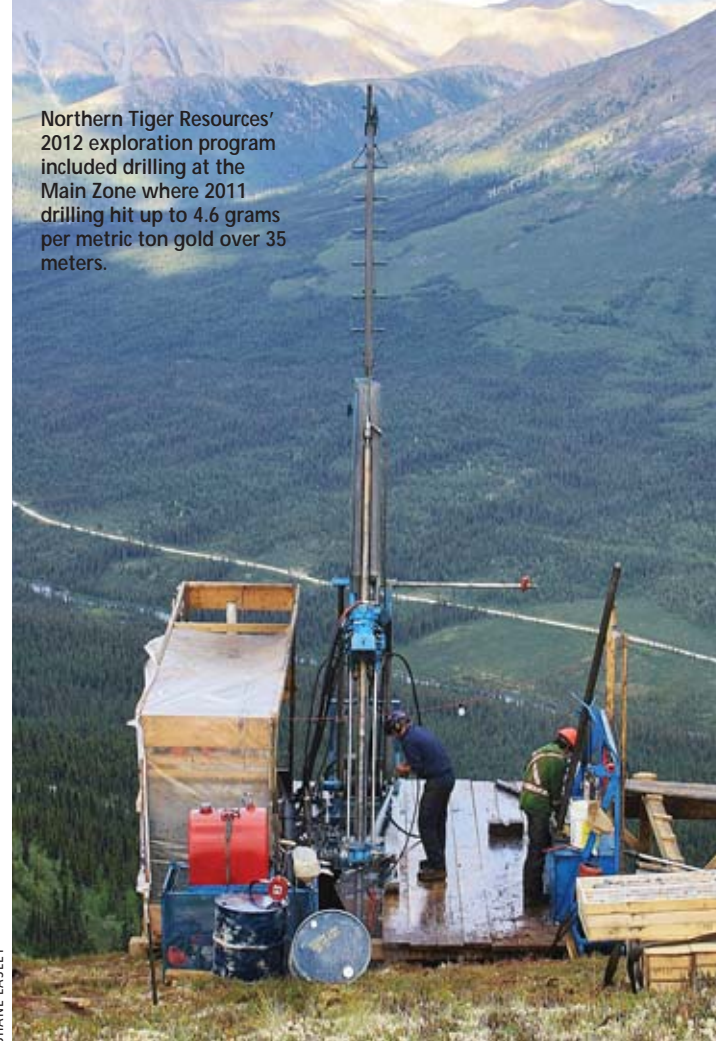
**VICE PRESIDENT, EXPLORATION:** Dennis Ouellette, B.Sc.



Northern Tiger Resources Inc. started diamond drilling at least 3,000 meters in mid-July on its 3Ace and Sprogge properties in southeastern Yukon Territory. The 2012 exploration program focused on testing new targets on both properties and attempting to expand the Main Zone (both along strike and down-dip), where 2011 drill highlights included up to 4.6 grams per metric ton gold over 35 meters. In August, Northern Tiger reported that channel sampling on a newly exposed quartz vein in the Sleeping Giant Zone at 3Ace confirmed the high-grade nature of gold mineralization previously reported from chip sampling that returned a weighted average of 50.3 g/t. The new high-grade vein segment is exposed for 25 meters along strike, and is estimated to be 3 meters wide. Results of additional trenching and channel samples prompted Northern Tiger to redirect a drill rig to the Sleeping Giant zone to test what the company believed was a second zone on the 3Ace Property to host high-grade gold mineralization. Seven holes (366 meters) were drilled and assays were pending in mid-September. The most advanced target on the Sprogge Property is the Sugar Bowl Zone, defined by a highly anomalous gold and pathfinder element geochemical signature measuring 2,400 meters by 1,200 metres. A 1,200-meter by 600-meter core area averages more than 200 ppb gold-in-soils and returned a maximum gold-in-soil value of 10.3 g/t. Rock chip samples taken along a 2.5-kilometer ridge bisecting the Sugar Bowl zone contain numerous multi-gram gold values up to a maximum of 34.8 g/t, and including 6.9 g/t gold over 12.0 metres and 9.6 g/t gold over 4.0 metres. Due to the continuing de-

SHANE LASLEY

Northern Tiger Resources' 2012 exploration program included drilling at the Main Zone where 2011 drilling hit up to 4.6 grams per metric ton gold over 35 meters.



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\*Socialnomics, Erik Qualman.

pressed market for junior exploration companies, no significant exploration was planned in 2012 for Northern Tiger's other Yukon properties, including the Sonora Gulch Project where a 9-square-kilometer (3.5 square miles) gold anomaly has been outlined, which covers at least three gold zones and a two-kilometer-by-one-kilometer (1.24 miles by 0.62 mile) copper-molybdenum anomaly.

**CASH AND SHORT-TERM DEPOSITS:** C\$1.23 million (April 30, 2012)  
**WORKING CAPITAL:** C\$ 1.15 million (April 30, 2012) (raised C\$60,000 in private placement in August 2012)  
**MARKET CAPITALIZATION:** C\$36.59 million (Sept. 9, 2011)

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 Edmonton, AB Canada T5S 1K7  
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## NUNAVUT

### Northquest Ltd.

**NQ:** TSX-V  
**CEO:** Jon North, Ph.D., P.Geo.  
**CHIEF FINANCIAL OFFICER:** Carmelo Marrelli  
**VICE PRESIDENT, EXPLORATION:** Dwayne Car

In Nunavut, Northquest Ltd. focused in 2012 on its Pistol Bay Gold Project where it planned to spend about C\$2 million on exploration. In July, the company commenced a second phase of exploratory drilling at its 575 square-kilometer (xx square miles) land package of mineral rights covering a 35-kilometer (22 miles) strike length of prospective stratigraphy containing numerous gold occurrences. Northquest anticipates that about 4,000 to 4,500 meters of drilling will be completed by the end of the 2012 season. Drilling targeted three of the known gold occurrences, including the Vickers Target, an elliptical, 1-kilometer (0.62 mile) diameter, gabbro-diorite intrusive complex within silicified schist and mylonite of the Pistol Bay Corridor. A gold-bearing, siliceous, chloritic breccia zone is exposed in the margin and footwall of the intrusion in surface outcrops. The contact between the mineralized intrusion and the mineralized footwall sequence dips south at about 70 degrees; hence, the drill holes were drilled towards the north. Northquest expects to complete 14 drill holes covering about 3,000 to 3,500 meters at the Vickers Target by the end of the season. In late September, the company said a second rig commenced drilling at Pistol Bay with the objective of completing two or three additional drill holes at the Vickers Target this season. Northquest also reported staking and filing recording applications for 13 claims comprising an additional 98 square kilometers (24,250 acres) of mineral rights that cover the western extension of the Pistol Bay Corridor, a 2-kilometer- (1.24 miles) wide, northwest-trending, deformation zone which contains multiple gold occurrences including the Vickers, Sako, and Bazooka targets. In addition, Northquest is exploring five gold projects in the Republic of Mali.


**CASH AND SHORT-TERM DEPOSITS:** C\$1.47 million (March 31, 2012)  
**WORKING CAPITAL:** C\$1.64 million (March 31, 2012; raised C\$1.2 million in financing in July)  
**MARKET CAPITALIZATION:** C\$22.54 million (Oct. 7, 2012)

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 www.northquest.biz

## ALASKA

### NovaGold Resources Inc.

**NOVAGOLD**

**NG:** TSX / NG: NYSE-MKT  
**CHAIRMAN:** Thomas Kaplan  
**PRESIDENT AND CEO:** Gregory Lang  
**SENIOR VICE PRESIDENT AND COO:** Gil Leathley

Rick Van Nieuwenhuyse, founder of NovaGold Resources Inc., handed the company's top executive office over to Greg Lang, who assumed the role of president and CEO in early January. This shift in leadership marks the final stages of NovaGold's transition from a premier Alaska and Northwest Canada exploration company to a mine developer focused on advancing its 50 percent interest in the 40-million-ounce Donlin Gold project. On Aug. 7, Donlin Gold LLC – owned 50-50 by subsidiaries of NovaGold and Barrick – submitted permit applications for development of the 40-million-ounce gold deposit in Southwest Alaska. It is expected to take about four years to gain the 100 or so permits needed to develop Donlin and, if the partners decide to move ahead with development, construction will take about as long. NovaGold's 15 years of exploration success has not completely come to a close. Both NovaGold and Barrick have indicated that they have only scratched the surface when it comes to the exploration potential at Donlin Gold. Van Nieuwenhuyse believes the eight-kilometer (five miles) mineralized trend at Donlin could more than double the amount of gold found there. Although, with reserves sufficient enough to produce 1.1 million ounces of gold per year for 27 years, there is no pressing urgency to investigate this upside potential.

NovaGold did contribute to a substantial drill program at the Galore Creek copper-gold project in northwestern British Columbia. Galore Creek Mining Co., a partnership held equally by NovaGold and Teck Resources Ltd., budgeted C\$35.4 million for 20,000 meters of exploration drilling, 5,000 meters of geotechnical drilling, engineering studies and maintenance at Galore Creek in 2012. According to a prefeasibility study completed in 2011, Galore Creek has proven and probable mineral reserves of 528 million metric tons averaging 0.6 percent copper, 0.32 grams per metric ton gold and 6.02 g/t silver. The PFS foresees Galore Creek producing 6.2 billion pounds of copper, 4 million ounces of gold and 65.8 million ounces of silver over an 18-year mine life – making it the largest copper mine in Canada. The PFS includes an enhanced plan that envisions adding some 200 million metric tons to these reserves by upgrading resources and expanding the pit to encompass the adjacent Bountiful zone. This work began with an 18-hole program carried out in 2011, 15 of which cut significant intercepts. Highlights include: GC11-0824 cut 185 meters grading 1.29 percent copper, 0.51 g/t gold and 9.5 g/t silver; GC11-0835 intersected 108 meters grading 1.25 percent copper, 0.81g/t gold and 10 g/t silver; GC11-0833 intersected 162 meters grading 1.09 percent copper, 0.54 g/t gold and 8.1 g/t silver; and GC11-0831 intersected 176 meters grading 0.90 percent copper, 0.42 g/t gold and 7.7 g/t silver. Twelve holes, including those highlighted, ended in mineralization. NovaGold is currently negotiating with a yet-to-be-named buyer for the sale of all or part of its 50 percent stake in Galore Creek.



**GREGORY LANG**

**CASH AND SHORT-TERM DEPOSITS:** C\$324.8 million (May 31, 2012)  
**WORKING CAPITAL:** C\$289.3 million (May 31, 2012)  
**MARKET CAPITALIZATION:** C\$1.7 billion (Sept. 21, 2012)

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## YUKON TERRITORY

### Pacific Ridge Exploration Ltd.

**PEX:** TSX  
**PRESIDENT AND CEO:** John S. Brock, B.Sc.



**VICE PRESIDENT, EXPLORATION:** Janice Fingler, M.Sc., P.Geo.  
**CHIEF FINANCIAL OFFICER:** Lei Wang, CGA

Pacific Ridge Exploration Ltd. directed the majority of its 2012 field work to the Mariposa Gold Project located in the White Gold district of Yukon Territory. A 2012 phase 1 exploration program, budgeted at C\$2.1 million for up to 2,500 meters of drilling commenced in early June and diamond drilling at Mariposa began during the second week of July. The exploration was concentrated mainly within the Skookum Main zone, where 18 holes were drilled in 2011, of which 14 intersected gold values. The best drill intersection contained 2.44 grams per metric ton gold over 38.9 meters. During preparation for a second year of drilling at Skookum Main, additional drill target enhancement and definition included trenching, pitting, and magnetic surveys have been carried out. The 2012 drilling includes fill-in holes to define continuity of gold mineralization, as well as step-out holes to test potential extensions of the three-square-kilometer (1.2 square miles) Skookum Main gold zone. Drilling also is planned to test a one-kilometer-long gold-in-soil anomaly at the Big Alex zone located west of Skookum Main and the Alberta Creek target, which is comprised of open-ended gold-in-soil anomalies discovered last season. Additional soil sampling and magnetic surveys carried out this year have been directed to further definition of potential drill targets.

**CASH AND SHORT-TERM DEPOSITS:** C\$2.93 million (June 30, 2012)  
**WORKING CAPITAL:** C\$2.84 million (June 30, 2012)  
**MARKET CAPITALIZATION:** C\$4.9 million (Sept. 17, 2012)

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## NUNAVUT

### Peregrine Diamonds Ltd.

**PGD:** TSX

**CHAIRMAN AND CEO:** Eric Friedland

**PRESIDENT:** Brooke Clements

**CHIEF GEOSCIENTIST:** Jennifer Pell, B.Sc. (Honors), Ph.D.



Peregrine Diamonds Ltd. focused in 2012 on its diamond exploration projects in Nunavut and Northwest Territories, spending more than C\$3 million on at least two successful exploration programs. In December, BHP Billiton Canada Inc., Peregrine's joint venture partner in the Chidliak Project located 120 kilometers (74 miles) northeast of Iqaluit, the capital of Nunavut opted to end the partnership and relinquish its 51 percent interest in the JV. Peregrine, which discovered Chidliak in 2008, has discovered 61 kimberlites to date on the property and is preparing to collect the first bulk samples from up to six kimberlites that show economic potential. In addition, more than 720 line-kilometers of ground magnetometer surveys were completed, 131 man-days were devoted to prospecting and mapping and 402 kimberlite indicator mineral samples were collected. Twenty overburden profile holes were drilled at the CH-6 kimberlite with a helicopter reverse circulation drill and the 2012 field program was to conclude after overburden profile holes were drilled at the CH-7 and CH-31 kimberlites. Some 20 kimberlite targets were generated from the 2012 prospecting and ground geophysical surveying programs. Testing of these targets by reverse circulation drilling, originally planned for this year, has been deferred to a future program. In September, Peregrine entered an option and subscription agreement with De Beers Canada Inc. whereby De Beers gained the exclusive right, until Dec. 31, 2013, to earn a 50.1 percent interest in the Chidliak project. De Beers agreed to complete a C\$2.5 million private placement unit offering in Peregrine priced at C75 cents per unit and to make the Jan. 31, 2013, C\$2.5 million payment due to BHP Billiton that is required under Peregrine's agreement to purchase BHP Billiton's 51 percent interest in Chidliak. Both the private placement and the payment will be credited towards De Beers' earn-in requirements, which also include De Beers investing C\$58.5 million into Chidliak to earn a 50.1 percent interest in the diamond project, with a minimum work commitment of C\$37 million.



**ERIC FRIEDLAND**



**BROOKE CLEMENTS**

Peregrine also followed up on 2011 exploration at its WO, Thelon and Peregrine projects in the Lac de Gras region of Northwest Territories. The company conducted winter ground geophysics and drilling at WO during March and April as part of a larger exploration program that resulted in the discovery of three kimberlites in the region. Peregrine found the LD-2 kimberlite on the WO property some 2.5 kilometers west of Peregrine's DO-27 kimberlite when a magnetic high anomaly with a surface expression of about one hectare (2.47 acres) was tested by core drilling. Peregrine owns a 72 percent in the nine-hectare (22.2 acres) DO-27 kimberlite located 27 kilometers (17 miles) from the Diavik Diamond Mine. DO-27 has a NI 43-101-compliant mineral resource of 18.2 million carats in 19.5 million metric tons of kimberlite at a grade of 0.94 carats per metric ton, which is open at depth. Peregrine also discovered the LD-1 kimberlite on its Thelon Joint Venture property located 40 kilometers (25 miles) northwest of the DO-27 kimberlite when a magnetic low anomaly with a surface expression of about one hectare (2.47 acres) was tested by core drilling. Peregrine owns 70.6 percent of the Thelon JV, which comprises 32 mineral claims covering 320 square kilometers (123.5 square miles). Further, the explorer identified with ground geophysics and drilling the LD-3 kimberlite located on the Peregrine property, which is located about seven kilometers southwest of the DO-27 kimberlite.

**CASH AND SHORT-TERM DEPOSITS:** C\$1.9 million (at Aug. 9, 2012)  
**WORKING CAPITAL:** C\$200,000 million (at Aug. 9, 2012)  
**MARKET CAPITALIZATION:** C\$37.56 million (Oct. 8, 2012)

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## BRITISH COLUMBIA

### Pretium Resources Inc.

**PVG:** TSX

**PRESIDENT AND CEO:** Robert A. Quartermain, BSc (Hons), MSc, P.Geo, DSc

**CHIEF EXPLORATION OFFICER:** Kenneth C. McNaughton, M.A. Sc., P.Eng.

**CHIEF GEOLOGIST:** Warwick Board, Ph.D., P.Geo, MAusIMM, Pr.Sci.Nat.

Pretium Resources Inc. is a mineral exploration company that is advancing the Brucejack Project, located 65 kilometers (40 miles) north-northwest of Stewart, B.C. and the Snowfield Project, which borders Brucejack to the north, in northern British Columbia. Combined, these projects are among the largest undeveloped gold resources in the world. Pretium completed an initial 2012 exploration program of 26,230 meters of drilling in 60 holes with six drills in the Valley of the Kings Zone in early June. In April, the company mobilized a seventh drill to site, and by the end of June, 154 drill holes had been completed or were in progress comprising some 46,845 meters of drilling. Pretium also released an updated mineral resource estimate for the Valley of the Kings, at 5.0 grams per metric ton gold-equivalent cut-off grade, of 4.9 million ounces of gold in the indicated resource category (8.9 million metric tons grading 17.3 g/t gold); and 10.4 million ounces of gold in the inferred resource category (12.7 million metric tons grading 25.5 g/t gold). The second phase of the 2012 Brucejack exploration program, underway in August, is focused on high-grade definition drilling of shallow high-grade Valley of the Kings resources, and testing its extensions and those of other high-grade zones. Pretium reported a record intersection at the Brucejack project in late July – hole SU-452 intersected 0.5 meters with uncut grades of 41,582 g/t gold and 27,725 g/t silver (1.6 feet averaging 1,212.8 ounces per ton gold and 808.6 oz/t silver), within a three-meter intersection with uncut grades of 8,330 g/t gold and 5,628 g/t (9.8 feet averaging 243.0 oz/t gold and 164.2 oz/t silver per ton). The company posted a bonanza-grade interval from hole SU-452 (including the record intercept) that extends over 10 meters, from a downhole depth of 198.79 meters, with an average grade of 2,393 g/t gold and 1,605 g/t silver uncut over 10.71 meters (70.3 oz/t gold and 46.8 oz/t silver over 35.1 feet). Hole SU-452 intersected a total of seven separate intervals grading more than 20 g/t gold, including 0.65 meters grading 1,130 g/t gold uncut from a downhole depth of 150.79 meters, along with intersections grading greater than 1,000 g/t gold in four additional drill holes. Pretium said it received a permit to begin an underground exploration program at Brucejack to access the Valley of the Kings underground by driving an exploration decline about 450 meters from the 1330 meter level of the existing West Zone underground workings to the 1314 meter level in the Valley of the Kings. The company expects to take an underground bulk sample in the Valley of the Kings in early 2013. Pretium has retained

Wardrop, a Tetra Tech Company to prepare a feasibility study on Brucejack, and Snowden Mining Industry Consultants to provide an underground resource model for the high-grade gold and silver resources identified in the Valley of the Kings and West zones. The feasibility study is expected to be completed by year's end 2012. An access road from the Brucejack Project to Highway 37 was expected to be completed in late 2012. Pretium planned to use a further update to the project's mineral resource estimate, anticipated by Sept. 30, as the basis for mine planning in the feasibility study, due for completion in early 2013.

**CASH AND SHORT-TERM DEPOSITS:** C\$73.87 million (June 30, 2012)  
**WORKING CAPITAL:** C\$75.7 million (June 30, 2012)  
**MARKET CAPITALIZATION:** C\$1.38 billion (Sept. 2, 2012)

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## YUKON TERRITORY

### Prophecy Platinum Corp.

**PNIKF:** OTC  
**CHAIRMAN AND INTERIM CEO:** John Lee  
**VICE PRESIDENT, CORPORATE DEVELOPMENT:** Rob Bruggeman  
**GENERAL MANAGER:** Joseph Li

Prophecy Platinum Corp. focused in 2012 on its flagship Wellgreen PGM Nickel Project located 320 kilometers (198 miles) from Whitehorse in southwestern Yukon Territory. One of the few mineral deposits in North America with all of the platinum group elements in significant quantities, the Wellgreen property has mineralization known to extend for 17.5 kilometers (nearly 11 miles). In January, Prophecy commenced a 9,000-meter underground diamond drilling program as part of an infill program for a NI 43-101-compliant resource estimated for the property in July 2011. The company also outlined a plan to complete 20,000 meters of combined surface and underground drilling in 2012 with a combined budget of about C\$15 million. At a 0.4 percent nickel-equivalent cut-off, Wellgreen is estimated to contain 14.3 million metric tons grading 0.99 grams-per-metric-ton platinum, 0.74 g/t palladium, 0.52 g/t gold (2.25 g/t PGM + gold), 0.69 percent nickel, and 0.69 percent copper in indicated resources and inferred resources of 289.2 million metric tons grading 0.53 grams per metric ton platinum, 0.42 g/t palladium, 0.23 g/t gold (1.18g/t PGM + gold), 0.38 percent nickel, and 0.35 percent copper at the same cutoff grade. Prophecy envisions producing bulk nickel-copper-PGE concentrated in a conventional, diesel truck-shovel open pit mine using a conventional concentrator with a 32,000-metric-tons-per-day mill feed. Over a projected mine life of 37 years, the mill would produce 1.959 billion pounds of nickel, 2.058 billion pounds of copper and 7.119 million ounces of platinum + palladium + gold in concentrate. In mid-September, Prophecy reported results from four surface holes and four underground holes, all of which intercepted significant mineralized widths, ranging from 28.5 meters (WS12-201) to 459.5 meters (WS12-193). Highlights include WU12-540, which returned 8.9 meters of 5.36 g/t platinum + palladium + gold, 1.73 percent copper and 1.01 percent nickel within 304.5 meters of 0.66 g/t platinum + palladium + gold, 0.20 percent copper, and 0.27 percent nickel. In August Prophecy said it was well-funded to execute the 2012 summer drill program, with two active rigs and pending assays from more than 20 underground and surface holes. Prophecy also reported preliminary results of metallurgical tests that indicate separate nickel-PGE-cobalt concentrates grading up to 12.9 percent nickel and copper-PGE-gold concentrates grading up to 23.2 percent copper can be produced from Wellgreen's disseminated PGE-Ni-Cu mineralization. The company is also exploring its Burwash property located immediately east of the Wellgreen project and known to host extensive nickel-copper-PGM mineralization. Prophecy is purchasing the Burwash property from Strategic Metals Ltd.



JOHN LEE

**CASH AND SHORT-TERM DEPOSITS:** C\$ 1.20 million (at June 30, 2012)  
**WORKING CAPITAL:** C\$1.45 million (at June 30, 2012; raised C\$3 million in August 2012)  
**MARKET CAPITALIZATION:** C\$105.11 million (Sept. 14, 2012)

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## NUNAVUT

### Prosperity Goldfields Corp.

**PPG:** TSX  
**PRESIDENT AND CEO:** Adrian Fleming  
**TECHNICAL ADVISOR:** Quinton Hennigh  
**CORPORATE ADVISOR:** Darren Devine

Prosperity Goldfields Corp. initiated its first drill program on the 590-square-kilometer (228 square miles) Kiyuk Lake Property near Nueltin Lake in central Nunavut in the summer of 2011, testing the Rusty, Cobalt and Gold Point targets. In May Prosperity completed a spring diamond core drill program to follow up the initial drilling and test undrilled targets with encouraging characteristics. The company completed 12 drill holes covering 2,652 meters at the Rusty, Gold Point, Cobalt, North Snake and Amundsen targets. The drilling intersected multiple zones of gold mineralization and confirmed the substantial potential at the Rusty Zone. The best intersection was 61.5 meters at 3.3 grams per metric ton gold, including 7.5 meters at 3.7 g/t gold; and 15.0 meters at 6.7 g/t gold from 159 meters in hole K112-003. Amundsen, a newly discovered gold zone, is the fourth gold zone at Kiyuk to provide significant drill results (following Rusty, Cobalt and Gold Point). Amundsen is located about 1 kilometer (0.62 mile) southwest of the Cobalt gold zone. The junior spent \$2,253,872 on exploration and evaluation costs during the three months that ended June 30. In July and August Prosperity completed a field check of a new glacial geology map of the property; collected till geochemical samples over the entire area and grid till samples of priority targets. The explorer also prospected and geologically mapped known targets and new areas of interest to refine its drill targeting. In October, Prosperity reported a new surface showing (Rasmussen) with values up to 6.96 g/t gold; three untested targets delineated from grid till sampling with values up to 3.6 parts per million gold and new areas of interest outlined from regional prospecting with values up to 25 g/t gold. Prosperity also terminated its option agreement on the Whiskey Property in Yukon Territory to focus on the Kiyuk project.

**CASH AND SHORT-TERM DEPOSITS:** C\$2.7million (June 30, 2012)  
**WORKING CAPITAL:** N/A  
**MARKET CAPITALIZATION:** C\$13.02 million (Oct. 8, 2012)

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## ALASKA

### Pure Nickel Inc.

**TSX:** NIC  
**PRESIDENT AND CEO:** David McPherson  
**CHAIRMAN:** R. David Russell  
**CHIEF GEOLOGIST:** Jon Findlay



Pure Nickel Inc., a junior with a portfolio of nickel and platinum group element projects in Canada and Alaska, is focused on exploring its Man nickel-copper-platinum group element project. Itochu Corp., which joined the project at the end of 2008, can earn a 75 percent interest in Man by spending US\$40 million on the Interior Alaska project by the end of 2013 – so far the company has spent US\$17 million and earned a 30 percent stake in the project. Itochu budgeted US\$4.9 million for exploration at Man in 2012. While Man continues to be prospective for a large nickel discovery, two other metals – platinum and palladium – are the current exploration focus. Four ultramafic complexes – Alpha, Beta, Canwell and Rainy – are found across the 290-square-mile- (750 square kilometers) Man property. Itochu funded a US\$4.1 million exploration program focused primarily on the Alpha complex in 2011. A total of 2,580 meters in 11 holes was completed, along with 151 line-kilometers of ground magnetometer surveys and 6.9 kilometers of ground electromagnetic surveys during the 2011 pro-



gram. PNI-036, the last hole of the 2010 season, cut 165.9 meters averaging 253 parts-per-billion (0.253 grams per metric ton) platinum + palladium, including 318 ppb (0.318 g/t) platinum and palladium over 24 meters. The disseminated sulfides, which averages 2.47 percent sulfide, was also observed in hole 28 about 2,700 meters to the west. Three holes targeting Alpha in 2011 did not cut economic PGE concentrations. Hole ER-11-02, drilled at the East Rainy complex, however, did encounter disseminated sulfides at several depths, with anomalous PGE values of up to 650 ppb over 2.52 meters. Though PGE mineralization has captured the explorer's attention at Man, the project's enormous land package has no shortage of precious and base metals targets to investigate. PNI-058, drilled at Rainey in 2011, cut 0.91 meters averaging 0.21 percent copper and 0.65 percent nickel. In addition to the nickel-copper-PGE targets found throughout the claim block, the northern portion of the property has gold potential. Pure Nickel said the 2011 work was valuable in developing new models for mineralization at Man and several key target areas have been identified for follow-up work.

In August, Pure Nickel began a 2,000-meter drill program at its Salt Chuck property on Prince of Wales Island in Southeast Alaska. The historical Salt Chuck Mine produced some 300,000 metric tons of ore, reported by U.S. government summaries (1948) to average 0.95 percent copper, 1.96 g/t palladium, 1.12 g/t gold and 5.29 g/t silver. The mine was the largest producer of palladium in the USA during its era of production. The temperate climate on Prince of Wales Island is favorable for year-round drilling.

**CASH AND SHORT-TERM DEPOSITS:** C\$2.58 million (at May 31, 2012)

SHANE LASLEY



Rockhaven Resources 2012 drilling focused on the Klaza property in central Yukon Territory which hosts seven parallel structural zones of gold-silver mineralization with a cumulative mineralized strike length of 6,100 meters.



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**WORKING CAPITAL:** C\$4.66 million (at May 31, 2012)  
**MARKET CAPITALIZATIONS:** C\$5.09 million (at Aug. 23, 2012)

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## YUKON TERRITORY

### Rockhaven Resources Ltd.



**RK:** TSX-V

**CHIEF EXECUTIVE OFFICER:** Matthew A. Turner

**CHIEF OPERATING OFFICER:** Ian J. Talbot

**VICE-PRESIDENT OF BUSINESS DEVELOPMENT:** Marc G. Blythe, P.Eng.

Rockhaven Resources Ltd. currently holds interests in 11 mineral exploration properties in Yukon Territory. The junior focused in 2012 on the Klaza property in central Yukon, which hosts seven parallel, 1-75 meters wide, structural zones of gold-silver mineralization with a cumulative mineralized strike length of 6,100 meters. The zones consist of quartz-sulphide veins, breccias and fracture networks, which are spatially associated with quartz-feldspar porphyry dykes that intrude granitic country rocks. The zones, which exhibit exceptional lateral continuity, collectively form a 1.5-kilometer-wide by 8-kilometer-long northwesterly-trending structural corridor. Diamond drilling of 8,000 meters began in early June intended to test several unexplored anomalies on the 60-square-kilometer (23.2 square miles) property and expand the Klaza and BRX zones. Concurrent with the drilling, about 5,000 meters of excavator trenching was conducted along strike of the known zones and to test other targets on the property. Soil geochemical surveys and prospecting was also completed in other areas of the property to define additional targets for drilling or trenching. By mid-August, Rockhaven had four skid-mounted diamond drills testing the seven main zones and flanking subsidiary structures. Of the 50 holes completed by Aug. 23, 48 intersected targeted precious metal zones, and all zones remained open for expansion along strike in both directions and at depth. Together, they form a 1.5-kilometer-wide-by-8-kilometer-long northwesterly-trending structural corridor. To date, drilling and trenching have tested less than 20 percent of the Klaza project's prospective target area. Rockhaven Aug. 27 said it would raise another C\$2 million in a private placement to finance additional 2012 drilling at Klaza.

**CASH AND SHORT-TERM DEPOSITS:** C\$5.44 million (April 30, 2012)  
**WORKING CAPITAL:** C\$6.98 million (April 30, 2012; raised C\$2.02 million in a July private placement)  
**MARKET CAPITALIZATION:** C\$18.32 million (Sept. 2, 2012)

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## BRITISH COLUMBIA

### Romios Gold Resources Inc.

**RG:** TSX-V/RMIOF:NASDAQ OTC/D4R:FE

**PRESIDENT AND DIRECTOR:** Anastasios (Tom) Drivas

**CHIEF FINANCIAL OFFICER:** Michael D'Amico, CA

Vice President, Exploration and Geologist: Thomas Skimming, P. Eng. Romios Gold Resources Inc. focused its 2012 exploration activities Romios on its gold-copper properties located in northern British Columbia. Following up on extensive 2010 and 2011 programs at its Trek, Newmont Lake and the Dirk properties, Romios undertook a C\$1.4 million exploration campaign in June on the Newmont Lake Project consisting of diamond drilling on the Northwest, Ken, '72, and Telena zones, with additional ground magnetic and magneto-telluric geophysical surveys planned at both Newmont Lake and Trek. The junior also planned more prospecting and geochemical sampling to test for extensions of existing mineralization and identification of new high-grade gold and copper mineralization on both the Newmont Lake and Trek projects. In late August, Romios re-



ported completing 15 diamond drill holes totaling 2,613 meters at Newmont Lake. In addition, the junior completed a technical review of the Trek Property's North Zone and confirmed extensions of geophysical conductors to the north and south. Romios also acquired about 5,700 hectares (14,085 acres) of mineral tenures, bringing to some 72,000 hectares (177,912 acres) its holdings in the vicinity of Pretium Resources' Brucejack deposit, Barrick Gold's Eskay Creek mine and the Galore Creek Mining Corp.'s Galore Creek project. The mineral tenures expand Romios' land position southward along the projected metallogenic corridor of the Newmont Lake Project. Field evidence acquired during Romios' 2012 summer exploration campaign confirms that the mineralized zones on the Newmont Lake Project coincides with the BC Ministry of Mines' interpretation of a volcanic massive sulphide belt of mineralization which extends over a distance of at least 20 kilometers (12.4 miles).

**CASH AND SHORT-TERM DEPOSITS:** C\$3.73 million (March 31, 2012)  
**WORKING CAPITAL:** C\$3.73 million (March 31, 2012)  
**MARKET CAPITALIZATION:** C\$17.24 million (Aug. 27, 2012)

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Tel: 416-221-4124 • Fax: 416-218-9772  
www.romios.com

## YUKON TERRITORY

### Ryan Gold Corp.

**RYG:** TSX-V

**INTERIM CHIEF EXECUTIVE OFFICER:** David Schmidt

**PRESIDENT:** Shawn Ryan

**ACTING CHIEF GEOLOGIST:** Andy Randell



**SHAWN  
RYAN**

Ryan Gold Corp. is an exploration company focused primarily on prospects in Yukon Territory. A well-funded explorer, the company holds a 4,700-square-kilometer (1,815 square miles) land package comprised of 80 different properties. Ryan Gold's flagship Ida Oro property is located 85 kilometers (53 miles) east of Dawson City in central Yukon. In 2012 the explorer's work program included drilling 6,000 meters on Ida Oro. At Ida Oro, the company advanced a program of step-out drilling to further test the extent of gold-in-soil anomalies explored in 2011. In September, Ryan Gold reported significant drill results and metallurgical test results from Ida Oro. Of the 28 eight diamond drill hole (7,525 meters) completed this summer, assays had now been received for 13. The best intersections hit 8.97 meters grading 2.31 g/t gold from 72.63 meters in hole IO12-016; and 50.72 meters grading 2.04 g/t gold from 113.32 meters, including 8.77 meters grading 7.01 g/t Au from 140.70 meters in hole IO12-026. Ryan Gold planned to drill 1,500 meters on a large untested gold-in-soil anomaly on the Flume Property located about 60 kilometers southwest of Dawson City in the heart of the gold rich 10-Mile River placer district of west-central Yukon. The company hoped to define controls and distribution of gold mineralization in 2012 as highlighted by the gold-in-soil anomaly and associated structural features defined from the magnetic and radiometric survey. Should results warrant, the company said it could drill a further seven holes in the 2012 season. Ryan Gold has an option with Bearing Resources Ltd. to earn up to a 75 percent interest in the Flume property.

Ryan Gold also explored the Kluane Properties located in a largely unexplored area of the Whitehorse Mining District in southwestern Yukon to follow up encouraging results of ridge and spur soil sampling from 2011 that identified significant anomalies in a number of project areas. The objective of the 2012 Kluane program is to ground truth those ridge and spur anomalies identified in the 2011 exploration program with the view to following up with grid soil geochemical sampling and mapping. The company also planned to evaluate a number of priority targets with infill grid and ridge and soil geochemical sampling, rock chip sampling, and mapping, collecting up to 23,800 soil samples and about 1,200 rock chip samples. In addition, Ryan Gold intended to spot check lower priority targets to determine whether further exploration on these targets is warranted.

At the Mahtin Project in the Mayo Mining District, Ryan Gold planned follow-up work involving geological mapping of the grids in the project and completion of ridge and spur sampling on the Alp/Forty, May and Qu claim blocks, collecting 6,000 soil samples and 600 rock samples. Spot anomalies from ridge and spur sampling and geophysical target areas identified also were ground truthed and mapped. Ryan Gold also carried



smaller programs in a number of other property areas including 50 Mile, Cantung, Nug and McQuesten, mostly involving mapping and soil and rock chip sampling to determine if follow up exploration programs (grid soil sampling and/or drilling) are warranted.

Ryan Gold also planned to collect about 30,000-50,000 soil samples, both grid and ridge and spur, over a number of its properties, and undertake reconnaissance and detailed mapping, concentrating on areas where significant anomalies were found in 2011 to determine if any further property areas will be drill-worthy for 2013.

As of Sept. 11, the company forecast for expenditures in 2012 totaled roughly C\$21.9 million, including about C\$5.9 million budgeted for Ida Oro, C\$2.1 million for Flume, C\$900,000 for Mahtin, C\$2.2 million for the Kluane projects, C\$1.7 million for other projects and C\$2.5 million for a quartz claims payment that is due. Ryan Gold also said it was seeking a more advanced-stage project in which to expend about C\$4.0 million of its flow-through commitment in 2012.

**CASH AND SHORT-TERM DEPOSITS:** C\$41.13 million (June 30, 2012)

**WORKING CAPITAL:** C\$36.16 million (June 30, 2012) (raised C\$52.3 million in June 2011)

**MARKET CAPITALIZATION:** C\$39.83 million (Sept. 20, 2012)

Suite 2800 - 1 Adelaide St. East  
Toronto, ON Canada M5C 2V9  
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www.ryangold.com

## NUNAVUT

### Sabina Gold & Silver Corp.

**SBB.V:** TSX-V

**PRESIDENT AND CEO:** Robert Pease

**VICE PRESIDENT, CORPORATE DEVELOPMENT:** Jason Hynes

**VICE-PRESIDENT, EXPLORATION:** Angus Campbell



In 2012 Sabina Gold & Silver Corp. carried out extensive exploration programs on its Back River Gold Project and Wishbone Property in

Nunavut focused on continuing to add ounces to resources and advance the Back River project to the development stage. At Back River, the company mainly targeted infill, geotechnical and extension drilling of existing deposits in support of the upcoming Back River Pre-Feasibility Study anticipated in 2013. At Wishbone, Sabina planned to assess the resource potential of the newly discovered Lucky 7 trend with additional drilling. Sabina reported multiple high-grade intersections from up to 76,000 meters of extension, resource conversion and geotechnical drilling at Back River, along with the discovery of a new shallow zone of gold mineralization, the Wing Zone, between the proposed Umwelt and Llama open pits. The Wing Zone was discovered by drill holes targeting the extension of the Llama deposit at depth. Hole 12GSE226 intersected 12.68 grams per metric ton gold over 15.45 meters in the western part of the zone starting at a down-hole depth of 52.00 meters. The hole then went on to intersect the eastern limb of the fold returning several significant intercepts including 5.86 g/t gold over 1.05 meters, 3.91 g/t gold over 3.00 meters, 4.19 g/t gold over 2.95 meters and 17.63 g/t gold over 0.60 meters between 213.10 and 245.80 meters depth. The hole finally intersected its target at depth, returning 7.14 g/t gold over 4.05 meters in the deep extension of the Llama Main West zone. Below the zone, a sample from a sediment-hosted dyke yielded 7.08 g/t gold over 0.80 meters. Much of Sabina's work in 2012 has focused on extending the Umwelt deposit at depth. Planned conversion holes both in the G2 Zone and some 200 meters below the proposed Umwelt pit continue to demonstrate the continuity of the deposit. At Wishbone, Sabina planned to drill 15 holes on the Lucky 7 target where hole SWB-11-07 intersected 6.45 g/t gold over 4.50 meters and 71.3 g/t gold over 1.50 meters. As a result of the discovery, Sabina staked 73 new claims in 2011 to the east and south of the existing property. With exploration expected to wind down in early October, the company said drilling results would be reported through the fall. At June 30, Sabina had spent C\$26.2 million and drilled of 33,737 meters at Back River; C\$4.3 million and 5,639 meters at Wishbone as well as smaller sums on exploration programs at its Ontario and Manitoba properties.

**CASH AND SHORT-TERM DEPOSITS:** C\$152.9 million (at June 30, 2012)

**WORKING CAPITAL:** N/A

**MARKET CAPITALIZATION:** C\$528.81 million (Oct. 9, 2012)

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## BRITISH COLUMBIA & NORTHWEST TERRITORIES

### Seabridge Gold Inc.

SEABRIDGE GOLD

**SEA:** TSX and SA: NYSE Amex  
**CHAIRMAN AND CEO:** Rudi P. Fronk  
**PRESIDENT AND COO:** Jay S. Layman  
**SENIOR VICE PRESIDENT, EXPLORATION:** William E. Threlkeld

Seabridge Gold Inc. is a development stage company focused on the KSM (Kerr-Sulphurets-Mitchell) property in Northwest British Columbia, which is one of the world's largest undeveloped gold/copper projects, and the Courageous Lake property located in the Slave Province of Northwest Territories. "Our business plan from inception has been to grow gold resources and reserves, while minimizing equity dilution. With an estimated 6.5 million ounces of newly defined proven and probable reserves at Courageous Lake, combined with the 38.2 million ounces of gold reserves estimated at our KSM project, we now report total proven and probable gold reserves of 44.7 million ounces. Not only does this rank Seabridge among the top 10 companies in the world with respect to gold reserves, but with only 43.4 million common shares outstanding, we provide our shareholders with more than one ounce of gold reserves per common share outstanding. Furthermore, this entire reserve base is located in Canada, one of the safest and most mining-friendly jurisdictions in the world," CEO Fronk said in announcing the completion of a C\$5 million preliminary feasibility study for the Courageous Lake project in July. At KSM, proven and probable reserves are estimated at 2.2 billion metric tons grading 0.55 grams per metric ton gold, 0.21 percent copper and 2.74 g/t silver. Seabridge's 2012 exploration objective for the project is to determine whether it has a high-grade core like other world-class copper-gold systems. A growing body of evidence now suggests that such a core remains to be discovered on the KSM claims at a reasonable depth and that it was the source not only of the Kerr, Sulphurets, Mitchell and Iron Cap porphyry zones but also the neighboring Snowfields and Brucejack deposits. "Six years of intensive exploration and data analysis strongly suggest that the six deposits in the immediate area are distinct yet related mineralizing events likely generated by a single magmatic source. The vertically-zoned mineral assemblages were then displaced laterally by regional thrust faulting. What is most encouraging to us is that the total displacement along these faults now appears to have been just a few hundred meters, not kilometers. The core should therefore be close to the existing KSM deposits at a reasonable depth. A magnetotelluric geophysical survey conducted last year has identified several distinct resistivity targets which could represent the core," Fronk said. The junior planned to drill 11 deep holes totaling about 7,500 meters this summer on four distinct targets. In the updated PFS, the junior outlines a 55-year combined open-pit/underground block-caving mining operation and milling about 130,000 tpd from open-pit mining during the first 25 years.

At Courageous Lake, Seabridge converted nearly 1.2 million ounces of previously disclosed inferred resources in 2011 to measured and indicated categories in a C\$6 million, 52-hole exploration program. Fronk said Seabridge believes the most cost effective way to improve project economics is to add to reserves. Thus, in the C\$8.5 million exploration program for 2012, the junior drilled highly prospective targets that can be accessed easily by the operation proposed in its PFS with the objective of finding a second major gold deposit along the 52-kilometer- (33 miles) long Matthews Lake Greenstone Belt. In addition to 12,500 meters of core drilling, Seabridge also planned detailed airborne magnetic and electromagnetic geophysical surveys over the thickest part of the belt.

**CASH AND SHORT-TERM DEPOSITS:** C\$35.4 million (June 30, 2011)  
**WORKING CAPITAL:** C\$39.3 million (June 30, 2012)  
**MARKET CAPITALIZATION:** C\$712.61 million (Aug. 25, 2011)

106 Front Street East, Suite 400  
Toronto, Ontario M5A 1E1  
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www.seabridgegold.net

## YUKON TERRITORY

### Selwyn Resources Ltd.



**SWN:** TSX-V  
**CEO:** Harlan D. Meade, Ph.D.  
**PRESIDENT:** Stephen Rea, MBA  
**VICE PRESIDENT, EXPLORATION:** Jason Dunning

Selwyn Resources Ltd. focused in 2012 on exploration and development of the Selwyn Project in eastern Yukon Territory, which it owns 50-50 with China-based Chihong Canada Mining Ltd. The Selwyn project hosts large tonnages of zinc-lead mineralization that extends across the border into Northwest Territories. The project has the potential for large-scale production. Known zinc and lead mineralization hosted within favorable strata has been traced by drilling over a continuous strike length of 37.5 kilometers on the property and exceeds 154.35 million metric tons grading 5.35 percent zinc and 1.86 percent lead of indicated resources, and 234.15 million metric tons grading 4.54 percent zinc and 1.41 percent lead of inferred resources. At Selwyn, 14 deposits and zones have been defined, including high-grade underground mineralization which could be initially targeted in development that exceeds 16 million metric tons grading 10.25 percent zinc and 4.23 percent lead in indicated resources, and 26.7 million metric tons grading 8.81 percent zinc and 2.81 percent inferred resources. In the second-quarter of 2012, the company spent C\$9.6 million on exploration, engineering and permitting at the Selwyn Project, including more than C\$1.6 million on drilling. An updated NI 43-101 resource estimate for the project's Don deposit reported Aug. 13 included results from a 14-hole, 10,638.5-meter drill program completed in April, which increased Selwyn's indicated mineral resources by 2.60 percent at a base case 2.0 percent zinc cut-off grade and inferred resources by 4.84 percent at the same cut-off grade.



HARLAN MEADE



JASON DUNNING

Cash and short-term deposits: C\$7.63 million (at Aug. 28, 2012)  
Working capital: C\$7.25 million (at Aug. 28, 2012)  
Market capitalization: C\$37.29 million (Sept. 4, 2012)

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Vancouver, BC Canada V6B 2Z6  
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## YUKON TERRITORY

### Silver Range Resources Ltd.

**SNG:** TSX-V  
**PRESIDENT AND CEO:** W. Douglas Eaton, B.A., B.Sc.  
**CHAIRMAN:** Bruce A. Youngman, B.Sc.  
**CHIEF OPERATING OFFICER:** Ian J. Talbot, B.Sc., LLB.

Silver Range Resources Ltd., a 2011 spin-out from Strategic Metals Ltd., is exploring bulk tonnage targets at the silver-enriched Silver Range Project located 10-40 kilometers (6-25 miles) north of Faro in southern Yukon Territory and gold-rich Mint Project located 26 kilometers (16 miles) south of the Alaska Highway in southwest Yukon. Aggressive follow-up work programs were carried out at both projects in 2012, with budgeted expenditures of about C\$9 million at Silver Range and C\$1 million at Mint. The 2012 exploration programs used at least four drills to complete at least 16,000 meters of drilling at a total phase one cost of \$10.2 million. At 1,100-square-kilometer (424.6 square miles) Silver Range, the company focused on its 2011 Hammer Zone discovery and other high-grade silver-gold showings within the 17-kilometer- (10.5 miles) long Mount Mye Trend. In early August, Silver Range reported bonanza-grade intercepts in the silver-rich epithermal vein system at Hammer, including 4,620 grams per metric ton silver (134.8 ounces per ton) over 0.53 meters in sulphide mineralization and 1,590 g/t silver (46.4 oz/t) over 0.70 meters in oxide mineralization. Expansion drilling was completed at the Keg Main Zone, where bulk-tonnage, silver-polymetallic mineralization has been outlined along an 850-meter strike length and to vertical depths of 350 meters. The company also aimed to advance multiple additional targets for high-grade or



bulk-tonnage silver mineralization to drill readiness by systematic surface exploration. The project hosts 17 silver-bearing mineralization zones, plus 15 discrete soil geochemical anomalies that await follow-up prospecting, mapping and sampling. At the 50-square-kilometer (19 square miles) Mint Project, a first-ever drilling program tested gold-copper porphyry mineralization associated with extensive soil geochemical and coincident IP chargeability/magnetic anomalies.

**CASH AND SHORT-TERM DEPOSITS:** C\$16.42 million (at June 30, 2012)  
**WORKING CAPITAL:** C\$13.35 million (at June 30, 2012)  
**MARKET CAPITALIZATION:** C\$23.23 million (Sept. 4, 2012)

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## BRITISH COLUMBIA

### SnipGold Corp.

**SK:** TSX-V  
**CHIEF EXECUTIVE OFFICER:** John Zbeetnoff, P.Geo  
**CHIEF OPERATING OFFICER:** James (Jim) Sparling, P.Geo, MBA  
**VICE PRESIDENT, CORPORATE DEVELOPMENT:** Susan P. Craig, M.Sc., P.Geo.

SnipGold Corp., formerly Skyline Gold Corp., focused in 2012 on exploring its principal asset, the Iskut Property northwestern British Columbia with a seven-hole, 2,000-meter first-phase drill program. As of Aug. 02, 2012, SnipGold had drilled 1,517 meters in six holes, SG12-22 to SG12-27 aimed at testing electro-magnetic conductors located in the southwestern part of the property to determine the character of the structural controls and style of any mineralization associated with airborne electro-magnetic conductors identified on the property. Four holes had been completed along the Burnie Trend, as well as one hole at the C-1 area and a single hole at Johnny Flats. SnipGold said the program was proceeding below the projected cost, allowing for its drill contract to be extended and holes in the Gorge area and along the Snip-Bronson Trend to be added to the program. In addition, the cost effective execution of the 2012 exploration will allow for Borehole Pulse Electromagnetic surveys of historical holes and other prospective areas. SnipGold, which changed its name in May, also had planned a second phase of its 2012 program subject to satisfactory completion of phase 1. The Iskut Property is adjacent to the historic Snip Gold Mine, which yielded more than 1 million ounces gold at an average grade of 25.32 grams per metric ton gold.

**CASH AND SHORT-TERM DEPOSITS:** C\$1.37 million (at June 14, 2012)  
**WORKING CAPITAL:** C\$1.37 million (April 30, 2012; raised C\$1.65 million in July 2012)  
**MARKET CAPITALIZATION:** C\$9.21 million (Aug. 27, 2012)

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## YUKON TERRITORY & BRITISH COLUMBIA

### Strategic Metals Ltd.

**SMD:** TSX-V  
**PRESIDENT AND CEO:** W. Douglas Eaton, B.A., B.Sc.  
**CHAIRMAN:** Bruce A. Youngman, B.Sc.  
**CHIEF OPERATING OFFICER:** Ian J. Talbot



Over the past 15 years, Strategic Metals Ltd. has assembled an impressive portfolio of some 160 mineral properties and royalty interests in Yukon, British Columbia and western Northwest Territories, including many that are currently under option to other companies. Strategic recently expanded its wholly-owned Midas Touch project to cover over 1,200 square kilometers (463 square miles) of prospective stratigraphy for Carlin-type gold mineralization south of Atac Resources Ltd.'s Osiris discovery. Midas Touch now hosts four areas of orpiment-realgar mineralization, arsenic sulphide minerals that are often associated with Carlin-style gold deposits. At the Crag property, recent drilling by Strategic confirmed that a

hydrothermal system is gold-bearing and large in extent. The pathfinder element signature is consistent with the upper portions of a Carlin system, and requires further drilling to depth. Three other areas of orpiment-realgar mineralization are new discoveries located through follow-up prospecting of regional pathfinder and/or gold geochemical anomalies. At the Crag East property, situated 14 kilometers (9 miles) southwest of the Atac discoveries, scout drilling intersected strong orpiment/realgar within favorable carbonate rocks and high pathfinder elements over broad intervals. The most extensive geochemical anomalies identified to date occur on the Crag East property where arsenic values in soil are on average greater than 200 parts per million over strike lengths of more than 2,000 meters and widths of 1,000 meters. At the Trent zone, continued diamond drilling encountered similar results to 2011 work, including 0.4 grams per metric ton gold over 7.04 meters. Two holes drilled at the Crag South zone cut locally sheared, strongly listwaenitized ultramafic rocks with weak gold values, including 0.25 g/t gold over 6.09 meters. At Crag East, widely spaced drilling encountered hydrothermally altered limestone with realgar and other arsenic minerals was encountered in a number of holes, but to date no economic grade gold mineralization has been found. Mapping and drilling at the Scarlet East project optioned from Rackla Metals Inc. identified favorable host rocks and several structurally complex zones that coincide with 2011 gold and arsenic soil geochemical anomalies. In early September, Strategic also began a reverse circulation drill program at its Zakco and Tagai properties located in the Nechako Plateau of central British Columbia. Drilling tested a number of geochemical and geophysical anomalies. Some of the holes will target porphyry copper-gold mineralization, while others search for structurally hosted gold zones similar to those at NewGold Inc.'s Blackwater-Davidson project, located about 75 kilometers (47 miles) to the southwest, which hosts an indicated resource of 5.5 million ounces of gold and an inferred resource of 2.3 million ounces of gold.

**CASH AND SHORT-TERM DEPOSITS:** C\$39.08 million (June 30, 2012)  
**WORKING CAPITAL:** C\$90 million (Sept. 5, 2012)  
**MARKET CAPITALIZATION:** C\$81.14 million (Sept. 4, 2012)

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## ALASKA

### Tintina Resources Inc.

**TINTINA**RESOURCES

**TAU:** TSX-V  
**EXECUTIVE CHAIRMAN:** Rick Van Nieuwenhuyse  
**CEO AND EXECUTIVE VICE CHAIRMAN:** Raj Chowdhry  
**VICE PRESIDENT, EXPLORATION:** Jerry Zieg

Tintina Resources Inc. emerged on the Alaska mining scene in 2009 when NovaGold Resources Inc. rolled 397,680 acres of its early-stage Alaska exploration properties into the Vancouver B.C.-based junior. Tapping NovaGold's exploration expertise, Tintina appointed Rick Van Nieuwenhuyse as executive chairman of its board of directors and re-cruited geologist Jerry Zieg to become the junior's vice president of exploration. Spending 2011 focused on its Black Butte (formerly known as Sheep Creek) copper-cobalt property in Montana, Tintina Resources returned to Alaska in 2012 with a 2,500-meter drill program at its Baird copper-zinc project in Northwest Alaska. Tintina believes the large-scale copper-zinc mineralized exposures at Baird - a 70,160-acre (28,393 hectares) property situated between Teck Resources' Red Dog zinc mine and the Ambler mining district being explored by NovaCopper Inc. - could lead to a significant new discovery. The 2012 drill program focused on Omar, Deadfall, and Frost - three targets within a 300-square-kilometer (116 square miles) area enriched with copper, zinc, cobalt, lead and silver. The Omar target exhibits mineralization over a 4,000-by-2,000-meter area with coincident copper and zinc soil and rock chip anomalies. Historical drilling at Omar cut 22.8 meters averaging 3.99 percent copper, 6.1 meters grading 9.37 percent copper and 7.32 meters averaging 2.95 percent copper. The Deadfall target consists of a 4,000-meter-long zinc and copper anomaly. Although no drilling has been completed on this target, channel sampling of outcrops has identified significant bedrock mineralization. Results from continuous channel sampling include 36 meters averaging six percent zinc



**RAJ CHOWDHRY**



After focusing in 2011 on the Black Butte copper-cobalt property in Montana, Tintina Resources returned to Alaska in 2012 with a 2,500-meter drill program at its Baird copper-zinc project in Northwest Alaska. Hole OM12-003 targeted Omar, a prospect with numerous occurrences of copper sulfide as chalcopyrite, bornite and chalcocite hosted in brecciated dolostone along a 3,000-meter-long structurally complex zone. Select rock samples from along this zone show up to 34.3 percent copper, 0.85 percent zinc and 0.4 percent cobalt.









The Eagle Gold Deposit lies near the top of a low mountain that overlooks the 2012 exploration camp of Victoria Gold Corp. on the Dublin Gulch Property in central Yukon Territory. The deposit has a NI 43-101-compliant gold resource of 2.3 million ounces in reserves, plus 4.8 million ounces in indicated and 1.5 million ounces in inferred resources.

VICTORIA GOLD CORP.

and 21.7 grams per metric ton silver, including 12 meters averaging 10.1 percent zinc and 42.4 g/t silver.

Tintina is earning a 60 percent joint venture interest in the 9,600-acre Omar claim block from Teck Resources Ltd. The Deadfall, Frost and Peak targets lie on 60,560 acres of 100 percent owned Alaska mining claims. Tintina Resources also owns the Kugruk project about 70 miles (110 kilometers) north of Nome. The 177,280-acre property hosts copper-iron skarns, silver-lead-zinc prospects and placer gold rich drainages. The juxtaposition of these various mineral systems leads the explorer to believe that a large-scale iron oxide-copper-gold deposit could be hidden below the loess that covers this prospect.

**CASH AND SHORT-TERM DEPOSITS:** C\$18.4 million (at June 30, 2012)

**WORKING CAPITAL:** C\$18.3 million (at June 30, 2012)

**MARKET CAPITALIZATION:** C\$49 million (at Oct. 1, 2012)

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## ALASKA

### TNR Gold Corp.

**TNR:** TSX-V

**EXECUTIVE CHAIRMAN AND PRESIDENT:** Gary Schellenberg

**VICE PRESIDENT, EXPLORATION:** John Harrop

Following a five-year hiatus, TNR Gold Corp. returned to Alaska in 2012 to confirm a 1 million-ounce gold resource at its Shotgun project in the Kuskokwim Gold Belt of western Alaska. Located about 110 miles (175 kilometers) south of Donlin Gold and about the same distance northeast of Pebble, this property lies at the intersection of two trends known to host big deposits. When TNR Gold optioned Shotgun from NovaGold Resources Inc. in 2002 the property had a historical resource of 980,000 ounces grading 0.93 grams per metric ton at a zone known as Shotgun Ridge. 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. TNR's early investigation of the property did not focus on the resource area, instead drilling targeted several other prospects — with a particular focus on Winchester, a promising intrusion-related zone about 10 miles (16 kilometers) south of Shotgun Ridge. Highlights from the drilling completed at Winchester include 23.6 meters averaging 1.9 grams per metric ton gold in hole 06-45; 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. Shot and King are two other prospects the junior has investi-

gated. A small drill program targeting the historical resource area returned what could be the most significant hole of this past program. Hole 06-43, drilled at Shotgun Ridge, cut 210.5 meters averaging 1.29 g/t gold and includes a 27.4-meters 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 geologists. This hole transformed the understanding of structures controlling mineralization at Shotgun Ridge and revealed feeder zones, opening the gold resource to depth. A geophysical orientation survey conducted in 2011 revealed previously unknown structures within Shotgun Ridge that appear to correlate well with geology and mineralization identified in drilling. TNR secured a C\$3.5 million loan from a private backer, providing the junior with the funds to mount an 814-meter drill program at Shotgun 2012. The loan — to be repaid by May 31, 2015 — is secured by a promissory note and general security agreement and bears an annual interest rate of 20 percent. The three-hole program carried out in 2012 targeted mineralization to depth along the southwest dipping feeder zones identified in hole 06-43. SR12-56 — drilled approximately 50 meters northwest of and parallel to hole 43 — cut 242 meters averaging 1.25 grams per metric ton gold. Holes 12-57 and 12-58 were drilled about 30 meters west of 06-43. TNR said the geology, sulfide mineralization and structural features encountered in the three holes drilled are similar to that found in 06-43, providing the company with confidence in extending this zone along strike and to depth with further drilling. Following up on the success of 2011 three-dimensional induced polarization-resistivity survey, the company carried out additional geophysical work in 2012. One grid was centered on a surface geochemical gold anomaly at the Winchester prospect. Two other grids were designed to extend the 2011 survey at Shotgun Ridge.

**CASH AND SHORT-TERM DEPOSITS:** C\$1.86 million (June 30, 2012)

**WORKING CAPITAL:** C\$367,570 (June 30, 2012)

**MARKET CAPITALIZATION:** C\$14.77 million (Sept. 13, 2012)

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## ALASKA

### Ucore Rare Metals Inc.



**UCU:** TSX.V/ UURAF: OTCQX

**PRESIDENT AND CEO:** James McKenzie

**CHIEF OPERATING OFFICER:** Ken Collison

Ucore Rare Metals Inc. is rapidly steering its Bokan Mountain-Dotson Ridge project in Southeast Alaska toward becoming a primary United



States source of dysprosium, terbium, yttrium and other heavy rare earth metals. Based on 9,550 meters of drilling completed at Bokan, Ucore released an inaugural resource estimate for the REE deposit in 2011. At a 0.4 percent total rare earth oxide cut-off grade, the property hosts an inferred resource of 5.3 million metric tons averaging 0.65 percent TREO. Some 40 percent of the rare earths in the resource are the higher value heavy rare earth oxides. A 10,112-meter drill program carried out in 2011 focused on upgrading and expanding this resource. The 34-hole program, which has confirmed the integrity and continuity of the mineralization, is being incorporated in an updated resource estimate. Ucore's primary focus in 2012 is on the metallurgical and engineering work for a preliminary economic assessment being carried out by Wardrop, a Tetra Tech Company. One of the programs involved in this work is the use of an x-ray transmission sorter to reject waste before ore reaches the mill. Results from testing three one-ton bulk samples show that 46 percent of the feed could be rejected as waste with 93 percent recovery of rare earth oxides. This essentially doubles the grade of the ore being fed into the mill. Ucore increased the scale of testing the x-ray sorter with a 20-ton bulk sample extracted from three sites along its Bokan Mountain in June. A local contractor crushed and segregated the material into four specified size fractions, prior to the samples being transported to Germany to be processed through a production scale X-ray sorter to prepare an upgraded ore sample for future metallurgical testing. Ucore is also testing an innovative process for processing the rare earths, referred to in scientific circles as solid phase extraction. Montana-based IntelliMet LLC treated a representative sample of Bokan ore with nitric acid, generating a solution containing the rare earths and other elements contained in the ore. An additional processing step prior to bulk precipitation of the REE prevents the generation of an impure precipitate containing the unwanted elements. On a bench scale, the tests showed that more than 99 percent of detrimental contaminant elements, including uranium and thorium, can be removed from Bokan ore prior to the precipitation of a mixed REE concentrate. In October, the United States Department of Defense contracted with Ucore to further this metallurgical work at Bokan. This program is focused on the possibility of Bokan as a source of critical heavy REEs for the Department of Defense. A mine plan completed in April determined that blast-hole stoping, based on a mining rate of 1,500 metric tons per day, is the most appropriate method for the project. The mine plan, metallurgical and other studies are being incorporated into a preliminary economic assessment due out by the end of 2012.

In addition to Bokan, Ucore is exploring a placer deposit of rare earths at its Ray Mountain property in Interior Alaska. To better understand the placer potential, Ucore collected alluvial samples from upper Kilolitna River, Ray River, and No Name Creek during a field investigation carried out in 2011. Using gravity separation, Ucore concentrated these measured samples collected from the Ray Mountain drainages. Assays of these concentrates returned up to 50 percent tin; as much as 10 percent total REE; and 0.01 to 1 percent tungsten, tantalum and niobium. Heavy rare earths – including terbium, dysprosium, erbium and yttrium – make up 15 to 25 percent of the total rare earth content in the majority of samples. As much as 60 percent of the TREO content of samples collected at No Name Creek is the prized HREEs. The company said most of the initial samples were collected directly from surface exposures, and the heavy mineral content can be expected to increase at greater depths within the alluvium. In some areas the gravels are reported to be as much as 100 meters deep.

**CASH AND SHORT-TERM DEPOSITS:** C\$4.5 million (at June 30, 2012)  
**WORKING CAPITAL:** C\$4.6 million (at June 30, 2012)  
**MARKET CAPITALIZATION:** C\$62.9 million (at Sept. 17, 2012)

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## YUKON TERRITORY

### Victoria Gold Corp.

**VIT:** TSX-V  
**PRESIDENT AND CEO:** John McConnell  
**VICE PRESIDENT - YUKON:** Mark Ayranto  
**VICE PRESIDENT, EXPLORATION:** Richard Eliason



Victoria Gold Corp., (formerly Victoria Resource Corp.), is a gold exploration company focused on bringing the Eagle Gold Deposit on its Dublin Gulch property in central Yukon Territory into production in 2014/2015. The

deposit has a NI 43-101-compliant gold resource of 2.3 million ounces in reserves, plus 4.8 million ounces in indicated and 1.5 million ounces in inferred resources. In 2012 the company released drilling results from Eagle Gold following the completion of a feasibility study for the Eagle Project in February, and drilling results in March, which included 47.2 meters of 2.1 grams per metric ton gold. The current program, begun in November and planned for 17,000 meters of drilling, explored untested areas within the planned open pit limits. Recent results demonstrate the potential for continued expansion of the gold resource and an enhanced understanding of the deposit. Additional drilling is targeted to further delineate extensions of gold mineralization. Hole DG12-482C encountered 4.5 meters of 1.52 g/t gold and 7.5 meters of 1.15 g/t gold below currently planned pit limits. By Mat 29, 37 holes had been completed for a total of 11,822 meters. These holes were all targeted to improve the knowledge base at the Eagle gold deposit with an emphasis on discovering new mineralization, improving mineable grades and eventually optimizing mine scheduling. Other goals include reclassifying grade blocks from inferred to indicated and enhancing the understanding of alteration and oxidation controls and distribution. The drill program was scheduled for completion in the third quarter of 2012, at which time the additional data was expected to be incorporated in a revised resource and reserve model.

**CASH AND SHORT-TERM DEPOSITS:** C\$30.60 million (at June 26, 2012)  
**WORKING CAPITAL:** C\$56.70 million (at June 26, 2012)  
**MARKET CAPITALIZATION:** C\$78.17 million (Sept. 4, 2012)

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 Toronto, Ont. Canada M5H 2A4  
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 www.victoriaresourcecorp.com

## BRITISH COLUMBIA

### Yellowjacket Resources Ltd.

**YJK:** TSX  
**PRESIDENT AND CEO:** Charles C. "Chuck" Downie, P.Geo.  
**CHAIRMAN:** Tim J. Termuende, P.Geo.  
**CHIEF FINANCIAL OFFICER:** Glen J. Diduck, CA

Yellowjacket Resources Ltd., spun out in December 2011 from Eagle Plains Resources Ltd., is focused on the Yellowjacket Gold Project located 9 kilometers (5.6 miles) east of Atlin, B.C. In a plan of arrangement, the junior acquired the Yellowjacket gold project, together with C\$600,000 cash, C\$969,020 in investment assets and reclamation bonds of C\$150,522. The project is the site of a gold rush in the late 19th century that produced more than 1 million ounces of recorded gold. Yellowjacket intends to develop lode gold mineralization at three known zones and along strike within the project in hopes of identifying a substantial gold resource that will attract the acquisition interest of a large mining company. Yellowjacket's 2012 exploration program consisted of a minimum of 2,500 meters (8,200 feet) reverse circulation drilling, ground-based geophysics and geological mapping designed to provide data to upgrade the near-surface resource calculation for future open pit mining operations. Step-out drilling will provide information about the continuity of gold mineralized zones away from the main Yellowjacket Zone. In addition to the RC drilling, Aurora Geosciences Ltd. of Whitehorse conducted a ground-based geophysical survey of the Pine Creek valley in order to better define the location of the main Pine Creek structure. The survey will be used to help target drill holes. Geological mapping also focused on bedrock exposed by recent placer mining in the eastern area of the Rock of Ages pit. Eagle Plains owns 15 percent of the outstanding common stock of Yellowjacket Resources Ltd.

**CASH AND SHORT-TERM DEPOSITS:** C\$1.38 million (June 30, 2012)  
**WORKING CAPITAL:** C\$2.41 million (June 30, 2012)  
**MARKET CAPITALIZATION:** C\$5.88 million (Sept. 1, 2012)

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 Cranbrook, B.C. Canada T2P 2Z1  
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 www.yellowjacketresources.com





MILLROCK RESOURCES INC.



SHANE LASLEY



NOVACOPPER INC.

(Clockwise from top) SE12-008, the discovery hole at the RPM Showing at the Estelle property in Alaska, cut 102.1 meters averaging 1.04 g/t gold (page 42).

NovaCopper Inc.'s camp at the Upper Kobuk Mineral Project rests alongside the headframe that Kennecott used to explore the Ruby Creek zone in Northwest Alaska nearly half a century ago (page 50).

Minus 40F temperatures did not prevent a mid-January launch of the 2012 drill program at Freegold Venture's Golden Summit project in Interior Alaska (page 26).





(From top) Geologists investigate the Sunshine volcanogenic massive sulfide prospect at the Upper Kobuk Mineral Project in Northwest Alaska (page 50).

Avalon Rare Metals completed nearly 23,000 meters of drilling during 2012 at its Thor Lake REE project in Northwest Territories (page 54).

The Aurora dancing over Comstock Metals' QV gold project south of Dawson City signals the looming close of the summer exploration season in Yukon Territory (page 57).



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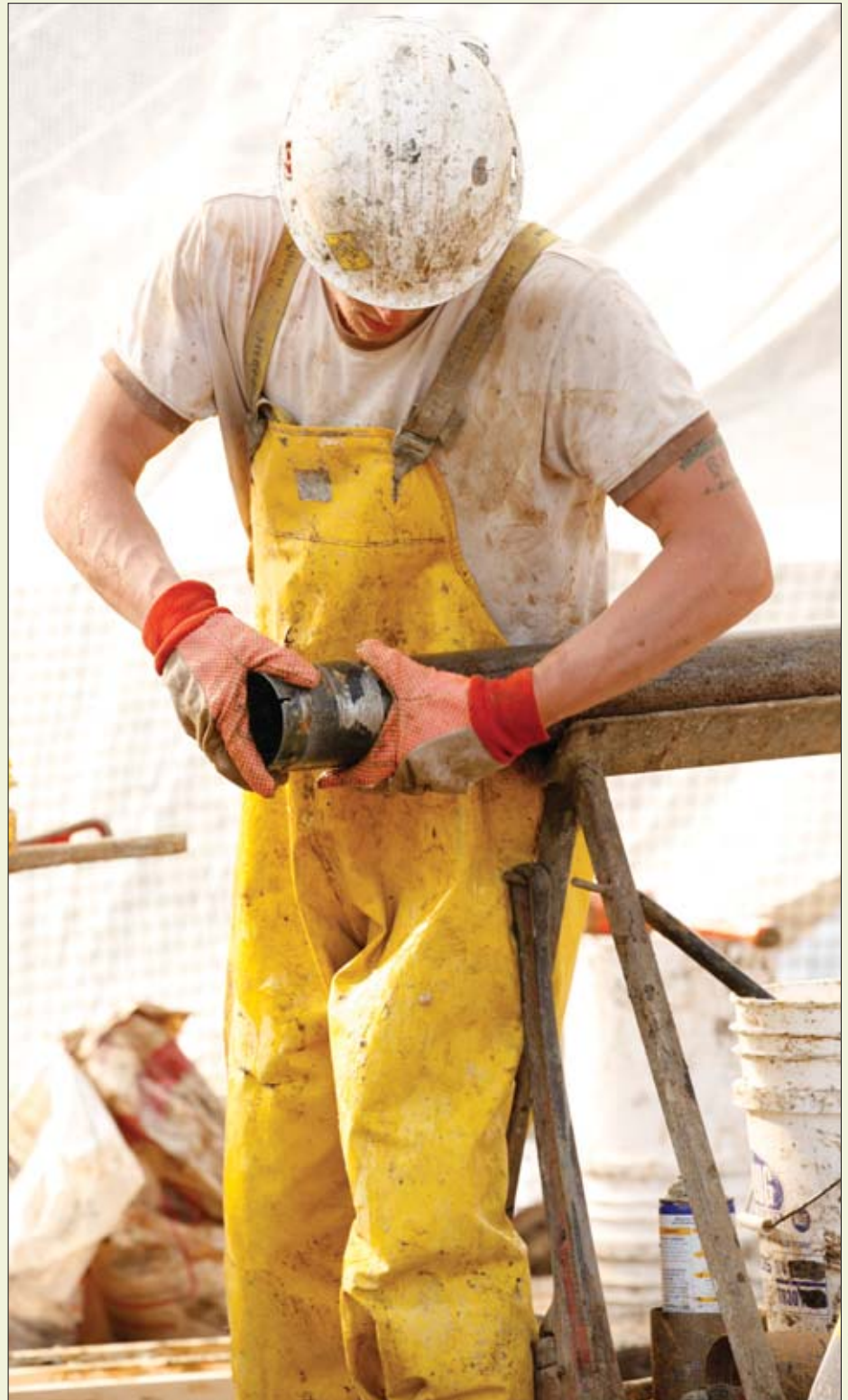
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