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**NWT** EXPLORERS

# Spring is nearing for mining explorers!

The cyclical nature of mineral exploration markets is reminiscent of my early years spent as a placer gold miner a few clicks south of the Arctic Circle. The summers were a time of frantic activity as I, and my fellow gold miners, endeavored to make the most of every minute of the long, warm summer days that the land North of 60 has to offer. When winter enveloped this northern land with snow, we placer miners of the North hoped that our summer bounty would be enough to sustain us through the cold, dark months to come.

Not unlike the seasonal cycles of mining alluvial gold in the Arctic, junior mineral explorers face the extremes of working busy market summers and surviving long winter months when the rivers

of equity are frozen.

As an observer of both cycles, it seems to me that mineral exploration markets this time around have reached early March – a time when sunlight reflecting off of the white landscape of the Far North provides the promise of the coming spring but radiates little warmth on those eager for the prosperous days of summer to return.



SHANE LASLEY

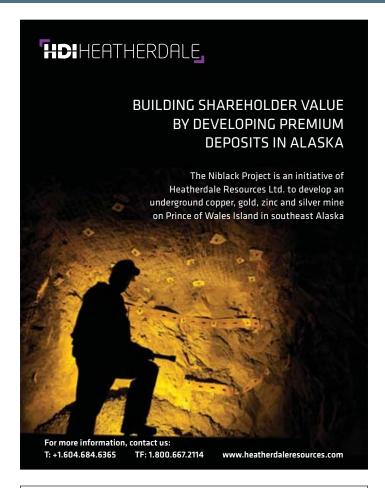
For mining explorers with gold left in the poke (money in the bank), this transition to spring is a time to revel in the prospect of warmer days to come. Those who are eating their last cans of soup, however, yearn for an early spring, while pondering ways to survive a lingering winter. For all, a freshet of venture capital will be a welcome event that will once again fund a season of robust exploration across the North.

Even in these waning months of a harsh equity winter, more than 40 companies mounted million-dollar-plus exploration programs at promising mineral projects across Alaska, Yukon, Northwest Territories, Nunavut and northern British Columbia during 2014.

Drawing on its unparalleled coverage of the mining industry in these jurisdictions, North of 60 Mining News is proud to present Mining Explorers 2014, the sixth annual edition of the magazine that showcases these explorers who endure the extreme seasonal fluctuations to seek the rich troves of minerals for which Alaska and Canada's North are known.

To stay up-to-date on whether a break in the current financial winter will come in time to provide for the mining explorers seeking to unlock the vast mineral potential of Alaska and Canada's

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#### **Mining Explorers**

Released November 2014

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#### Cover photo:

First Quantum Minerals Geologist Tim Ireland collects a sample at the Warner Bay prospect on the Alaska Peninsula project, a 1.6-million-acre- (650,000 hectares) tract of land for which Millrock Resources Inc. has secured an exploration agreement with option to lease.

First Quantum agreed to fund an initial US\$600,000 exploration program in exchange for an exclusive right to enter into an option to joint venture on this large copper and gold project in Southwest Alaska.

Photo by Phil St. George Courtesy of Millrock Resources Inc.

> Printed by Journal Graphics, Portland, Oregon



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GOOD FYEAR

# DNR tackles broad spectrum of issues

State regulators continue battle to improve, modernize resources management in numerous ways to benefit miners and general public

By ED FOGELS

Special to Mining Explorers

The increasing crush of complex issues and decisions facing state land managers has a silver lining for Alaskans and our mining industry. It means things are happening. The busier we are at the Department of Natural Resources, the better Alaska is doing, in terms of jobs, revenue and overall economic health.

Much already has been said in this publication about the difficulties facing large mining projects in Alaska. On many fronts, the State is engaged in a continual battle to maintain and protect a state and federal permitting system for large mines that has worked very well in Alaska. So I will focus on some other issues that have not received quite as much attention.

We are pleased to report that Alaska's placer miners just finished off a busy summer season. DNR processed 447 placer mining applications this year, with about 312 operations on state land. Our staff spends a considerable amount of time in the field visiting these operations and provides much assistance to these miners to ensure responsible operations.

That said, small-scale miners in Alaska face some serious issues, with more stringent federal regulations and policies under development. Our staff is working closely with the U.S. Army Corps of Engineers as it rewrites its general per-

Corps of Engineers as it rewrites its general permit for small placer mining operations. The Corps' draft permit recently published for public comment has elicited considerable concern, and DNR is asking the Corps to develop a general permit that is workable for the small miners. The Corps is not the only federal agency focused on placer mining right now: the U.S. Bureau of Land Management is in the process of revising placer mining reclamation performance standards and re-writing its staff procedures on placer mine permitting.

Wetland issues remain at the forefront of our efforts to improve the permitting environment in Alaska. We are still extremely interested in the possibility of the State of Alaska assuming the wetlands permitting program for Alaska from the Corps. I believe that in the long run, more state control over this critical permitting function can only benefit us. The state has had much success in assuming another major permitting program from the federal government – the wastewater discharge permit program.

In addition to state assumption, the State is also looking at ways to better handle wetlands compensatory mitigation. Currently, the norm in Alaska is for a project proponent to pay everincreasing sums of money for every acre of disturbed wetlands or impacted streams – money that is subsequently used to buy and



Ed Fogels, Deputy Commissioner, Alaska Department of Natural

lock up additional land. Alaska has largely-intact wetlands and more wetlands acreage than anywhere else in the United States. Lower 48 compensatory solutions don't work here because we don't have many degraded natural areas to restore. Can't we use this money to instead address real environmental problems? Restoring fish habitat by fixing perched culverts, for example? The state is looking for solutions that will help public and private development. Until then, small-scale placer miners, homebuilders and our own Department of Transportation and Public Facilities are caught by regulations that are not flexible for our unique and abundant natural lands.

We are always looking for ways to improve our permitting process. One of our strongest efforts is in developing a modernized system to manage the permitting business process in DNR's Division of Mining, Land and Water. This division has the highest permitting workload within our department, and has developed a serious backlog over the years (we have cut this backlog by over 50 percent in the last few years!). Our updated business process is already handling some of the permitting workload and we continue to make improvements almost daily. In time, we hope that we can thoroughly modernize the permitting systems not only within this division but throughout the entire department.

Our staff at the Division of Geologic and Geophysical Surveys has been busy, too. This year, DGGS has released airborne geophysical surveys for more than 2,500 square miles (6,477 square kilometers) of new ground in the Wrangellia and Farewell areas. It also has published data from the re-analysis of thousands of old samples collected by the BLM, the U.S. Bureau of Mines, and the U.S. Geological Survey with modern analytical techniques. To find this information, please visit http://www.dggs.alaska.gov/

But perhaps the most exciting news from DGGS is the imminent opening of its new Geologic Materials Center facility in Anchorage. As many of you probably know, the old facility in Eagle River was worse than inadequate. The new location, a large warehouse space previously occupied by a Sam's Club, will not only provide secure storage, but also improved accessibility to our geologic materials for decades to come. This new facility will allow school groups and the public to understand the importance of geology to every Alaskan. We expect the entire collection of geologic materials from Eagle River to the new center to be moved by early next summer.

Another exciting development for us is the creation of the Governor's Alaska Geospatial Council. This body is tasked with developing a system to better coordinate geospatial data throughout the state, and also with completing a new and accurate digital base map of the state using new satellite imagery and an accurate digital elevation model. The council has already acquired new 2.5

continued on next page

#### LASLEY continued from page 5

North in 2015, please visit us at www.miningnewsnorth.com. From the informative News Nuggets in our weekly online newsletter to the in-depth analysis in our monthly editions, North of 60 Mining News keeps readers up to date on the activities of mining and exploration companies Alaska, Yukon, Northwest Territories, Nunavut and northern British Columbia as well as the is-

sues and events important to the mining sector across this vast and mineral rich region.

Thank you, and I hope you enjoy Mining Explorers 2014.

— Shane Lasley, publisher, North of 60 Mining News

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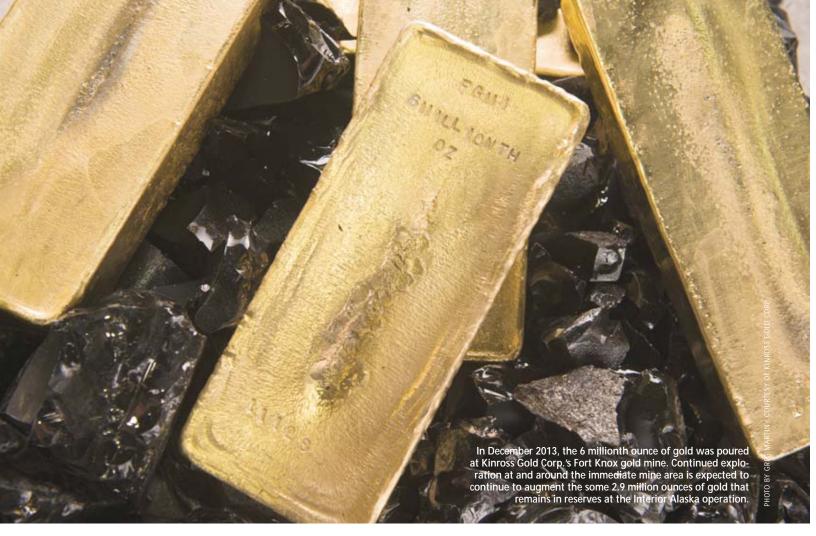
meter SPOT satellite imagery for the entire state, and it is about halfway done with a statewide 5-meter digital elevation model. This base map will prove valuable to scientific researchers and the general public – not to mention mineral explorers– and is driving the development of the new USGS topographic maps. For more information, go to http://agc.dnr.alaska.gov/

I have described just a few of the projects we are working on. It has been an exciting time here at DNR, and we are all trying hard to continually find ways to improve the way we manage Alaskans' vast portfolio of natural resources.

Ed Fogels is deputy commissioner of the Alaska Department of Natural Resources, responsible for overseeing five divisions – Agriculture, Forestry, Mining, Land & Water, Parks and Outdoor Recreation and Support Services – as well as the Office of Project Management and Permitting.







Alaska Exploration 2014

# A quiet year for Alaska explorers

Japanese mineral exploration investments resonate in Last Frontier void

By SHANE LASLEY
Mining News

ineral exploration spending in Alaska will likely struggle to top US\$80 million for 2014, a dramatic fall from the US\$365.1 million pinnacle reached in 2011.

"The din of mineral industry activity that is normally a part of the summer months in Alaska is decidedly muted this year as the global mining industry attempts to lift itself off the bottom of a plus-18-month-long slump," Avalon Development President Curt Freeman opined in a June column written for Mining News.

Unlike 2013, where a handful of big-budget projects across Alaska helped soften the blow landed by unruly equity markets, in 2014, only a single mining explorer operated in Alaska with an exploration budget north of US\$15 million. Previous big spenders – such as Novagold, NovaCopper, Pebble Partnership and Con-

tango Ore – carried out minimal exploration programs at best.

"Some Alaska projects are moving forward but most field budgets are small with commensurately reduced goals attached. Larger mining companies, many under new management, are rapidly shedding non-core assets while revising budgets and timeframes for exploration, new development and planned operational upgrades," longtime Alaska geologist Freeman added.

While many companies are turning down the volume at promising mineral projects across the Alaska landscape, a pair of Japanese firms dialed up mineral exploration investments in the Last Frontier.

#### \$17M of exploration at Pogo

Sumitomo Metal Mining Pogo LLC – a joint venture between Japanese firms Sumitomo Metal Mining Company (85 percent) and Sumitomo Corp. (15 percent) ranked as the most prolific

mining explorer in Alaska during 2014.

Located roughly 60 miles (100 kilometers) southeast of Fairbanks, the companies' Pogo gold mine lies in the heart of Alaska's eastern Interior, a roughly 85,000-square-mile (220,207 square kilometers) swath of Alaska that stretches westward from the Yukon Territory border and is flanked by the Brooks Range to the north and the Alaska Range to the south.

The Japan-based owners of Pogo are spending roughly US\$17 million on defining and expanding new deposits immediately adjacent to the underground workings at their high-grade gold mine this year.

"Some of the companies are reducing their exploration costs; we aren't doing that," said Sumitomo Metal Mining Pogo General Manager Chris Kennedy.

Instead, the company is ratcheting up exploration and delineation drilling at East Deep, North and South Pogo, three zones of high-grade gold mineralization adjacent to the current underground workings at Pogo.

A few miles beyond the southeastern exploration horizon of Pogo proper, subsidiaries of Sumitomo Metal Mining (95 percent) and Sumitomo Corp. (5 percent) continue a broader search for high-grade gold on a group of claims that are part of the Stone Boy project.

The Stone Boy partners have been exploring the larger Pogo district since 1991. This includes recent drilling on the Monte Cristo property, located about 40 miles (65 kilometers) west of Pogo, and the Ink claims situated roughly 15 miles (24 kilometers) southeast of the mine.

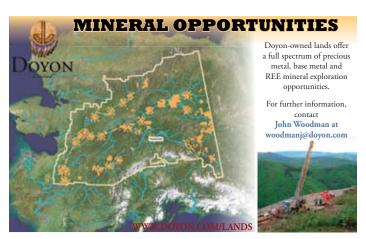
Sumitomo is not the only global mining company that is interested in this segment of the Tintina Gold Belt that trends southeast from Pogo Mine.

Over the course of 2012 and 2013, Newmont Mining Corp. staked two blocks of claims – Healy and Healy River – immediately south of Stone Boy's Ink property.

Newmont North America Exploration Ltd., the North American exploration arm of the Colorado-based global gold miner, completed a reconnaissance-stage program of geochemical sampling and mapping at its Healy claims during 2013.

Mining News was unable to confirm whether Newmont is conducting exploration at Healy this year, but the fresh claims staked in 2013 is a good sign of continued interest in the area.

Roughly 100 miles southeast of Pogo, Contango ORE is sitting on a gold-copper-silver skarn deposit at the Peak zone of its Tetlin project with an initial 1.1 million-ounce gold-equivalent resource and a 760,000-acre land package with enough "blue sky" potential to keep a mineral exploration company busy for decades.

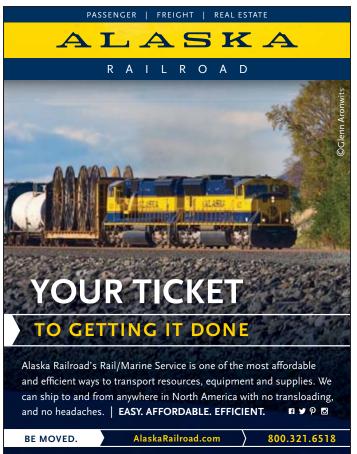


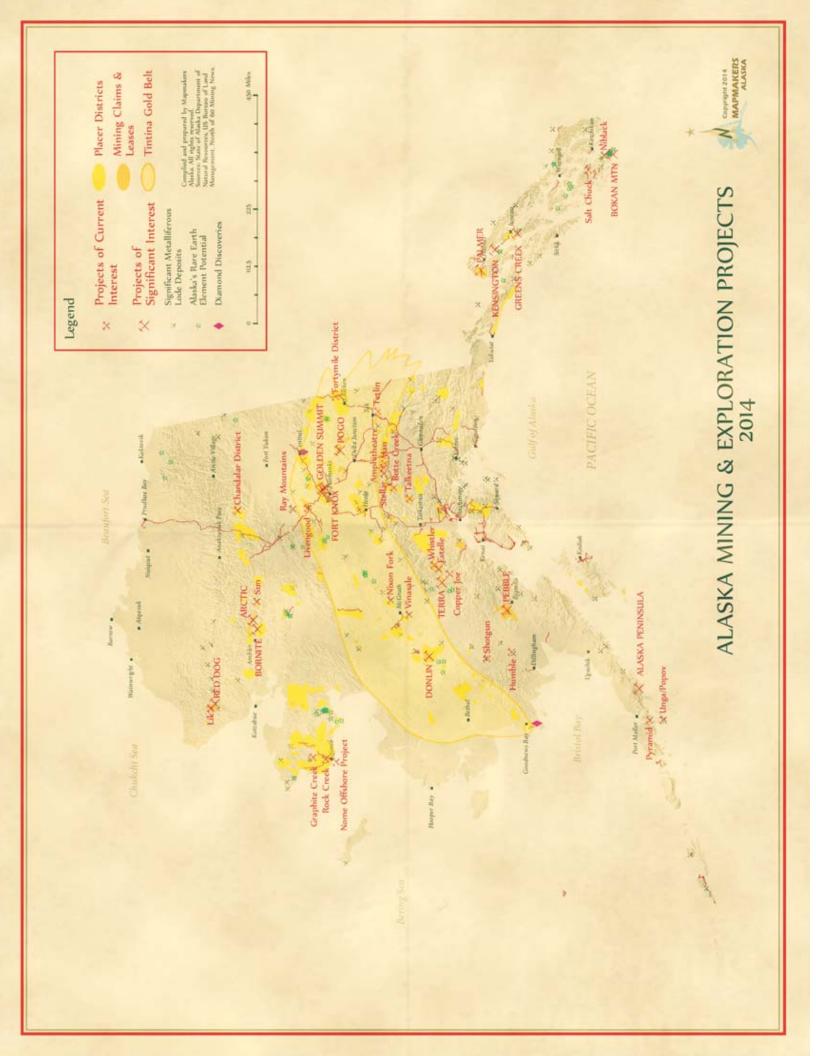


In October, Contango Ore inked an agreement with Royal Gold Inc. in which the royalty company has the opportunity to invest US\$30 million to further reveal the vast potential at Tetlin and earn a 40 percent interest in the project.

Kinross Gold Corp. (Fort Knox, Circle Mining District); Freegold Ventures Ltd. (Golden Summit, Shorty Creek); and En-

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#### ALASKA OVERVIEW continued from page 11

durance Gold Corp. (Elephant Mountain) were other active gold explorers in Interior Alaska.

In addition to gold exploration, Ucore Rare Metals completed a reconnaissance level field program at its Ray Mountains rare earths-tin project roughly 110 miles (175 kilometers) northwest of Fairbanks; and MMG Ltd., owner of the famed Century zinc mine in Australia, is quietly carrying out early-stage base metals exploration on its Twenty Mile and Squaw Creek projects in the Rampart District, roughly 20 miles (32 kilometers) south of the Ray Mountain claims.

#### MMG seeks Southcentral nickel

MMG's land holdings in the Rampart District are a small portion of the company's Nikolai project, an exploration campaign targeting Alaska's nickel potential. The larger portion of this endeavor is focused in Southcentral Alaska, where the Australia-based miner holds three large blocks of mining claims that follow an arc south of the Alaska Range.

These claim groups include Amphitheater, which borders Pure Nickel's Man property to the south and west; Butte Creek, located about 40 miles (65 kilometers) southwest of Amphitheater; and Talkeetna, a block of claims roughly 30 miles (about 48 kilometers) further along this arc that coincides with the Wrangellia Terrane, a band of rocks known to host nickel-platinum group metal deposits that arcs from Southcentral Alaska through southern Yukon Territory and along the coast of British Columbia.

During 2013, the U.S. exploration subsidiary of MMG invested at least US\$2 million on early-stage exploration at the Nikolai project. This work included geophysical surveys, mapping, rock sampling and 1,188 meters of drilling on the properties geophysical surveys in Southcentral Alaska.

MMG continued it Nikolai exploration, including drilling, in 2014. The global miner, however, is keeping the details, results and future plans for this nickel project close to its vest.

Itochu Corp., which had invested roughly US\$23.5 million on nickel exploration at Pure Nickel's Man property since 2008, withdrew from the project late in 2013. As a result, Pure Nickel did not carry out any significant exploration on the property that lies east of MMG's Amphitheater claims.

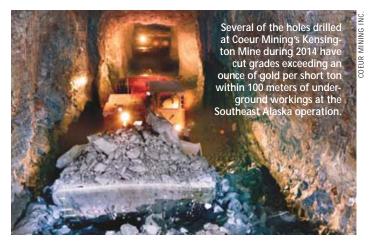
About 15 miles west of the Man property, Millrock Resources is investigating Stellar, a property added to the company's portfolio in 2012.

The Stellar claims cover a copper-gold skarn deposit known as Zackly and are considered prospective for porphyry copper-gold deposits.

Kiska Metals Corp. completed minimal work on its Whistler copper-gold project in 2014. The company did, however, attract a potential partner to its Copper Joe project, an earlier staged project situated about 20 miles (30 kilometers) southeast of Whistler.

To secure the exclusive right to option Kiska's Copper Joe property, First Quantum Minerals Ltd. agreed to fund an initial 1,500-meter drill program on the property. The program, operated by Kiska, began in September.

If First Quantum decides to option Copper Joe, the company formerly known as Inmet Mining can earn an initial 51 percent interest in the project by funding expenditures of US\$5 million before the end of 2017, a stake that will increase to 80 percent if a decision to mine Copper Joe is made.



#### Dowa turns up spending in SE

In Southeast Alaska, Tokyo-based Dowa Metals & Mining Co. Ltd. has agreed to invest US\$6.2 million on a 2014 exploration program at Constantine Metals Resources' Palmer volcanogenic massive sulfide project located near the coastal community of Haines.

The 10,000-meter program slated for 2014 found early success at this property located at the northern end of the Southeast Alaska panhandle. In July, Constantine reported a 22.1-meter drill intercept grading 2.48 percent copper, 4.05 percent zinc, 24 grams per metric ton silver and 0.39 g/t gold in hole CMR14-54.

This lens of high-grade massive sulfide mineralization was cut 150 meters below the lowest previous intercept at the South Wall

continued on next page



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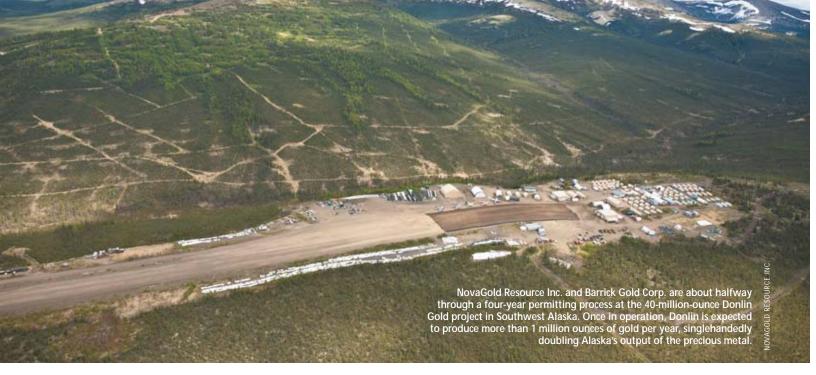
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#### ALASKA OVERVIEW continued from page 13

zone. CMR14-54 expand upon a 4.75-million-metric-ton deposit already delineated at Palmer and is the first hole to tap a 400-square-meter conductive plate that could represent an enormous extension of the VMS mineralization further down-dip.

The 2014 program marks the second year of exploration funding by Dowa which has the option to earn a 49 percent joint venture interest in Palmer by investing US\$22 million over four

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years. The investment is part of the Tokyo-based smelting and mining company's strategy of securing copper and zinc concentrates by investing in mines and promising exploration projects.

At the southern end of the Southeast Alaska Panhandle, Ucore Rare Metals had two drills turning at its Bokan Mountain-Dotson Ridge rare earths project in 2014.

Late in 2013, Ucore published an updated Dotson Ridge resource of 2.9 million metric tons averaging 0.614 percent (39.7 million metric tons) total rare earth oxides in the indicated category and 2 million metric tons averaging 0.605 percent (26.6 million pounds) TREOs in the inferred category.

The smaller of two rigs drilling this year is aiming to upgrade a portion of the inferred resources to the indicated category by infill drilling of the rare earths deposit.

The larger rig is drilling multiple deep holes with the goal of expanding the resource to depth, as well as completing a number of geotechnical holes and groundwater monitoring wells to obtain supplementary data for use in the engineering and permitting of the project.

This program is expected to provide engineers with the data needed to complete a plan of operations for mining the heavy rare earth element-enriched deposit at Bokan Mountain.

Between Palmer and Bokan Mountain, Southeast Alaska's two producers continued exploration around their respective mines.

Coeur Mining Inc. budgeted US\$6.2 million to follow up on recent success in discovering additional high-grade gold zones near its Kensington mine.

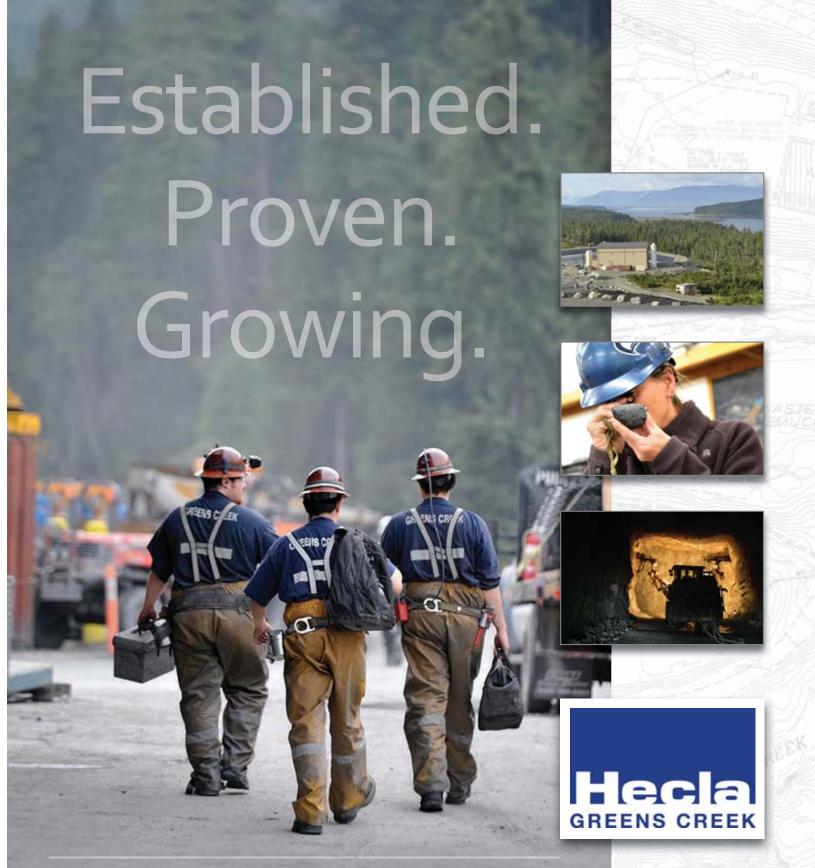
After hitting several intercepts of more than one once per ton gold near underground workings at Kensington, Coeur increased the exploration budget to US\$9.1 million.

Hecla Mining Company's 2014 exploration at Greens Creek was divided between continued expansion and delineation of near mine deposits and exploration of Killer Creek, where previous drilling has encountered broad zones of high-grade copper, silver, lead and zinc stockwork mineralization.

#### All quiet in SW Alaska

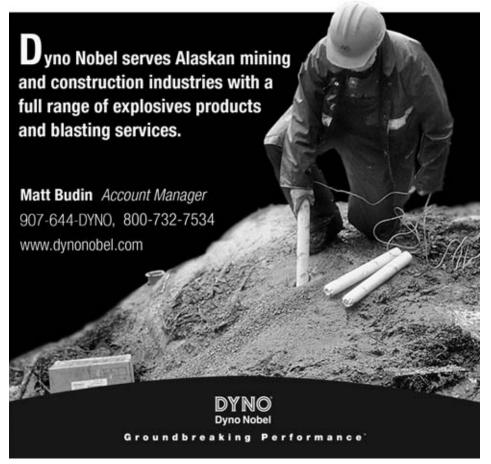
Southwest Alaska, home to some of the world's biggest deposits of copper and gold, has traditionally been a juggernaut of

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#### ALASKA OVERVIEW continued from page 14

mineral exploration in the state. During 2014, however, exploration spending in this region is diminutive.

This flagging of exploration expenditures is largely attributable to the status of the Donlin and Pebble projects.

Though it has been several years since partners NovaGold Resource Inc. and Barrick Gold Corp. have completed any appreciable exploration at Donlin Gold, spending at this 40-million-ounce gold project has traditionally been attributed to the exploration category.

Two years into the permitting process, this project has clearly crossed the threshold between advanced exploration and development.

The U.S. Army Corps of Engineers continues to forge ahead with an environmental impact statement for Donlin. A decision on the final EIS and the bevy of accompanying permits is slated for 2016, a few months later than hoped for but still within the four-year estimated time-frame.

If permits are approved, mine construction is anticipated to take about four years, putting first production at 2020.

Once in operation, Donlin is expected to produce more than 1 million ounces of gold per year, singlehandedly doubling Alaska's output of the precious metal.

The Pebble project, on the other hand, was dealt a series of setbacks. The most notable, in terms of exploration expenditures, was the withdrawal of funding partner Anglo American at the end of 2013.

After spending more than half a billion dollars to take the Pebble project to the cusp of permitting, the mining giant pulled out of The Pebble Limited Partnership, an alliance it forged with Northern Dynasty Minerals Ltd. to gain a 50 percent stake in one of the largest copper-gold-molybdenum deposits on the planet.

According to the most recent published resource estimate, Pebble contains 80.6 billion pounds of copper, 107.4 million ounces of gold and 5.6 billion pounds of molybdenum.

Now solely owned by Northern Dynasty, the Pebble Partnership is battling a proposal by the U.S. Environmental Protection Agency's to limit the footprint of any future mine at this mammoth deposit by restricting the surface disturbances that would be allowed.

This pre-emptive move by the EPA is unprecedented, and the Pebble Partner-

ship has challenged the agency's authority to impose limitations on Pebble before the company gets a fair hearing under the established state and federal permitting process.

"Litigation is necessary in order to get the agency's attention and bring some rational perspective back to the U.S. permitting process," explains Pebble Partnership CEO Tom Collier.

In September, the presiding federal judge dismissed the case on the grounds that EPA had not yet placed any restrictions on development. The Pebble Partnership will revisit the case if and when the federal agency does take preemptive action to limit development. A second case relating to the legitimacy of an assessment for which EPA is basing its restrictions is pending.

WestMountain Gold Inc. continues bulk sample mining and milling operations at Terra, a high-grade gold located roughly 125 miles (200 kilometers) northeast of Pebble and about the same distance southeast of Donlin.

#### Alaska Peninsula gets a glance

Stretching some 1,600 kilometers (1,000 miles) off Southwest Alaska into the Pacific Ocean, the Alaska Peninsula and trailing Aleutian Islands is rich with porphyry copper-gold and epithermal gold systems but has had limited modern exploration, making this island arc environment prime for new discoveries.

Hoping to take advantage of the limited exploration, Millrock Resources Inc. has secured an exploration agreement with option to lease on a 1.6-million-acre- (650,000 hectares) tract of prospective land owned by Bristol Bay Native Corp.

This massive property, appropriately named the Alaska Peninsula project, covers a number of porphyry copper-gold-molybdenum prospects as well as intrusive-related deposits such as polymetallic skarn and replacement deposits, base metal veins

"Some Alaska projects are moving forward but most field budgets are small with commensurately reduced goals attached. Larger mining companies, many under new management, are rapidly shedding non-core assets while revising budgets and timeframes for exploration, new development and planned operational upgrades." -Curt Freeman, president, Avalon Development Co.

and epithermal gold deposits.

In January, First Quantum Minerals Ltd. agreed to fund an initial US\$600,000 exploration program in exchange for an exclusive right to enter into an option to joint venture the large copper and gold project in Southwest Alaska.

This program involved 1,140 line-kilometers of high-resolution airborne magnetic and radiometric flown over three porphyry copper-gold occurrences - Kawisgag, Mallard Duck Bay and Bee Creek – followed up by a mapping and sampling program that started in July.

Pyramid, situated roughly 50 miles (80 kilometers) to the southwest, is the most advanced porphyry copper-gold project on the Alaska Peninsula.

From 2010 through 2012, Full Metal Minerals Ltd. and Antofagasta Minerals S.A. completed roughly 7,486 meters of drilling in 30 holes at Pyramid. This effort confirmed and expanded upon 19 shallow historical holes completed by Quintana-Duval during the 1970s and resulted in an inferred resource of 1.34 billion pounds of copper, 74 million pounds of molybdenum and 488,000 ounces of gold.

continued on next page



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#### ALASKA OVERVIEW continued from page 17

As a result of its three-year tenure at Pyramid, Antofagasta earned a 51 percent joint venture stake in Pyramid, an interest Full Metal has cut a deal to re-acquire and regain full ownership.

In turn, Pyramid is to be rolled into CopperBank Resources Corp., a new company that will result from the amalgamation of Full Metal and Pyramid; Enexco International Inc. and its Contact

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copper project in Nevada; and Choice Gold Corp., which will serve as the vehicle for the emergent company.

On Unga Island, just off the peninsula from Pyramid, Redstar Gold Corp. carried out a two-month surface program at its high-grade Unga gold project.

The Unga project covers the legendary Apollo gold mine, considered to be the first hardrock gold mine in Alaska.

Redstar's 2014 surface program involved chip and rock sampling along with detailed mapping on two of the most prospective high-grade gold trends on the property.

This work initially focused on the Apollo Trend, home of the historic Apollo Mine, before investigating the Shumagin Trend, a parallel high-grade gold vein system about 3,000 meters northwest of the Apollo Trend.

#### From Au to Zn in Northwest

The Seward Peninsula and Alaska Northwest continues to be a hunting ground for explorers seeking zinc, lead, silver, copper, gold and graphite.

The Nome Offshore Project, a large tract of marine placer gold properties off the golden shores of Nome, is being advanced towards a production decision by an international consortium known as Placer Marine Mining.

In 2013, a PEA was completed on the large-scale marine placer project that was originally a joint venture between De Beers and AngloGold Ashanti. Some C\$5.1 million was invested on exploration of the marine property last year. Exploration, environmental baseline studies and other work in support of the operation outlined in the PEA are ongoing.

In August, Graphite One Resources Inc. announced a late-season drill program at its aptly named Graphite Creek deposit, located on the Seward Peninsula roughly 40 miles (65 kilometers) north of Nome.

Over the previous two years, the company has outlined an inferred resource of 186.9 million metric tons grading 5.5 percent (10.35 million metric tons) graphite. This deposit represents drilling along less than 30 percent of an 18-kilometer- (11.2 miles) long.

This year's program, however, did not focus on expanding the breadth of the deposit. Instead, Graphite One focused on upgrad-

ing a portion of the inferred resource to either indicated or measured categories by infill drilling on roughly 50-meter centers. The program also involved the collection of mini-bulk samples for ongoing bench-scale metallurgical testing.

The company plans to incorporate the results of the 2014 program into a preliminary economic assessment slated for completion in 2015.

NovaCopper Inc., which invested more than US\$30 million on exploration in the Ambler District of Northwest Alaska over the previous two years, only allotted US\$2.7 million for this year's program at the Upper Kobuk Mineral Projects.

UKMP combines Bornite and a number of other mineral prospects on Native lands owned by NANA Regional Corp. with the world-class Arctic deposit and dozens of similar VMS prospects located on NovaCopper's claims in the Ambler Mining District.

Between Bornite and Arctic, the equivalent of roughly 9.5 billion pounds of copper has been identified, so far, at Upper Kobuk Mineral Projects, when you calculate the worth of the zinc, lead, silver and gold found with the copper at Arctic.

No drills turned at Bornite, or any of the other Upper Kobuk projects during 2014. Instead, the program filled gaps inside Bornite deposit by re-sampling some 12,000 meters core from drilling carried out by Kennecott Mining from 1957 until 1975.

A similar re-sampling program completed last year played a crucial role in adding some 2.6 billion pounds of copper when the resource was updated.

While advancing UKMP on a budget, NovaCopper will continue to support AIDEA's work on permitting a road to the copperrich Ambler District, an overland route that is key to the economics of mining Arctic, Bornite and the number of other deposits that dot

this region of northwestern Alaska.

Teck Resources continues to expand high-grade zinc deposits in the area of its Red Dog Mine.

At the end of 2013, Teck reported 50 tons of reserves at Red Dog with an average grade of 15.8 percent zinc, 4.1 percent lead and 2.1 ounces per ton silver.

Teck's recent Red Dog targets include Qanaiyaq and Paalaaq, potential sources of near-term higher-grade ore to supplement the reserves currently being mined from the adjacent Aqqaluk pit.

Qanaiyaq, a near-surface deposit that lies to the south of the mined out Red Dog main deposit, has an indicated resource of 8.3 million tons with an average grade of 25.7 percent zinc, 6.9 percent lead and 3.99 ounces per ton silver. Teck has not released a resource for Paalaaq, a deeper deposit immediately north of Aqqaluk.

In addition to NANA-owned lands immediately surrounding the Red Dog Mine, Teck exploration interest includes Noatak, a block of state claims bordering the west side of the Red Dog property.

In March, Zazu Metals Corp. published an updated PEA for Lik, a sediment-hosted zinc project about 14 miles (22 kilometers) northwest of Red Dog. The company, however, completed only minimal site work at the project in 2014.

Spurred by growing interest in zinc, Millrock has staked Lisburne, a grassroots zinc prospect some 85 miles (140 kilometers) northwest of Red Dog.

"We can see the potential for zinc shortages and price increases in the medium to long term and therefore have decided to act on this conceptual target," said Millrock President and CEO Greg Beischer.

Typical to its project generator business model, Millrock is seeking a partner to advance this prospective zinc discovery.



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# Tip of the VMS iceberg at Palmer

Drilling, geophysics indicate largest portion of deposit remains hidden

By SHANE LASLEY
Mining News

Like an iceberg, it appears the 4.75 million metric tons of massive sulfide mineralization outlined so far at the Glacier Creek deposit near the top of Mt. Morlan at Constantine Metal Resources' Palmer project in Southeast Alaska may be just a glimpse of the precious metals enriched copper-zinc mineralization that lies below.

To find out, Dowa Metals & Mining Co. Ltd. has agreed to invest US\$6.2-million on a 2014 exploration program that included at least 10,000 meters of drilling focused on a significant expansion of the Glacier Creek deposit as well as testing some of the other tantalizing volcanogenic massive sulfide prospects across the Palmer property.

"With the largest program to date at Palmer, there is tremendous potential in 2014 to expand the existing resource and discover new deposits," said Constantine President and CEO Garfield MacVeigh.

This program marks the second year of exploration funding by Dowa, which has the option to earn a 49 percent joint venture interest in Palmer by investing US\$22 million over four years. The investment is part of the Tokyo-based smelting and mining company's strategy of securing copper and zinc concentrates by investing in mines and promising exploration projects.

Situated 33 miles (53 kilometers) from a Pacific Rim deep-sea port at Haines, a mine at Palmer would be well-situated to provide feedstock for Dowa's state-of-the-art Kosaka smelter in Japan.

In 2013 the smelting company invested roughly US\$3 million on a program that allowed it to get a first-hand understanding of the geology and metallurgy of the VMS mineralization at Palmer.

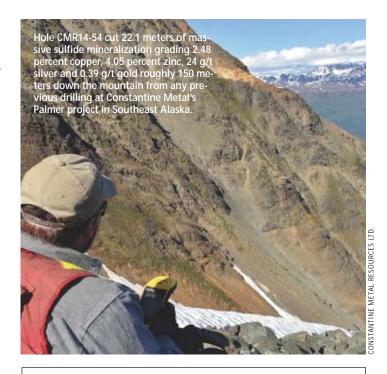
Satisfied with what it learned during the inaugural program, Dowa has more than doubled its 2014 exploration budget for Palmer.

To meet its earn-in commitment, it is anticipated that Dowa will fund the 2015 and 2016 programs at similar levels as this year.

#### Tip of the iceberg

Since its formation in 2007, Constantine's exploration at Palmer has focused primarily on expanding Glacier Creek, a prospect that consists of five inter-related subzones of massive sulfide mineralization – RW East, RW West, and South Wall zones 1, 2 and 3.

The South Wall zones are parallel layers of nearly vertical VMS mineralization. At the upper extent of South Wall, a fault cuts and folds the three layers at which point they lay nearly flat. South Wall Zone 2 and Zone 3 are of the same age as two strata



#### Constantine Metal Resources Ltd.

CONSTANTINE metal resources ltd.

CEM:TSX.V

CHAIRMAN: Wayne Livingstone
PRESIDENT AND CEO: Garfield MacVeigh
VICE PRESIDENT, EXPLORATION: Darwin Green

#### PROPERTIES WITH MINERAL(S) EXPLORED:

Palmer, Alaska: Polymetallic VMS • Yukon JV, Yukon Territory: Gold Trapper , British Columbia: Gold • Croesus, Ontario: Gold Golden Mile, Ontario: Gold

CASH AND SHORT-TERM DEPOSITS: C\$1.91 million (July 31, 2014) WORKING CAPITAL: C\$978,599 (July 31, 2014) MARKET CAPITALIZATION: C\$19.8 million (Oct. 7, 2014)

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drilled at RW, the flat lying limb of mineralization found near the top of Mt. Morlan.

Based on 32 holes drilled through 2009, an inferred resource of 4.75 million metric tons averaging 1.84 percent copper, 4.57

continued on page 22

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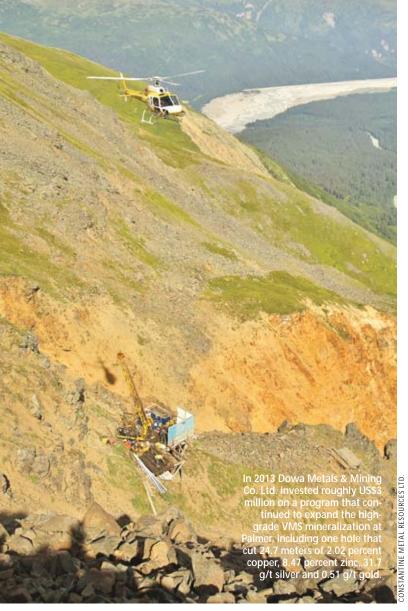


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#### **CONSTANTINE** continued from page 20

percent zinc, 0.28 grams per metric ton gold and 29 g/t silver (using an NSR cut-off of US\$50/t) was calculated for the RW and South Wall zones at Glacier Creek.

Constantine believes that, given the grades, increasing the tonnage of this resource to around 10 million metric tons would make Glacier Creek a compelling deposit to evaluate the economics of building a mine.

Given that the resource calculation does not include the re-

sults from seven holes that Constantine drilled into the Glacier Creek deposit in 2010 and a 10-hole program funded by Dowa in 2013, the partners have already made headway towards their tar-

Seven of the holes drilled last year cut significant mineralization, two of which penetrated the flat-lying RW zone, the balance tapped the plunging zones at South Wall.

CMR13-44, a roughly 100-meter eastward step out from the nearest drill intersection at RW, cut a 3.36-meter zinc-rich intercept averaging 0.51 percent copper, 9.18 percent zinc, 0.92 percent lead, 46.2 g/t silver and 0.21 g/t gold.

Precious metal-rich oxide mineralization was intersected at the RW zone in hole CMR13-50, including 37.5 meters of 123.2 g/t silver and 0.62 g/t gold. The intersection includes a partially un-oxidized subinterval of 13.7 meters grading 0.51 percent copper, 4.97 percent zinc, 1.61 percent lead, 134.3 g/t silver and 0.71 g/t gold.

Another three holes of the 2013 program tapped South Wall

Hole CMR13-43, which represents roughly a 35-meter downdip step-out of South Wall Zone I, cut 25.23 meters grading 1.17 percent copper, 0.43 percent zinc, 8.5 g/t silver and 0.07 g/t gold;

CMR13-45, a 65 meter up-dip step-out at Zone I, cut 21.71 meters averaging 2.36 percent copper, 9.06 percent zinc, 0.13 percent lead, 28.8 g/t silver and 0.33 g/t gold; and

CMR13-49 intersected 24.7 meters near true width of 2.02 percent copper, 8.47 percent zinc, 31.7 g/t silver and 0.51 g/t gold.

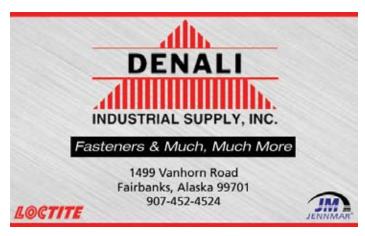
Hole 49 was drilled roughly 30 meters up-dip of CMR10-40, a hole drilled in 2010 that cut 20.8 meters grading 1.03 percent copper and 5.01 percent zinc. Both these intersections are outside the limits of the resource estimate and are located 80 meters east of the nearest South Wall intersection in CMR08-11, which cut 36.3 meters grading 1.7 percent copper and 5.74 percent zinc.

At South Wall Zone 2, CMR13-46 cut 20.58 meters averaging 0.92 percent copper, 7.18 percent zinc, 0.25 percent lead, 45.3 g/t silver and 0.32 g/t gold approximately 50 meters west and 50 meters up dip of previous drilling.

Constantine said the intersection in hole 46 significantly expands an area of thick Zone 2 mineralization, and opens the potential to add additional tons between the base of Zone 1 and the currently defined top of Zone 2. The breadth of Zone 1, which has been traced over an area measuring roughly 200 meters by 450 meters, has largely been defined.

There is strong evidence, however, that zones 2 and 3 continue to plunge down the mountain.

CMR10-39, drilled 110 meters down plunge and to the west of any previous hole, cut 2.45 meters averaging 1.1 percent copper,





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5381 Tudor Top Circle Anchorage, AK 99507-1631 4.52 percent zinc, 0.13 g/t gold and 24.8 g/t silver.

While hole 39 was in and of itself a significant expansion of South Wall, a geophysical anomaly provided tantalizing evidence that this was at the edge of a ballooning area of VMS mineralization below.

#### Below the surface

A 400-square-meter conductive plate that trends downward and to the southwest of hole 49 was a tantalizing resource expansion target at Palmer in 2014. A similar, but much smaller conductive plate lies at the heart of the South Wall mineralization tapped near the top of Mt. Morlan. If the mineralization at and around the lower plate is analogous, then a larger portion of the deposits remains to be drilled.

Hole CMR14-54, the first hole to intercept the area were the lower conductive plate was identified, cut 22.1 meters grading 2.48 percent copper, 4.05 percent zinc, 24 g/t silver and 0.39 g/tgold. This intersection represents a major expansion of the South Wall zone to depth and provides the first evidence that a much larger portion of the deposit remains hidden.

MacVeigh said, "Hole CMR14-54 not only expands the footprint of the South Wall zones but opens up the opportunity for considerable further expansion and will be a focus for ongoing drilling. The thickness and high copper content associated with a large conductive target enhances the potential around this new area."

If the South Wall zonation found in the higher plate repeats below then thicker zones of copper-rich mineralization should be found as drilling nears the center of the conductive zone.

Constantine Vice President of Exploration Darwin Green told Mining News that the company will likely update the Glacier Creek resource with the results of the 2010, 2013 and 2014 drilling, following the completion of this year's program.

#### Intriguing targets

While two rigs traced South Wall, a third drill was originally designated to test some of the other intriguing exploration targets at Palmer.

The third rig tested targets beyond the resource but within the larger Glacier Creek prospect area before it too was aimed at expanding South Wall.

Mount Henry Clay, the source of enormous high-grade massive sulfide boulders that occur near the limits of a stranded glacier, is another outlying target waiting to be tested.

Twenty-six samples of various boulders collected by the U.S. Bureau of Mines at the toe of a small ice sheet near this prospect

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also known as MHC returned an average grade of 19.3 percent zinc, 1 percent copper, 0.4 percent lead, 38.2 g/t silver, 0.22 g/t gold and 20.6 percent barium. The source of these boulders, some of which measure up to six feet in diameter, has yet to be discovered.

Work completed by Constantine and Dowa in 2013, however, has provided a vector to a prospective source of these massive VMS stones trailing at the tail of the receding ice cap roughly two miles (3.2 kilometers) west of the Glacier Creek resource area.

Armed with GPS and chipping hammers, project geologists spent three days last fall locating and sampling more than 100 massive sulfide boulders strewn across the MHC prospect area.

Green said this exercise has outlined a narrow band of highgrade boulders that points to a small and "very compelling" target under the relatively thin ice sheet above.

CAP, a silver-rich target about 2.5 miles (four kilometers) south of Glacier Creek, is another prospect in queue for exploration drilling.

CAP01, drilled by Constantine in 2007, cut 23.2 meters of barite rich mineralization averaging 134 g/t silver. Constantine will apply what it has learned at Glacier Creek to target a larger zone of massive sulfide mineralization at this promising

In September, Constantine signed an upland mining lease on roughly 92,000 acres (37,200 hectares) of lands surrounding the Palmer property.

The company secured the property through a competitive lease process offered by the Alaska Mental Health Trust Authority, a state corporation within Alaska.

In addition to being prospective for VMS mineralization, the continued on next page





#### **CONSTANTINE** continued from page 23

newly acquired Haines Block also covers areas upland of the Porcupine placer district, which is estimated to have produced 82,489 ounces of gold, adding to the intriguing targets on the expansive property.

MacVeigh said, "We are very pleased to have secured this large and prospective land package and look forward to exploring these properties for the mutual benefit of Constantine shareholders and Alaska Mental Health Trust beneficiaries."

#### Dowa the smelter

Beyond providing the funds needed to take Palmer to the next level, Dowa offers 130 years of experience in processing and refining complex VMS ore to the project.

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The Japanese smelting and mining company has been improving its expertise in separating the various precious and base metals from VMS deposits since it began mining Kuroko ore in northern Japan during the 1880s.

Kuroko is a black-colored massive sulfide ore. Although Kuroko ore contained abundant precious metals such as gold and silver, they were difficult to smelt due to the ore's complex mineral composition.

As a result of technological improvements over the decades, Dowa overcame the metallurgical challenges of Kuroko ore. Today, Dowa's Kosaka Smelter is the largest zinc smelter in Japan and among the most technologically advanced smelters of complex ore in in the world.

This long history of refining massive sulfide ores makes Dowa ideally suited for understanding the best techniques for producing zinc and copper concentrates from the polymetallic mineralization at Palmer.

Working with metallurgists from Dowa, SGS Canada carried out locked cycle flotation tests on a composite of 212 assay sample rejects from past drilling at Palmer. These samples, which represent a blend of all major ore-types encountered during drilling of the South Wall resource area, had a head grade assay of 1.56 percent copper, 6.47 percent zinc, 28.5 grams per metric ton silver and 0.19 g/t gold.

The metallurgical testing yielded smeltable copper and zinc concentrates, with high metal recoveries produced at moderate grind sizes.

This relatively straightforward process returned copper recoveries of 89.6 percent to a concentrate containing 25.5 percent copper, and 84.9 percent of the zinc reported to a concentrate containing 59.1 percent zinc. Of particular importance to Dowa, which may very well want to refine potential future zinc concentrates from Palmer is the zinc concentrates produced from the locked cycle tests had low impurities and no potential penalty or problematic elements.

The concentrates produced during testing captured 89.7 percent of the silver and 75 percent of the gold in the samples; with 73.7 percent of the silver and 61.5 percent of the gold reporting to the copper concentrate.

"In addition to achieving high copper and zinc recoveries, particularly for an initial test program, we are also pleased with the precious metal recoveries. These favorable metallurgical results continue to remove project risk as the company advances Palmer," said MacVeigh.

No follow-up metallurgical testing is planned for 2014, which indicates that Dowa, as a likely smelter of concentrates from any future mine developed at Palmer, also is satisfied with the metal-





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## **SMM Pogo invests** in golden future

Japanese firms budget US\$17M on expanding high-grade gold finds near mine

By SHANE LASLEY Mining News

ontinuing its success in finding new deposits of high-grade gold in the shadow of the mill at the Pogo Mine located in Interior Alaska, Sumitomo Metal Mining Pogo – a joint venture between Sumitomo Metal Mining Company (85 percent) and Sumitomo Corp. (15 percent) – ramped up exploration spending at its Interior Alaska operation to US\$17 million in 2014.

"Some of the companies are reducing their exploration costs; we aren't doing that," Sumitomo Metal Mining Pogo General Manager Chris Kennedy informed attendees of the spring Alaska Miners Association convention in

Fairbanks. "Without (exploration) you have got no future, and we want to be here for a long time."



Situated some 60

miles (100 kilometers) southeast of Fairbanks, the Pogo Mine currently has enough ore in reserves to last until 2019, however, a number of deposits with gold grades comparable to current reserves have been identified immediately adjacent to the underground working at Pogo.

"They say 'you never run out of gold you can mine, you just run out of gold you can afford to mine,"" Kennedy told symposium participants.

Expansion of two zones adjacent to the mill, East Deep and North, will almost certainly add years to gold that Sumitomo can afford to mine and a number of other deposits and prospects stretching south of the current operation have the potential extend this horizon.

"In the end, we are assuming that we can replace the number of ounces going through the mill each year by finding new reserves and converting known resource into reserves by additional drilling," Lorna Shaw, spokeswoman for SMM Pogo, told Mining News.

#### **Expanding East Deep**

First tapped by drilling in 2010, East Deep, a growing zone of high-grade gold mineralization immediately northeast of the processing facilities at Pogo, is one of the primary locations that SMM Pogo has been expanding its resources and reserves.

East Deep appears to be a twin to the Liese zone, three flat-lying, parallel quartz veins that carry high-grade gold that have been the primary source of ore for the mill since mining began at Pogo in 2006.

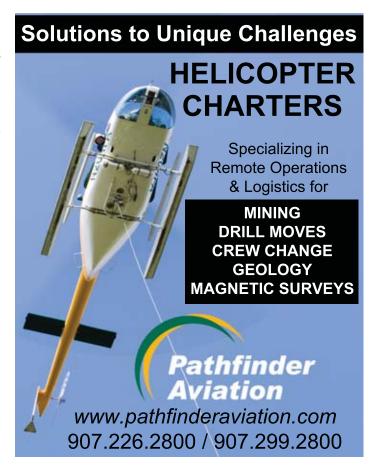
Geological and metallurgical evidence indicates that East Deep and Liese and East Deep zones were once a single body of gold-rich mineralization that was split by a wedge of gold-barren igneous rock (diorite) some 95 million years ago.

In 2012, Sumitomo drove two drifts through some 300 meters of diorite wedged between these now separate zones. From the underground vantage, SMM Pogo completed 24,596 feet of definition drilling and extracted a 12,000-ton bulk sample during 2013.

In addition to providing a platform for underground drilling, these drifts provided access for a 12,000-ton bulk sample of East Deep ore that was processed during the third quarter of 2013.

To mine the high-grade gold at East Deep, Sumitomo developed the 2150 portal. This year, ore from East Deep makes up a portion of the feed for the mill at Pogo.

continued on next page



#### Yukon Territory

#### Alexco Resource Corp.

AXR:TSX / AXU:NYSE-MKT

PRESIDENT AND CEO: Clynton Nauman
EXECUTIVE VICE PRESIDENT AND COO: Brad Thrall
VICE PRESIDENT, EXPLORATION: Alan McOnie

Alexco Resource Corp. owns the Bellekeno silverzinc-lead mine, as well as a number of other mineral properties within historical Keno Hill Silver District of central Yukon Territory. Bellekeno began commercial production at the beginning of 2011, but was temporarily suspended late in 2013 due to lower silver prices. The company said developing additional feed for the mill

from the property's Flame & Moth deposit is a key to lowering costs and restarting operations. To this end, Alexco's 2014 exploration budget for Keno Hill is roughly C\$5 million, in-



cluding a surface drill program focused primarily on defining the potential limits of mineralization and adding immediate resources at the Flame & Moth deposit, and further defining the nearby Flame & Moth West discovery. The Flame & Moth deposit occurs in two zones separated by a fault, and while the current poten-

tially mineable portion has a strike length of about 600 meters, results from drilling in 2013 show the mineralization extends for at least 900 meters. The deposit averages four to five meters in thickness, with some areas up to 11 meters thick. Drilling results released in 2013 included 28 ounces per ton of silver over 5.6 meters true thickness at the southwest



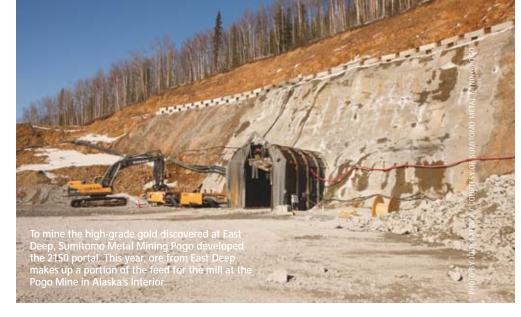
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extent of the deposit. Alexco, which had originally planned to complete 10,500 meters of drilling, increased the program to 14,000 meters as a result of early season drill efficiency. A large portion of this drilling focused on the southwest extensions to the Flame Vein, where 2013 drilling demonstrated that mineralization extends at least an additional 220 meters beyond the existing resource. Satellite deposits such as Flame West, where there have been intercepts of up to 28.7 oz/t silver over a true thickness of 0.85 meters, are also drill targets for 2014. In addition to drilling, Alexco is carrying out initial exploration along trend of the Flame & Moth deposit northeast of the mill, where there is little existing geologic information because of surficial cover. Additional surface exploration work was completed at Bermingham, an exploration target in the area of the historical Birmingham Mine, in the Keno Hill District.

**CASH AND SHORT-TERM DEPOSITS:** C\$6.3 million (at June 30, 2014)

WORKING CAPITAL: C\$11.7 million (at June 30, 2014; closed a C\$8 million financing in August)
MARKET CAPITALIZATION: C\$62.9 million (Sept. 9, 2014)

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www.alexcoresource.com



#### SMM POGO continued from page 25

At the end of 2013, the Liese and East Deep zones encompassed 59 metric tons (1.9 million ounces) of gold in reserves and an additional 85 metric tons (roughly 2.7 million ounces) of gold in resources.

#### Finding feeder zones

While East Deep and Liese appear to have been torn apart by intruding igneous rocks, the zones are still linked at the North Zone, a group of higher grade vertical veins that likely provided a conduit to deliver gold mineralized fluids to the flat-lying Liese and East Deep zones.

Liese has long been known to be linked with the North Zone and mineralogical studies have provided compelling evidence that gold-rich fluids flowed up the vertical veins

and spread outward into the vertical veins mined at Pogo.

Drilling in 2013 traced East Deep to the North Zone.

In addition to expanding East Deep to the hypothesized feeder zones, this drilling discovered two new North Zone veins, NZ3 and NZ4.

SMM Pogo told Mining News that the expansion of these newly found North Zone veins is one of the primary focuses of the 2014 drilling at the project.

"The resource at 4021 stands like a beacon on the horizon and serves as an indicator that the mineralization extends out at least that far.

—Lorna Shaw, spokeswoman, SMM Pogo

"These veins are significant and are most likely the feeder zones for the main ore body and probably continue down for considerable depth. In addition, drilling this year continues to expand these vein resources along their strike length," Shaw explained.

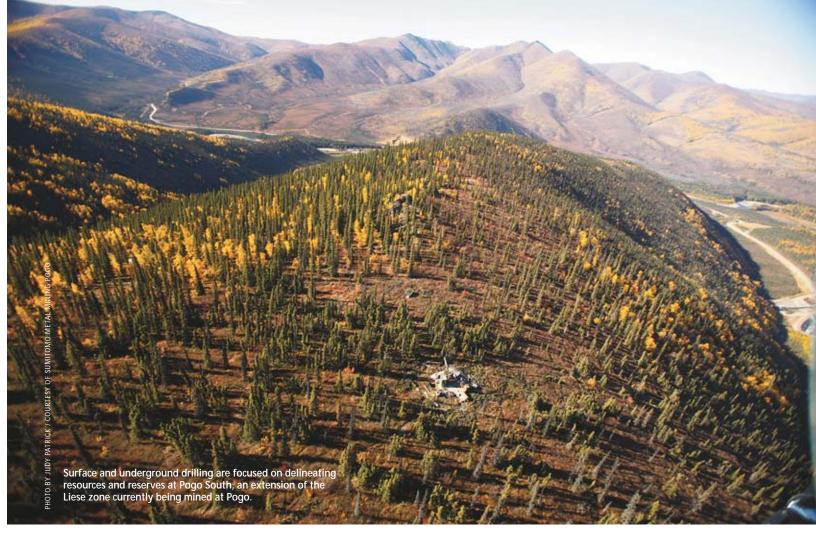
Roughly US\$5 million of the 2014 exploration budget at Pogo is being invested in driving two drifts from the underground workings at East Deep to the North Zone. These exploration drives will provide a better angle for drill the vertical North Zone veins as well as provide a platform for defining the northwest expansion area of the East Deep zone.

"The continuity of the North Zone mineralization is sufficient that part of the resource will most likely become part of the reserve at the end of the year," Shaw said.

#### Southerly horizon

While underground rigs continue to expand East Deep north and North zone downwards, surface drilling seeks to expand Pogo South, an exploration target located immediately south of the Liese zone.

"There are two helicopter fly rigs drilling at South Pogo for the entire field season. This is augmented by another drill rig drilling from underground in the most southerly drift inside the mine," Shaw said. "So far, we have defined three separate veins in this area that appear to be extensions of the Liese veins in the mine. This drilling will add to the resource at South Pogo and part of this resource may be converted to reserve by the



end of year."

The 4021 zone, a known gold deposit located roughly 2.5 miles (four kilometers) southeast of Liese, furthers the southward expansion potential.

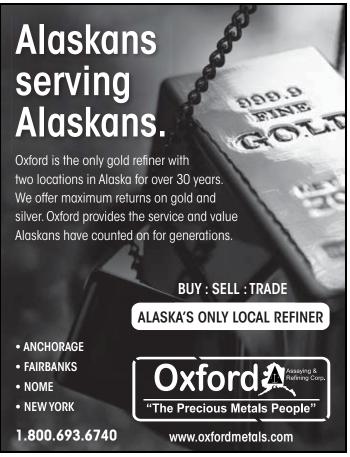
Kennedy explained that 4021 has shifted to the east along a major fault separating it from the Liese zones. If the geological units are lined up to their original positions, 4021 is on strike with the Liese zone. This opens up the prospect of gold mineralization between these two known zones.

"The resource at 4021 stands like a beacon on the horizon and serves as an indicator that the mineralization extends out at least that far. Eventually, we will get there as we systematically expand the main Pogo deposit in that direction," explained Shaw.

For the time being, however, the Pogo exploration team has plenty of deposits and prospects immediately surrounding the mill to follow up on – an endeavor that is expected to add years, if not decades, to the life of the Pogo Mine.

"We are going to be here a long time," Kennedy asserted.





# B.C. invests in thriving mining sector

Government takes lead in investigating Mount Polley tailings dam breach; vows to ensure incident won't damage public's confidence

**By MIN. BILL BENNETT** Special to Mining Explorers

The mining industry has built and sustained communities in British Columbia for more than 150 years and today B.C. is considered a global leader in mining and mineral production. Mining contributes nearly C\$7 billion to B.C.'s economy and supports jobs for more than 30,000 people. Well over C\$470 million was spent on mineral exploration in 2013, and British Columbia now accounts for almost 20 percent of the total exploration in Canada.

Since 2011, five new major mines have opened in B.C.: Copper Mountain near Princeton, New Afton near Kamloops, Mount Milligan northwest of Prince George, Bonanza Ledge near Quesnel, and Yellow Giant on Banks Island near Prince Rupert.

The Red Chris mine south of Dease Lake is expected to open in the near future and four new mines are permitted for construction: Treasure Mountain near Hope, Quintette near Tumbler



BILL BENNETT

Ridge, Roman near Tumbler Ridge, and Kitsault north of Prince Rupert. Expansions of seven existing major mines also have been completed at Elkview, Endako, Gibraltar, Highland Valley, Huckleberry, Quinsam, and Line Creek.

Building relationships and working with First Nations is a crucial part of resource development in British Columbia. Economic and Community Development Agreements underscore our government's commitment to help First Nations meaningfully participate in, and benefit from, resource activity happening within their traditional territories. British Columbia is the first province in Canada to share mineral tax revenues from new mines and major mine expansions. To date, 16 of these agreements have been signed and some of the first cheques have already been delivered to First Nations.

We're also investing now to ensure we have the infrastructure in place to power future mining development in B.C. In July 2014 the Northwest Transmission Line was completed. The NTL is a 340-kilometer (211 miles) transmission line that runs from the Skeena substation near Terrace to a new substation near Bob Quinn Lake. The NTL will deliver affordable, reliable and clean power to a part of B.C. that's never before had access to the grid, unlocking the economic potential of northwest British Columbia and growing our economy by supporting new jobs and investment in mining and clean energy at sites like the Red Chris mine and the Forest Kerr hydroelectric project.

On Aug. 4, the tailing storage facility at the Mount Polley mine near Likely, B.C. breached. This was a serious incident that should not have happened. We have a responsibility as the jurisdiction where this breach took place to take a leadership role internation"British Columbia is working closely with the Department of Foreign Affairs, Trade and Development, the Canadian Embassy and Canadian Consulate in Seattle, the U.S. Consulate in Vancouver, as well as directly with the Alaska government on projects, including the proposed KSM mine in northwest British Columbia, which recently received an environmental assessment certificate."

—Bill Bennett, minister of Energy and Mines and Minister Responsible for Core Review, Government of British Columbia

ally to find out exactly why it happened and ensure it never happens again, and we are taking steps to re-build public confidence.

On Aug. 18, the Government of British Columbia, with the support of the Soda Creek Indian Band and Williams Lake Indian Band, ordered an independent engineering investigation and inquiry into the Mount Polley breach. The inquiry will be led by a panel of three experienced geotechnical experts who will have the ability to compel evidence. They will submit their final report with recommendations by Jan. 31, 2015.

The B.C. Chief Inspector of Mines also has issued an order to all mining companies to conduct a Dam Safety Inspection for every tailings storage facility at a permitted mine in the province by Dec. 1. Under the order, those inspections must be reviewed by an independent, qualified, third-party, professional engineer from a firm not associated with the tailings facility.

The Mount Polley mine is not in a trans-boundary area that could directly impact Alaska, but I understand that it might raise questions about existing and proposed tailings storage facilities that are in trans-boundary areas. British Columbia is working closely with the Department of Foreign Affairs, Trade and Development, the Canadian Embassy and Canadian Consulate in Seattle, the U.S. Consulate in Vancouver, as well as directly with the Alaska government on projects, including the proposed KSM mine in northwest British Columbia, which recently received an environmental assessment certificate.

Mining is a critical industry in British Columbia supporting dozens of communities and thousands of families. Through the independent engineering investigation into the incident at Mount Polley and third-party reviews of Dam Safety Inspections for every tailings facility at a permitted mine in the province, we will get the answers necessary to provide the public with confidence.

Bill Bennett is Minister of Energy and Mines and Minister Responsible for Core Review, Government of British Columbia. He was reelected to a fourth term as a Member of the Legislative Assembly for Kootenay East, B.C. in 2013.

### **NTL** powers Northwest exploration

Industrial grade electricity compliments world-class geology in region

By SHANE LASLEY

Mining News

Ineral and coal exploration in British Columbia, which peaked at C\$680 million in 2012, retreated to roughly C\$476 million in 2013. This drop is on par with the roughly 30 percent decrease in exploration expenditures worldwide.

The dynamics that led to the decrease – tight capital markets that continue to challenge the ability of junior explorers to raise money, senior miners keeping tight reins on exploration spending and softer gold prices - have remained in play during 2014.

These factors, however, are tempered by the world-class geology and better-than-average infrastructure Canada's westernmost province has to offer.

This infrastructure got a major upgrade in August, when BC Hydro announced that the 287-kilovolt Northwest Transmission Line is energized to Bob Quinn Lake, delivering industrial grade electricity into the heart of the Skeena district, a stretch of northwestern B.C. rich in copper and gold.

"The transmission line has the potential to serve communities as well as current and proposed mine projects in an area the size of France. This area, known to the mineral exploration and development community as the Golden Triangle, has more than 935 mineral occurrences, including 10 potential new mines that could provide more than 4,000 direct jobs and C\$18 billion in capital investment," according to the Association for Mineral Exploration British Columbia.

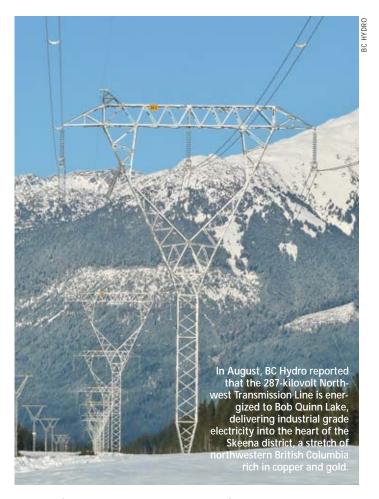
Imperial Metals Corp.'s Red Chris mine project is anticipated to be the first of these potential mines to plug into the 344-kilometer- (213 miles) long power line. The project was scheduled to begin commissioning upon the completion of a final leg of power line in September. In the wake of the tailings breach at Imperial's Mount Polley Mine to the south, however, an independent engineering review of the tailings facility at Red Chris must be approved by the Tahltan First Nation before the coppergold mine is allowed to proceed.

Based on reserves of more than 300 million metric tons of ore grading 0.36 percent copper and 0.27 grams per metric ton gold, a mine at Red Chris is projected to produce 2.1 billion pounds of copper and 1.32 million ounces of gold over an initial 28-year mine-life.

KSM (Seabridge Gold), Galore Creek (NovaGold Resources-Teck Resources), Schaft Creek (Teck-Copper Fox Metals), and Brucejack (Pretium Resources) are among the next generation of advanced exploration projects that are hoping to plug into the clean, affordable electricity that the NTL has to offer.

#### KSM, Brucejack attract investors

Like the rest of the province, the Skeena Region of northwest-



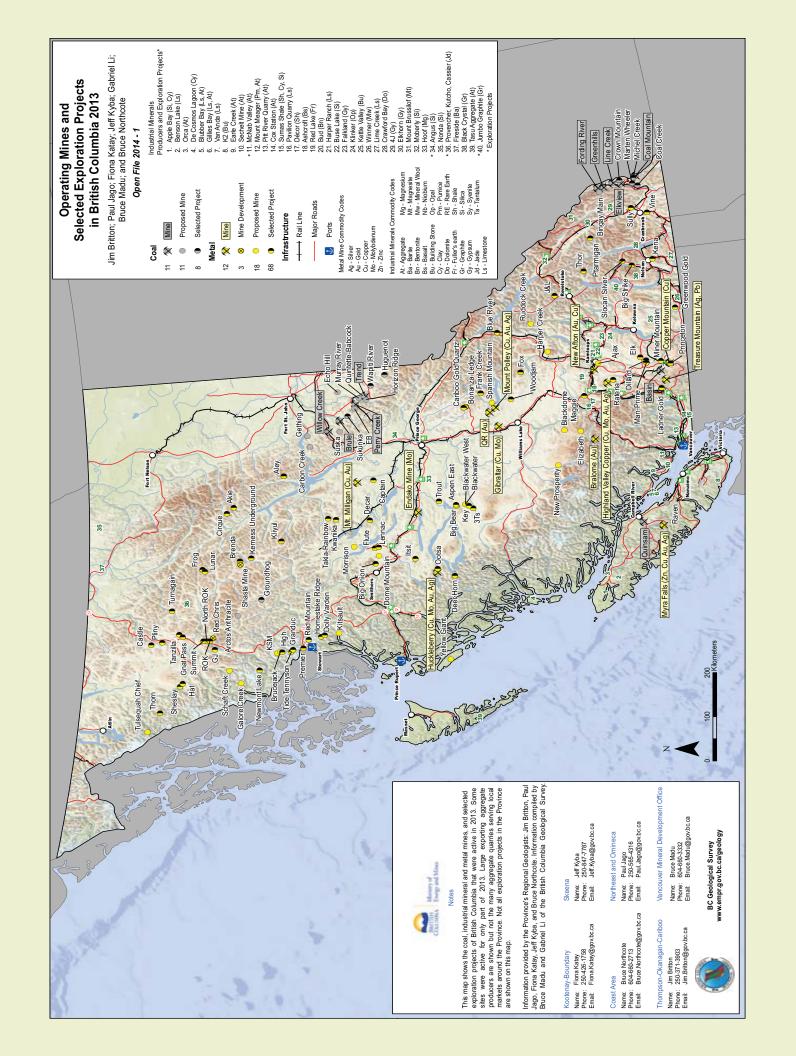
ern British Columbia experienced a roughly 30 percent drop in exploration spending, from C\$285 million in 2012 to C\$201 million in 2013. With very little new money being invested in the junior mining sector, this trend is expected to carry over in 2014.

There are, however, a number of the more advanced and tantalizing projects in the Skeena that continue to attract venture capital.

In July, Seabridge Gold Inc. closed a C\$13.8 million financing, providing the company with the capital to step up its exploration program at the KSM gold-copper project located about 65 kilometers (40 miles) northwest of Stewart, British Columbia.

Seabridge Chairman and CEO Rudi Fronk said, "This financing enables us to commit the necessary resources for an expanded 2014 program at KSM. We have been refining the targeting data obtained from the geophysical surveys completed this spring. This work has helped us to establish additional high-

continued on page 31



#### **Yukon** Territory

#### Atac Resources Ltd.

ATC: TSX-V

**PRESIDENT:** Robert Carne

**CHIEF EXECUTIVE OFFICER:** Graham Downs **CHIEF OPERATING OFFICER:** lan Talbot



Atac Resources Ltd. continues to build upon ongoing success at it Rackla Gold project in east-central Yukon Territory. The initial phase of the 2014 exploration program targeted recent Carlin-type gold discoveries at the Osiris and Anubis areas within the Nadaleen Trend, a 50-kilometer- (30 miles) long subset of the company's

east-west extending land package that blankets an area more than 185 kilometers (114 miles) long by about 15 kilometers (10 miles) wide. Through 2013, Atac has defined six zones of Carlin-type gold mineralization - Conrad, Osiris, Sunrise, Isis, Isis East and Anubis – and more than 40 geochemical anomalies at Nadaleen. The phase-1 2014 program at Rackla includes expanding high-grade mineralization at the Conrad lower zone and step-out drilling at the Sunrise zone. Hole OS-14-277, targeting the lower zone at Conrad, cut 30.79 meters averaging 9.5 grams per metric ton gold. Mineralization at the lower zone has only been traced with limited drilling over a 300-meter strike length below the core area of the upper



ROBERT CARNE

zone, which has been traced for a continuous 800 meters. The 2014 drilling at Sunshine has expanded gold mineralization west of the last two 2013 holes, which returned 19.81 meters of 5.54 g/t gold (OS-13-214) and 16.76 meters of 6.76 g/t gold (OS-13-217). Two holes reported in August cut gold mineralization to the west of Sunrise, including 15.85 meters of 2.03 g/t gold in hole OS14-255 and 10.66 meters of 3.45 g/t gold in OS14-266. The initial phase of exploration also included excavator trenching and pitting in preparation for additional drilling at Anubis-area targets. This work will expand upon the Anubis discovery where hole AN-12-001 intersected 8.51 meters of 19.85 g/t gold as well as on nearby surface showings and priority soil anomalies in the area. None of the three holes drilled at Anubis in

the phase-1 program cut significant mineralization. To better understand the Anubis outcrop and previous intersections, Atac completed additional trenching and prospecting in the area.

In July, Atac reported results from a preliminary economic assessment completed for the oxide portion of the Tiger deposit, located within the 20-kilometer (12.4 miles) long Rau Trend. The Tiger deposit was discovered in 2007 and is distinct from the more recent larger scale Carlin-type discoveries located 100 kilometers (60 miles) to the east. The PEA envisions a seasonal open-pit mine with singlestage, low intensity crushing followed by size classification, no grinding needed. Over the projected four-year seasonal mine-life, the operation outlined in the PEA would produce 221,558 ounces of gold from 2.06 million metric tons of oxide material at an average diluted grade of 3.72 grams per metric ton gold. At a US\$1,250 gold price, this operation is forecast to result in a pre-tax net present value (5 percent discount) of C\$52.1 million and an internal rate of return of 30 percent, with an all-in sustaining cash cost of C\$626 per ounce of gold produced. Additional geotechnical and resource drilling at the Tiger deposit combined with exploration drilling at several untested satellite oxide targets are among a number of opportunities the PEA noted as having the potential to enhance the value of the project economics.

Atac is a member of the Strategic Exploration Group, a collection of junior resource companies focused on exploring northwestern Canada. Members of the group enjoy a close working relationship with Archer, Cathro & Associates (1981) Limited, a geological consulting firm with extensive knowledge and exploration expertise in the Yukon Territory and northern British Columbia.

CASH AND SHORT-TERM DEPOSITS: C\$24.4 million (June 30, 2014) WORKING CAPITAL: C\$23.1 million (June 30, 2014) MARKET CAPITALIZATION: C\$78.9 million (Oct. 8, 2014

Suite 1016 - 510 West Hastings Street Vancouver, British Columbia Canada V6B 1L8 Tel: 604-688-2568 • Fax: 604-688-2578 www.atacresources.com

#### BC OVERVIEW continued from page 29

priority opportunities that we would like to test this year if possible."

These high-priority opportunities are higher grade "core zones" that the company has identified below the porphyry copper-gold deposits that make up the world-class KSM project.

One such zone has been partially delineated below the Kerr portion of the KSM deposits.

Following a 25-hole program at Deep Kerr in 2013, Seabridge announced a maiden inferred resource of 515 million metric tons grading 0.53 percent (6.1 billion pounds) copper and 0.36 g/t (5.9 million ounces) gold for the deposit.

Expanding Deep Kerr and seeking a similar zone below Iron Cap are Seabridge's primary drill targets for 2014.

Immediately to the east of KSM, Pretium Resources Inc. continues to attract investors tantalized by the high-grade gold and strong economics of developing the Brucejack gold project.

The Valley of the Kings deposit at Brucejack contains 15.3 million metric tons of measured and indicated resources averaging 17.6 grams per metric ton (8.7 million ounces) gold and 5.9 million metric tons of inferred resources averaging 25.6 g/t (4.9 million ounces) gold, according to a resource updated in December.

Completing a C\$20.7 million flow-through financing in March, Pretium launched an exploration program that included bulk sampling and drilling from both the surface and under-

In July and August, the company closed a trio of associated financings for another US\$58.5 million. In addition to exploration,

these funds are being applied towards environmental, engineering and permitting activities.

According to a feasibility update completed in June, a 2,700metric-ton-per-day mine at Brucejack producing 7.3 million ounces of gold over an 18-year mine life.

Pretium is targeting 2017 to begin commercial production at this 404,000-ounce-per-year gold operation.

Roughly 25 kilometers (16 miles) west of Seabridge's KSM property, Colorado Resources Ltd. is investigating KSP, a large land package that includes properties that the company staked and the southeastern guarter of SnipGold Corp.'s Iskut property, which Colorado has secured on option to earn up to an 80 percent interest.

"Snipgold's founders are to be commended for assembling one of the most significant mineral landholdings in northwestern British Columbia," said Colorado Resources President and CEO Adam Travis. "Our planned exploration program will be aided both by new geological models developed in the Kerr Sulphurets Camp by both Seabridge Gold Inc. and Pretium Resources Inc. as well as by recent infrastructure development which has brought roads and power lines to the area's doorstep."

With initial exploration of the newly assembled property identifying two regional deformation zones - the KSP Deformation Zone, which extends for more than 20 kilometers (12.4 miles); and the Big Rock Deformation Zone, which is more than six kilometers (3.7 miles) long - Colorado remobilized field crews to conduct detailed follow up investigations on these dis-

continued on next page



#### BC OVERVIEW continued from page 31

coveries. This work included geological mapping, rock channel sampling, drill site selection and preparation.

If permits are approved in time, Colorado hopes to drill this KSM-esque property before winter weather sets in.

#### Copper-gold at the end of NTL

Some 140 kilometers (85 miles) to the northeast of its newly acquired KSP project, Colorado had drills turning on two properties near the terminus of the Northwest Transmission Line.

At North ROK, situated about 15 kilometers (nine miles) Imperial Metals' Red Chris project, Colorado cut significant copper in three of five holes drilled during an early 2014 drill program.

North ROK hosts an inferred resource of 142.3 million metric tons averaging 0.22 percent (690.3 million pounds) copper and 0.26 grams per metric ton (1.19 million ounces) gold.

At Eldorado, located adjacent to the east side of the Red Chris property, Colorado completed 892 meters of drilling in four holes this year. The best of which, EL14-008, cut 196.5 meters averaging  $0.19~\rm g/t$  gold and  $0.06~\rm percent$  copper.

Some 68 kilometers (42 miles) north of Red Chris, Kaizen Discovery Inc. completed a first-ever drill program on a porphyry copper-gold target at its Tanzilla project. The 1,600-meter drill program is being funded by Freeport-McMoRan, which can earn a 51 percent interest in the property by investing C\$8 million over four years.

In July, Kaizen Discovery purchased West Cirque Resources in an all-share transaction.

Roughly 50 kilometers (32 miles) east of Tanzilla, Carmax Mining Corp. completed airborne geophysics, the re-logging of historical drill core and a six-hole drill program at its Eaglehead copper- gold-molybdenum-silver project. The company said Quantec Titan-24 IP survey along with historical and current drilling has outlined a large chargability anomaly that appears to be mineralized for at least 4,500 meters.

Teck Resources pulled in the reins on exploration at the large porphyry copper-gold projects it is involved with in northwestern B.C.

At GJ, situated about 30 kilometers (20 miles) west of Red Chris, Teck completed a minimal program of data compilation and drill core re-logging. Though nominal, the program is expected to push the company's total investment in the property over the C\$12 million needed to earn an initial 51 percent interest from partner, NGEx Resources Inc, a stake that can be raised to 75 percent by spending C\$44 million by the end of 2020.

Similarly, Teck did not have drills turning at two other joint venture projects – Galore Creek (Teck-Novagold) or Schaft Creek (Teck-Copper Fox Metals).

Doubleview Capital Corp. completed an early season fivehole drill program at the Hat copper-gold property, located in the Sheslay Valley region some 95 kilometers (60 miles) southwest of Dease Lake. The best hole, H11, cut 451 meters averaging 0.22 percent copper and 0.17 g/t gold.

Teck Resources, Garibaldi Resources, Romios Gold, Ashburton Ventures and Alix Resources are other companies with significant land positions in the emerging Sheslay Valley area.

Approximately 100 kilometers (60 miles) northwest of the Sheslay Valley, Brixton Metals completed a 1,287-meter drill program at its Thorn gold-silver property.

Capstone Mining Corp. has hung a "for sale" sign on its Kutcho copper-zinc project, located roughly 100 kilometers (60 miles) east of Dease Lake. In August, the company reported that a sale process is underway.

#### Namesake silver properties

Roughly 100 kilometers (60 miles) southeast of the gold and copper projects at and around KSM, a pair of mining explorers are forging ahead at namesake projects better known for their high-grade silver.

Homestake Resource Corp. holds a pair of properties in this region – Homestake Ridge and Kinskuch.

Homestake Ridge hosts indicated resources of 604,000 metric tons averaging 6.4 g/t (124,000 ounces) gold and 48.3 g/t (939,000 ounces) silver and inferred resources of 6.8 million met-

ric tons averaging 4.2 g/t (911,000 oz) gold and 93.6 g/t (20.4 million oz) silver.

Agnico Eagle Mines Ltd., which entered into option to earn up to a 65 percent interest in Homestake Ridge in 2012, drilled six holes at the property in 2014 before withdrawing from the project in favor of a gold discovery made near its Meadowbank Mine in Nunavut.

Slide, located to the southeast of the resource at Homestake, was the first target of the 2014 drilling.

Highlights of Agnico's drilling include 4.5 meters grading 144 g/t silver and 0.20 g/t gold in hole HR14-264; and 4.74 meters of 97.2 g/t silver in hole HR14-266.

"Agnico's drilling has demonstrated that a silver resource is likely to be developed with further drilling at the Slide target," according to Homestake President Joe Kizis.

To continue the exploration at Slide, Homestake has asked Agnico for the opportunity to continue with the 2014 drill program without the added time and money required to of establish new camp or mobilizing a drill.

Prior to Agnico's pullout, Homestake was focusing its efforts on further refining drill targets at Kinskuch, a property immediately to the east of Homestake Ridge. This work focused on evaluating three primary target areas: Esperanza, an Eskay Creek-type silver-gold target; FH, a Red Chris/North Rok-type porphyry coppergold target; and Illiance River, a silver-lead-zinc target.

Immediately southeast of Homestake Ridge and encompassed to the east by the Kinskuch property, Dolly Varden Silver Corp. continues to forge ahead with exploration at its namesake property.

An early season geophysical program helped identify targets within three corridors on the Dolly Varden property:
Torbrit-Red Point, an Eskay-Creek style target; Musketeer, which has numerous silver-rich epithermal vein-type showings with strong potassic radiometric signatures; and Wolf-Surprise, where silver-enriched volcanogenic massive sulfide mineralization has been identified.

Dolly Varden raised C\$5.66 million to fund a late season 2014 drill program at its namesake project.

#### **Kechika Trough draws zinc miners**

The Kechika Trough, a finger of the Selwyn Basin that stretches some 500 kilometers into northern B.C., makes the Omineca region a favored place to seek sedimentary exhalative zinc-lead deposits For around two decades a 50-50 joint venture between Teck and Korea Zinc Co. has been investigating zinc prospects in both the Selwyn Basin and Kechika Trough.

In 2013, the zinc seeking partners cut a deal with Canada Zinc Metals Corp. to explore the Pie, Yuen and Cirque East properties, part of the junior's larger land package in the Kechika Trough. Under the agreement, Teck and Korea Zinc could earn up to a 70 percent interest in the properties by investing C\$8.5 million in them by 2019.

With a 2014 budget that will top the C\$500,00 first year minimum, the joint

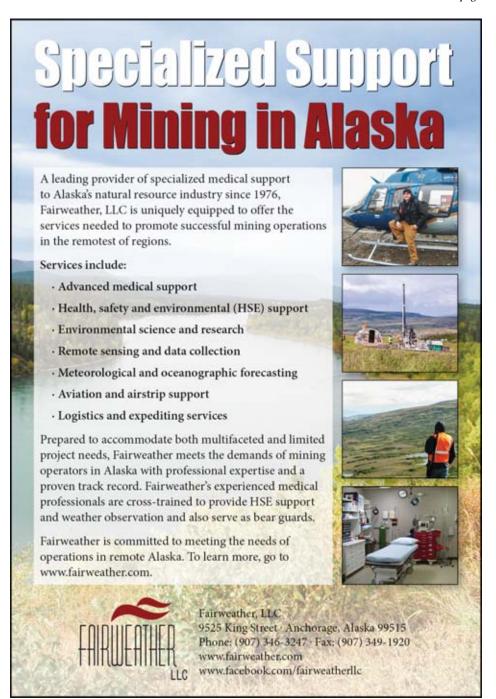
venture partners plan to complete targeted geological mapping, selective rock and soil sampling on high priority targets, core re-logging and sampling from historical Pie and Yuen drill core, and potentially geophysical surveys.

Additionally, Teck bought 1.25 million units of Canada Zinc (each unit consists of one share and one purchase warrant) for C\$500,000.

The Pie, Cirque East and Yuen properties lie adjacent to Cirque, an advanced zinc-lead project already owned by Teck and Korea Zinc.

Mineable reserves at Cirque are re-

continued on next page





#### **BC OVERVIEW** continued from page 33

ported to total 22.1 million metric tons grading 9.4 percent (4.6 billion pounds) zinc, 2.8 percent (1.4 billion) lead and 60 g/t (42.6 million ounces) silver.

In its exploration and mining summary, the British Columbia Ministry of Energy and Mines reports that Teck re-established the camp at Cirque and drilled deep targets at the property during 2013.

For 2014, Canada Zinc focused its own exploration on Cardiac Creek deposit of its Akie property, located immediately southeast of the properties optioned to Teck and Korea Zinc.

Cardiac Creek hosts an indicated resource of 12.7 million metric tons grading 8.4 percent (2.4 billion pounds) zinc, 1.7 percent (472 million pounds) lead and 13.7 g/t (5.6 million ounces) silver (at a 5 percent zinc cut-off grade) and an inferred resource of 16.3 million metric tons grading 7.4 percent (2.6 billion pounds) zinc, 1.3 percent (482 million pounds) lead and 11.6 g/t (6.1 million ounces) silver.

An eight-hole drill program focused on expanding a high-grade core of this deposit. Highlights of the first six holes drilled include 8.9 percent zinc, 1.3 percent lead and 10.5 g/t silver over 9.4 meters in hole A-14-111; and 7.4 percent zinc, 1.2 percent lead and 10.7 g/t silver in hole A-14-115.

"Drill hole 115 appears to have expanded the high grade core of the deposit further up-dip and it continues to demonstrate the consistency of grade and thickness of the high-grade core within the deposit," said Canada Zinc President and CEO Peeyush Varshney.

#### NE miners take a hit

With metallurgical coal selling at six-year lows, companies have put the skids on currently operating and coming coal mines in northeastern B.C.

In April, Walters Energy shuttered its Wolverine coal mine, laying off some 415 employees of the operation located about 25 kilometers (15 miles) south of Tumbler Ridge, a coal mining town of about 2,700.

"These layoffs are particularly unfortunate because our employees have worked very hard to keep these mines competitive in the face of daunting market conditions," said Walters Energy CEO Walter Scheller.

Walters Energy also idled operations at its Brazion group mines, laying off another 218 workers at the two operations, northwest of Tumbler Ridge closer to the community of Chetwynd.

"These coal reserves remain valuable assets," Scheller added.
"However, given the current met coal pricing environment, our best course of action at this time is to idle these operations until we can achieve reasonable value from these reserves."

Teck, which had been gearing up to re-open the Quintette coal mine, has deferred development and placed the operation on care and maintenance until the market for steel-making coal improves.

In a similar move, Anglo American plc is suspending operations at its Trend coal mine by the end of 2014 and has delayed start-up of Roman, an expansion project immediately south of Trend. Combined, Trend and Roman were expected to employ 450 people.

Teck and Anglo's projects are situated within 25 kilometers (15.5 miles) of Tumbler Ridge.

#### **British Columbia**

### Seabridge taps core of KSM

Drills test deeper, higher grade zones at world-class copper-gold project

By SHANE LASLEY

Mining News

ver the past decade, Seabridge Gold Inc. has outlined 9.9 billion pounds of copper and 38.2 million ounces of gold in reserves at its Kerr-Sulphurets-Mitchell project in northwestern British Columbia. While the gold reserves are the largest for any yet to be developed project on Earth and the copper reserves are themselves of world-class status, Seabridge believes that the results of exploration in 2014 could surpass all previous years of drilling at the project more commonly known as KSM.

"The Seabridge exploration team believes the 2014 program will be our best yet. The excitement level is really palpable as the drilling begins," Seabridge Gold Chairman and CEO Rudi Fronk said at the June start of drilling at KSM.

This confidence in a banner year of exploration rests upon the understanding and discovery of higher grade "core zones" that are looking to increase the size and grades already delineated at this copper-gold mine project.

"We now know a great deal more about the geophysical and geochemical signatures of the higher grade core zones we are looking for, and we also have unraveled the major displacements that have occurred along the district's faults. With these powerful tools at our disposal, we are confident that we will find more core zones this summer," Fronk said.

#### **Expanding Deep Kerr**

Deep Kerr, located below the Kerr portion of the KSM deposits, is currently the most tested of the deep zone targets.

Following a 25-hole, 23,802-meter program at Deep Kerr in 2013, Seabridge announced a maiden inferred resource of 515 million metric tons grading 0.53 percent (6.1 billion pounds) copper and 0.36 g/t (5.9 million ounces) gold.

"Deep Kerr has the size and grade of a world-class deposit, and it is very well-situated for low-cost, efficient underground block cave mining. The resource model assumes this method of exploitation and is based on a set of realistic economic assumptions derived from similar deposits now in production. We, therefore, have a high degree of confidence that, with further work, Deep Kerr can mature into an outstanding opportunity for a large, high-margin operation attractive to major mining companies," Fronk commented on the resource reported in February.

Seabridge geologists believe that Deep Kerr is not only ripe for expansion in terms of size but grade as well.

"We think the best is yet to come. Deep Kerr has excellent continuity of grade vertically and laterally within the deposit, which is helpful for mine planning and lower costs, but there is also a strong apparent improvement in thickness and grade to

#### Seabridge Gold Inc.

SEA:TSX

SA: NYSE Amex

CHAIRMAN AND CEO: Rudi Fronk PRESIDENT AND COO: Jay Layman SENIOR VICE PRESIDENT, EXPLORATION: William Threlkeld

#### PROPERTIES WITH MINERAL(S) EXPLORED:

KSM, British Columbia: Copper-Gold Courageous Lake, Northwest Territories: Gold Red Mountain, British Columbia: Gold

CASH AND SHORT-TERM DEPOSITS: C\$11.3 million (June 30, 2014)

WORKING CAPITAL: C\$18.7 million (June 30, 2014; C\$13.8 million financing completed on July 22, 2014)

MARKET CAPITALIZATION: C\$389.5 million (Sept. 26, 2014)

106 Front Street East, Suite 400 Toronto, Ontario M5A 1E1 Tel: (416) 367-9292 Fax: (416) 367-2711 www.seabridgegold.net



RUDI FRONK

SEABRIDGE GOLD

the north, which was the site of the last holes drilled in our 2013 program," Fronk explained.

Eager to add tons of higher grade mineralization to Deep Kerr and test other similar targets at KSM, Seabridge launched a 19,000-meter drill program in June.

One of the priority targets for 2014 is to determine the northern extension of the deposit with step-outs that could extend the strike of Deep Kerr by several hundred meters in that direction.

The company also plans to drill deeper into Deep Kerr, where mineralogical data suggests greater concentrations of copperrich bornite could be lying in wait.

In addition to expanding the known Deep Kerr, company geologists will seek a twin that could be hiding to the east.

Seabridge is basing its Deep Kerr east theory on the standard model for very large porphyry mineral systems such as Bingham Canyon in Utah, where the core of the source intrusion typically pushes its metal load out to the margins. Variations in pressures and temperatures as fluids moved away from its source results in various mineralization, creating a somewhat symmetrical metallic thumbprint of sorts.

If this model applies to Deep Kerr, Seabridge believes it would mean that the resource drilled to date may only represent half of the mineral thumbprint, leaving open the possibility of an eastern counterpart yet to be found. The company believes such

continued on next page



#### **SEABRIDGE** continued from page 35

a discovery would be significant, potentially repeating the known Deep Kerr deposit in addition to the expected expansion of the west limb to the north.



Data from the original Kerr deposit in combination with 2011 geophysical surveys that indicate the rocks in the eastern part of the Kerr system have properties similar to the already discovered Deep Kerr zone provides further evidence that an eastern extension of Deep Kerr could exist.

A round of recently completed magnetotelluric surveys, a geophysical technique that measures fluctuations in naturally-occurring electrical and magnetic fields, adds to the growing body of evidence pointing to a second deposit below Kerr.

These magnetotelluric surveys were used to guide the discovery of the original Deep Kerr and could be useful tool for locating the foreseen eastern extension and group of other core zones Seabridge believes to be lurking below the deposits it has already discovered at KSM.

"Our understanding of the KSM system has increased immensely since the discovery of Deep Kerr, and the more we learn, the more upside we see," the Seabridge CEO expounded.

#### Below the Iron Cap

Aside from Deep Kerr, Seabridge's 2014 search for core zones will focus on higher grade depth extensions of Iron Cap, a deposit with an indicated resource of 361.7 million metric tons averaging 0.44 g/t (5.1 million ounces) gold, 0.21 percent (1.7 billion pounds) copper, 5.4 g/t (62.8 million ounces) silver and 47 ppm (37.5 million pounds) molybdenum.

"A key objective for this year's drilling is to find additional higher grade core zones following last year's major discovery of the Deep Kerr deposit. The potential below Iron Cap was our No. 1 new target because of where it is," explains Fronk. "Iron Cap is currently designed as an underground block cave mine, sitting about 1,000 to 1,200 meters laterally from the access tunnels designed for the KSM project, making it the closest deposit to infrastructure. Seabridge said deeper and higher grade zones of copper and gold would significantly improve the Iron Cap deposit with little change to the KSM project design."

Drilling over the past couple of years has sought a higher

grade core zone below Iron Cap. One such hole, IC-13-49, cut 261.4 meters of 0.40 percent copper and 1.09 g/t gold.

Instead of a top-down approach, which did not test the width and strike of the projected core zone, the 2014 drilling is designed to cut across the projected Iron Cap core zone.

Hole IC-14-53 cut 514 meters averaging 0.68 g/t gold, 0.30 percent copper and 5.2 g/t silver; and IC-14-54 cut 510 meters averaging 0.41 g/t gold, 0.28 percent copper and 10.5 g/t silver.

Seabridge said these new holes indicate that the Lower Zone has excellent size and continuity as well as higher grades than the Iron Cap deposit above it.

The mineralization cut in these first two holes below Iron Cap indicate to Seabridge that drilling is closing in on the core zone the company is seeking.

Upon the September release of the first two holes, Seabridge said the drill program is being intensified in order to generate sufficient data for an initial resource estimate expected by January 2015.

#### Assembling the pieces

As drilling seeks to add new higher grade mineralization, Seabridge Gold is in the final stages of assembling all of the pieces needed to develop a mine at KSM. Attracting a partner of the same world-class caliber as the deposits that make up the project simply known as KSM and getting that final stamp of approval from the federal government are the key outstanding pieces.

In July, the British Columbia Ministers of the Environment and Energy and Mines put its stamp of approval on an environmental assessment certificate for development of a mine at KSM.

"This decision confirms that KSM is a well-designed, envi-

ronmentally responsible project which is technically feasible and offers significant economic benefits to both British Columbia and Canada," said Fronk. "This decision also affirms the value of extensive public consultation early in the environmental assessment process which helped us to understand the cultural, social, environmental and economic context of the KSM project."

In the wake of a tailings dam failure at Imperial Metals' Mount Polley Mine to the south, however, many in British Columbia and across the border in Alaska are calling for an extra level of scrutiny by way of an independent panel to review before Seabridge is issued the federal permits to develop KSM.

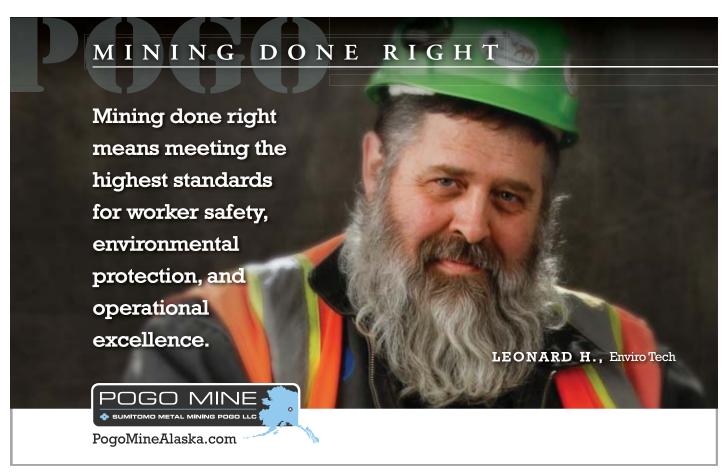
To alleviate concerns over the integrity of existing and future tailings facilities in the province, British Columbia has assembled a panel of engineering experts to investigate the cause of the breached dam at Mt. Polley Mine and is expected to beef up dam regulations based on the panel's findings and recommendations.

The proposed KSM tailings facility, which has already been engineered to standards that exceed regulatory requirements, will get weighed against the new standards set by the province.

The 2.16 billion tons proven and probable reserves averaging 0.55 grams per metric ton (38.2 million ounces) gold, 0.21 percent (9.89 billion pounds) copper, 2.74 g/t (191 million ounces) silver and 44.7 parts per million (213 million pounds) molybdenum, KSM has plenty of ore grade material to support a 130,000 metric ton per day mine at KSM for more than 50 years.

Any additional higher grade gold and copper found in the core zones will add to project that already ranks among the world elite.

The project now awaits a final decision by the Canadian Environmental Assessment Agency.



# Revitalizing the future of mining

Devolution and development strategies pave way for success in the NWT

By MINISTER DAVID RAMSAY

Special to Mining Explorers

The mining industry has been a pillar of the Northwest Territories' economy for more than 80 years. A strategic approach to manage resources in the territory is creating a new investment climate and opportunities for responsible resource development. In addition to being the largest private sector contributor to the NWT economy, the mining industry is also the largest private sector employer.

As new mining and exploration projects emerge, it is essential to keep environmental sustainability and social responsibility top of mind to ensure this industry continues to be an economic pillar long into the future.

A major milestone was reached this year when Devolution came into effect on April 1, 2014. The Government of the Northwest Territories gained responsibility for managing public land, water,



DAVID RAMASAY

and resources in the NWT. Decisions will now be made by a responsive government that can focus the needs of a single territory and its investors – resulting in faster response times to industry questions. This is key for the NWT to unlock its vast mineral and resource potential in a way that is in line with northern priorities.

The NWT currently has four producing mines, five advanced exploration projects, and more projects in the early, yet promising, stages of development. There is a wealth of mineral resources in the territory, including diamonds, gold, cobalt, bismuth, tungsten and rare earths, which have the capability to turn the NWT into an economic powerhouse.

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The four operating mines in the NWT are: Ekati Diamond Mine, Diavik Diamond Mine, Snap Lake Diamond Mine, and the Cantung Tungsten Mine. In 2013, \$1.67 billion worth of minerals and diamonds were produced by the NWT. The territory is the world's third largest producer of diamonds, by value.

Developing a solid framework in which to grow mineral and exploration development was essential. The Mineral Development Strategy, released in 2013, was the first step to building this framework and revitalizing the NWT mining industry. It focuses on five key areas: creating a competitive edge, establishing a new regulatory environment for the NWT, enhancing Aboriginal engagement and capacity, promoting sustainability, and enriching workforce development and public awareness.

A number of MDS recommendations are being advanced, including the NWT's first-ever Mining Incentive Program. This contribution program is tailored to the unique NWT operating environment, with the goal of maximizing return on investment through innovative and effective exploration.

The incentive program was launched in June 2014 and provides funds to eligible prospectors and mining exploration companies that are already engaged in mining exploration projects or proposing new projects in the NWT. It aims to offset some of the financial risk associated with grassroots mineral exploration. The NWT will now be able to compete better with other Canadian jurisdictions offering similar incentives that attract mineral exploration expenditures. The MIP celebrated a successful launch and was oversubscribed in its inaugural year.

The GNWT, poised for success in a post-devolution climate, is attracting new investments, developing long term plans and frameworks and supporting new, sustainable mineral exploration. The NWT is on track to create a legacy of positive benefits and a bright future across the territory for generations to come.

David Ramsay is minister of Industry, Tourism and Investment for the Government of the Northwest Territories.

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## **Diamonds draw** industry interest

Incentives, devolution mark 2014 mining activity in Far North territory

By ROSE RAGSDALE

For Mining Explorers

fter ushering in devolution in concert with implementing The first phase of a well-reasoned mineral development strategy, the Northwest Territories is eager to attract new mineral resource investment in 2014 in hopes of building on an uptick in exploration activity in recent years.

"The Canadian North is the next frontier in mining and mineral development and nowhere is this more evident than in the NWT," said NWT Industry, Tourism, and Investment Minister David Ramsav.

Home to the third-richest diamond resources in the world and untold quantities of precious and base metals, the Far North jurisdiction currently hosts three operating diamond mines and the sole tungsten producer in the West. The territory also recently approved plans for a fourth diamond mine and is shepherding four more advanced mine projects through regulatory permitting.

"It's been an exciting season for us because on April 1, we took over management of mineral and oil and gas resources in the territory," said Pam Strand, director of Mineral Resources for the Government of Northwest Territories.

"Overall, we're seeing a consistent trend for exploration as well as a bit of a resurgence of interest in diamonds," Strand told Mining Explorers in a recent interview. "During the slow times, different projects were dropped and we have new companies coming in. They are also interested in gold. Some are public companies and some are private, and for the first time, we've got an aboriginal company based in Yellowknife - DemCo - working on a project."

Strand noted that one of the new diamond explorers, Canterra Minerals Corp., is led by Randy Turner, who as head of Diamondex discovered the NWT's Snap Lake Diamond Mine, now owned by De Beers.

"It will be interesting to see what comes out of these projects," Strand observed.

The Northwest Territories is expected to attract about C\$71.5 million in exploration and deposit appraisal expenditures in 2014, down significantly from C\$90 million in 2013 and the territory's recent peak level of C\$108.7 million in 2012, according to Natural Resources Canada estimates.

Strand said she believes NRCan's estimate for 2014 is on the "conservative side," given the new interest in diamonds among explorers coming into the territory.

Another indicator of new interest in NWT exploration is a recent surge in the number of mining claims staked across the territory. Since April 1, 158 claims have been staked, compared with 177 claims for all of 2013 and 111 claims in 2012.



#### Diverse geology

Geoscientists have identified eight distinct and diverse geological provinces in the Northwest Territories - the Continental Shelf, Arctic Platform, Bear Province, Churchill Province, Cordilleran Orogen, Innuitian Orogen, Slave Province and the largest by landmass, the Interior Platform.

Since the early 1930s, the territory has produced more than C\$60 billion in minerals across a range of commodities and minerals, including gold, diamonds and zinc. Those three products alone account for more than 85 percent of the value produced, according to the NWT & Nunavut Chamber of Mines, which is working to spread a strong pro-mineral development message throughout the mining industry.

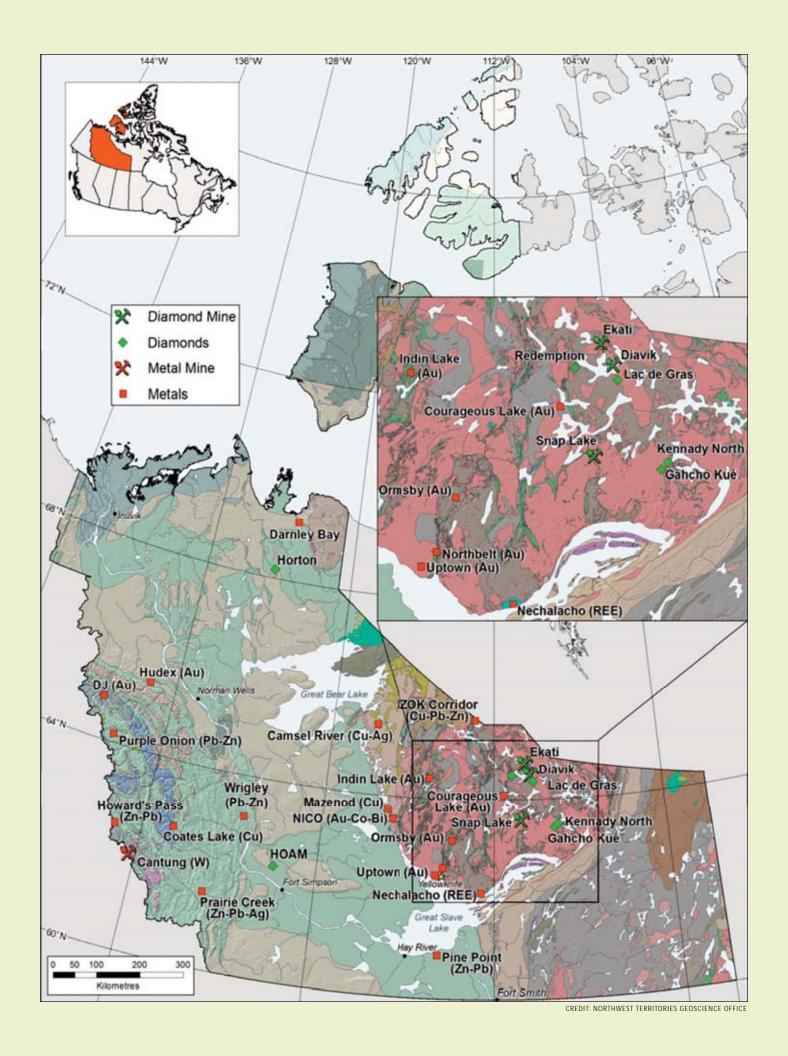
"There is much more to the mineralization story with other key products, including tungsten, uranium, copper, silver and even radium. When the new mines currently in the approvals phase enter production, that list also will include bismuth, cobalt and rare earth metals, which are minerals found in only a few places worldwide," the chamber said in a recent statement.

"The Northwest Territories really is an emerging land of undiscovered opportunity," said Tom Hoefer, executive director of the Chamber of Mines.

Hoefer said recent exploration activity is due not to growing numbers of grassroots projects, which are suffering in the NWT as elsewhere in the world, but to sizable advanced projects like Gahcho Kué that are moving forward with some spending as their approval processes inch closer to completion.

"In essence, we are taking advantage of the downturn in the marketplace to improve the investment climate through the NWT Mineral Development Strategy, devolution, and regulatory improvement," he observed.

continued on page 41



#### **Northwest** Territories

#### Avalon Rare Metals Inc.

AVI: TSX

PRESIDENT AND CEO: Donald Bubar SENIOR VICE PRESIDENT, METALLURGY: Dave Marsh VICE-PRESIDENT, EXPLORATION: William Mercer

Avalon Rare Metals is focused on developing a mine at its Nechalacho rare earth elements deposit at Thor Lake in Northwest Territories. During 2014, the company is continu-



ing exploration while optimizing a feasibility study completed in 2013. Drilling in 2013 identified high-grade rare earth mineralization near the proposed access ramp location, with one hole intersecting 12.1 meters averaging 2.82 percent total rare earth oxides, with 29.9 percent of the TREO being the higher valued heavy rare earth oxides in the lower part of the Basal Zone. A 15-hole drill program completed during the winter months of 2014 obtained about 1.5 metric tons of bulk sample material from the Basal zone for on-going metallurgical process. The company said the 3,135 meters of drilling also helped define the geometry of Basal. The balance of the five metric tons of needed bulk sample material was collected during the summer program. Based on the results of recent exploration, Avalon intends to incorporate new resource model for Nechalacho into a revised mine plan that will be included in an updated technical report for the rare earths project. In June, Avalon grossed roughly C\$6 million through the completion of two financings. The net funds raised will be used for drilling, exploration, engineering, permitting and market development for Nechalacho; and exploration at the East Kemptville tin-indium property in Nova Scotia. In April, the company received a Class A Land Use Permit from the Mackenzie Valley Land and Water Board to start pre-construction work at Nechalacho. This permit allows Avalon, in a phased approach, to carry out identified low-impact

activities including site preparation, early camp erection, portal development and associated infrastructure such as roads, power and water treatment. The company said it is



continuing the application process for securing full construction and operations permits by early 2015. Avalon said its plans to achieve commercial production at Nechalacho by 2018 are contingent on securing a strategic or financial partner for the rare earths project.

CASH AND SHORT-TERM DEPOSITS: C\$4.4 million (May 31, 2014) WORKING CAPITAL: C\$3.1 million (May 31, 2014; raised C\$6.2 million in financings that closed in June and July, 2014) MARKET CAPITALIZATION: C\$57.5 million (Sept. 9, 2014)

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#### **NWT OVERVIEW** continued from page 35

#### **Enhancing economic development**

The Northwest Territories is planning for a prosperous future by enhancing economic development through several new strategies - mineral development, economic opportunities, and energy action.

The government implemented a new Mining Incentive Program in 2014 that was oversubscribed by midyear, with strong interest shown by companies and prospectors in the Northwest Territories and across Canada.

The program was launched in June to provide funds to eligible prospectors and mining exploration companies that are already engaged in mining exploration projects or proposing new projects in the NWT. It aims to offset some of the financial risk associated with grassroots mineral exploration in the NWT.

Three prospectors and 11 companies made up the 14 applications that requested a total of over \$1.02 million of funding support. The budget for the program is \$400,000.

"The Mining Incentive Program helps our government support those with the energy, expertise and perseverance that this industry relies on to conduct mineral exploration in an environmentally sustainable way," Ramsay said. "I especially look forward to using this program to contribute to the success of northern and Aboriginal-owned businesses pursuing mining projects, so more northerners can enjoy the benefits of economic development and a healthy mining sector."

Administered by the Northwest Territories Geoscience Office, the incentive program awarded grants ranging from C\$50,000 to C\$80,000 to six exploration companies and split C\$21,500 between two prospectors. The grantees were Proxima Diamonds (C\$80,000 – diamonds); Songful Resources (C\$65,000 – gold); DemCo (C\$65,000 – multiple metals); Panarc Resources (C\$64,544 – base metals, gold); TerraX Minerals (C\$50,000 – gold); North Arrow Minerals (C\$50,000 - diamonds); Lane Dewar (C\$12,000 - gold), and Dave Nickerson (C\$9,500 - gold).

#### Substantial mine development

Six companies have acquired the prerequisite permits, or are in the process of obtaining them, to bring mining projects into production in Northwest Territories.

The proposed Gahcho Kué diamond project received approval for a Type A Water License in late September and two other key permits in August, which paves the way for the project to proceed to construction and startup of operations in the third quarter of 2016. Gahcho Kué, a joint venture between De Beers Canada (51 percent) and Mountain Province Diamonds Inc. (49 percent), has probable reserves totaling 31.3 million metric tons grading 1.57 carats per metric ton for 49 million carats in the Tuzo, 5034 and Hearne kimberlites. A 2010 feasibility study demonstrated that an open-pit operation could produce an average of 4.5 million carats per year over an 11-year period, while employing nearly 700 workers during the peak of construction and roughly 400 mine workers once operational.

"As the world's largest and richest new diamond mine, Gahcho Kué will maintain Canada's position as a leading diamond producer," said Mountain Province CEO Patrick Evans. "Employment created by Gahcho Kué and revenues generated by the mine will contribute to growth and prosperity in the NWT."

The Gahcho Kué approvals were preceded by final regulatory approvals for the Prairie Creek zinc-lead-silver mine in the western NWT, and for the NICO gold-cobalt-bismuth-copper mine and concentrator in the central NWT.

An additional mining project proposal for the Nechalacho Rare Earth Elements Project, located at Thor Lake 100 kilometers (62) miles) southeast of Yellowknife, is also advancing through the regulatory phase.

Canadian Zinc Corp.'s Prairie Creek Project comprises a partially developed underground mine and plant that was constructed in the early 1980s. The plant was three months away from operations but was never put into use. In June 2012, Canadian Zinc Corp. released a pre-feasibility study projecting an 11-year mine life based on a measured and indicated mineral reserve estimate of



#### **NWT OVERVIEW** continued from page 41

5.43 million metric tons of zinc, lead and silver with a mill rate of 1,000 tpd. Inferred resources encompass another 6.2 million metric tons of the three metals, which have the potential to double the life of the mine. The federal minister responsible for northern mining approved the project in September 2013. Near-term, Canadian Zinc intends to focus on pre-construction optimization activities with site construction potentially beginning in 2014. The company is currently seeking funding to bring the mine into production with the potential for first shipment of concentrate south in 2016.

The Nico gold-cobalt-bismuth-copper deposit of Fortune Minerals Ltd. is located 160 kilometers (100 miles) northwest of Yellowknife, and only 85 kilometers (53 miles) north of the major highway to the capital. Construction of an all-weather road is proposed to allow metal concentrates to be trucked to southern markets. A 2012 Front End Engineering and Design Study outlines pre-production capital costs estimated at C\$441million for a vertically integrated project with a mine and mill in the Northwest Territories and a refinery planned for Saskatchewan. The study indicated life-of-mine average operating costs of mine at C\$61.97 per metric ton of ore processed. The Tlicho and federal governments have given the go ahead for the NICO mine and mill with permitting and financing requiring completion prior to the commencement of mine construction. The proposed mine site boasts reserves of 33 million metric tons containing gold, cobalt, bismuth and copper with a projected mine life of 20 years. Fortune Minerals has begun site preparations for construction at NICO that is targeted to begin in 2014.

In April Avalon Rare Metals Inc. received a land use permit to start pre-construction at Nechalacho, which is contemplated as a 2,000-metric-ton-per-day underground mine and concentrator, with a hydrometallurgical secondary processing facility being proposed for the south side of the lake and a refinery located in Louisiana. Avalon completed a feasibility study in 2013 that confirmed strong economics with a 22.5 percent pre-tax internal rate of return and average annual revenues of C\$645.8 million, with initial production projected for the second half of 2017.

Total capital requirements estimated for the feasibility study are

C\$1.575 billion and more than 200 new jobs are expected to be created in the NWT, mainly at the Nechalacho site.

Proceeds from a C\$2 million financing funded a 2014 summer drilling program and other exploration work along with engineering, permitting and market development work for the project.

The Yellowknife Gold Project, Tyhee Gold Corp.'s flagship property, is located 90 kilometers (56 miles) north of Yellowknife and covers 12,635 hectares (31,221 acres) over five zones of gold mineralization. A feasibility study released in August 2012 estimated pre-production capital costs of C\$193 million with an estimated mine life of about 15 years based on a production rate of 4,000 tpd at an average grade of 2.03 g/t gold. Proven and probable reserves are estimated at just over 1.3 million ounces of gold. The project owners are working to raise financing to advance the project through the approvals process.

#### **Diamonds**

In addition to the Gahcho Kué project, NWT's producing diamond mines and diamond exploration project invested substantial funds in exploration in 2014.

Dominion Diamonds Corp., which owns and operates the territory's largest producing diamond mines, reported exploration expense of C\$6.8 million incurred during the second quarter of 2014, compared with C\$3.1 million in the comparable quarter of the prior year. All of the spending went to work on the Jay kimberlite pipe within the Buffer Zone at the Ekati Diamond Mine located 310 kilometers (192 miles) northeast of Yellowknife, NT.

The proposed Jay Pipe Project is expected to enable the continued operation of the Ekati diamond mine, past its current projected mine life of five years. There is significant upside potential to extend the mine life if some or all of the mineralization in the Buffer zone is promoted to resource status. The Ekati mine's current annual production is estimated to exceed 7.5 million carats (1,500 kilograms, or 3,307 pounds) of diamonds.

Kennady Diamonds Inc. is exploring the Kennady North diamond project adjacent to the Gahcho Kué diamond mine project located 280 kilometers (174 miles) northeast of Yellowknife. The company conducted 2014 exploration, delineation and mini-bulk

sample drilling. More than 129 meters of kimberlite was intersected in diagonal delineation drill hole KDI-14-058a at the far north of Kelvin kimberlite, the widest intersection drilled to date at Kelvin. In response to multiple encouraging intersections of kimberlite on the property this season, Kennady extended its 2014 target of 12,000 meters of drilling to 14,000 meters and its target for the bulk sample program to 28 metric tons. This is shallower than previously modeled and indicates the potential for additional tonnage at the high-grade Kelvin pipe," said Kennady Diamonds CEO Patrick Evans. Kennady Diamonds also reported the recovery of a high-quality 0.94 carat diamond found during logging of core from the Kelvin kimberlite.

Margaret Lake Diamonds Inc. is another junior exploring for diamonds in Northwest Territories. Its efforts are focused on the 23,199-hectare (57,325 acres) Margaret Lake property located 10 kilometers (six miles) from the Gahcho Kué diamond project and within a 90-kilometer by 40-kilometer (56 miles by 25 miles) diamond field that also contains the Snap Lake mine operated by De Beers. The Margaret Lake property contains several indicator anomalies based on previous work done in the 1990s, and a number of untested kimberlite-like EM and magnetic anomalies. Margaret Lake Diamonds is proceeding with a similar gravity survey and strategy.

Margaret Lake Diamonds Inc. and Canterra Minerals Corp. entered into an option agreement whereby Margaret Lake has been granted, subject to the acceptance of the TSX Venture Exchange, the right to acquire up to an aggregate 49 percent right, title and interest in and to Canterra's 26,000-hectare (64,246-acres) Marlin Property in the Northwest Territories. The property comprises 23 mineral claims covering an area of about 26,000 hectares and lies contiguous to the north and west of the Kennady North project

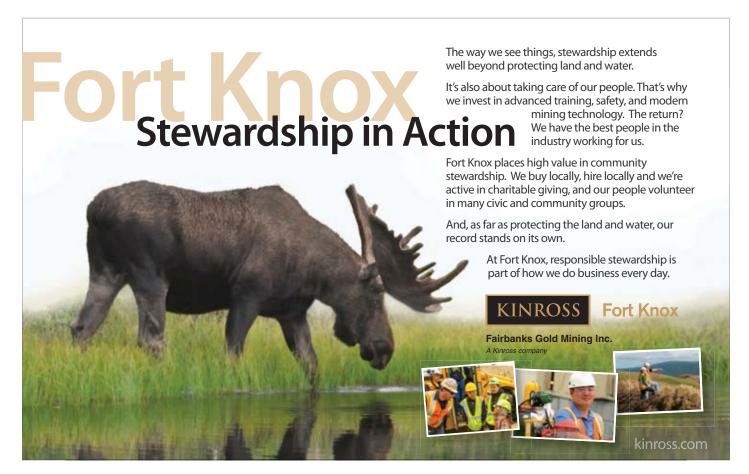
and west of Margaret Lake's Margaret Lake Property. To earn its interest in the Marlin Property, Margaret Lake must make staged cash payments totaling \$100,000, issue an aggregate of 600,000 common shares and incur \$1.75 million in exploration expenditures over a three-year period. Canterra is the operator, and the initial exploration program which consists of basal till sampling is expected to commence immediately.

Canterra President and CEO Randy Turner, commented, "This option agreement with Margaret Lake Diamonds creates an opportunity between two companies that hold contiguous properties to the Gahcho Kué and Kennady North projects and share a similar geological environment. With the proximal nature of our land packages, the synergies of data collection and analysis, plus the additional capital to advance the Marlin Property expeditiously, we are delighted with this partnership and look forward to a mutually successful outcome."

Paul Brockington, president and CEO of Margaret Lake, said, "We are pleased to enter into this option agreement with Canterra, as we now have ground under option that surrounds all the northern and western boundaries of the Kennady North property. We look forward to combining the knowledge base of our two management teams."

Under the terms of the option agreement, Margaret Lake has the right earn an initial 30 percent interest in the Marlin Property over a two-year period and an additional 19 percent interest in the Marlin property by the end of the third year.

North Arrow Minerals Inc. also completed an exploration drilling program this year at the Redemption Diamond Project in the Northwest Territories. The property is located in the Lac de Gras region, about 32 kilometers (19 miles) southwest of the Ekati



#### **NWT OVERVIEW** continued from page 41

Diamond Mines. A total of 799.8 meters of drilling tested seven targets located in the central part of the property near the up-ice termination of the South Coppermine kimberlite indicator mineral train. None of the drill holes definitively encountered a bedrock kimberlite source for the South Coppermine KIM train. Drill hole 14-RED23-08 (Az. 180 degrees; dip -60 degrees) tested a linear gravity low and encountered predominantly fresh to weakly altered granite that included a moderately to strongly fractured fault zone from 89.9 m to 99.7 m downhole. This fault zone contained intervals of dull green clay gouge, which have been collected for kimberlite indicator mineral analyses. North Arrow is exploring the Redemption property under an option agreement with Arctic Star Exploration Corp., in which the company can earn a 55 percent interest by incurring C\$5 million in exploration expenditures prior to July 1, 2017.

#### Other exploration

Among other mining explorers in the Northwest Territories, three companies stood out in 2014.

North American Tungsten Mines Co. Ltd., which owns and operates the Cantung tungsten mine, believes there is good potential to expand resources on the property though the remaining established resources on the property are limited. Underground drilling continues, and the company is in the process of updating a technical report under NI 43-101 for the mine. N.A. Tungsten is also considering a project to extract significant quantities of tungsten concentrates from tailings accumulated in prior years. Favorable results of these projects could extend the Cantung mining operation for many years.



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#### ALASKA MINERS ASSOCIATION

121 W Fireweed Ln., Ste. 120, Anchorage, AK 99503 Ph (907) 563-9229 | Fax (907) 563-9225 www.alaskaminers.org The company's 2014 underground diamond drilling program aimed to further define resources and develop an extended mine plan. A second underground diamond drill commenced drilling in June for a planned 13,000-foot drill program. Geophysical surveys were employed to supplement and guide the diamond drilling. A surface exploration drill program began in July 2014 to follow up on results from the company's 2013 summer drill program and to enable the exploration and evaluation of potential ore targets in the vicinity of the Cantung ore body. The company is also developing the Mactung tungsten project across the border in Yukon Territory.

Gold explorer TerraX Minerals Inc. is focused on the Yellowknife City Gold Project, which encompasses roughly 8,400 hectares (20,756 acres) of contiguous land immediately north of the City of Yellowknife and including TerraX's wholly-owned Northbelt property acquired in February 2013.

TerraX's field exploration in 2014 included mapping and prospecting and surveying over the contiguous Northbelt, Walsh Lake, U-Breccia and Ryan Lake properties that make up the project, followed by a drill program. The junior commenced its first drill program on the project in March. The 6,000-meter campaign tested three initial target areas; the Barney Shear, which is the extension of the Con/Giant shear system; the Crestaurum Zone, which is a high grade zone with nearly 200 historical drill intersections; and the Homer Lake base metal/precious metal target at the north end of the property.

TerraX Minerals Inc. also completed surface sampling results in a summer prospecting and mapping program. Combined with 2013 results, the company said some 718 grab, chip and channel samples collected during surface work led to the generation of more than 10 additional discoveries that could be quickly made 'drill ready' in the short term. Several of the new high-grade targets are oblique or high-angle veins that occur near the main Crestaurum and Barney structures, and they could be indicative of gold-bearing vein sets common to large mineralized systems.

Another explorer focused on gold in the NWT is Nighthawk Gold Corp., which mounted a 14,000-meter drill program in its Colomac gold project at the Indin Lake property located about 220 kilometers (136 miles) north of Yellowknife. The property covers 90 percent, or 930 square kilometers (229,791 acres) of the Indin Lake Greenstone Belt

2014 drilling, from which Nighthawk reported its first results Sept. 25, confirmed significant opportunities for expansion at Goldcrest and Colomac Main, two of a half-dozen gold deposits on the property. Two Goldcrest holes, which substantiate a north plunging mineralized shoot; hole G14-05 intersected 20.25 meters of 4.83 grams per metric ton gold, including 5.25 meters of 10.21 g/t gold and hole G14-04 intersected 19.60 meters of 4.19 g/t gold, including 7.90 meters of 7.85 g/t gold. At the Colomac Main deposit, hole C14-02 intersected 25.00 meters grading 2.38 g/t gold, including 8.75 meters of 4.98 g/t gold, effectively tracing Zone 2.0 mineralization down plunge of previously drilled higher grade shoots.

Goldcrest is a 2.5-kilometer (1.5 miles) long mineralized mafic sill similar to the Colomac intrusion located 400 meters to the east. As a primary candidate for resource expansion, Goldcrest hosts the highest average grade in the current resource estimate at 2.19 g/t gold; historic drilling was limited to a depth of 100 meters. Nighthawk's recent drilling has produced the first documentation of a higher grade shoot at Goldcrest.

Nighthawk released an updated mineral resource estimate for the project in mid-2013 of 39.815 million metric tons grading 1.67 g/t (2.1 million ounces) gold.

### Raising the bar at Kennady North

Drilling outlines larger than expected kimberlite at NWT diamond project

By SHANE LASLEY

Mining News

ince being spun-out of Mountain Province Diamonds Inc. in the summer of 2012, Kennady Diamonds Inc. has had a singular focus - find a next-generation Northwest Territories diamond mine at its Kennady North diamond project located 280 kilometers (174 miles) northeast of Yellowknife.

Receiving a highly prospective diamond property enveloping three sides of the Gahcho Kué diamond mine project and C\$3 million in seed money in exchange for slightly more than 16 million common shares, Kennady Diamonds was off to a good start in meeting its goal.

"Kennady North is an exceptionally prospective diamond exploration project, located adjacent to the Gahcho Kue JV between De Beers Canada and Mountain Province Diamonds," Kennady Diamonds President and CEO Patrick Evans explained at the time of the start-up. "Our priority is to define a resource along the Kelvin-Faraday kimberlite corridor which hosts three diamondiferous kimberlites."

Two years later, the company has set a higher bar for this primary objective.

"Our vision is to define a Kelvin-Faraday resource of between 5 and 8 million tonnes (metric tons) with a grade of greater than 2 carats per tonne. We expect to be able to declare our maiden resource by the end of 2014," Evans said at the on-set of the 2014 summer drill program at Kennady North.

#### Confirming the potential

As the calendar turned to 2014, Kennady Diamonds was preparing for an upcoming 10,172-meter winter-spring drill program at Kennady North, a property that envelops the south, west and north of Gahcho Kué, a diamond project being developed by De Beers and Mountain Province Diamonds.

The winter program, which got started by the end of February, saw three drills focused on delineation and exploration drilling and a larger diameter rig collecting bulk samples from the Kelvin and Faraday kimberlites.

Kennady said the delineation drilling was successful in both confirming the resource model and adding to the potential tonnage

"Besides achieving our targets for both meters drilled and metric tons of kimberlite recovered, we are particular pleased with the results from delineation drilling at both the Kelvin and Faraday kimberlites. Kelvin delineation drill hole KDI-14-018 intersected kimberlite over 80 meters, with substantially all of the kimberlite to the north and beyond the current geological model. Also, delineation drilling at Faraday 3 resulted in the discovery of a kimberlite 'blow' with intercepts ranging up to 42 meters." Evans said upon



#### **Kennady Diamonds Inc.**

KDI: TSX.V



**CHAIRMAN:** Jonathan Comerford **PRESIDENT AND CEO:** Patrick Evans VICE PRESIDENT, FINANCE & CFO: Bruce Ramsden

PROPERTIES WITH MINERAL(S) EXPLORED: Kennady North, Northwest Territories: Diamonds

CASH AND SHORT-TERM DEPOSITS: C\$6.94 million (June 30, 2014) WORKING CAPITAL: C\$6.42 million (June 30, 2014) MARKET CAPITALIZATION: C\$178.3 million (Sept. 30, 2013)

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conclusion of the spring exploration program. "These discoveries confirm the potential for substantial additional tonnage at the Kelvin and Faraday kimberlites, both of which have already returned exceptionally high sample grades."

The bulk sample portion of the early season program collected roughly 25 metric tons of kimberlite from Kelvin and another metric ton from Faraday. Both samples were shipped to the Saskatchewan Research Council for processing.

The 933-kilogram sample collected at Faraday yielded 4.76 carats of diamonds, or about 5.1 carats per metric ton. Of the diamonds recovered, 97 were larger than 0.85 millimeters, making them commercial grade. Besides the sample grade, Kennady said almost all the commercial size diamonds are described as transparent and either white-colorless or off-white. Approximately 75 percent have either no or only minor inclusions.

#### KENNADY continued from page 45

Results from the Kelvin bulk sample is expected before the end of 2014.

#### Raising the bar

With the goal of publishing a maiden resource by the end of the year, Kennady resumed its 2014 bulk sampling and delineation drilling at Kelvin and Faraday with a 5,000-meter summer program. Encouraging early returns from this drilling, however, caused the company to raise the bar on the scope of both its summer program and potential size of the resource

"Kennady North is an exceptionally prospective diamond exploration project, located adjacent to the Gahcho Kue JV between De Beers Canada and Mountain Province Diamonds," —Patrick Evans, president and CEO, Kennady Diamonds Inc.

being delineated.

"Delineation drilling at the north lobe of the Kelvin kimberlite pipe is exceeding expectations and initial exploration drilling at the Kelvin dyke is returning promising kimberlite intersects. Based on the results to date, we have revised our tonnage estimate for the Kelvin-Faraday kimberlite corridor from the previous 5 to 8 million tonnes to 7 to 10 million tonnes."

This declaration came on the heels of completing one hole that cut 183 meters of kimberlite outside of the geological model for Kelvin and a second that hit the Kelvin kimberlite pipe shallower than expected.

Further expansion to the north has given the company reason to believe the Kelvin-Faraday kimberlite corridor may be even larger than the 7 to 10 million metric tons.

Adding to the excitement of the 2014 summer program, a high-quality 0.94 carat diamond was spotted while core from the Kelvin kimberlite was being logged. The diamond measures 7.0 by 4.5 by 3.5 millimeters and is described as white-colorless, transparent, octahedral, distorted, twin with etched trigons. The diamond, which has no inclusions, was found at a break in the core from drill hole KDI-HQ14-030a at a depth of roughly 75 meters.

As drilling increased the breadth of the Kelvin kimberlite, Kennady increased the scope of the summer drill program. By mid-October, the company had more than tripled the drilling to 18,000 meters.

Kennady North also increased its summer Kelvin kimberlite bulk sample program to roughly 30 metric tons. This sample will add to the 25 metric tons collected early in 2014.

Given its explorations success thus far, Kennady plans to continue drilling into the winter months.

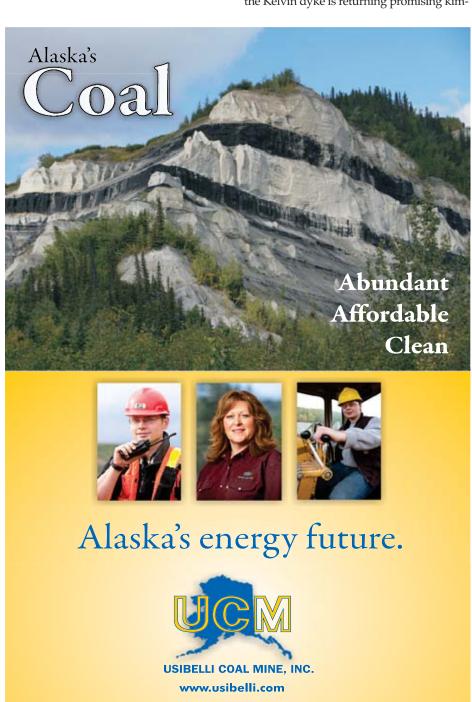
"We're now planning to build a 30 person camp at Kelvin so that we can continue drilling through the winter," explains Evans.

A C\$5 million private placement financing to fund the extended program was completed on Oct. 1.

In addition to Kelvin and Faraday, the company is eager to drill a number of exploration targets at Kennady North, including the MZ and Doyle kimberlites. Getting to these outlying prospects, however, will have to wait until the Kelvin kimberlite is fully outlined.

"I'm hoping we'll be able to get to the other exploration targets this year, but we'll have to wait and see how it goes," Evans told Mining News on Oct. 1.

A maiden resource for Kennady North, originally slated for completion by the end of 2014, but with drills still seeking the full extent of the Kelvin kimberlite into the third quarter the estimate will likely not be ready until early in 2015.



### **Abundant** minerals bode well for future

Federal, local governments invest in detailed geological mapping of vast territory to spur investment in exploration, development

By THE HON. GEORGE KUKSUK

For Mining Explorers

unavut's landmass, including the internal waters and offshore lands as legislated by the "Nunavut Act," occupies roughly a quarter of Canada's land mass. With such a large amount of land and unexplored territory, there is a strong promise of abundant resources yet to be discovered. At present, at least half of Nunavut is unmapped at a detailed scale and geologically, is poorly understood.

However, both the Government of Canada and Government of Nunavut are investing in geological mapping. This process allows Nunavut to compete with other jurisdictions, both within Canada and globally, for investment money. The Government of Nunavut remains strongly committed to public geoscience as a means of encouraging new exploration opportunities. It works through the Canada-



Nunavut Geoscience Office to deliver and carry out geoscience research in the territory.

Nunavut is geologically diverse and the resources are as varied and significant as the vastness of the land. Exploration efforts for all commodities are currently underway, including gold, zinc, copper, iron, uranium, diamonds and coal. Nunavut has one settled land claim in which Inuit beneficiaries are the major recipients of any resource development. Although streamlining of the regulatory processes is on-going, the processes are well-defined.

The GN developed "Parnautit: The Nunavut Mineral Exploration and Mining Strategy" in 2007. The goal of Parnautit is: "To create the conditions for a strong and sustainable minerals industry that contributes to a high and sustainable quality of life for all Nunavummiut". In 2014, after the election of a new premier and government, "Sivumut Abluqta: Stepping Forward Together 2014-2018" was released. Education and train-

continued on next page



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#### **NUNAVUT COMMENTARY** continued from page 47

ing, healthy families and strong communities, economic growth through responsible development, and good government through wise use of Nunavut's resources are all priorities for our territory and its government. I believe that as we work together and build on our successes, we can move forward as a stronger Nunavut.

Nunavut has one operating mine, the Meadowbank gold mine near Baker Lake in central Nunavut. One project is at the development stage, four projects are at the environmental assessment stage and active exploration continues across Nunavut. These projects are:

Mary River high-grade iron ore project of northern Baffin Island. This project is at the development and construction stage and could be operational by 2016;

Kiggavik uranium project in the Thelon Basin in central Nunavut;

Meliadine gold project in central Nunavut; Back River gold project in western Nunavut; Hope Bay gold project in western Nunavut; and, Chidliak advanced diamond exploration project. All of these projects are returning encouraging results.

Nunavut's exploration and mining opportunities have consistently attracted the attention of major global producers. Natural Resources Canada determined that \$313 million was spent on mineral exploration activities in Nunavut in 2013, and further estimates that \$166 million will be spent in 2014. While exploration efforts in Nunavut have experienced a decline, this actually reflects a global trend. A major factor in this trend is the

Education and training, healthy families and strong communities, economic growth through responsible development, and good government through wise use of Nunavut's resources are all priorities for our territory and its government. —Min. George Kuksuk, Economic Development and Transportation, Government of Nunavut

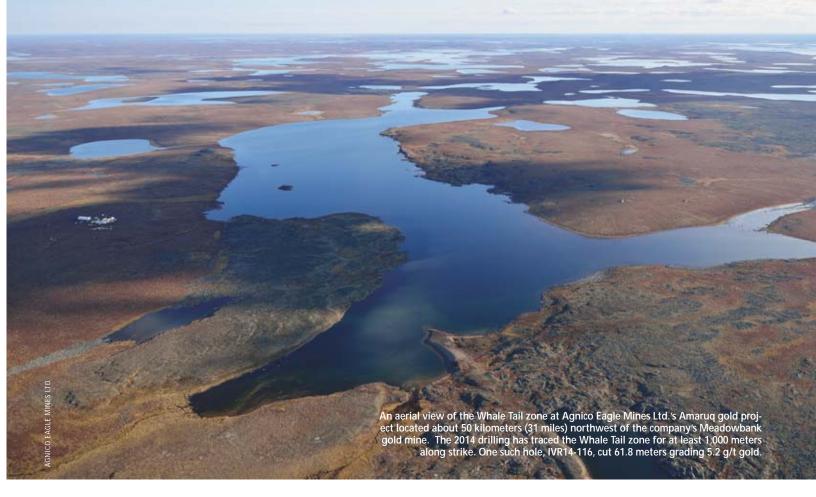
reduction of mineral exploration programs undertaken by junior mining sector companies. Still, the amount of exploration in Nunavut is robust and the future is promising. The next decade is widely expected to bring the territory more benefits through increased mineral production and economic growth in the mining sector.

Additionally, there is major potential for petroleum prospects within Nunavut. Our land contains significant sedimentary basins, both onshore and offshore, with similar geology to the oil-producing basins in the rest of Canada and other areas of the world. It is speculated that up to 10 oil-potential sedimentary structures exist between Greenland, Baffin Island and Labrador. The possibility of petroleum exploration and development within the next decade is real.

With its vast amount of resources, Nunavut will continue to be one of the leaders in mineral exploration and mining expenditures. The future of the territory's resource development industry is as bright as the midnight sun.

The Hon. George Kuksuk is minister of Economic Development and Transportation for the Government of Nunavut.





Nunavut Exploration 2014

## Big projects dominate field season

Gold, silver projects account for more than half of territory's exploration

By ROSE RAGSDALE

For Mining Explorers

Ineral exploration activity is holding its own in Nunavut this year, despite a tough funding environment and stiff competition from other attractive mining jurisdictions around the world.

Although the Far North territory has only one operating mine, Meadowbank, at least eight mineral projects are currently hurtling through development and the permitting process on their way to production. Of these, two projects – one gold and one iron – have project certificates, and six projects are progressing through the environmental assessment process.

Mineral exploration activity, meanwhile, is fairly robust, particularly in Nunavut's westernmost and central regions where companies continue to seek diamonds and a variety precious and base metals.

Nunavut is expected to attract about C\$166.5 million in exploration and deposit appraisal expenditures in 2014, down signifi-

cantly from C\$313 million in 2013 and from the territory's 16-year average of C\$220 million, according to Natural Resources Canada estimates.

Exploration and deposit appraisal expenditures are estimated to decrease in every sector, except for uranium where spending is expected to climb about 27 percent to C\$22.6 million. Precious metals projects will attract about half the spending, with C\$86 million invested primarily in gold and silver projects, while spending on base metals projects will total an estimated C\$40.5 million. The remaining outlay will go to diamonds (C\$10.5 million) and iron (C\$6.6 million) projects.

In 2014, exploration and deposit appraisal spending in Nunavut is projected to decrease substantially, plummeting to C\$166.5 million in total with corresponding declines in every sector, except uranium where expenditures are expected to jump to C\$22.6 million.

Regional geologists recently summarized mineral exploration, deposit appraisal, development and related activities

#### **British Columbia**

#### **Banks Island Gold Ltd.**

BOZ: TSX-V

PRESIDENT AND CEO: Benjamin Mossman CHAIRMAN: Wolfgang Nickel CHIEF GEOLOGIST: Dirk Meckert

Banks Island Gold Ltd. is on the cusp of transitioning from explorer to producer. Organized in 2010 by partners Ben Mossman and Jason Nickel, Banks Island is already enjoying income from gold recovered from bulk sampling the high-



BENJAMIN MOSSMAN

grade Bob zone at its Yellow Giant gold-silver property on Banks Island. From the first shipment of gold concentrates from the bulk sample program in February through June 10, the company reports that 7,145 ounces of gold and 18,559 ounces silver contained in concentrate shipped from Bob zone. The average mill grade of Bob zone bulk sample material through mid-July was 21 grams per metric ton gold and 51 g/t silver. Banks Island is planning for a seamless transition from bulk sampling to commercial production at Yellow Giant. In March, the company was issued a mines act permit that allows the construction of a 200-ton-per-day grinding and flotation plant, an underground mine at the Tel zone, and associated facilities including rock stockpiles and other infrastructure. Banks Island reports that the implementation of grinding and flotation circuits, which the company began commissioning in August, has resulted in a dramatic improvement in metallurgical gold recoveries from previous dense media separation plant production. The average gold grade of final tailings from the expanded recovery circuit through

Aug. 26 was less than 1 g/t gold resulting in a concentrate grade averaging 64 g/t

While bringing the recovery circuit online, Banks Island continued to enjoy exploration success at Yellow Giant. Early in 2014, the company said it had cut 11.9 grams per metric ton gold, 118 g/t silver, and 6.8 percent copper over 3.6 meters

(2.3 meters estimated true width) in hole BOB-13-32. This vein intercept is about 60 meters below the Bob zone resources. The biggest discovery, however, came near Quartz Hill, situated about 4.5 kilometers



(2.8 miles) southeast of the Bob zone. QH-14-01 – the first hole drilled into a 600-meter-long gold-silver-arsenic soil anomaly near Quartz Hill – returned results of 14 g/t gold over 2.3 meters inside a larger mineralized intercept of 2.5 g/t gold over 14.5 meters. Company geologists believe this block acted as a significant fluid trap in the contact zone with the quartz monzonite to the northeast. Banks Island geologists believe this discovery has the potential to develop into a mineralized zone and are working on plans to explore the Quartz Hill area.

CASH AND SHORT-TERM DEPOSITS: C\$193,060 (May 31, 2014)
WORKING CAPITAL: C\$5.6 million deficit (May 31, 2014; closed C\$4.0 million financing July 7, 2014 and C\$1.3 million financing Sept. 17, 2014)
MARKET CAPITALIZATION: C\$18.9 million (Oct. 8, 2014)

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#### **NUNAVUT OVERVIEW** continued from page 49

throughout 2013 and predicted that the territory's active exploration projects in 2014 across the territory will focus on gold, uranium, diamonds, copper, zinc, iron diamonds, rare earth elements and platinum group elements.

#### **Gold projects**

Perhaps the busiest explorer in 2014 is Agnico-Eagle Mines Ltd., which has undertaken new gold exploration programs at the 408-square-kilometer (157.5 square miles) Amaruq (formerly known as IVR) property located about 50 kilometers (31 miles) northwest of the Meadowbank Mine – Nunavut's only operating mine, and on the Greyhound Property, which the company optioned from Aura Silver. Greyhound is located about 35 kilometers (22 miles) south of Meadowbank.

"The new IVR (Amaruq) discovery has yielded some very exciting results for Agnico Eagle this summer," Sean Boyd, the company's president and CEO, said in late August. "We are particularly interested in the project because of its proximity to our Meadowbank mine and mill, which is currently our best cash flow generator," Boyd added.

In addition, the company is continuing to explore the Meliadine and Meadowbank properties. At Meliadine where Agnico Eagle is currently in the permitting phase for the development of a mine, the company anticipates spending C\$45 million in 2014 on exploration and extension of an underground exploration ramp from which deep exploration and conversion drilling of the Tiriganiaq and Wesmeg/Normeg zones will occur. The company is targeting startup at Meliadine in 2018, and it could surpass Meadowbank as Agnico Eagle's largest gold producer.

In Kitikmeot, Nunavut's westernmost region, exploration in 2014 centered on gold and base metals projects.

TMAC Resources Inc. is exploring the 80-kilometer (50 miles) long and seven to 20 kilometers (4.5-12.4 miles) wide Hope Bay greenstone belt located in the northeast Slave Structural Province

for gold.

The junior raised C\$78 million in equity financing last spring, net proceeds of which will further advance exploration and other work at Hope Bay in 2014. Pending 2014 results, TMAC plans to conduct a pre-feasibility study by early 2015, which, when completed, will allow the company to consider equity and debt project-financing options.

"A large portion of the approved 2014 plan and budget will consist of surface drilling to upgrade the mineral resource estimates to higher classifications and to add to our global gold resource," TMAC President Catherine Farrow said in May.

Six diamond drill rigs are expected to complete a total of 57,000 meters at a cost of about C\$28. Work is underway to reopen the Doris portal and ramp to facilitate future underground mapping, underground drilling and mine design. In addition, work has begun on environmental permitting of the Madrid and Boston trends for advanced exploration, engineering and project execution planning and will continue throughout 2014.

"We are very fortunate in having regulatory approvals in place that allow us to put Doris North into production and other permits that allow underground advanced exploration including bulk sampling at Boston and surface exploration drilling at Doris, Madrid and Boston," Farrow added.

Combined with the Doris North project certificate already in place, all necessary permits are secured to allow mining and milling to start at that deposit as early as the fourth quarter of 2015.

Sabina Gold & Silver Corp. continues to aggressively advance its Back River gold project in 2014. The company has initiated a feasibility study, and was expected to submit a draft Environmental Impact Statement to Nunavut regulators in early 2014. Sabina planned a C\$19 million 2014 work program at Back River \$19 million, including a modest drilling program following up on earlier discoveries.

The Back River gold project comprises six properties, Bath, Boot, Boulder, Del, George and Goose. In late July, Sabina re-

ported completion of nearly 9,000 meters of infill definition and expansion drilling program at the Echo deposit, one of four deposits that comprise the Goose Property.

Sabina is also exploring the 79,000-hectare (195,209 acres) Wishbone Gold project located in the southeastern portion of the Wishbone greenstone belt that also hosts the Hackett River deposits. In addition to Hackett River, Sabina sold a substantial portion of Wishbone to Glencore Xstrata, but retained claims viewed as prospective for banded iron formation-hosted gold, analogous to the primary host rocks at the Back River project. Sabina also acquired additional claims to bring the property to its current size of roughly 79,000 hectares (195,209 acres).

A reconnaissance surface exploration program was carried out on three blocks of claims within the property in 2013, and included prospecting and geological mapping. Further mapping and follow-up of gold anomalies is planned for 2014.

The Itchen Lake gold project, which straddles the Nunavut-NWT border, is also being explored under a strategic alliance between Transition Metals Corp., newly merged with HTX Minerals Corp., and Nunavut Resources Corp. The alliance planned to follow up in 2014 on a modest C\$1.0 million reconnaissance surface exploration program conducted a year earlier. More than 60 conductivity anomalies were identified in 2013, with some located along the same trends as known gold occurrences.

#### Base metals projects

To the south, Glencore Xstrata plc, a company formed in May 2013 from a merger of Glencore International plc and Xstrata plc, is exploring the Hackett River and Wishbone projects, from Sabina Gold & Silver Corp. in 2011.

Hackett River is considered one of the largest undeveloped VMS deposits in Canada, and possibly the world. With three main silver-rich zinc deposits, the property has a NI 43-101 resource estimate of 25 million metric tons of indicated resources grading 4.2 percent zinc, 0.6 percent lead, 0.5 percent copper, 130 grams per metric ton silver and 0.3 g/t gold, and 57 million metric tons of inferred resources grading 3.0 percent zinc, 0.5 percent lead, 0.4 percent copper, 100 g/t silver and 0.2 g/t gold.

Glencore has indicated that submission of a draft environmental impact statement to the Nunavut Impact Review Board will await the completion of a pre-feasibility study.

The Wishbone property spans the 115 kilometers (71 miles) length of the Hackett River greenstone belt, alternatively referred to as the Wishbone greenstone belt, and is comprised of 238 mineral claims with a combined area of almost 200,000 hectares (494,200 acres).

The property also encloses the Musk VMS deposit, discovered by Noranda Mining and Exploration Inc. in 1979, and owned by Glencore. Exploration on Wishbone in 2013 was limited to electromagnetic and gravity airborne geophysical surveys to expand the geophysical coverage of the property and to generate targets to follow up in future programs

MMG Resources Inc. continued work at on its High Lake and Izok Lake volcanogenic massive sulphide deposits, known collectively as the Izok Corridor Project, and the Hood zinc-copper project.

The 2014 program on the Izok Corridor project were anticipated to follow up on efforts in 2013 to prepare for regulatory review of the projects. Proposed plans includes a mine and mill at Izok Lake, a mine at High Lake, and a port at Grays Bay on the Coronation Gulf from which mineral concentrates would be



shipped seasonally, all connected by a 325-kilometer (202 miles) all-weather road. Much of the work completed on the Izok Corridor project in 2013 was focused on engineering studies to assess design alternatives. The exploration program, which included geological mapping, prospecting, and ground and airborne geophysical surveys, concentrated on regional target identification along the proposed road route. No exploration results have been released.

The company originally planned to submit a revised project description with alternative engineering options to the Nunavut Impact Review Board in late 2013, but since has indicated that the submission will take place in the fourth quarter of 2014 at the earliest. MMG said the revision would be submitted after the completion of the 2014 exploration program which is intended to

continued on next page



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#### **NUNAVUT OVERVIEW** continued from page 51

identify more mineral resources within the Izok Corridor. However, the company said it likely will need partners to finance construction of a road and port system that would make the Izok Corridor Project economically viable.

At the Storm copper-zinc-silver project, located on the northwest coast of Somerset Island, Aston Bay Holdings recently reported completion of a joint summer exploration program at the 139,633-hectare (345,033 acres) project conducted in conjunction with a subsidiary of Antofagasta plc. Outcomes from the program include new discoveries of copper-bearing frost heaved subcrop and float that increase the distance over which copper mineralization has been found at surface on the project.

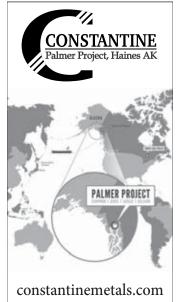
"The presence of copper-bearing subcrop and float in new areas re-affirms our belief that mineralization on the property may be more extensive than what has been defined to date by drilling," said Benjamin Cox, chief executive officer of Aston Bay.

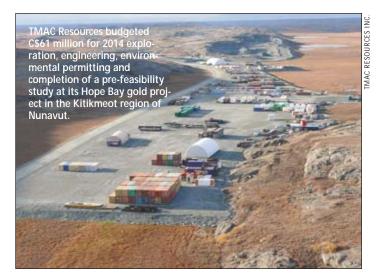
The joint exploration program was conducted over a threeweek period by technical professionals from Aston Bay, Antofagasta and consulting company APEX Geoscience Ltd. Work completed at Storm included geological mapping in the vicinity of the known mineralization as well as prospecting and soil sampling in areas where little or no mineralization had been previously identified. The strike length of surface mineralization was increased to 30 kilometers (18.6 miles) from the seven kilometers (4.34 miles) previously identified. Targeting for the prospecting and soil sampling was driven by results from a Versatile Time Domain Electromagnetic survey conducted in 2011 and previous soil sampling programs. Copper-bearing minerals, including malachite and chalcocite, were discovered in frost-heaved subcrop and float in several areas where no previous drilling or surface sampling had been conducted. Samples of the copper-bearing material were collected for assay and results will be released once obtained. The completion of the 2014 summer field program was an important milestone in progressing towards a proposed definitive agreement with Antofagasta, which the parties have agreed to complete by Dec. 1.

#### Iron and diamonds

Of the advanced mineral projects edging closer to production







in Nunavut, the Mary River iron project is likely the closest to startup. For the past two years, the venture, spearheaded by Baffinland Iron Mines Corp., has headlined mining news coming from the Qikiqtani, the territory's easternmost region.

Baffinland planned to focus work in 2014 on Deposit No. 5 at Mary River, including geophysical surveying and additional surface sampling. Construction of mine-related infrastructure and work on the mine site is underway and is expected to continue through 2014.

Located in northern Baffin Island, the iron mine project is expected to produce 3.5 million to 4.2 million metric tons of iron ore annually when it begins operation, potentially in 2015. The ore, which will require little or no processing will be shipped from Milne Inlet to markets in Europe.

On southern Baffin Island, Peregrine Diamonds Ltd. continued work in 2014 on its Chidliak diamond project, beginning in March with an exploration and diamond resource definition program. Chidliak is a 7,989-square-kilometer (3,087 acres) property comprised of Crown land and IOL (surface) parcels and located 120 kilometers (74 miles) northeast of Iqaluit, on the Hall Peninsula of Baffin Island. The primary objective of the 2014 program is to advance three to five kimberlites showing economic potential to the bulk sample stage and to commence logistical preparations for the 2015 bulk sampling program. The objective of the 2015 bulk sampling program will be to confirm sufficient diamond resources to enable commencement of a pre-feasibility study for Baffin Island's first diamond mine. The approved budget for the 2014 program is C\$7 million.

Peregrine planned to advance additional kimberlites to the bulk sample stage in 2014 by completing a program of core drilling on these pipes. In addition, thorough exploration will be focused on discovering new kimberlites with economic potential in a priority area that includes the CH-6, CH-7 and CH-44 kimberlites. The 2014 program was expected to be completed in September.

In May, Peregrine reported a maiden independent NI 43-101compliant inferred mineral resource estimate for the top 250 meters of the CH-6 kimberlite pipe and additional tonnage as a target for further exploration. Key elements of the CH-6 estimates included an inferred mineral resource of 7.47 million carats of diamonds in 2.89 million metric tons of kimberlite to a depth of 250 meters, an estimated 2.60 million to 3.47 million metric tons of kimberlite classified as a target for further exploration and the kimberlite is open at depth.

#### **British Columbia**

Canada Zinc Metals Corp. czx: TSX-V

CHAIRMAN, PRESIDENT AND CEO: Peeyush Varshney VICE PRESIDENT EXPLORATION: Ken MacDonald DIRECTOR: Henry Giegerich

Canada Zinc Metals Corp. is focused on exploring a band of zinc-lead-silver properties that blankets 79,870 hectares (197,359 acres) of the Kechika SEDEX belt in northeastern British Columbia. The company has divided this land package into two projects – Akie, which hosts the Cardiac Creek deposit, and the Kechika regional properties, a series of property blocks that extend about 140 kilometers (85

miles) northwest of Akie. According to a calculation completed in 2012, Cardiac Creek hosts an indicated resource of 12.7 million metric tons grading 8.4 percent (2.4 billion pounds) zinc, 1.7 percent (472 million lbs) lead and 13.7 g/t (5.6 million oz) silver; and an inferred resource of 16.3 million metric



tons grading 7.4 percent (2.6 billion lbs) zinc, 1.3 percent (482 million lbs) lead and 11.6 g/t (6.1 million oz) silver. During 2014, Canada Zinc drilled eight holes aimed at testing the perimeter and up-dip sections of the Cardiac Creek deposit. The first hole of the program, A-14-111, cut 9.4 meters averaging 8.9 percent zinc

and 1.3 percent lead. In August, Canada Zinc completed an airborne gravity survey on the Akie and Mt. Alcock properties. The company said this survey will add important geophysical coverage to an airborne VTEM survey that was completed in 2012. Coincident VTEM and gravity anomalies will be prioritized as drill targets for future exploration.

In 2013, Canada Zinc entered into an agreement to option its Pie, Yuen and Cirque East properties to Teck Resources Ltd. and Korea Zinc Co. Ltd. Under this agreement the joint venture between Teck and Korea Zinc can earn up to 70 percent interest in these three blocks of claims stretching northwest from the Akie property by investing C\$8.5 million in them by 2019. With a 2014 budget that will top the C\$500,000 first year minimum, the joint venture partners plan to complete targeted geological mapping, selective rock and soil sampling on high priority targets, core re-logging and sampling from historical Pie and Yuen drill core, and potentially geophysical surveys.

CASH AND SHORT-TERM DEPOSITS: C\$13.1 million (March 31, 2014) WORKING CAPITAL: C\$12.9 million (March 31, 2014) MARKET CAPITALIZATION: C\$80.39 million (Sept. 9, 2014)

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In addition, Peregrine reported estimates for the CH-7 and CH-44 kimberlites. The CH-7 kimberlite tonnage estimate is between 2.75 million and 3.97 million metric tons from surface to a depth of 280 meters. The CH-44 tonnage estimate is between 1.16 and 2.05 million metric tons from surface to a depth of 230 meters. Both CH-7 and CH-44 are open at depth. The tonnage estimates that have been identified at CH-6, CH-7 and CH-44 are classified as targets for further exploration and are conceptual in nature.

Peregrine also said insufficient exploration has occurred to define a mineral resource on those targets, and it is uncertain if further exploration will result in the tonnage estimates being delineated as a mineral resource.

North Arrow Minerals Inc. also conducted a bulk sampling program at the Qilalugaq Diamond Project located near the hamlet of Repulse Bay (Naujaat), Nu. The intent of the program was to recover a diamond parcel of about 500 carats for the purpose of determining an initial value estimate for the diamonds in the Q1-4 kimberlite. North Arrow is funding the bulk sampling program as part of an 80/20 percent option agreement with Stornoway Diamond Corp. A total of 1,688 megabags of kimberlite have been collected from the 12.5-hectare (31 acres) Q1-4 kimberlite.

North Arrow also explored its Mel and Luxx diamond projects in 2014. The Mel project consists of five prospecting permits covering about 73,865 hectares (182,520 acres), and is part of an option agreement with Anglo Celtic Exploration Ltd., along with the Luxx project. At Mel, work included prospecting of targets identified from 2013 magnetic surveys and additional till sampling. At Luxx, follow-up to a substantial 2013 surveying and sampling program included additional till sampling and detailed prospecting of the highest priority target areas, as well as the acquisition of required permits for a spring 2015 drilling program.

#### **Uranium**

Uranium mining activity, while mainly in the early stages in Nunavut, advanced at an encouraging pace in 2013, but slowed significantly this year. The territory boasts vast potential for eco-

nomic uranium deposits and at least 10 active uranium projects, most of which are located in the south-central Kivalliq region near Baker Lake. The area hosts a number of deposits similar to those found in the Athabasca Basin region of Saskatchewan.

Nunavut's most advanced uranium project, Kiggavik, is inching closer toward potential development within a couple of years. The project, located about 80 kilometers, (50 miles) west of Baker Lake, is owned by Areva Resources Canada, one of Canada's largest uranium producers.

Several other companies are targeting deposits and prospects clustered nearby, though little activity has been reported in 2014. The uranium explorers include Cameco at the Turqavik-Aberdeen claims, located some 85 kilometers (53 miles) west of Baker Lake, where exploration has focused on finding mineralization in the southern portion of the two claims similar to that found within deposits at Areva's Kiggavik and Sissons properties to the east. Forum Uranium Corp. is exploring the North Thelon Project, which covers 50 kilometers (31 miles) of the eastern extension of the trend that hosts the Kiggavik deposits, and potentially hosts similar-style uranium deposits.

In February, Forum consolidated its North Thelon property interests by entering into a purchase and sales agreement with Agnico Eagle Mines Ltd. to acquire a 100 percent interest in Agnico Eagle's Judge Sissons and Schultz Lake claims. Sufficient work has been done by Forum to keep the claims in good standing with minimal expenditures for three years.

Another junior, Kivalliq Energy Corp., was the first company to explore for uranium on Inuit-owned lands in Nunavut, a move that could pay off handsomely for the company. Five years later, Kivalliq has identified the 340,268-acre Angilak property which is believed to host Canada's highest grade uranium resource outside Saskatchewan's Athabasca Basin. Angilak, located 225 kilometers (140 miles) south of Baker Lake has a 2.8-millionmetric ton inferred resource grading 0.69 percent U3O8, totaling 43.3 million pounds.

Advancement of Angilak has evolved to focus on de-risking the project by evaluating potential extraction and processing options for the Lac 50 uranium deposit.

#### Nunavut

# Agnico hits high-grade gold at Amaruq

Excited about new discovery just a few kilometers north of its Meadowbank Mine, producer expands drilling program by 500 percent

By SHANE LASLEY

Mining News

From expanding reserves at its proposed Meliadine gold mine to early-stage exploration at an enticing gold discovery a few miles up the road from its Meadowbank Mine, 2014 is emerging as a year marked with exciting growth for Agnico Eagle Mines Ltd.

In addition to growth through the bit of a drill, Agnico expanded its reserves and production profile through acquisitions.

In June, the producer and Yamana Gold Inc. finalized the purchase of Osisko Mining Corp. Agnico and Yamana each own 50 percent of Osisko and have formed a joint committee to operate the Malartic mine in Quebec.

The partners also will jointly explore and potentially develop other Quebec and Ontario exploration assets resulting from the Osisko purchase. In August, Agnico reported that one drill each was turning at the Upper Beaver and Kirkland properties that came with the Osiko purchase. Exploration programs and budgets for the Kirkland Lake camp were expected to be announced later this year.

While Agnico also operates gold mines in Quebec, Mexico and Finland, the company continues to focus on Nunavut as a core part of its growth strategy.

"Our drilling costs in Nunavut are less than they are in Mexico. So, this is why we say Nunavut is a big part of our strategy at Agnico; there's lots of gold there, its resource rich," Agnico Eagle President and CEO Sean Boyd explained during a Sept. 4 presentation at the Bank of America Merrill Lynch 20th Annual Canada Mining Conference.

#### A Whale Tail at Amarug

Amaruq, an early-stage gold project located on Inuit-owned land 50 kilometers (31 miles) northwest of Meadowbank, has bolstered Agnico's confidence in Nunavut's gold riches.

"This project further enhances our northern strategy. Given the size and scope of the discovery, studies are currently underway to evaluate how Amaruq could be incorporated into the Meadowbank operational plan and possibly linked with the Meliadine project," explains Agnico Eagle CEO Sean Boyd.

The project, formerly dubbed IVR in reference to three of the original gold-bearing zones identified on the property, was renamed Amaruq in September.

Agnico Eagle's recent work has revealed the potential for multiple mineralized zones within a two-kilometer-wide (1.24 miles) northeast-southwest corridor that can be traced for at least 10 kilometers (6.2 miles). Based on current information, Agnico said

#### Agnico Eagle Mines Ltd.

AEM.TO: TSX/ AEM:NYSE

PRESIDENT AND CEO: Sean Boyd SENIOR VICE PRESIDENT, OPERATIONS: Yvon Sylvestre SENIOR VICE PRESIDENT, EXPLORATION: Alain Blackburn

#### **PROPERTIES WITH MINERAL(S) EXPLORED:** Meadowbank, Nunavut: Gold

Meliadine, Nunavut: Gold Amaruq, Nunavut: Gold Greyhound, Nunavut: Gold-Silver Akasaba West, Quebec: Gold-Copper

Perron, Quebec: Gold

CASH AND SHORT-TERM DEPOSITS: US\$245 million (June 30, 2014)

WORKING CAPITAL: US\$585.9 million (June 30, 2014) MARKET CAPITALIZATION: US\$6.2 billion (Sept. 13, 2013)

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AGNICO EAGLE



SEAN BOYD



ALAIN BLACKBURN

all four structures identified to date – I, V, R and Whale Tail – are open in all directions including at depth.

High-grade results from drilling at R zone include: IVR14-031, with 26.1 g/t gold (54.4 g/t uncapped) over 4.8 meters at 89 meters depth; and IVR14-028, with 27.6 g/t gold over 3 meters at 58 meters depth.

The most recent intercept in the R zone, hole IVR14-057, encountered 5.6 g/t gold over 12.8 meters at 159 meters depth.

I zone is hole IVR14-050, which returned 7.6 g/t gold over 3.3 meters at 37 meters depth.

Whale Tail, a new zone that has been traced over a strike length of more than 1,000 meters, is the most tantalizing discovery at Amaruq.

"This year, the most exciting part is the Whale Tail zone. On the eastern side we are getting very high grades (over) four or five meters; on the western side we are getting 20-30-plus meter thicknesses in the five- to six-grams-tonne range," Boyd explained.

Highlights from drilling at Whale Tail include:

Hole IVR14-054 intersected four apparently parallel zones grading: 7.7 g/t gold over 6.5 meters at 52 meters below surface, 7.1 g/t gold over 9.6 meters at 104 meters depth, 7.3 g/t gold over 5.4 meters at 115 meters depth, and 3.1 g/t gold over 5.2 meters at



132 meters depth.

Across a 400-meter-wide lake, Hole IVR14-058 intersected what is interpreted as the same structure 500 meters along strike to the northeast, grading 4.9 g/t gold over 16.7 meters at 109 meters depth, including 8.1 g/t gold over 8.0 meters at 113 meters depth.

Some 70 meters farther east, hole IVR14-060 intersected 10.1 g/t gold over 3.8 meters at 86 meters depth.

Hole IVR14-081, drilled to test vertical continuity of Whale Tail, intersected 6.0 g/t gold over 23.7 meters at 122 meters depth; and 7.2 g/t gold over 7.5 meters at 289 vertical depth, representing the deepest intercept so far on the project.

On the next section, 70 meters to the west of drill hole IVR14-054, hole IVR14-056 returned two intercepts grading 3.6 g/t gold over 9.0 meters at only 9 meters depth including 5.3 g/t gold over 4.5 meters and a second intercept of 7.3 g/t gold over 3.5 meters at 43 meters depth. On the next section, 70 meters to the west of drill hole IVR14-056, hole IVR14-079 returned an intercept grading 8.1 g/t gold over 21.6 meters at only 35 meters depth, including 27.3 g/t gold over 4.5 meters.

IVR14-103, drilled on the southwest side of Whale Lake, cut 55.6 meters grading 6.1 g/t gold, from a depth of 278 meters.

IVR14-116, drilled roughly 140 meters west of IVR14-03, cut 61.8 meters grading 5.2 g/t gold from a depth of 81 meters.

In addition to the drilling, a 600-meter-long boulder field containing large blocks of quartz vein material (locally with sulfides and visible gold) has been located about 3 kilometers (1.9 miles) west of the Whale Tail zone.

"We picked up boulders on surface that have visible gold in them, so it is very unique," Boyd said of an early September visit to Amaruq.

The blocky shape and large size of the boulders suggests they have not been transported far from their original location, an important discovery in a region lacking true exposed bedrock. Based on the nature of the boulders, the proximity of a significant electromagnetic conductor and Agnico's understanding of the glacial transport direction, a third drill rig has been mobilized to investigate this area.

Mammoth, located some four kilometers (2.5 miles) southwest of Whale Tail, and Whale Fin, situated about 1,000 meters south of Whale Tail, are two other promising targets of the 2014 program.

With an original budget of C\$1.8 million to drill 5,000 meters, the 2014 program at Amaruq has been increased to roughly C\$9.3 million to drill 25,000 meters. An inaugural mineral resource for the property is anticipated to be completed by the end of 2014.

To support the growing exploration program, a new 25-person exploration camp built at Amaruq is already being expanded to accommodate a crew of 60 by the spring of 2015.

Field work, including mapping and sampling, is currently underway focusing on geophysical anomalies highlighted by an airborne VTEM plus Time-Domain electromagnetic survey conducted earlier this year. A total of 510 surface rock samples have been collected so far in an area of about 1,300 hectares (32,123 acres), work that led to the discovery of the gold-bearing boulder field.

Agnico Eagle has begun collecting environmental baseline data at Amaruq in the second half of 2014, as well as beginning the preliminary engineering for road design. Qualified fisheries, geochemical, terrestrial and archaeological consultants have begun to

#### AGNICO continued from page 55

review available baseline data from public sources and design field programs to gather additional data. Agnico said this baseline work could be used in future permitting for the Amaruq project.

The 408-square-kilometer (158 square miles) IVR property is located within Inuit Owned Lands and a 100 percent interest was acquired by Agnico in 2013 subject to a mineral exploration agreement with Nunavut Tunngavik Inc.

#### **Elsewhere in Nunavut**

In addition to finding success north of Meadowbank, Agnico is seeking nearmine exploration upside a few miles to the south.

In June, Agnico Eagle entered into an option agreement with Aura Silver Resources Inc. to earn up to a 70 percent interest in 17 claims of Aura's Greyhound property located 32 kilometers (20 miles) south of Meadowbank. In July, Agnico began an initial 1,000-meter drill program to test three precious and base metals targets: South Aura Lake; North Aura Lake and the Dingo prospect to the northeast. During this initial drill program, approximately 300 meters will be drilled for each area.

Agnico Eagle can acquire an initial 51 percent interest in the property by paying Aura C\$250,000 and completing C\$1.75 million in exploration expenditures before May 31, 2017, this interest can be increased to 70 percent by paying another C\$250,000 and investing another C\$5 million in exploration.

Agnico also terminated its partnership with Homestake Resource Corp. to explore the Homestake Ridge gold-silver project in northwestern British Columbia in September. The miner withdrew from the option



Agnico Eagle has begun collecting environmental baseline data at Amaruq in the second half of 2014, as well as beginning the preliminary engineering for road design.

before earning an interest in the property, leaving Homestake with full ownership of its namesake project. Prior to letting the option lapse, Agnico drilled 2,972 meters in six holes at Homestake.

The Meliadine project, which covers a nearly 80-kilometer (50 miles) stretch of land near the western shore of Hudson Bay in the central Kivalliq region of Nunavut, is the target of C\$8.3 million of exploration during 2014.

The surface program, which wrapped up in August, included 130 exploration and conversion holes totaling 37,991 meters completed at Meliadine.

The exploration portion of this program made an important discovery that indicates the potential of a high-grade resource at Meliadine's Pump zone, including 5.2 meters of 19.8 g/t gold starting at a depth

of 12 meters in hole M14-2220. Two other zones, Discovery and Wolf, also were targets of exploration drilling.

Conversion drilling targeted the project's Wesmeg-Normeg and Tiriganiaq zones.

Agnico anticipates the results from this drilling will continue the expansion of the company's largest and fastest-growing high-grade complement of reserves, plus resources.

Probable reserves total 2.8 million ounces of gold (12.0 million metric tons at a grade of 7.4 g/t), while indicated resources are 3.1 million oz of gold (19.0 million metric tons at 5.1 g/t) and inferred resources are 2.7 million oz of gold (11.7 million metric tons at 7.2 g/t).

Agnico Eagle is investing roughly another C\$42 million on capital expenditures at Meliadine, a large portion of which is being spent on 1,400 meters of exploration ramp development. In addition to providing a platform for conversion drilling, the company said this ramp will help keep the advanced gold project on track for a potential 2018 start-up.

An updated technical study is expected by early 2015.

Meadowbank, which had proven and probable reserves of 1.75 million oz gold (16.8 million metric tons grading 3.2 g/t gold) at the end of 2013, was only targeted with roughly 2,000 meters of conversion drilling and 300 meters of regional exploration drilling during 2014.



## Government funding bolsters exploration

YGS continues data releases aimed at de-risking projects; initiates study of Jurassic-aged granitic plutons in south-central area

By LARA LEWIS

Special to Mining Explorers

In 2014, many junior exploration companies work to preserve capital by undertaking modest exploration programs. The injection of funding into the Yukon Mineral Exploration Program continues to be a valuable source of seed money for prospectors and juniors. The Government of Yukon increased its 2014 program funding to C\$1.4 million from C\$1.17 million in 2013. Forty-eight placer and hardrock exploration projects received funding in 2014. The program also has increased its limits from C\$35,000 to C\$50,000 matching dollars per project, offering companies strong backing for their programs.

Exploration spending is forecast to be approximately C\$65 million for 2014. Nine programs are spending more than C\$1 million and 10 programs involve drilling. Although numbers are down from the peak activity of 2011, exploration spending shows healthy increases from 2013 and the activity level is well above the average



LARA LEWIS

for the past two decades. Gold continues to be alluring, with two-thirds of exploration programs searching for this precious metal. The remaining programs are searching for lead, zinc, copper, nickel, silver and platinum group elements.

Despite current equity markets, a few exploration companies had enough cash or were able to raise the money to undertake substantial programs. With a budget of C\$6.8 million, Atac Resources continued exploring its Rackla

Gold project along the northern margin of Selwyn basin. Kaminak Gold Corp. continued to drill its multi-zone Coffee Gold property and began a feasibility study after posting a positive preliminary economic assessment in July 2014.

Selwyn Chihong Mining Ltd. is carrying out an ambitious C\$65 million exploration and development project on its massive lead-zinc property in eastern Yukon. The program includes infill





#### YUKON COMMENTARY continued from page 57

drilling, geotechnical drilling, and upgrading a historic road to a full access road connecting the property to the Nahanni Range Road near Cantung mine.

Wellgreen Platinum Ltd. (formerly Prophecy Platinum Corp.) announced a new NI 43-101 mineral resource estimate on its Wellgreen PGM-Ni-Cu project in southwest Yukon in July 2014. Measured and indicated resources increased to 330 million metric tons at 1.67 grams per metric ton platinum equivalent at a 0.57 g/t platinum-equivalent cut-off. The new resource estimate, along with metallurgical testing results, will be incorporated into a PEA to be released this year.

After a hiatus from drilling in 2013, Rockhaven Resources has resumed its drilling program at its Klaza epithermal gold-silver property, located in the historic Mt. Nansen district. The 21,000-meter drill program includes definition drilling on the high-grade western BRX and Western Klaza zones.

#### Mining and Development

The territory is home to three hard rock mines. Capstone Mining's Minto (copper-gold-silver) mine continued to produce at capacity, producing over 37 million pounds of copper from open pit production in 2013. Capstone began underground mining at Minto in 2014 after exhausting the reserve in the Area 2 open pit and is in the process of permitting all known mineral reserves with the expectation of mining the high-grade Minto North pit by 2015.

The Wolverine (lead-zinc-copper-gold-silver) mine of Yukon Zinc Corp. achieved full production in early 2013 (1,700 metric tons per day), but then reduced production by 40 percent six months later due to uncertain economic conditions and declining metal prices. The company has since ramped up to 75 percent production capacity.

Alexco Resource Corp. temporarily suspended its mining operation at Bellekeno (silver-lead-zinc) mine in the historic Keno Hill Mining District in September 2013 due to low silver prices. Alexco filed a PEA technical report in December 2013 for its operations at Bellekeno, Lucky Queen and the new Flame & Moth property. The company successfully renegotiated its silver purchasing agreement in June. Production decisions, including the re-opening of Bellekeno mine are expected to be made in 2015. The company continued to explore its property in 2014 with a budget of C\$5 million and a plan for 10,000 metres of surface drilling.

Victoria Gold received permits to begin development of its Eagle gold deposit, but has deferred a production decision until

The Government of Yukon is committed to providing an attractive investment climate. This is achieved through a strong regulatory system, a consistent and comprehensive mining regulatory framework, good access to markets, and engaged First Nations partners.

—Lara Lewis, Yukon Geological Survey, Department of Energy Mines and Resources, Government of Yukon

equity markets recover. In the meantime, Victoria Gold has undertaken a metallurgical sampling program at the Olive Zone, a drill target located two kilometers (1.24 miles) north of the Eagle deposit, and begun the second phase of drilling at Olive. Phase 2 is following up on high-grade intersections from the phase 1 (19 holes, 3,000 meters) program. The company plans to calculate a resource estimate at Olive to be later incorporated into an updated feasibility study.

Golden Predator Mining Corp is advancing its Brewery Creek gold deposit with a PEA anticipated for the fourth quarter 2014. The PEA will assess open-pit mining of several shallow oxide deposits on the property.

North American Tungsten Mines Ltd. is undergoing the final stages of assessment for its Mactung tungsten deposit near the Northwest Territories border at Macmillan Pass.

Western Copper and Gold Corp has begun the assessment process for its massive Casino copper-gold porphyry deposit in western Yukon.

#### Yukon's commitment

The Yukon government's commitment to supporting a strong mining and exploration industry continues to be reflected in its Yukon Mineral Exploration Program, which provides a portion of the risk capital required to locate, explore and develop mineral projects to an advanced exploration stage. YMEP has also proven to be a strong vehicle for companies to leverage additional funding from investors.

The Government of Yukon is committed to providing an attractive investment climate. This is achieved through a strong regulatory system, a consistent and comprehensive mining regulatory framework, good access to markets, and engaged First Nations partners. The Government of Yukon and Government of Canada have signed modern land claim agreements with 11 of the 14 Yukon First Nations. These agreements contribute to clarity for industry in regard to engagement and potential for First Nation partnerships and opportunities.

The Yukon Geological Survey supports mineral exploration and mining by providing information that helps to reduce exploration risk. Projects underway this year include ongoing bedrock mapping in the easternmost Rackla belt, in the Hyland Group in southeast Yukon, and in southwestern Yukon in rocks that are correlative to the Juneau gold belt. In addition, they initiated a new study to assess the porphyry potential of Jurassic-aged granitic plutons in south-central Yukon. New data releases this year include a gravity survey in the Dawson area, a three-dimensional geologic model between Aishihik Lake and Carmacks, and some new interpretive maps generated from stream sediment geochemical data.

For more information on Yukon's Mineral Resources, visit www.emr.gov.yk.ca/mining

Lara Lewis is an economic geologist at the Yukon Geological Survey, Department of Energy Mines and Resources, Government of Yukon.



Yukon Exploration 2014

## Mining exploration jumps in 2014

Rapid advancement of Selwyn, big-time investments in Coffee boost spending

By SHANE LASLEY Mining News

nlike its neighbors in the North, the Yukon Territory is forecasting a marked increase in exploration in 2014. While well shy of the roughly C\$300 million invested in exploration in 2011, the peak of the modern Yukon gold rush, the C\$65 million forecast to be invested on exploration in the Yukon during 2014 is roughly a 45 percent leap over last year.

This exploration spending is dominated by an aggressive drill program at the Selwyn zinc project, situated in an area of eastern Yukon Territory renowned for its lead-zinc-silver sedimentaryexhalative massive sulfide deposits.

With its sights set on firing up a 35,000-metric-ton-per-day mine (roughly 3.5 times the size of the Red Dog Mine in Northwest Alaska) by 2020, Selwyn Chihong Mining Ltd. budgeted C\$65 million for year-round exploration and development at Selwyn in 2014.

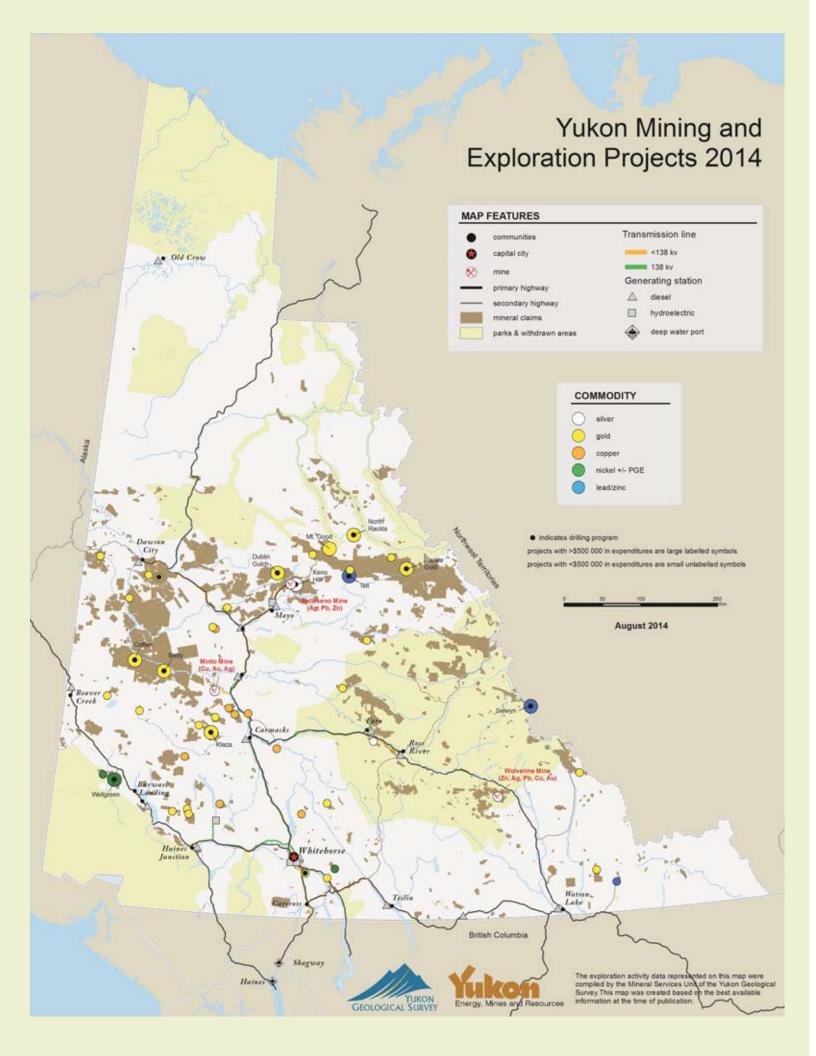
Many other projects received assistance from the Yukon Mineral Exploration Program, a highly successful territory incentive that encourages prospecting, grassroots and early-stage exploration with cash grants totaling C\$1.4 million awarded to 42 recipients in 2014.

While the spending on these grassroots programs may seem insignificant, YMEP investments grubstaked legendary Yukon prospector Shawn Ryan, whose discoveries sparked the White Gold Rush in 2009 and played a significant role in the more than C\$700 million of exploration investments in the territory over the past five years.

#### Zinc-rich Selwyn

Expected to produce more than 480,000 metric tons of zinc

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#### YUKON OVERVIEW continued from page 59

and 120,000 metric tons of lead annually, the proposed Selwyn mine located near the Yukon-Northwest Territory border is singlehandedly expected to double Yukon Territory's gross domestic product.

The current mine-life is projected to by 10 years, but continued exploration across the 316-square-kilometer (122 square miles) property is expected to tack on substantial reserves to the current plan.

Selwyn Chihong, which is owned by China-based Yunan Chihong Zinc & Germanium Co. Ltd., plans to invest C\$22.4 million this year to drill an initial 50,000 meters, averaging 200 meters per hole, for more than 250 holes to meet the requirements of geotechnical, hydrological and metallurgical programs as well as upgrade inferred resources to indicated resources.

During an early August visit to Selwyn, Mining News counted five drills turning and two rigs on standby during the first week of August.

"This thing is the most giving property I've ever worked," enthused J. J. O'Donnell, Selwyn Chihong's vice president of exploration.

Selwyn Chihong aims to complete a preliminary economic assessment for the Selwyn project in 2014, a pre-feasibility study by May 2015 and a feasibility study by December 2015.

"We picked the best deposits to get us over the feasibility study," O'Donnell said. "Since March, we're about 40 percent done, and we're moving the rigs every third day. My deadline is to get all the infill drilling done this year."

Other explorers investigating zinc enriched projects in the Selwyn Basin during 2014 include Alexco Resource Corp. and Manson Creek Resources Ltd.

Alexco continues to focus its exploration on the Bellekeno property that blankets much of the historic Keno Hill District, a particularly silver-rich portion of central Yukon.

A 10,000-meter surface drill program at Bellekeno focused primarily on defining the potential limits of mineralization and adding immediate resources at the Flame & Moth deposit and further defining the nearby Flame & Moth West discovery.

Flame & Moth has an indicated resource of 1.38 million metric tons averaging 516 g/t silver, 5.7 percent zinc and 1.7 percent

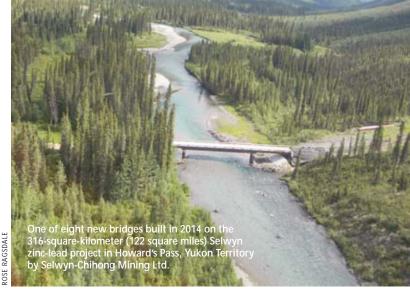
Manson Creek is investigating the potential for zinc enriched SEDEX or VMS deposits believed to be responsible for the springs of minerals laden water and a vegetation kill zone at its Guaman project (Tell property). The 2014 program includes drilling to see if the sulfide rich mineralization indicated on the surface translate to metal-rich deposits underground.

"We were able to finance over the last three years enough to test the target, and we still feel great about the potential for volcanogenic massive sulfide mineralization here," Manson President Jean-Pierre Jutras, P. Geol., told Mining News during the first week of August. "We've been drilling for three weeks this summer, and we've found bedded barite in the drill holes, which typically caps VMS mineralization."

#### Lundin, Beaty invest in Coffee

While zinc is the biggest game in the Yukon during 2014, gold continues to lure investors to the home of the Klondike.

"The biggest development in the Yukon this year is that Lukas Lundin and Ross Beaty, two of the smartest investors in the junior mining space, each bought 10 percent interest in Kaminak



(Gold Corp.)," Victoria Gold Corp. President and CEO John Mc-Connell told Mining News during an August visit to the Yukon Territory. "That level of interest shows the project is for real and so is the Yukon."

Lukas, through his family's Zebra Holdings and Investments S.à.r.l., Luxembourg, and noted geologist and entrepreneur Beaty each invested C\$6.76 million, collectively C\$13.52 million, in

A preliminary economic assessment published in June envisions an open-pit mine and heap-leach facility at Coffee producing an average of 167,000 ounces of gold annually over an 11-year mine-life at an all-in sustaining cash cost of US\$688 per ounce.

With a robust PEA in hand and cash in the bank, Kaminak wasted no time initiating on taking Coffee to the next level. In July, the company appropriated C\$12 million to launch a feasibility study for the gold project located on the banks of the Yukon River some 130 kilometers (81 miles) south of Dawson City.

Feasibility activities, which began in the third quarter, include infill drilling, additional metallurgical test-work, continued environmental baseline activities and a condemnation drill program.

Kaminak is also completing upwards of 70,000 meters of drilling aimed at upgrading and expanding the rich gold resources at Coffee.

"Ongoing exploration of the numerous high-tenor geochemical anomalies remaining at Coffee continues to demonstrate the resource upside of the project and has the potential to enhance the already positive, high-margin economics at Coffee as demonstrated in the recently completed PEA," said Kaminak CEO Eira Thomas.

As of January, an indicated resource of 14 million metric tons averaging 1.56 grams per metric ton (719,000 ounces) gold and an inferred resource of 79 million metric tons averaging 1.36 g/t (3.43 million ounces) gold had been delineated at Coffee.

Elsewhere in the White Gold District, Comstock Metals Ltd. published a maiden inferred resource of 4.4 million metric tons grading 1.65 g/t (230,000 ounces) gold for its QV project situated some 40 kilometers (25 miles) north of Coffee; Goldstrike Resources Ltd. carried out a reconnaissance level exploration program aimed at identifying additional drill targets on its Lucky Strike gold prospect situated about five kilometers (three miles)east of Kinross Gold's White Gold property; and Centerra Gold Inc. is expected to spend C\$1 million on detailed geological mapping, soil and rock chip sampling, and geophysical surveys

#### YUKON OVERVIEW continued from page 61

on the Betty and Hayes properties adjacent to Kaminak's Coffee project.

#### Gold across the Yukon

Roughly 130 kilometers (80 miles) southeast of Coffee, Rockhaven Resources Ltd. continues to uncover new zones of high-grade gold and silver at its Klaza property.

The 21,000 meters of drilling slated for 2014 is primarily targeting a zone known as Western BRX.

Among the best of these intersections from early drilling at Western BRX are: 26.71 grams per metric ton gold and 172 g/t silver over 2.98 meters including 38.20 g/t gold and 333 g/t silver (44.86 g/t gold-equivalent) over 1.16 meters in hole 150; and 22.43 g/t gold ad 245 g/t silver (27.33 g/t gold-equivalent) including 64.90 g/t gold and 725 g/t silver (79.40 g/t gold-equivalent) over 0.72 meters in hole 151.

"We figure that we're in the sweet spot of the system, and we don't know how much farther it goes out to the west. But we've pulled some pretty phenomenal holes this year," Turner told Mining News during a visit to the Klaza property Aug. 7.

Victoria Gold has found its own sweet spot at Olive, a gold-rich zone expected to enhance the mine-plan at the company's Dublin Gulch gold property, located roughly 160 kilometers (100 miles) east of Dawson City.

Situated some 2.5 kilometers (1.5 miles) northeast of Eagle Gold, a 2.3-ounce gold deposit at Dublin Gulch currently being permitted to mine, the Olive zone has the potential to add at least 10 million metric tons of higher grade material to the mine plan at Eagle.

To follow up on this potential, Victoria launched a 3,000-meter, phase-1 2014 program in May. This initial phase of drilling included 20 holes, three of which were used solely for metallurgical testing.

Highlights from this drilling include 69.7 meters of 2.29 g/t gold in hole DG14-584C; 96.1 meters of 1.22 g/t gold in DG14-586C; 99 meters of 1.02 g/t gold in DG14-588C; 35.3 meters of 1.67 g/t gold in DG14-590C; and 89.6 meters of 1.18 g/t gold in DG14-600C.

Victoria plans to integrate the deposit it is defining at Olive into the mine-plan for Eagle.

"Our confidence continues to increase that the Olive Zone will have a meaningful economic impact on the proposed Eagle Gold Mine," said President and CEO McConnell. "We intend to demonstrate this through a maiden Olive resource estimate followed by an update to the Eagle Feasibility Study and economic model with the incorporation of Olive."

Roughly 100 kilometers (60 miles) southeast of Dublin Gulch, Goldstrike Resources Ltd. completed a 3-D induced polarization survey of the VG zone at Plateau South. The company said this geophysical work outlined a large anomaly under Gold Dome. A nearby hole, PSVG13-03, cut 7.6 g/t gold over nine meters and rocks with visible gold are readily found on the surface.

"We think it's a bigger monster up here, and it's got a lot more appeal," Trevor Bremner, chief project geologist and director of Goldstrike told Mining News during an early August visit to Plateau South. "Geologists we brought in yesterday found eight to nine sample of visible gold in 20 minutes."

Some 100 kilometers (60 miles) north of the Plateau property, Atac Resources continues its exploration of the massive Rackla gold property.



This 1,700 square kilometer land package is divided into two distinct trends: the 50-kilometer- (30 miles) long Nadaleen Trend which hosts Carlin-type gold deposits at the Conrad, Osiris, Isis East, Sunrise and Anubis zones: and the 20-kilometer- (12.5 miles) long Rau Trend which hosts the Tiger Gold Deposit and the Ocelot silver-lead-zinc-tin discovery.

An initial C\$5 million initial phase of the 2014 exploration program continues the company's primary focus on the Carlintype discoveries towards the eastern end of the extensive property.

"Year over year we continue to make new gold discoveries and expand high-grade gold zones at the Rackla Gold Project. The 2014 Phase I exploration program is specifically designed to continue our excellent discovery rate and support our confidence in the global resource potential of the project," said Atac CEO Graham Downs.

In July, Atac released a preliminary economic assessment for the Tiger deposit in the Rau Trend that envisions a seasonal open-pit mine and tank heap leach operation producing 221,558 ounces of gold from 2.06 million metric tons of oxide material at an average diluted grade of 3.72 g/t gold over four years

"The simplicity of the mining and processing combined with the approach of modular design and construction for the on-site facilities has resulted in an optimized development scenario for this size of deposit. Additional geotechnical and resource drilling at the Tiger deposit combined with exploration drilling at over six untested satellite oxide targets has the potential to significantly enhance the PEA and the district potential of the Rackla Gold Project," explained Downs.

#### PGM, Nickel in the south

Wellgreen Platinum Ltd. (formerly Prophecy Platinum) is leading a charge to explore for and develop platinum-rich deposits in Kluane ultramafic belt, a stretch of the Wrangellia Ter-

#### **Northwest Territories**

#### Canadian Zinc Corp.

CZN: TSX

CHAIRMAN, PRESIDENT AND CEO: John Kearney
VICE PRESIDENT, EXPLORATION AND COO: Alan Taylor
VICE PRESIDENT, PERMITTING AND ENVIRONMENTAL AFFAIRS: David Harpley

Canadian Zinc Corp. has permits in hand and the majority of the required infrastructure in place to put the Prairie Creek Mine into production, positioning this project to stream some 76 million pounds of zinc, along with 90 million pounds of lead and 2.2 million ounces of silver, per year into global markets. Located in the

South Mackenzie Mountains of western Northwest Territories – about midway between Whitehorse, Yukon, and Yellowknife, NWT – Prairie Creek contains a mineral reserve of 5.2 million



metric tons averaging 9.4 percent zinc, 9.5 percent lead and 151 grams per metric ton silver. This is enough ore for an 11-year mine-life. In addition, the partially developed zinc project hosts an inferred resource of 6.2 million metric tons averaging 14.5 percent zinc, 11.5 percent lead, 0.57 percent copper and 229 g/t silver. One of the primary objectives of Canadian Zinc's 2014 exploration program at Prairie Creek is to upgrade some of these inferred resources by infill drilling the main quartz vein on 50-meter centers from surface and underground. Resources shifted to the measured and indicated categories can then be included in the mine plan. The company is also developing a 1,200-meter exploration ramp to allow drilling from the hanging-wall side of the vein. Canadian Zinc says the current resources at Prairie Creek cover only about 2.1 kilometers of a 16-kilometer mineralized trend, providing ample upside potential at the zinc-lead-silver property. The company's primary objective, however, is to start production at Prairie Creek. The company al-

ready has a 1,000-metric-ton-per-day mill, five kilometers (three miles) of underground workings, underground equipment, a heavy and light duty surface fleet, and the permits to develop the mine. Canadian Zinc has hired Tetra Tech and AMC Consultants to assist with an optimization study for the operation. The studies are scheduled to be completed by mid-2014 and, dependent on the progress of financing strategies concurrently being executed, Canadian Zinc plans to begin ordering long lead time items; building the access road; preparing the mine site and completing other startup activities on site. Canadian Zinc, meanwhile, is evaluating strategies for raising funds necessary to complete development of the Prairie Creek Mine. In 2013, the company raised US\$10 million through the sale of a royalty to Sandstorm and granted Sandstorm a right of first refusal on any future royalty or stream financing for the Prairie Creek project. Under the agreement, Canadian Zinc can repurchase the royalty if it enters into a metal stream financing under which Sandstorm will provide an upfront deposit of not less than US\$90 million to be used to finance part of the capital cost to develop the Prairie Creek Mine. At the end of July, the company closed a C\$15.75 million financing. This financing included C\$5.75 million raised from the sale of flow-through shares, which will be applied to exploration at Prairie Creek and the company's volcanogenic massive sulfide properties in Newfoundland. The balance will be applied towards checking things off the development list at Prairie Creek, including underground development; opening the winter access road; completing the optimization study; and reclamation security.

CASH AND SHORT-TERM DEPOSITS: C\$6.8 million (June 30, 2014)

WORKING CAPITAL: (June 30, 2014; C\$15.75 million

financing closed July 31, 2014)

MARKET CAPITALIZATION: C\$52.3 million (Oct. 8, 2014)

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rane that extends from British Columbia, through southwestern Yukon Territory and into Alaska.

A preliminary economic assessment prepared for the company's Wellgreen project in 2012 outlines plans for a 32,000-metric-tons-per-day operation producing 1.96 billion pounds nickel, 2.06 billion pounds copper and 7.12 million ounces platinum-palladium-gold in concentrate over a 37-year of mine life.

The company, however, has been busy expanding the resource since the publication of this scoping level study.

All told, roughly 40,000 meters of new drilling, new sampling or re-logging of historic core has been conducted since the last resource estimate on the Wellgreen project was completed in 2011.

The measured and indicated resources at Wellgreen have increased to 330 million metric tons at  $1.67~\rm g/t$  platinum-equivalent in a pit constrained resource containing 5.53 million ounces of 3E (platinum-palladium-gold), 1,894 million pounds of nickel and 1,021 million pounds of copper. In addition, the project has 846 million metric tons of inferred resources containing 13.8 million ounces of 3E (platinum-palladium-gold), 4,431 million pounds of nickel and 2,595 million pounds of copper.

An updated PEA that investigates starting with lower throughput that initially targets higher grade ore; improved PGM and base metal recoveries based on recently completed metallurgical tests; and the potential of using LNG to power the mine is expected to be completed by the end of 2014.

As Wellgreen edges its project towards feasibility level studies, Duncastle Gold Corp. is investigating earlier staged platinum deposits in the same neighborhood.

In June, the company signed a deal to acquire 262 square kilometers of land in three claim groups – Catalyst, Spy and Ultra –

along the Kluane ultramafic belt of southwestern Yukon.

"We are now the largest property owner in that area, mostly within sight of the (Alaska) Highway," said Bill Harris, a long-time Yukon prospector and director of Duncastle.

Duncastle is seeking high-grade platinum mineralization with bulk tonnage potential. One of the properties, the Spy Project, has yielded samples of up to 75 g/t platinum and another sample with 0.5 oz palladium, he added.

With the YMEP program contributing exploration funds, Duncastle is exploring the Arch zone, an area of its Catalyst property adjacent to Wellgreen.

Within the Arch Zone, the Teck showing is located on the western edge of the Wellgreen property and consists of ultramafic rocks in fault contact with sedimentary rocks with historic assays of 0.36 g/t PGM + gold, 581 parts per million nickel and 709 ppm copper from chip samples over two meters.

Duncastle said the YMEP funds will be used to extend geophysical and geochemical orientation surveys previously carried out over the Arch zone.

Roughly 50 kilometers (30 miles) southeast of Whitehorse, First Point Minerals Corp. completed approximately 1,000 meters of drilling at its Mich nickel-iron alloy property.

The Mich claims are underlain by ultramafic rocks of the Cache Creek Terrane, the same belt of rocks that host the awaruite mineralization at First Point's 40 percent-owned Decar project in central British Columbia.

"We see a lot of striking similarities between Mich and our Decar project in terms of recoverable nickel grade, high temperature environment of emplacement and structural controls," said First Point Vice President of Exploration Ron Britten.



Yukon Territory

## Coffee rockets towards feasibility

Beaty, Lundin investment funds increased program at Kaminak's gold project

By SHANE LASLEY
Mining News

ver the past five years, Kaminak Gold Corp. has rocketed the Coffee project from Yukon Territory's other White Gold property to an expansive set of gold deposits on pace to be the first of the Shawn Ryan discoveries to be developed into a mine.

A preliminary economic assessment published in June envisions an open-pit mine and heap-leach facility producing an average of 167,000 ounces of gold annually over the life of mine at an all-in sustaining cash cost of US\$688 per ounce.

The PEA is based on an indicated and inferred mineral resource estimate derived from 961 diamond core and reverse circulation drill holes completed from 2010 to 2013 for a total of 185,000 meters.

This estimate consists of an indicated resource of 14 million metric tons averaging 1.56 grams per metric ton (719,000 ounces) gold and an inferred resource of 79 million metric tons averaging 1.36 g/t (3.43 million ounces) gold.

"The recently completed Coffee PEA has delivered a high-value, high-margin and low-risk gold project in one of the world's safest, pro-mining jurisdictions, Yukon Canada, and marks a significant milestone for our company. At a US\$1,250 gold-price, Coffee will generate more than \$2 billion in gross revenue, deliver total life of mine, pre-tax, free cash of \$800 million and payback capital in under two years," said Kaminak CEO Eira Thomas. "Further upside to this evaluation is anticipated through optimization studies and continued exploration."

#### Kaminak Gold Corp.

PRESIDENT AND CEO: Eira Thomas
VICE PRESIDENT, EXPLORATION: Tim Smith
EXPLORATION MANAGER: Rory Kutluoglu

#### PROPERTIES WITH MINERAL(S) EXPLORED:

Coffee Gold, Yukon Territory: Gold Kirkman, Yukon Territory: Gold Apollo, Yukon Territory: Gold Matrix, Nunavut: Gold Needle Lake, Nunavut: Gold Cry Lake, British Columbia: Silver-Gold Sail, British Columbia: Polymetallic VMS Hemlo, Ontario: Gold Quebec, Quebec: Copper-Nickel

CASH AND SHORT-TERM DEPOSITS: C\$6.94 million (June 30, 2014) WORKING CAPITAL: C\$6.42 million (June 30, 2014) MARKET CAPITALIZATION: C\$178.3 million (Sept. 30, 2013)

KAMINAK

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The Kaminak executive was not alone in her assessment. A month after the release of the PEA, a pair of world renowned mining investors showed up at the Coffee Gold project with check books in hand.

"The biggest development in the Yukon this year is that Lucas

Lundin and Ross Beaty, two of the smartest investors in the junior mining space, each bought 10 percent interest in Kaminak (Gold Corp.)," Victoria Gold Corp. President and CEO John McConnell told Mining News in August. "That level of interest shows the project is for real and so is the Yukon."

Lundin, head of Zebra Holdings and Investments S.à.r.l., Luxembourg (a company owned by a trust whose settlor was the late Adolf H. Lundin) and Beaty each agreed to invest C\$6.76 million, collectively C\$13.52 million, in Kaminak by way of a non-brokered private placement in July.

Lundin and Beaty each now own a 9.98 percent stake in Kaminak and increases the junior's cash position to C\$26.5 million, enough to take the Coffee Gold project to the next level.

Two weeks after the cash infusion, Kaminak's board of directors two weeks later approved a C\$12 million to get a feasibility study started for its Coffee Gold Project, located on the banks of the Yukon River some 130 kilometers (81 miles) south of Dawson City.

"Following the announcement of a private placement by Ross Beaty and Zebra Holdings on July 14, Kaminak's board of directors have approved the commencement of an approximately C\$30 million feasibility study for the Coffee Gold Project, to be completed by the end of 2015," explains Thomas.

Feasibility activities, which began in the third quarter, include infill drilling, additional metallurgical test-work, continued environmental baseline activities and a condemnation program.

#### Kona North adds gold

By the time Lundin and Beaty invested in Kaminak, a C\$3.5-million phase-1drill program aimed at testing new oxide gold targets and expanding previously drilled discoveries near the 4.15-million ounce gold resource was well underway at Coffee.

Results from this program identified near-surface predominately oxidized gold mineralization at the Kona North zone; added 900 meters to the Supremo T3 trend; and intersected high-grade gold mineralization at Cappuccino.

"Ongoing exploration of the numerous high-tenor geochemical anomalies remaining at Coffee continues to demonstrate the resource upside of the project and has the potential to enhance the already positive, high-margin economics at Coffee as demonstrated in the recently completed PEA,"

Thomas said upon the release of the results

from 27 holes. "Delineation drilling at Kona North is underway with the goal of defining a near surface, oxide resource that may be incorporated into the Coffee Feasibility Study."

Results from phase-1 drilling at Kona North include: 28 meters of  $3.55\,\mathrm{g/t}$  gold from a depth of 14 meters and nine meters of  $2.66\,\mathrm{g/t}$  gold from a depth of 53 meter in hole CFD376; and eight meters of  $4.05\,\mathrm{g/t}$  Au from a depth of 38 meters and eight meters of  $3.79\,\mathrm{g/t}$  gold from 51 meters in hole CFD379. Additional drilling is underway to determine the structural orientation and geometry of the zone and to delineate near-surface oxide ounces that may be incorporated into the feasibility study.

The phase-1 drilling also extended the Supremo T3 zone some 1,000 meters to the north, increasing the strike of this gold-rich zone to at least 3,500 meters. . The best intercepts occurred at the intersection of T3 and the Macchiato trends, including: 14 meters of 1.95 g/t gold from a depth of 81 meters and nine meters of 2.21 g/t gold from a depth of 128 meters in hole CFD356. Kaminak said the magnetic and geochemical signature for T3 extends a further 1,000 meters north, warranting systematic step-out drilling in that direction.

To continue the expansion of Kona North and investigate other high priority targets, Kaminak launched a C\$2-million, phase II program.

Rory Kutkuoglu, Kaminak Gold's exploration manager, told Mining News during an early August interview that the junior is expected to spend an estimated C\$18.5 million in 2014 and bring five drills online to drill 70,000 meters this year, with a goal of upgrading Coffee's 3.43-million-ounce inferred resource to the indicated category.

By early September, the company had four core drills and two reverse circulation rigs undertaking resource delineation infill, condemnation, geotechnical, hydrological and metallurgical drilling.

With the goal of finalizing a feasibility study by early 2016, this year's program also includes environmental and heritage baseline studies as well as engineering studies into the optimal route and design of a road to access the property.

"Coffee represents a low-risk, high-return development-track gold project in Yukon, Canada where there is a long history of and strong support for gold mining. The completion of a feasibility study is the next major milestone on our path towards a production decision," explained Thomas.



### Mining explorers continued

#### **BRITISH COLUMBIA**

#### **Carmax Mining Corp.**

CXM: TSX-V



PRESIDENT AND CEO: Jevin Werbes
VICE PRESIDENT, EXPLORATION: Jeff Poloni
DIRECTOR: Chris Healey, P.Geo

Carmax Mining Corp.'s exploration program at the Eaglehead coppergold property was bolstered by financial and technical support from Copper Fox Metals Inc. In May, Northern Fox Copper, a wholly owned subsidiary of Copper Fox, bought 20 million units of Carmax at C5 cents per unit. This investment provided Northern Fox with a 42 percent equity interest in Carmax, a stake the company maintained by purchasing another 1.96 million shares in July. All told, Carmax raised roughly C\$1.23 million to further the exploration of the Eaglehead project, located 48 kilometers (30 miles) east of Dease Lake in northwestern B.C. The property hosts an inferred resource of 102.5 million metric tons averaging 0.29 percent (662 pounds) copper, 0.01 percent (22 million pounds) molybdenum and 0.08 grams per metric tons (265,000 ounces) gold. This resource is contained within two conceptual open pits covering the East and Bornite zones. A 4,000-meter drill program that began in July included one metallurgical hole in each of the East and Bornite zones, the remaining holes targeted extensions of these deposits. To further its understanding of the geological model for Eaglehead, Carmax conducted comprehensive re-logging of core from historical drilling at the project. The company also had a Quantec Titan-24 geophysical survey conducted over a 5,600-meter-long portion of the property that covers the East, Bornite, Camp and Pass mineralized zones. A new zone of oxide copper mineralization measuring at least 250 by 650 meters located east of the Camp and Pass zones was also covered by the Quantec Titan-24 survey. Carmax said President and CEO Jevin Werbes said the IP survey in combination with historical and current

PROJECTS Baffinland Iron Mine Roche Bay Iron Mine Hope Bay Gold Mine Izok Corridor Project Bathurst Inlet Port & Road Red Dog Mine Illinois Creek Gold Mine Pogo Gold Mine Usibelli Coal Mine Valdez Creek Mine Donlin Creek Gold Mine Pebble Project Kensington Gold Mine Engineers, Inc. Greens Creek Mine OFFICES WITH A TEAM OF MULTI-DISCIPLINED Anchorage, AK CIVIL/STRUCTURAL ENGINEERS, PND Palmer, AK HAS LENT SUPPORT TO THE MINING Juneau, AK INDUSTRY IN THE ARCTIC AND Vancouver, BC BEYOND SINCE 1979 Seattle, WA Houston TX

W W W . P N D E N G I N E E R S . C O M

drill information appears to have outlined what appears to be a 4,500-meter-long zone of continuous mineralization that encompasses four of six zones of mineralization identified to date at Eaglehead. A second signature at Eaglehead that is some 1,100 meters long approximately 1,000 meters wide and is open at depth. This signature has not been drill tested and is open to the southeast towards the Far East zone. This ground-based IP survey was followed with an airborne magnetic survey.

CASH AND SHORT-TERM DEPOSITS: C\$513,798 million (April 30, 2014) WORKING CAPITAL: C\$526,411 (April 30, 2014; C\$1.23 million financing completed July 10, 2014; C\$237,000 financing completed Sept. 25, 2014) MARKET CAPITALIZATION: C\$4.8 million (Oct. 8, 2014)

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#### **ALASKA**

#### Coeur Mining Inc.

CDE: NYSE

PRESIDENT AND CEO: Mitchell Krebs CHAIRMAN: Robert Mellor VP, EXPLORATION: Hans Rasmussen



MITCHELL KREBBS

ploration last year. Despite the overall cuts to exploration budgets, Coeur's Kensington gold mine in Southeast Alaska was allotted US\$6.2 million, or about a quarter of the companywide budget. Kensington's healthy share of exploration funding is the result of success-driven approach that rewards exploration success with a boost in funds. At Kensington, this success came during drilling at the Jualin area, which hosts the historical Jualin Mine just south of the Kensington. Highlights include: 1.7 feet of 7.3 oz/t gold in hole JU14-X012; 8.6 feet of 5.54

Coeur Mining Inc. allocated roughly US\$25 million

for exploration in 2014, substantially lower than the

US\$40 million budgeted for 2013 and around 26 per-

cent lower than the US\$34 million actually spent on ex-

oz/t gold in JU14-X015; and 7.9 feet of 0.701 oz/t gold in JU14-X029. In addition to surface drilling at Jualin, underground drills targeted zones 10 and 20, in the immediate



Kensington mine area. Highlights from drilling in this area include: 2.4 feet of 4.03 ounces per short ton gold in hole KX13-069; 15.2 feet of 0.969 oz/t gold in KX13-071; and 4.1 feet of 3.416 oz/t gold in hole K14-1560-270-X05. Coeur said grade and thickness of mineralization is improving at depth and to the southern portion of the ore body. Zones 10 and 20 are expected to be further drilled and developed over the next year and bring additional high-grade production into the mine plan beginning in 2016. At the end of 2013, Coeur Mining reported 6.0 million tons of proven and probable reserves at Kensington averaging 0.15 oz/t (902,000) ounces of gold. In addition, the property hosts 2.7 million tons of measured and indicated resources averaging 0.211 oz/t (566,000 ounces) gold and 1.0 million tons of inferred resource grading 0.259 oz/t (263,000 oz) gold at Kensington. Coeur expects to complete a new resource estimate for Kensington by the end of 2014 and anticipates releasing a new mine plan in early 2015. Based on the success of the program, in October Coeur increased 2014 exploration spending at Kensington to US\$9.1 million, nearly a US\$3 million increase over the already robust program.

CASH AND SHORT-TERM DEPOSITS: US\$316.8 million (June 30, 2014) WORKING CAPITAL: US\$471.2 million (June 30, 2014) MARKET CAPITALIZATION: US\$489.4 million (Oct. 6, 2014)

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#### **BRITISH COLUMBIA**

#### Colorado Resources Ltd.

CXO- TSX-V

PRESIDENT AND CEO: Adam Travis **EXECUTIVE CHAIRMAN: Larry Nagy** VICE PRESIDENT, EXPLORATION: Greg Dawson

Colorado Resources Ltd. had drills turning two copper-gold properties in northern British Columbia and geologists identifying targets for potential future drilling at a third. In January, Colorado reported the re-



sult of an inaugural NI 43-101-compliant resource estimate for its North ROK project located 15 kilometers (nine miles) northwest of Imperial Metals' Red Chris copper-gold mine project. At a 0.20 percent copper-equivalent cut-off, North ROK has an inferred resource of 142.3 million metric tons averaging 0.22 percent (690.3 million pounds) copper and 0.26 grams per metric ton (1.19 million ounces) gold. Following up on the recommendations in the accompanying technical report, Colorado completed a phase 1 2014 drill program of 2,191 meters in five holes, three of which

cut significant copper-gold mineralization. DDH NR14-034, the best hole of the program, cut 199 meters grading 0.21 percent copper and 0.42 g/t gold, including 100.4 meters grading 0.31 percent copper and 0.74 g/t gold. Colorado said the



Colorado Resources Ltd.

phase-1 drilling established the continuity of higher grade copper-gold mineralization at North ROK, expanded the size of the known zones and greatly expanded the projects potential. At Eldorado, located adjacent to the east side of the Red Chris property, Colorado completed 892 meters of drilling in four holes. This second phase of exploration was a follow-up on a 2013 drill intercept of 0.33 g/t gold and 0.14 percent copper over 71 meters. EL14-008, drilled 300 meters to the west, cut 0.19 g/t gold and 0.06 percent copper over 196.5 meters. The company said the nine holes it has drilled at Eldorado have identified copper-gold mineralization over a strike of 1,000 meters within a larger porphyry system that measures 1,000 by 2,000 meters. The company said it will review its results from Eldorado in the context of its other project when considering future drilling. Colorado's portfolio includes the Kinaskan (copper-gold), KSP (copper-gold), Hit (copper gold), and Heart Peaks (gold) properties in northern British Columbia; and the Sol (gold) property in the Yukon Territory. KSP, located roughly 15 kilometers (nine miles) southeast of the past-producing Snip Mine, is one such project.

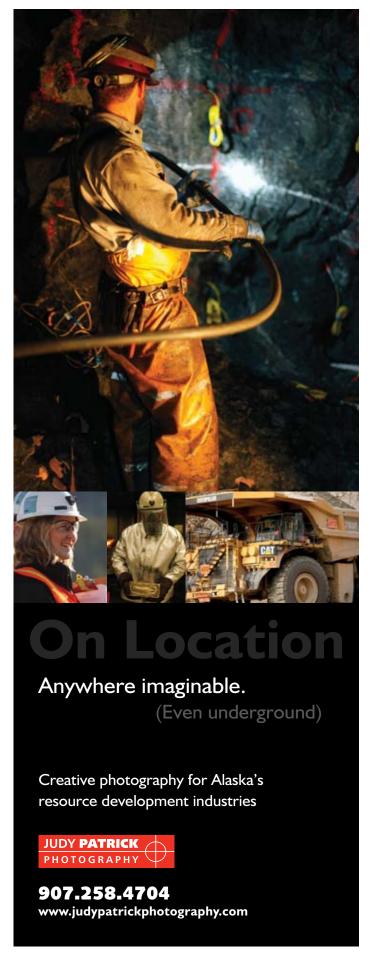
Late in 2013, Colorado entered into an option agreement with Snip-Gold Corp. to earn an 80 percent in the southeastern quarter of SnipGold's Iskut property. This property, along with 22,201 hectares of adjoining land owned by Colorado, has been merged into a property referred to as KSP. The first order of business was to compile historical data from more than 38 minfile occurrences, 230 drill holes (both underground and surface), 6,000 soil samples, 2,500 rock samples and 350 trench samples. Colorado said it is extremely encouraged by its initial review of this data and have sent crews to the property to evaluate prospects identified during the review of historical data, expand known anomalies and prioritize targets for future drilling. This work included the collection of 684 rock and 1,247 soil samples; 600 line-kilometers of airborne magnetics; and detailed geological mapping over a 40-square-kilometer-area. Based on this work, Colorado's technical team said KSP shares many traits to

Kerr-Sulphurets-Mitchell camp some 45 kilometers (28 miles) to the east. Based on the encouraging results from the initial exploration at KSP, Colorado has remobilized crews to carry out detailed geological mapping, rock channel sampling, drill site selection and preparation. If permits are approved in time, the company plans to carry out drilling before winter weather sets in at KSP.

CASH AND SHORT-TERM DEPOSITS: C\$4.3 million (June 30, 2014) WORKING CAPITAL: C\$4.8 million (June 30, 2014) MARKET CAPITALIZATION: C\$7.9 million (Sept. 10, 2014)

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www.coloradoresources.com



#### **BRITISH COLUMBIA**

#### **Dolly Varden Silver Corp.**

DV: TSX-V

PRESIDENT AND CEO: George Heard CHAIRMAN: John King Burns **VICE PRESIDENT, EXPLORATION: Ron Nichols** 

Dolly Varden Silver Corp. started 2014 by pri-

oritizing drill-ready targets at the company's Dolly Varden property, located 26 roadkilometers (16 miles) from the community of Alice Arm in northwestern British Colum-

bia. An early season geophysical program helped identify targets within three corridors: Torbrit-Red Point, an Eskay-Creek style target; Musketeer, which has numerous silver-rich epithermal vein-type showings with strong potassic radiometric signatures; and Wolf-Surprise, where silver-enriched volcanogenic massive sulfide mineralization was identified by drilling in 2011. This work was followed up by a geochemical survey that involved the collection of 970 soils, 28 silts, and six heavy mineral samples over selected areas on the property. The company said this work identified multi-element anomalous trends along the prospective sediment-vol-

canic contact of the Salmon River Formation in areas with no previously known showings. The sampling also returned a strong geochemical response within the airborne

radiometric anomaly that has been outlined on the east side of the Kitsault River, which the company believes could outline trends that related to structurally controlled epithermal mineralization. Dolly Varden said anomalous goldsilver results from silt samples taken north of the gridded area underlain by Salmon River Formation add to the property's prospectivity. A second phase of step-out and infill geochemical sampling started in September. Geologic and structural mapping was also completed in preparation for a late-season 2014 drill program. A C\$5.7 million financing that closed in mid-August funded a late-season drill program of up to 8,000 meters at the company's namesake silver project. The 20-hole program is designed to test numerous defined drill-ready epithermal and Eskay-Creek style targets, as well as expand known silver mineralization on the Torbrit-Red Point corridor, where 2013 drilling cut a 17.1meter interval grading 509 grams per metric ton

CASH AND SHORT-TERM DEPOSITS: C\$ 386,116 (June 30, 2014)

WORKING CAPITAL: C\$483,406 (June 30, 2014;

C\$5.7 million financing completed Aug. 15, 2014)

MARKET CAPITALIZATION: C\$21.9 million

(Sept. 10, 2014)

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#### **NORTHWEST TERRITORIES**

#### **Dominion Diamond Corp.**

DDC: TSX / NYSE

**CHAIRMAN AND CEO: Robert Gannicott CHIEF OPERATING OFFICER:** Chantal Lavoie **EXECUTIVE VICE PRESIDENT, COMMUNITY AFFAIRS:** Brendan Bell

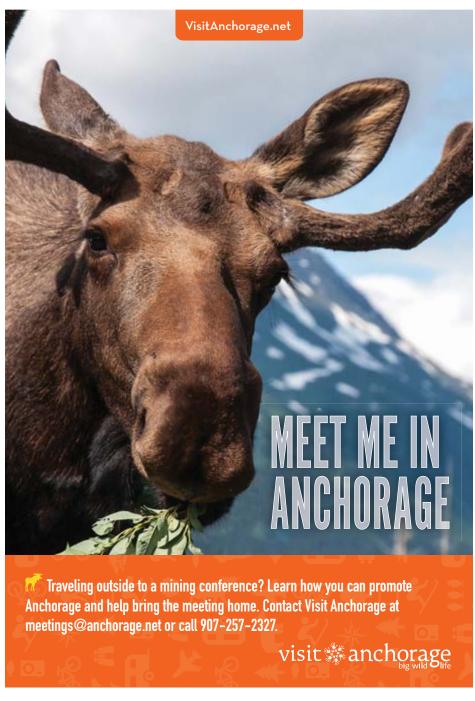
**Dominion Diamond Corporation mines** rough diamonds at the Ekati and Diavik mines, both located in Northwest Territories about 300 kilometers (190 miles) north of Yellowknife. The company operates the Ekati Diamond Mine through an 80 percent ownership of the project's Core zone as well as a 58.8 percent ownership in the Buffer zone. In July, Dominion Diamond Corp. announced that the Misery Satellite, previously considered an exploration

target at Ekati, had been upgraded to deposit with



an inferred resource of 3.9 million metric tons grading 1.3 carats per metric ton, or 5 million carats. Following analysis of the previous winter's drilling, Dominion Diamond is preparing an updated technical report on the mineral resources and mineral reserves at Ekati that will include further details on the Misery Satellite resources as well as updates to some other pipes. The company expects to file this updated technical report in the later part of calendar 2014. Stripping of waste material is in progress at Misery open pit with expected full year production from the Misery Main Pipe in the company's fiscal year 2016 and completion of mining in fiscal 2018.

Dominion Diamond Corp. also owns a 40 percent in the Diavik Mine. A subsidiary of Londonbased Rio Tinto plc, Diavik Diamond Mines Inc.,



DOLLY VARDEN

owns the remaining 60 percent and operates the high-grade diamond mine. The three kimberlite pipes currently being mined, A154 South, A154 North, and A418, are small in diameter by global comparison, but are very high grade, with some of the world's highest per ton ore value. At the end of 2012, the Diavik Mine had 52.5 million carats of proven and probable reserves. The current mine plan is expected to take the mine's production to at least 2022.

The Lac de Gras joint venture property, located roughly 10 kilometers (six miles) south of Ekati and less than 40 kilometers (25 miles) southeast of Diavik, is an exploration project that covers kimberlite trends from both mines. Dominion Diamond Corp.'s Lac de Gras property covers 32,780 hectares and is contiguous with a 91,459-hectare property held by North Arrow Minerals Inc. Under the terms of an agreement between Dominion Diamond and North Arrow, the two adjacent parcels are to be joined to form a joint venture property.

CASH AND RESTRICTED CASH DEPOSITS: US\$383.9 million (July 31, 2014) WORKING CAPITAL: US\$615.3 million (July 31, 2014) MARKET CAPITALIZATION: US\$1.15 billion (Sept. 26, 2014)

P.O. Box 4569, Station A Toronto, Ontario M5W 4T9 Tel: 416-362-2237 Fax: 416-362-2230 www.ddcorp.ca

#### **ALASKA**

#### Freegold Ventures Ltd.

TSX: FVL

PRESIDENT AND CEO: Kristina Walcott VICE PRESIDENT, EXPLORATION AND DEVELOPMENT: Alvin Jackson



Freegold Ventures Ltd. has a portfolio of four gold exploration properties in Alaska. In recent years, the company has focused its exploration primarily on Golden Summit, a 6-million-ounce bulk-tonnage gold project located roughly 20 miles (32 kilometers) northeast of Fairbanks and four miles (seven kilometers) from Kinross Gold Corp.'s Fort Knox Mine. The Dolphin-Cleary zone at Golden Summit has an indicated resource of 79.8 million tons averaging 0.66 grams per metric ton (1.68 million ounces) gold; and an inferred resource of 248.1 million metric tons averaging 0.61 g/t (4.84 million ounces) gold. In addition, a resource was calculated for the oxide portion of this deposit, which is contained largely within the upper 60 meters of the overall resource. At a 0.2 percent cut-off, the oxide cap of the Dolphin-Cleary zone has an indicated resource of 25 million metric tons averaging 0.55 g/t (439,000 oz) gold; and an inferred resource of 16.6 million metric tons averaging 0.47 g/t (253,000 oz) gold. To date resource drilling has been confined to a 300-by-1,500-meter area (roughly 110 acres) of the 11,400-acre Golden Summit property, which hosts a number of promising exploration targets, including several high-grade gold occurrences. In March 2014, Freegold hired Tetra Tech to complete a preliminary economic assessment for Golden Summit. The PEA will examine potential for a stand-alone heap leach operation and will also complete a comprehensive review of the current sulfide resource using different cut off grades. The results of metallurgical testing needed for the PEA were released in June. Overall gold recoveries from standard 48-hour bottle roll tests and 120-hour intermittent agitation leach tests of drill core assay rejects representing the different areas of the resource were: 88 percent recovery for oxide material; 45 percent for hornfels-sulfide material; 56 percent for intrusive-sulfide material and 57 percent for transitional material. Recoveries of the transitional material improved to greater than 70 percent at a 75 micron grind size. Other materials did not show appreciable better recoveries with finer grinds. Metallurgical tests are ongoing. Other 2014 work at Golden Summit includes baseline studies, cultural resource work and geochemical sampling.

Shorty Creek – a copper-gold porphyry target located 60 miles (100 kilometers) northwest of Fairbanks, Alaska and about 2.5 miles (four kilometers) south of International Tower Hill's Livengood gold project – is the newest project in Freegold's portfolio. Previous exploration at Shorty Creek has identified mineralization similar to other gold-enriched porphyry copper deposits of Tertiary age found throughout Interior Alaska and the western Yukon. In addition to the geochemical signature, Freegold said extensive alteration and hornfels metamorphism spatially associated with small bodies of biotite granodiorite, quartz porphyry and aplite are mapped across the property and are suggestive of this deposit type.



Following the acquisition of Shorty Creek in July, Freegold completed a 28.6 line-kilometer induced polarization survey; collected 354 soil geochemical sample; and staked 5,200 acres of additional claims, increasing the project area to 20,920 acres. The company said this program, along with historical work, has defined significant chargeability anomalies which are coincident with strong copper, gold and bismuth geochemistry. The company believes Shorty Creek project represents a drill-ready porphyry copper-gold target.

Vinasale and Rob round out Freegold's portfolio of Alaska gold projects. The Vinasale project in Southwest Alaska has an indicated resource of 3.41 million metric tons averaging 1.48 g/t gold for 162,000 ounces, and an inferred resource of 53.25 million metric tons averaging 1.05 g/t gold for 1.8 million ounces of gold. Rob is an early-stage high-grade gold property about 20 miles (35 kilometers) east of the Pogo gold mine in Interior Alaska.

CASH AND SHORT-TERM DEPOSITS: C\$441,008 (June 30, 2014) WORKING CAPITAL: C\$258,717 (June 30, 2014; C\$1 million financing closed Sept. 12)

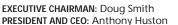
MARKET CAPITALIZATION: C\$15 million (Sept. 26, 2014)

P.O. Box 10351 888 - 700 West Georgia Vancouver, British Columbia Canada V6B 1L8 Tel: 604-662-7307 Fax: 604-662-3791 www.freegoldventures.com

#### ALASKA

#### **Graphite One Resources Inc.**

**GPH**: TSX.V



GENERAL MANAGER, OPERATIONS: David Hembree



Graphite One Resources Inc. is focused on advancing the Graphite Creek project in western Alaska to production as quickly as possible. Over the previous two years, the company has drilled 28 holes which have resulted in an inferred resource of 186.9 million metric tons grading 5.5 percent graphite. The current deposit represents drilling along less than 30 percent of an 18-kilometer- (11.2 miles) long conductor zone revealed by an extensive airborne magnetic-electromagnetic survey flown in 2012 and the drilling completed to date has demonstrated a close correlation between the conductor and graphite in the ground. With a 10.35-million-metric-ton inferred graphite resource, Graphite One has little need to expand the breadth of the deposit. A drill program that began in August, focused on upgrading a portion of the deposit's inferred resource to the higher confidence measured and indicated category. This drilling targeted a region of the deposit where near-surface intercepts up to 50 meters of

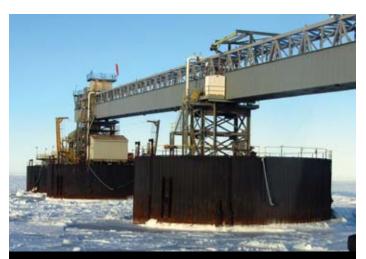
10 percent graphite had previously been encountered. The upgraded resource will be used to inform a preliminary economic assessment, scheduled to be completed by the second quarter of 2015. With the goal of producing a product that can compete with the synthetic graphite market and meets the needs of potential end users, metallurgy has been a key focus of Graphite One. In April, the company reported that metallurgical tests on samples from Graphite Creek have returned grades topping 99.9 percent carbon. SGS Canada, which completed the testing, achieved the nearly pure graphite in a two-step process of leaching a flotation concentrate containing 92 percent carbon. Graphite One's 2014 field program includes the collection of mini-bulk samples from the surface and drill core, which can be used to continue the development and simplification of a process to produce graphite of the purity required for lithium-ion batteries. Spherical graphite is used to make the anodes in lithium-ion batteries and is manufactured from the flake concentrate produced by graphite mining operations. Natural graphite produced from mining typically has recoveries from 70 to plus-90 percent graphitic carbon, whereas synthetic graphite is usually greater than 99 percent. With initial tests from Graphite Creek concentrates being above 99 percent graphite, the company hopes to be positioned to compete in the \$13-billion, or 1.5 million-metric-tonper-year, synthetic graphite market. The Graphite Creek property is located about 40 miles north of Nome and about 24 miles (39 kilometers) east of Port Clarence, which state and federal agencies are considering as a location for a deep-sea port to serve as a base to protect national interests, support ship traffic and serve economic development in the Bering Straits region of western Alaska.

CASH AND SHORT-TERM DEPOSITS: C\$244,088 (June 30, 2014; closed C\$2 million financing Aug. 27, 2014)

WORKING CAPITAL: C\$1.85 million (Aug. 27, 2014) MARKET CAPITALIZATION: C\$20.9 million (Sept. 26, 2014)

1280 - 885 West Georgia St. Vancouver, BC Canada, V6C 3E8 Tel: 604-681-8780 Fax: 604-681-8775

www.graphiteoneresources.com



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#### **Hecla Mining Company**

HI: NYSE

PRESIDENT AND CEO: Phillips Baker Jr. **CHAIRMAN:** Ted Crumley SENIOR VP. EXPLORATION: Dean McDonald

Idaho-based Hecla Mining Co. is the largest primary silver producer in the United States and is a growing gold producer. The company operates the Greens Greek silver mine in Southeast Alaska, the Lucky Friday silver mine in Idaho and the Casa Berardi gold mine in



**PHILLIPS** BAKER JR.

Quebec. Hecla planned to invest US\$21 million for exploration and pre-development in 2014. This spending is focused primarily at its three operations and San Sebastian, an advanced silver-gold project in Mexico. Greens Creek has been the primary revenue generator for Hecla in recent years and much of the company's exploration is focused on replacing reserves at the mine with underground drilling and seeking new deposits across the 27-square-mile (70 square kilometers) property from the surface. The underground portion focused largely on testing the 200 South and Deep 200 South zones, a mineralization trend that stretches more than 900 meters

along strike and more than 300 meters of dip. Hecla said this year's drilling of Deep 200 South has confirmed the resource model and shows the upper limb of the bench fold extends up to 50 meters further east than previously estimated. Drilling of the bench mineralization provided some of the widest and highest grade intercepts in Greens Creek's recent history, including: 85.1 ounces per ton silver, 0.18 oz/ton



gold, 10.2 percent zinc, and 4.8 percent lead over 12.9 feet; and 44.3 oz/ton silver, 0.40 oz/ton gold, 23.1 percent zinc, and 12.4 percent lead over 3.2 feet. The company said drill intersections at the Deep 200 South continue to be very encouraging and mineralization remains open to the south. Additional exploration drilling tested for mineralization along the limbs of the lower fold; the projected intersection of the Gallagher Fault and the Deep 200 South mineralization; and a 1,000 foot gap in drilling at the junction of the projection of the Southwest Bench, 200 South and Deep 200 South. Definition and pre-production drilling during the first half of 2014 continued to upgrade the 5250, West Wall and Deep Southwest resources at Greens Creek. A planned 6,000-meter surface program that included three surface drills targeting the south, middle and north regions of Killer Creek began in mid-June. This drilling aims to follow up on broad zones of high-grade copper, silver, lead and zinc mineralization defined by surface drill programs in over the previous two years. During 2013, drilling in the Killer Creek area, which is less than a mile from the current Greens Creek mine infrastructure, intersected broad mineralized zones up to 120 meters with stringer veins locally grading as high as 10 percent copper and 10.4 percent combined lead-zinc. Widely spaced drilling at this prospect currently covers an area of 2,500 feet by 2,500 feet and suggests mineralization open in all directions. In general, the northern holes drilled at Killer Creek are more copper-gold rich and the southeast area is more zinc, lead and silver rich. Hecla believes these "stockwork veins" are characteristic of a vent or source area for the mineralizing fluids for either the Greens Creek deposit or a completely separate sulfide deposit. In addition to better defining the outward extent of the stockwork



area, this year's drilling aims to intercept the mine contact at depth.

CASH AND SHORT-TERM DEPOSITS: US\$222.1 million (June 30, 2014) WORKING CAPITAL: US\$199.8 million (June 30, 2014) MARKET CAPITALIZATION: US\$928.7 million (Sept. 26, 2014)

6500 N Mineral Dr., Suite 200 Coeur d'Alene, ID 83815-9408 Tel: 208-769-4100 Fax: 208-769-7612 www.hecla-mining.com

#### ALASKA

#### **Kinross Gold Corp.**

KGC: NYSE / K.TO: TSX



CHAIRMAN: John Oliver

CHIEF EXECUTIVE OFFICER: Paul Rollison

CHIEF OPERATING OFFICER: Warwick Morley-Jepson

Kinross Gold Corp. continues to carry out robust exploration at and around its Fort Knox gold mine in Interior Alaska, while quietly investigating other prospects around the state. When Kinross began mining at Fort Knox in 1996, the deposit had 4.1 million ounces of proven and probable gold reserves; going into 2014 the mine continues to boast 2.86 million ounces of gold contained in 183.11 million metric tons of reserves averaging 0.49 grams per metric ton gold. This is enough ore to last the operation until roughly 2018. Continued exploration at and around the immediate mine area is expected to continue to augment these reserves, including upgrading a portion of the projects measured and indicated resources of 78.15 million metric tons averaging 0.46 g/t (1.15 million ounces) gold. Fort Knox produced 421,641 ounces of gold during 2013, topping the operation's previous annual record of 411,220 ounces recovered in 2001. As a result of the record-setting pace, the six-millionth ounce of gold was poured at the Interior Alaska operation in December, 2013. Fort Knox's success is not only measured by the record number of ounces recovered, but the low costs to extract that gold. It cost US\$569 to produce an ounce of gold at the Interior Alaska mine during 2013, ranking it as the lowest cost open pit mine in Kinross' portfolio. High output and low costs at Fort Knox are primarily attributable to improved performance of the project's heap-leach facility, including the addition of a second carbon-incolumn circuit brought online in mid-2013. The efficiency of the heapleach facility means that Kinross can continue to mine lower grade material found on the fringes of the deposit. In July, the U.S. Bureau of Land Management said it has received a proposal from Kinross subsidiary, Fairbanks Gold Mining Inc., to conduct mineral assessment work on BLMmanaged lands adjacent to the open-pit at Fort Knox that were previously withdrawn for use by the National Oceanic and Atmospheric Administration. Fairbanks Gold Mining's proposed work on this adjacent property in-



cludes soil sampling, geologic mapping, and drilling. This activity would occur on land near the western boundary of the Fort Knox mine. The Gil gold property, located about five miles (eight kilometers) east of Fort Knox, is a potential source of ore to extend the life of the mine. Kinross, which held a longstanding partnership with junior explorer Teryl Resources Corp. at Gil, bought full ownership of the property in 2011. Shortly before selling its stake in the property, Teryl reported an NI 43-101-compliant heap leach resource of 514,916 ounces of gold contained in 19.86 million short tons of mineralized rock. Kinross has not announced results from the drilling, trenching and other exploration completed at Gil since 2010. Fairbanks Gold Mining is also completing early-stage gold exploration its PB and NPB claims located in the Circle Mining District roughly 80 miles (130 kilometers) northeast of Fort Knox.

Kinross also owns the White Gold property about 60 miles (95 kilometers) south of Dawson City, Yukon Territory. The 2008 discovery at this property sparked the recent Yukon gold rush, and Kinross picked up the project in 2010. At the end of 2013, Kinross reported 9.8 million metric tons of indicated resources at White Gold averaging 2.67 g/t (840,000 ounces) gold, and 2.17 million metric tons of inferred resources at 1.79 g/t (125,000) ounces gold.

CASH AND SHORT-TERM DEPOSITS: US\$738.7 million (June 30, 2014) WORKING CAPITAL: US\$1.86 billion (June 30, 2014) MARKET CAPITALIZATION: US\$928.7 million (Sept. 26, 2014)

25 York Street, 17th Floor Toronto, ON M5J 2V5 Tel: 416-365-5123 Fax: 416-363-6622 www.kinross.com



#### YUKON TERRITORY

#### Manson Creek Resources Ltd.

MCK TSX V

**PRESIDENT:** Jean Pierre Jutras

**CHIEF FINANCIAL OFFICER:** Douglas Porter

SECRETARY: Barbara O'Neill

Manson Creek Resources Ltd. holds a portfolio of early-stage mineral exploration projects in Yukon Territory, Northwest Territories and British Columbia. The company's primary focus in 2014 is its Guaman project (Tell property), located about 140 kilometers (87 miles) northeast of Mayo, YT. Manson Creek staked the Tell property in 2002 but has only carried out

three short field programs on the property. Surface prospecting and geochemical sampling in 2005 and 2011 outlined the presence of seven significant zones of metalbearing gossanous material at surface. These gossans all carry high level of metals including zinc, nickel, cobalt, as well as anomalous amounts of cobalt, barium, arsenic, mercury and locally silver. A large zone of stunted vegetation, known as a kill zone, encompasses these gossans. Manson said the gossans, kill zone and a geophysical



Jean-Pierre "JP" Jutras, president of Manson Creek Resources Ltd. and Guatavita Gold Corp., explains aspects of suspected volcanogenic massive sulphide mineralization that his company chased in 2014 on the Tell Property in east-central Yukon Territory.

anomaly identified in 2012 indicate the potential for a shallow volcanogenic massive sulfide or sedimentary exhalative type deposit. In March, Manson Creek entered into an agreement with Guatavita Gold Corp., an Albertabased private company, to create an alliance to further exploration on Tell. In exchange for funding 65 percent of a C\$1 million program at Guaman in 2014, Guatavita will earn a 50 percent interest in the project. The alliance started its exploration of Guaman with a one-week field program surface sampling, mapping and prospecting. This program identified a large bedded barite zone capping the favorable target base metal stratigraphy and refined targets for a four-hole drill program that began in late July. All four holes of this inaugural drilling at Guaman cut anomalous values of silver and zinc throughout the sulfide-bearing shale units and in the contact zone above underlying volcanic units. The company is seeking data that could point the direction to higher grade mineralization.

Manson Creek's portfolio also includes the Up Town Gold property, located adjacent to the Giant mine in Yellowknife, NT, and the Meridian silver property in southern British Columbia.

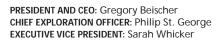
CASH AND CASH EQUIVALENTS: C\$840,091 (June 30, 2014) WORKING CAPITAL: C\$394,012 (June 30, 2014) MARKET CAPITALIZATION: C\$727,000 (Sept. 26, 2014)

808-4th Avenue SW Suite 800 Calgary, AB, T2P 3E8 Tel: 403-233-0464 • Fax: 403-266-2606 www.manson.ca

#### ALASKA

#### Millrock Resources Inc.

MRO: TSX.V





Millrock Resources Inc. identifies and acquires grassroots mineral prospects and then seeks joint venture partners to help fund the exploration. This project generator model lessens the company's need to raise money in the markets, minimizes the risks involved with grassroots exploration and exposes shareholders to a large amount of exploration expendi-

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ture per dollar invested. Since its formation in 2007, Millrock has built a portfolio of 21 early-stage mineral exploration projects in Alaska, Mexico, Arizona and New Mexico. In Alaska, the company has eight active projects prospect for gold, copper, zinc and associated metals. One such project, Alaska Peninsula, has drawn the attention of First Quantum Minerals Ltd. In January, First Quantum agreed to fund an initial US\$600,000 exploration program in exchange for an exclusive right to enter into an option to joint venture the large copper and gold project in Southwest Alaska. The Alaska Peninsula project is a 650,000-hectare (1.6 million acres) tract of mineral



**GREG BEISCHER** 

lands owned by Bristol Bay Native Corp. Millrock has an exploration agreement with the option to secure a 100 percent leasehold interest for mining. The property under the exploration agreement blankets three known porphyry copper-gold occurrences - Kawisgag, Mallard Duck Bay and Bee Creek. The Kawisgag prospect hosts two main centers of mineralization and alteration which locally contain disseminated and vein-hosted chalcopyrite, molybdenite and pyrite at surface. The Mallard Duck Bay prospect hosts a sizable zone of hydrothermal alteration that has seen very limited exploration. Millrock says a strong chargeability anomaly coincident with exposed mineralization in a potassic alteration zone was identified by prior workers, but never drilled. Mineralization at the Bee Creek prospect is hosted in hornfelsed sediments intruded by a multi-phase diorite intrusive rock containing mineralized veins and disseminated chalcopyrite, molybdenite and pyrite. The prospect was initially explored by Bear Creek Mining with five drill holes in 1976. In 2005 and 2006, Metallica Resources Inc. and Full Metal Minerals Ltd. carried out geochemical and geophysical surveys, and drilled two holes. One of the holes cut 118 meters averaging 0.31 percent copper, 0.009 percent molybdenum and 0.126 grams per metric ton gold. Mineralization, alteration and anomalous copper values in soils and rocks extend over a broad area at the Bee Creek prospect. The initial phase of 2014 exploration funded by First Quantum involved 1,140 line-kilometers of high-resolution airborne magnetic and radiometric flown over these prospects. This work was followed up by a mapping and sampling program that started in July. The Alaska Peninsula project covers a number of other porphyry copper-gold-molybdenum prospects as well as intrusive-related deposits such as polymetallic skarn and replacement deposits, base metal veins and epithermal gold deposits. First Quantum has until November 30, 2014 to decide whether it wants to enter an option to earn up to an 80 percent interest in the Alaska Peninsula project.

In April, Millrock added Lisburne, a large claim group in Northwest Alaska that is prospective for large-scale zinc-lead-silver deposits, to its Alaska portfolio. The Lisburne project, situated 12 miles (20 kilometers) south of Cape Lisburne on the coast of the Chukchi Sea, consists of 13,100 acres (5,300 hectares) of State of Alaska claims staked by Millrock. The claim blocks cover age-equivalent rock strata that are known to host the Red Dog district zinc-lead-silver deposits approximately 85 miles (140 kilometers) to the southeast. Stream sediment samples collected by the United States Geological Survey indicate strong zinc and barium anomalies on the claims. Millrock said regional and detailed geologic mapping is the first order of business for this grassroots zinc prospect.

Stellar, an Alaskan copper-gold project Millrock acquired through staking in 2012. Situated some eight miles (13 kilometers) north of the Denali Highway and 42 miles (68 kilometers) west of the town of Paxson, the Stellar claims covers the Zackly copper-gold skarn deposit and surrounding lands considered prospective for porphyry copper-gold deposits. Roughly 12,200 meters of historic drilling in some 85 holes has been completed at Zackly, outlining a historic resource of 218,944 ounces of gold and 66.9 million pounds of copper contained in a deposit of 1.13 million metric tons grading 6.03 grams-per-metric-ton gold and 2.69 percent copper. Known areas of skarn mineralization occur over a strike length in excess of 3,000 meters with the known resource occurring within the main skarn zone which has a strike length of about 1,000 meters. Extensive geochemical, geophysical and geological surveys have also been completed at the property. All historical data, as well as sample pulps and core, were obtained by Millrock. The company said Stellar has attracted several companies interested in a partnership.

Estelle, a copper-gold project in the Kahiltna Terrane region of South-central Alaska, is being explored under a joint venture between Millrock and Teck Resources. Exploration at Estelle was tabled in 2014.

CASH AND CASH EQUIVALENTS: C\$1.23 million (June 30, 2014) WORKING CAPITAL: C\$1.27 million (June 30, 2014) MARKET CAPITALIZATION: C\$6.85 million (Sept. 26, 2014)

P.O. Box 200867 719 E 11th Ave., Suite C Anchorage, AK 99520 Tel: 907-677-7479 Fax: 907-677-3599 www.millrockresources.com

#### **NUNAVUT & ALASKA**

#### MMG Ltd.

HKG: 1208

CHIEF EXECUTIVE OFFICER: Andrew Michelmore EXECUTIVE GENERAL MANAGER, EXPLORATION: Steve Ryan PRINCIPAL GEOLOGIST, AMERICAS: Katherine Smuk

Headquartered in Melbourne and listed on the Hong Kong Stock Exchange, MMG Ltd. continues to advance its Izok Corridor and Hood zinccopper projects in Nunavut and to complete early-stage exploration at its Nikolai nickel project in Alaska. The Izok Corridor project includes the High Lake and Izok volcanogenic massive sulfide deposits. Izok has a mineral resource of 15 million metric tons averaging 13 percent zinc and 2.3 percent copper. The High Lake deposit, located north of Izok, hosts a resource of 14 million metric tons averaging 3.8 percent zinc and 2.5 percent copper. MMG submitted a project description in 2012 to the Nunavut Impact Review Board to initiate the environmental review and permitting process for the project. The proposed plan includes a mine and mill at Izok Lake, a mine at High Lake, and a port at Grays Bay on the Coronation Gulf from which mineral concentrates would be shipped seasonally, all connected by a 325-kilometer (202 miles) all-weather road. The company has since advised Nunavut regulators that it is evaluating engineering alternatives aimed at improving project economics. One hurdle to an economically viable project at Izok, according to the MMG, is the cost of building the road and other infrastructure. The company says there would be many benefits for the improved regional infrastructure the company needs in the Kitikmeot: the mine project would add C\$5.1 billion to the gross domestic product of Nunavut and C\$2.5 billion to the GDP of Canada. During its operations, the mine would bring C\$391 million to Nunavut, equal to 18 percent of the territory's output in 2012, and C\$1.5 billion in jobs. It also would increase inbound cargo and full storage capacity, assist with Arctic sovereignty and safety and spill response. MMG is continuing its feasibility study and exploration program in 2014 and expects to provide NIRB with an update in the fourth quarter 2014.

MMG USA Exploration LLC, a subsidiary of Australia-based MMG Ltd., invested more than US\$2 million on nickel exploration at its Nikolai project in Alaska during 2013, a program the company followed up on during 2014. MMG's Alaska portfolio includes three large blocks of state of Alaska mining claims that follow an arc south of the Alaska Range. These claim groups include Amphitheater, which borders Pure Nickel's Man property to the south and west; Butte Creek, located about 40 miles (65 kilometers) southwest of Amphitheater; and Talkeetna, a block of claims roughly 30 miles (about 48 kilometers) further along this arc that coincides with the Wrangellia Terrane, a band of rocks known to host nickel-platinum group metal deposits that arcs from Southcentral Alaska through southern Yukon Territory and along the coast of British Columbia. The 2013 work program at Talkeetna, located about 100 miles (160 kilometers) northwest of Anchorage involved an early-stage program of compiling geological information on the property, mapping and rock sampling. In addition to a similar reconnaissance level mapping and sampling program, the company commissioned a 1,817-line-kilometer helicopter-borne versatile time-domain electromagnetic geophysical survey for Amphitheater, the claims bordering the Man nickel-PGM-copper property. Bluff, a block of claims that blankets a roughly 13-mile by five-mile (21 kilometers by eight kilometers) section of mountains stretching southwest of the Denali Highway, was the target of drilling last year. Beyond seeking nickel along the southern slopes of the Alaska Range, MMG carried out early-stage exploration on its Twenty Mile and Squaw Creek projects in the Rampart Mining District, some 100 miles (160 kilometers) northwest of Fairbanks. The 2013 programs on these claims located north of the Yukon River included a 2,396line-kilometer helicopter-borne VTEM survey, mapping and rock sampling. MMG continues exploration, including additional geophysical surveys and drilling, at its Nikolai project in 2014.

CASH AND SHORT-TERM DEPOSITS: US\$144.4 million (at June 30, 2014) WORKING CAPITAL: US301.2 million (at June 30, 2014) MARKET CAPITALIZATION: HK\$15.39 billion (at Sept. 26, 2014)



GPO Box 2982 Melbourne Victoria 3001 Australia Tel: 61-3-9288-0888 Fax: 61-3-9288-0800 www.mmg.com

#### **NORTHWEST TERRITORIES**

# **Mountain Province Diamonds Inc.**

MPV: TSX / MDM: NYSE

CHAIRMAN: Jonathan Comerford PRESIDENT AND CEO: Patrick Evans

Mountain Province Diamonds Inc. is an exploration company hoping to transition to diamond miner upon a 2016 start-up at the Gahcho Kué project located about 300 kilometers (186 miles) northeast of Yellowknife, Northwest Territories. Gahcho Kué, a joint venture between De Beers Canada (51 percent) and Mountain Province Diamonds (49 percent), is anticipated to produce 53.4 million carats of diamonds over a 12-year minelife, according to an updated feasibility study released in April. Capital needed to complete construction of the mine is estimated at C\$858.5 million (including a contingency of C\$75.6 million). According to the updated study, mining Gahcho Kué will produce an after-tax internal rate of return of 32.6 percent (excluding sunk costs) and a net present value (10 percent discount) of C\$1 billion. On Sept. 25, the Gahcho Kué partners received a Type A water license for the project, which rounds out the permits needed to develop the project. Major construction is expected to be complete by 2016, followed by plant commissioning in mid-2016 and commercial production targeted for the end of January 2017. While pushing ahead with development, the partners continue to explore the kimberlites at Gahcho Kué. The project covers four a cluster of four main kimberlite pipes - 5034, Hearne, Tuzo and Telsa. Three of these – 5034, Hearne and Tuzo – contain 35.4 million tons of probable reserves averaging 1.57 carats per ton for 55.5 million carats of diamonds. Roughly 20.6 million carats are contained in Tuzo. Expanding this kimberlite to depth has been the recent focus of exploration. In July 2013, Mountain Province released an updated NI 43-101 resource estimate for Gahcho Kué that incorporated the results of 2012 drilling that targeted the Tuzo pipe from a depth of 300–360 meters. Based on the results of this drilling Tuzo Deep was upgraded from an inferred to indicated resource, extending the indicated resource from surface to a depth 360 meters. In addition, the 2012 Tuzo Deep drilling resulted in the declaration of an inferred resource from a depth of 360-564 meters below surface. The recently completed 2014 Tuzo Deep drill program was designed to test the kimberlite to a depth of roughly 750 meters. This drilling tapped kimberlite to a depth of 743 meters, where the

kimberlite appears to plunge to the northeast. Core recovered from the program is being processed at the Geoanalytical Laboratories Diamond Services of the Saskatchewan Research Council. Based on the results, the Gahcho Kué joint venture will decide the next steps at Tuzo Deep. All the pipes remain open to depth. In addition to Tazo deep, the partners targeted at least 15 geophysical targets with exploration drilling.

CASH AND SHORT-TERM DEPOSITS: C\$59.3 million (June 30, 2014) WORKING CAPITAL: C\$40.3 million (June 30, 2014) MARKET CAPITALIZATION: C\$632.5 million (Oct. 4, 2014)

Ste. 2315 - 161 Bay St. Toronto, Ont. Canada M5J 2S1 Tel: 416-361-3562 Fax: 416-603-8565 www.mountainprovince.com

#### **NORTHWEST TERRITORIES**

#### Nighthawk Gold Corp.

NHK: TSX.V

CHIEF EXECUTIVE OFFICER: David Wiley CHIEF GEOLOGIST: Michael Byron

Nighthawk Gold Corp. budgeted C\$7.5 million for a 2014 exploration program at its 229,791-acre (92,993 hectares) Indin Lake gold property, located 220 kilometers (137 miles) north of Yellowknife, Northwest Territories. This large land package blankets a number of gold deposits, including the historical Colomac open pit mine, which produced 527,908 ounces of gold during the 1990s. The Colomac portion of the larger Indin Lake property hosts five known gold deposits - Colomac Main, Grizzly Bear, Goldcrest, Dyke Lake, and 24/27 - of which, only the main Colomac deposit was mined. In 2013, Nighthawk reported an inferred mineral resource estimate of 39.815 million metric tons averaging 1.64 grams per metric ton (2.1 million ounces) gold. Late in 2013, the company completed an option agreement to acquire four mining leases adjacent to the Indin Lake property that encompass two additional gold deposits - Kim and Cass. More than 32,000 meters of drilling have historically been completed on these properties. With much of the historical core preserved on site, Nighthawk focused much of its 2014 exploration on selective re-logging and re-sampling. Highlights from this re-sampling include: 36.85 meters of 5.67 g/t gold; 80.7 meters of 4.53 g/t gold; 61.5 meters of 4.24 g/t gold; 52 meters of 5.1 g/t gold; and 24 meters of 9.32 g/t gold. In July, Nighthawk launched a 14,000-meter drill program targeting four separate gold deposits - Goldcrest, Cass, Kim and Colomac. Goldcrest, located 400 meters east of Colomac, is a primary candi-

date for resources expansion and is the target of 6,000 meters of drilling. Two of the first holes drilled at Goldcrest this year substantiate a north plunging mineralized shoot: G14-05 intersected 20.25 meters of 4.83 grams per metric ton gold; and G14-04 intersected 19.6 meters of 4.19 g/t gold. Another 4,000 meters is targeting potential extensions to high-grade gold mineralization historically drilled at Cass, a deposit located about 20 kilometers (12.5 miles) northeast of Colomac. Approximately 13,500 meters of historic drilling traced the mineralization at Cass over a strike length of 360 meters and to a depth of 210 meters. A 2,000-meter drill program at Kim aims to confirm and extend shallow gold mineralization to depth and along strike. Over 18,000 meters of historic Kim drill core is stored on site. Re-sampling of this core has returned intercepts of 20.35 meters averaging 7.94 g/t gold 17.5 meters averaging 8.16 g/t gold; and 28.6 meters averaging 4.78 g/t gold. The balance of the program, 2,000 meters, focused on testing the plunge of higher grade shoots at Colomac. One such hole, C14-02, cut 25 meters grading 2.38 g/t gold Nighthawk said the summer program will lay the foundation for a subsequent winter program by expanding down plunge target opportunities that are best drilled from frozen lake setups.

CASH AND SHORT-TERM DEPOSITS: C\$1.26 million (April 30, 2013) WORKING CAPITAL: C \$1.36 million (April 30, 2013; closed C\$8 million financing on June 25, 2014) MARKET CAPITALIZATION: C\$21.03 million (Sept. 11, 2014)

Nighthawk Gold Corp. 150 York Street, Suite 410 Toronto, Ontario, M5H 3S5 Tel: 647-260-1247 Fax: 416-363-4567

**NUNAVUT & NORTHWEST TERRITORIES** 

# North Arrow Minerals Inc.

NAR: TSX.V

CHAIRMAN: D. Grenville Thomas PRESIDENT AND CEO: Ken Armstrong **ADVISOR:** Eira Thomas



North Arrow Minerals Inc. has seven diamond exploration projects in Canada - Qilalugag, Mel and Luxx in Nunavut; Lac de Gras and Redemption in Northwest Territories; Pikoo in Saskatchewan; and Timiskaming in Ontario. Located on the Melville Peninsula, Qilalugaq encompasses Q1-4, considered to be the largest known kimberlite in the eastern Canadian Arctic. In 2013, North Arrow confirmed an inferred resource for the Q1-4 kimberlite of 48.8 metric tons averaging 53.6 carats per hundred tons for a total of 26.1 carats, to a depth of 205 meters. The company has an option to earn an 80 percent interest in Qilalugaq from Stornoway Diamonds by completing a work program that includes the collection of at least a 1,000 metric ton bulk sample from the Q1-4 kimberlite. Targeting the recovery of 500 carats of diamonds, North Arrow collected a sample in excess of 1,500 metric tons from the Q1-4 kimberlite. The sample is being processed for the recovery of commercial sized diamonds, which will be used to better determine diamond content, size distribution and value. If North Arrow decides to vest an 80 percent interest in Qilalugaq, Stornoway has a one-time right to buy-back a 20 percent interest in the project by paying to North Arrow an amount equal to three times the costs incurred in connection with the option work program. North Arrow also completed a small till and stream sediment program at the Mel diamond project located roughly 250 kilometers (155 miles) northeast of Qilalugaq and a two-day program of prospecting and till sampling at high priority targets was completed in August at Luxx diamond project, located 100 kilometers (62 miles) north of the community of Rankin Inlet, Nunavut. In 2013, North Arrow entered into an agreement with Arctic Start Exploration to earn a 55 percent interest in Redemption, a diamond project located in the Lac de Gras district of NWT about 32 kilometers southwest of the Ekati Mine. North Arrow began its exploration of the newly acquired property with the completion of an airborne gravity survey, bathymetry survey and the collection of 350 heavy mineral till samples. An 800-meter drill program completed in 2014 did not encounter kimberlite. The company said the property hosts a number of lake-based geophysical anomalies that would need to be tested with winter drilling. North Arrow's 2014 exploration also included till sampling in preparation for winter drilling at the Pikoo diamond project in eastern Saskatchewan. This work is being carried out under an 80-20 joint venture with Stornoway Diamonds. In addition to its diamond projects, North Arrow holds an interest in a number of gold, base metal and lithium projects in the Northwest Territories and Nunavut. The

company does plan to explore these non-diamond properties on its own.

CASH AND CASH EQUIVALENTS: C\$7.63 million (July 31, 2014) WORKING CAPITAL: C\$7.04 million (July 31, 2014) MARKET CAPITALIZATION: C\$30.37 million (Sept. 30, 2014)

789 West Pender Street Suite 960 Vancouver, BC, V6C 1H2 Tel: 604-668-8355 Fax: 604-336-4813 www.northarrowminerals.com

# NUNAVUT

# Northquest Ltd.

NQ: TSX.V



CEO: Jon North CHIEF FINANCIAL OFFICER: Carmelo Marrelli VICE PRESIDENT, EXPLORATION: Dwayne Car

Northquest Ltd. is focused on seeking gold and other metals in geological terranes that have not reached geological maturity, such as its Pistol Bay gold project in Nunavut. This 861-square-kilometer (332 square miles) property covers 90 kilometers (55 miles) of the Pistol Bay Trend, a westtrending series of surface gold occurrences and zones that runs parallel to, and 80 kilometers (50 miles) south of, the Meliadine Trend of gold deposits owned by Agnico Eagle Mines Ltd. To fund its 2014 program, Northquest raised C\$2.5 million through the sale of shares to Nordgold, a Netherlandsbased gold producer with operations in Russia, Kazakhstan, Burkina Faso and Guinea. Since its first field operations at Pistol Bay in 2011, Northquest has encountered what it considers to be economically interesting drill intersections at three targets - Sako, Vickers, and Bazooka - that occur over a 20-kilometer segment of the Pistol Bay Trend. Northquest's 2014 drilling focused primarily on Vickers, a roughly 1,000-meter-long elliptical gabbrodiorite intrusive complex. Drilling at Vickers in 2012 cut 156.48 meters grading 8.23 grams gold per metric ton gold in hole PB-12-22. The best intersection from the Vickers target during 2013 was in hole PB-13-06, which cut 138.39 meters grading 3.79 g/t gold. In mid-September, Northquest reported results from four holes drilled at Vickers. These initial assay results include 245 meters of 1.4 g/t gold in hole PB-14-07 and 221.7 meters of 1.65 g/t gold in hole PB-14-08. PB-14-07 was drilled roughly 40 meters south of PB-13-10, which intersected 44 meters averaging 3.4 g/t gold; PB-14-08 was drilled below PB-14-07, confirming the Vickers zone at depth. By mid-September, Northquest had drilled 4,550 meters in 18 holes at Pistol Bay during 2014. The company also had a 6,890 line-kilometer of airborne magnetometer survey flown at Pistol Bay. This geophysical work aims to provide more information about the context of the CZ and Barrett gold occurrences, located on the Pistol Bay trend roughly 40 kilometers (25 miles) and 70 kilometers (45 miles) northwest of the Vickers zone. Northquest plans to complete some 5,000 meters of drilling at Vickers and 1,000 meters of scout drilling on outlying targets in 2015.

CASH AND SHORT-TERM DEPOSITS: C\$672,565 (June 30, 2014) WORKING CAPITAL: C\$349,156 (June 30, 2014; raised C\$2 million in July, 2014)

MARKET CAPITALIZATION: C\$5.6 million (Sept. 26, 2014)

1000 - 36 Toronto St. Toronto, Ont. Canada M5C 2C5 Tel: 416-306-0954 Fax: 416-350-5226 www.northquest.biz

# ALASKA

# NovaCopper Inc.

NCQ: NYSE/TSX

**CHAIRMAN**: Thomas Kaplan PRESIDENT AND CEO: Rick Van Nieuwenhuyse PROJECT MANAGER, UPPER KOBUK MINERAL **PROJECT**: Scott Petsel

NovaCopper Inc. has nearly reached its preliminary goal of defining 10





billion pounds of high-grade copper at the Upper Kobuk Mineral Projects, a long-term partnership between NovaCopper and NANA Regional Corp. The alliance combines Bornite and a number of other mineral prospects on NANA-owned lands with the world-class Arctic deposit and dozens of similar volcanogenic massive sulfide prospects located on NovaCopper's state, federal and patented mining claims in the Ambler Mining District. In March, NovaCopper provided an updated resource that increases the contained copper at Bornite by 2.56 billion pounds. The updated resource includes: indicated resources of 14.1 million metric tons grading 1.08 percent (334 million pounds) copper and inferred resources of 109.6 million metric tons grading 0.94 percent (2.3 billion pounds) copper for the potentially open-pittable portion of the Bornite; and inferred re-

sources of 55.6 million metric tons grading 2.8 percent (3.4 billion pounds) copper for the deeper, potentially underground minable portion of the project. The new resource estimate incorporates results from 216 drill holes including 17 holes totaling 8,142 meters drilled by NovaCopper in 2013, as well as new assays from 42 historical Kennecott drill holes comprising 14,457 meters with partial or no previous assays. Between Bornite and Arctic, the equivalent of roughly 9.5 billion pounds of copper has been identified, so far, at the Upper Kobuk Mineral Projects, when you calculate the worth of the zinc, lead, silver and gold found with the copper at Arctic. During 2014, NovaCopper conducted a modest field program which primarily consist of re-logging and re-as-



RICK VAN
NIEUWENHUYSE

saying between core from holes historically drilled within the extensions of the Upper and Lower Reef mineralization captured in the Bornite open pit resource and the up-dip portion of South Reef zone but only selectively sampled by Kennecott. This effort is a continuation of last year's program that contributed to a significant increase in the low-grade copper mineralization at Bornite. In July, crews arrived at the Bornite camp and began the cataloging and shipment of 4,030 boxes representing 12,918 meters of historical Bornite drill core to the company's warehouse and core logging facilities in Fairbanks, where crews have begun the re-logging and resampling of this core. NovaCopper expects this program will add lower grade material to the Bornite copper inventory and reduce the strip ratio for a potential open pit mining operation. In addition to the resampling program, NovaCopper is continuing to support the Alaska Industrial Development Export Authority in initiating the permitting process on the Am-



bler Mining District Industrial Access Road, a 211-mile- (340 kilometers) long road, extending west from the Dalton Highway to the project area. In 2013, NovaCopper and AIDEA entered into a memorandum of understanding that formalizes the roles of each party as they relate to permitting the Ambler Road and developing one or more mines at the Upper Kobuk Mineral Projects. In April, AIDEA was given the go-ahead by its board of directors to begin the permitting process for the Ambler Road and to engage a firm to prepare the environmental impact statement for the project under the direction of the federal agencies. NovaCopper anticipates signing a memorandum of understanding with AIDEA to explore the feasibility of utilizing liquefied natural gas from a plant the authority is preparing to build on the North Slope to replace diesel as the primary source of fuel for any future mines at the Upper Kobuk Mineral Projects. According to a preliminary economic assessment completed in 2013, open-pit mining of the volcanogenic massive sulfide deposit at Arctic is projected to require 15 megawatts of peak load power. The PEA estimates that an open-pit mine at Arctic would produce an after-tax net present value (8.0 percent discount) of US\$537.2 million; internal rate of return of 17.9 percent; and payback of five years. NovaCopper believes that switching from the diesel to LNG to fuel the electrical generation will substantially reduce the operating costs assumed in the PEA.

CASH AND SHORT-TERM DEPOSITS: US\$7 million (Aug. 31, 2014) WORKING CAPITAL: US\$6 million (Aug. 31, 2014) MARKET CAPITALIZATION: US\$53.6 million (Oct. 9, 2014)

1950 - 777 Dunsmuir Street Vancouver, BC V7Y 1K4 Tel: 604-638-8088 Fax: 604-638-8088 www.novacopper.com

#### **BRITISH COLUMBIA & ALASKA**

# NovaGold Resources Inc.

NG: TSX / NG: NYSE-MKT

NOVAGOLD

CHAIRMAN: Thomas Kaplan
PRESIDENT AND CEO: Gregory Lang
SENIOR ADVISOR TO PRESIDENT: Gil Leathley

With its attention focused primarily on advancing Donlin Gold through the permitting process, Novagold Resources Ltd. dialed back its exploration in 2014. In January, the company released results from a 2013 drill program focused on assessing the extent of the recently discovered Legacy zone at its 50 percent owned Galore Creek copper-gold project in northwestern British Columbia. This program included 22 infill and exploration holes totaling 11,649-meters. Legacy was directly targeted with 9,157 meters of this drilling, the remaining 2,492 meters was conducted to better understand geological features that could influence the mineralization in Legacy, identify mineralization trends, and explore possible extensions of known mineralized zones adjacent to the zone. The most significant intersections from the drilling in the Legacy zone were: GC13-0889 cut 129 meters grading 0.72 percent copper, 0.17 grams per metric ton gold and 7.2 g/t silver; GC13-0890 cut 117 meters grading 0.63 percent copper, 0.16 g/t gold and 8.3 g/t silver; GC13-0895 cut 135 meters grading 1.5 percent copper, 0.34 g/t gold and 13.2 g/t silver, and a further 84 meters grading 0.78 percent copper, 0.10 g/t gold and 8.8 g/t silver; and GC13-0901 cut 58 meters grading 0.87 percent copper, 0.20 g/t gold and 12.6 g/t silver. The 2013 program increased the drill density to a level required to support an inferred resource classification of the Legacy zone. The results also demonstrated that the copper mineralization may be extending beyond the initial Legacy discovery in the direction of the Bountiful mineralization. The mineralization remains open to the south, west, and at depth. No follow-up drilling, however, was completed at Legacy in 2014. Galore Creek Mining Co. - an operating company equally owned and supported by subsidiaries of Novagold and Teck Resources Inc. - is incorporating the 2012 and 2013 exploration results into a work plan that will advance the Galore Creek project toward a new resource and reserve estimate for next-level mine planning and design. 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 this deposit producing 6.2 billion pounds of copper, 4 million ounces of gold and 65.8 million ounces of silver over an 18-year span - making the proposed mine larger than any

copper operation in Canada. In order to update the PFS, the 2014 work plan includes technical studies in the areas of environmental and water management, as well as site layout. Novagold believes this work will increase the value of Galore Creek and make the large copper-gold project more marketable to potential buyers. The company hopes to sell all or part of its half of the project and utilize those funds to develop Donlin Gold. During the second quarter of 2014, the U.S. Army Corps of Engineers and cooperating agencies completed the alternatives identification phase of the environmental impact statement for Donlin Gold, a major step in the permitting process. Decisions on the final EIS and accompanying permits are expected in 2016. If permits are approved, mine construction is anticipated to take about four years.

CASH AND TERM DEPOSITS: US\$170.8 million (Aug. 31, 2014) WORKING CAPITAL: US\$155.7 million (Aug. 31, 2014) MARKET CAPITALIZATION: US\$961.4 million (Oct. 9, 2014)

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Vancouver, British Columbia Canada V6C 1H2

Tel: 604-669-6227 Fax: 604-669-6272 www.novagold.com

#### **NUNAVUT & NORTHWEST TERRITORIES**

#### Peregrine Diamonds Ltd.

PGD: TSX

CHAIRMAN AND CEO: Eric Friedland **PRESIDENT: Brooke Clements CHIEF GEOSCIENTIST: Jennifer Pell** 

Peregrine Diamonds Ltd. focused its 2014 exploration on readying promising kimberlites at its Chidliak diamond project for bulk sampling in 2015. Since 2008, more than 67 kimberlites have been found on the 748,000-hectare (1.85 million acres) Chidliak property, eight of which are considered to be potentially economic. In May, Peregrine announced a

maiden NI 43-101-compliant inferred resource of 2.9 million metric tons averaging 2.58 carats per metric tons for 7.47 million carats of diamonds in the top 250 meters of CH-6. An estimated 2.6 to 3.47 million metric tons is classified as a target for further exploration and the kimberlite is open at depth. CH-6 lies at the northwestern end of a 12-kilometer-long priority area that hosts seven of the known potentially economic kimberlites. Tonnage estimates have been completed for CH-7 and CH-44, two of the promising kimberlites in the priority area. CH-7 is estimated to contain 2.75 and 3.97 million metric tons from surface to a depth of 280 meters and CH-44 is projected to host 1.16 and 2.05 million metric tons from surface to a depth of 230 meters. Both kimberlites are open at depth. A C\$7 million exploration program slated for 2014 includes some 2,500 meters of core drilling at key kimberlites including CH-6, CH-7 and CH-44. Results from the core drilling, including microdiamond analyses and geologic models, will be incorporated into the final design of the 2015 bulk sampling program. In addition to core drilling, a heli-portable reverse circulation rig will grid-drill key kimberlites in order to map overburden in advance of future trenching. Peregrine hopes that this work and the bulk sample program planned for 2015 will confirm adequate diamond resources to undertake a pre-feasibility study for the first diamond mine on Baffin Island. While preparing the more advanced kimberlites for bulk sampling, more rudimentary exploration is seeking new economic kimberlites within the priority area. This work includes ground geophysics over areas with unexplained indicator minerals and kimberlite float; RC drilling of priority exploration targets; at least 1,500 meters of drilling on high-priority targets; and prospecting. Peregrine also holds a 72.11 percent interest in the WO Property located in the Lac de Gras region of Northwest Territories which hosts the DO-27 kimberlite pipe that has an indicated mineral resource of 18.2 million carats of diamonds. The company's portfolio also includes: Nanuq and Nanuq North, diamond projects located north of Rankin Inlet in Nunavut; Qilaq, a diamond and metals project on Baffin Island; and Pellat Lake, a diamond exploration property in Northwest Territories. No exploration activities occurred on those properties in 2013. The company is always seeking new diamond prospects in North America. A proprietary database acquired from BHP Billiton that contains data from about 38,000 kimberlite indicator mineral samples covering some 3 million square kilometers (1.16 million square miles) of Canada, is a key tool in this search.

CASH AND SHORT-TERM DEPOSITS: C\$3.6 million (June 30, 2014)



WORKING CAPITAL: C\$1.2 million (June 30, 2014)
MARKET CAPITALIZATION: C\$31.7 million (Sept. 26, 2014)

201-1250 Homer Street Vancouver, B. C. Canada, V6B 1C6 Tel: 604-408-8880 Fax: 604-408-8881 www.pdiam.com

#### **BRITISH COLUMBIA**

#### **Pretium Resources Inc.**

PVG: TSX

PRESIDENT AND CEO: Robert Quartermain
CHIEF DEVELOPMENT OFFICER: Joseph Ovsenek,
CHIEF EXPLORATION OFFICER: Kenneth McNaughton

Pretium Resources Inc. is focused on reaching commercial production at its high-grade Brucejack gold-silver project by 2016. Located 65 kilometers (40 miles) north-northwest of Stewart, B.C is part of a largely unexplored land package of more than 103,000 hectares (254,518 acres). The Valley of the



ROBERT QUARTERMAIN

Kings deposit at Brucejack contains 15.3 million metric tons of measured and indicated resources averaging 17.6 grams per metric ton (8.7 million ounces) gold and 5.9 million metric tons of inferred resources averaging 25.6 g/t (4.9 million oz) gold, according to a resource updated in December. An updated feasibility study completed in June, describes a 2,700-metric-ton-per-day mine at Brucejack producing 7.3 million oz of gold over an 18-year mine life, or about 404,000 oz of gold per year. A 1,000-metric ton bulk sample collected from the Valley of the Kings in February produced 3,120 oz of gold. Another 1,000-metric-ton sample has been permitted and is expected to be collected later in 2014. This year's exploration at Brucejack started with a 5,000-meter surface program targeting a deep zone of the indicated and inferred mineral resources in the Valley of the Kings. This drilling includes hole SU-632-W4, which cut 335.65 g/t gold over 2.10 meters, including 4,130 grams of gold uncut over 0.80 meters in the western part of the Valley of the Kings. Roughly 15,000 meters of underground drilling in the Valley of the Kings is slated to begin upon the completion of a water treatment plant towards the end of 2014. Pretium also owns the Snowfield project, a longer term bulk tonnage project to the north of Brucejack. Snowfield hosts 1.37 billion metric tons of measured and indicated resources containing 25.9 million oz of gold, 75.8 million oz of silver, 2.98 billion pounds of copper, 258.3 million lbs of molybdenum and 22.5 million oz of rhenium. The project also has considerable resources reporting to the inferred category. Pretium maintains a confidentiality and cooperation agreement with Seabridge Gold, whose KSM project shares a common boundary with Snowfield. Under the agreement the companies have studied the potential of combining Snowfield

CASH AND SHORT-TERM DEPOSITS: C\$19.7 million (June 30, 2014)
WORKING CAPITAL: C\$22.7 million (June 30, 2013; raised US\$49.5 million July 29, 2014)

MARKET CAPITALIZATION: C\$601.9 million (Sept. 30, 2014)

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and KSM into one operation.

#### YUKON TERRITORY

## Rockhaven Resources Ltd.

RK: TSX.V



**CHIEF EXECUTIVE OFFICER:** Matthew Turner **PRESIDENT:** Rob Carne

**CHIEF OPERATING OFFICER:** lan Talbot

Rockhaven Resources Ltd. released a steady stream of high-grade gold



and silver assays from drilling at the Western BRX zone of its Klaza property in southern Yukon Territory over the 2014 field season. As a result of raising an additional C\$1.245 million through an exercise of warrants at the end of July, Rockhaven increased it originally planned 12,000-meter drill program at Klaza to 21,000 meters. The Western BRX zone consists of three linear vein structures, which have been traced over a 750-meter-long strike and from surface to a depth of 400 meters. Rockhaven said 23 of the 25 holes from which the company received assay results through the end of July have tested a 580-meter section of strike. Highlights from this drilling at Western BRX include: 6.4 grams per metric ton gold and 318 g/t silver over 1.31 meters and 10.6 g/t gold and 32.2 g/t silver over 1.41 meters in hole 137; 28.9 g/t gold and 669 g/t silver over 1.65 meters in hole 143; 26.8 grams per metric ton gold and 705 g/t silver over 0.84 meters, and 29.3 g/t gold and 36.8 g/t silver over 1.01 meters in hole 144; 26.71 grams per metric ton gold and 172 g/t silver over 2.98 meters in hole 150; 22.43 g/t gold and 245 g/t silver over 3.21 meters in hole 151; and 66.2 g/t gold and 403 g/t silver over 1.00 meter in hole 154. Situated, 1,000 meters northeast of the Western BRX Zone, Western Klaza represents another high-grade gold-silver discovery. Highlights from 2014 drilling at Western Klaza are: 25.3 g/t gold and 637 g/t silver over 0.96 meters in hole 178; 20.6 g/t gold and 93.8 g/t silver over 1.06 meters in hole 180; 14.60 g/t gold and 778 g/t silver over 0.82 meters in hole 182; 15.25 g/t gold and 789 g/t silver over 0.78 meters in hole 218; and 15.38 g/t gold and 741 g/t silver over 1.46 meters in hole 220. The BRX and Klaza zones, of which Western BRX and Western Klaza are extensions, are two of nine main mineralized structural zones and numerous subsidiary structures identified within a 2,000-by 4,000-meters corridor Klaza property. If lined up end to end, the strike of these parallel zones has been traced for over 9,400 meters. Rockhaven said all of the zones are open for expansion along strike and to depth. Located in an active placer gold mining district about 50 kilometers (30 miles) west of Carmacks, Klaza is accessible by road. In addition to Klaza, Rockhaven owns the Mount Hinton property in the Keno Hill silver camp, the Plata silver-gold-lead-zinc property in eastern Yukon and the Ruby Range gold projects in the southwestern part of the territory. Strategic Metals Ltd, Rockhaven's largest shareholder, holds 27,377,500 Rockhaven shares, representing 32.68 percent of the 83,783,334 shares issued at the end of July. In addition, W. Douglas Eaton, the president and chief executive officer of Strategic holds, directly and indirectly, 11,452,500 Rockhaven shares, representing 13.67 percent of the issued shares.

CASH AND SHORT-TERM DEPOSITS: C\$3.66 million (July 31, 2014) WORKING CAPITAL: C\$3.04 million (July 31, 2014) MARKET CAPITALIZATION: C\$18.44 million (Sept. 30, 2014)

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www.rockhavenresources.com

#### NUNAVUT

#### Sabina Gold & Silver Corp.

SBB: TSX

PRESIDENT AND CEO: Robert Pease
VICE PRESIDENT, PROJECT DEVELOPMENT: Wes Carson
VICE-PRESIDENT, EXPLORATION: Angus Campbell



With the goal of evolving from an exploration company to mid-tier gold producer, Sabina Gold & Silver Corp. budgeted C\$23 million for the 2014 field program at its Back River gold project in western Nunavut. The primary objective of the 2014 work program was to complete definition and expansion drilling at Echo, one of four deposits that comprise mineral resources at the Goose Property and is centrally located in the area of planned mine infrastructure for the project. The Back River project is currently in feasibility stage with a published measured mineral resource of 10.4 million metric tons grading 5.2 grams per metric ton (1.76 million ounces) gold; an indicated mineral resource of 17.9 million metric tons grading 6.1 g/t (3.54 million ounces) gold; and an inferred mineral resource of 8.2 million metric tons grading 7.3 g/t (1.93 million ounces) gold for eight deposits at Goose and George, two property areas that make up the larger Back River project. The Echo deposit has indicated resources of 607,053 metric tons grading 6.8 g/t (132,690 ounces) gold; and inferred resources of 550,907 metric tons grading 7.2 g/t (127,545 ounces) gold. Twenty-five holes for a total of 8,832 meters of drilling were completed at Echo in 2014 to test the feasibility of including an open pit/underground operation in the early mine plan. The 2014 Echo drilling increased the drillhole density of the main deposit to about 50-meter centers to enable conversion of resources; drill tested for extensions to mineralization at depths of up to 350-meter vertical; tested for significant lateral extensions of the known mineral horizon; and collected data for metallurgical and geotechnical studies that will aid in the assessment of development potential. The results of the drilling indicate that the deposit is open at depth, below current drilling and also along strike to the northeast and west. At depth and extensional to the main mineral zone, higher grade potential is demonstrated by holes 14GSE474B, which returned four meters of 5.22 g/t gold from a depth of 334 meters, and 14GSE475 which returned five meters of 12.02 g/t gold from a depth of 331.4 meters. Sabina said the infill drilling will support an updated resource to be estimated for Echo later this year. It is expected to be included in a feasibility study due to be completed in the first half of 2015. Sabina said the new resource estimate will enable it to determine opportunities that the Echo zone could provide to early mine life. The 2014 program also saw roughly 2,500 meters of drilling at three other exploration targets near existing deposits on the Goose property, along with geotechnical drilling to support the feasibility study; ongoing optimization studies to be included in the feasibility study; ongoing baseline studies; and continued community engagement.

CASH AND SHORT-TERM DEPOSITS: C\$45.6 million (June 30, 2014) WORKING CAPITAL: C\$44.2 million (June 30, 2014) MARKET CAPITALIZATION: C\$102.8 million (Sept. 30, 2014)

930 West 1st St. Suite 202, North Vancouver, BC Canada V7P 3N4 Tel: 604-998-4175 Fax: 604-998-1051 www.sabinasilver.com

#### YUKON TERRITORY

## Selwyn Chihong Mining Ltd.

CHIEF EXECUTIVE OFFICER: Richard Li
EXPLORATION MANAGER: Jelle De Bruyckere
Selwyn Chihong Mining Ltd.., a Canadian subsidiary of Yunnan Chi-

hong Zinc & Germanium Co. Ltd., is marching the Selwyn zinc-lead project in western Yukon Territory towards production. Yunnan Chihong Zinc & Germanium formed a joint venture with Selwyn Resources Ltd. on the project in 2009. The southern China-based mining and smelting company subsequently invested C\$100 million to earn a 50 percent interest in Selwyn and then bought the other half of the project from Selwyn Resources for C\$50 million in cash. According to a 2012 calculation, the Selwyn project has an indicated resource of 185.57 million metric tons averaging 5.2 percent (21.26 billion pounds) zinc and 1.79 percent (7.3 billion lbs) lead, and an inferred resource of 237.86 million metric tons averaging 4.47 percent (23.45 billion lbs) zinc and 1.38 percent (7.22 billion lbs) lead. With the goal of putting a mine into production in 2020, Selwyn Chihong budgeted C\$56 million to advance the enormous zinc project in 2014. Though earlier studies considered an underground mine, Selwyn Chihong believes a larger scale open-pit mine with a 25,000-metric-ton-per-day mill is a better fit for developing one of the world's largest zinc deposits With the goal of gaining the geological information needed to support this more ambitious zinc mine, the Chinese mining company plans to invest some C\$22 million of its 2014 budget in a 55,000-meter drill program that targets seven of the 15 known mineralized zones at Selwyn. Another C\$13 million will be spent on upgrading the Howard's Pass Road, an access road that links the Selwyn project to Yukon Territory's contiguous road system. Selwyn Chihong Mining also must identify a port for transporting the zinc concentrates to overseas smelters. Any chosen port site, either in Southeast Alaska or British Columbia, would need to be expanded to handle the anticipated zinc and lead concentrates produced at Selwyn. The company is also considering its fuel options with an eye on sourcing liquefied natural gas. All of this year's work will support a bankable feasibility study due to be completed in mid-2015.

2701-1055 W. Georgia Street Vancouver, B. C. Canada, V6E 0B6 Tel: 604-620-6188 Fax: 604-681-8344 www.selwynchihong.com

#### ALASKA

### Stone Boy Inc.

Sumitomo Metal Mining (95 percent), Sumitomo Corp. (5 percent)

Stone Boy Inc., owned by subsidiaries of Sumitomo Metal Mining (95 percent) and Sumitomo Corp. (5 percent), continues to seek high-grade gold on claims in the area of the Pogo gold mine in Interior Alaska. The Stone Boy partners have been exploring the larger Pogo district since 1991. This includes recent drilling on the Monte Cristo property, located roughly 40 miles (65 kilometers) west of Sumitomo Metal Mining's Pogo gold mine, and the lnk claims, situated a few miles southeast of the underground operation. Under contract with the Stone Boy partners, Pathfinder Mineral Services managed a US\$2 million exploration program on the Stone Boy project during 2013 that included 5,623 meters of drilling in 21 holes on these properties; as well as rock and soil sampling. Roughly US\$429,000 of the 2013 program was allocated to ongoing exploration at Monte Cristo. The Naosi Zone, a gold-silver-antimony prospect within the larger Monte Cristo properties, had previously been one of the primary exploration targets of the Stone Boy project. In 2011, the partners released results from drilling Naosi, including drill intercepts of 7.8 grams per metric ton gold, 19.7 g/t silver and 0.1 percent antimony over 7.92 meters; and 22.83 meters grading 4.2 g/t gold, 48 g/t silver and 0.17 percent antimony. Last November, however, Sumitomo Metal Mining and Sumitomo Corp. said they have decided to put exploration at Naosi on hold in favor of other prospects at the Monte Cristo property as well as other properties that make up the district-scale Stone Boy project. The Ink claims, located about 15 miles (24 kilometers) southeast of Pogo, were the target of the remaining \$1.6 million of exploration on the Stone Boy Project. The program included 4,941 meters of drilling in 12 holes. In addition to drilling, 787 soil samples and 48 rock samples were collected on the lnk claims during 2013. Though precise quantities of gold discovered have not been disclosed, assessment reports state that results from the drilling indicate the presence of gold and pathfinder minerals associated with quartz veins cutting fine-grained granodiorite intrusive rocks. Going forward, the Stone Boy Inc. intends to continue exploration activities in the Stone Boy project in a quest to discover a new gold mine to follow operations at Pogo. This includes a robust exploration program in 2014.

#### ALASKA, BRITISH COLUMBIA & YUKON

### **Teck Resources Ltd.**

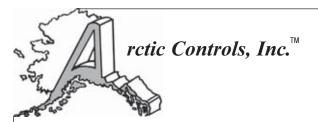
TCK: NYSE / TCK B: TSX

Teck

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

Teck Resources Ltd. continued robust zinc exploration in Alaska and British Columbia, while dialing back expenditures at many of its copper exploration and development projects during 2014. The discovery and delineation of high-grade deposits near its Red Dog Mine in Northwest Alaska continues to be a primary focus of Teck's zinc exploration. Going into 2014, Red Dog had 45.4 million metric tons of ore in reserve averaging 15.8 percent (6.05 million metric tons) zinc, 4.1 percent (1.86 million metric tons) lead and 72.6 grams per metric ton (106 million ounces) silver. Qanaiyaq and Paalaaq are potential sources of near term higher-grade ore to supplement the reserves currently being mined from the adjacent Aqqaluk pit. Qanaiyaq, a near-surface deposit that lies to the south of the mined out Red Dog main deposit, has an indicated resource of 8.3 million tons with an average grade of 25.7 percent zinc, 6.9 percent lead and 3.99 ounces per ton silver. Teck has not released a resource for Paalaaq, a deeper deposit immediately north of Aqqaluk. In addition to exploring lands immediately surrounding the mine, Teck continues exploration in the larger Red Dog District. Anarraaq-Aktigiruq, situated roughly eight miles (13 kilometers) northwest of the current operations, is among the highquality targets Teck is pursuing. Teck discovered Anarraaq in 1999, subsequently establishing an inferred resource of about 19 million tons grading 15.8 percent zinc, 4.8 percent lead, and 2.1 oz/t silver.

For around two decades, Teck and joint venture partner Korea Zinc Co. have been investigating zinc prospects in both the Yukon Territory's Selwyn Basin and the Kechika Trough of northern B.C. In 2013, the zinc seeking partners cut a deal with Canada Zinc Metals Corp. to explore the Pie, Yuen and Cirque East properties in the Kechika Trough. Under the agreement, Teck and Korea Zinc could earn up to a 70 percent interest in the properties by investing C\$8.5 million in them by 2019. With a 2014 budget that will top the C\$500,00 first-year minimum, the joint venture partners plan to complete targeted geological mapping, selective rock and soil sampling on high priority targets, core re-logging and sampling from historical Pie and Yuen drill core, and potentially geophysical surveys. The Pie, Cirque East and Yuen properties lie adjacent to Teck and Korea Zinc's Cirque project. Mineable reserves at Cirque are reported to total 22.1 million metric tons grading 9.4 percent (4.6 billion pounds) zinc, 2.8 percent (1.4 billion) lead and 60 g/t (42.6 million oz) silver. Teck re-established the camp at Cirque and drilled deep targets at the property during 2013. Teck pulled in the reins on exploration at the large porphyry copper-gold projects it is involved with in northwestern B.C. and Alaska. At GJ, situated about 30 kilometers (20 miles) west of Red Chris, Teck completed a minimal program of data compilation and drill core re-logging. Though nominal, the program is expected to push the company's total investment in the property over the C\$12 million needed to earn an initial 51 percent interest from partner, NGEx Resources Inc, a stake that can be raised to 75 percent by spending C\$44 million by the end of 2020. Similarly, Teck did not have drills turning at two other joint venture projects - Galore Creek (Teck-Novagold) or Schaft Creek (Teck-Copper Fox Metals). Early in 2014 Teck elected to take up an option on Kiska Metals Corp.'s Kliyul gold-copper project located 67 kilometers (42 miles) southeast of the shuttered



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Kemess Mine in north-central British Columbia. Teck can earn a 51 percent interest in the property by spending C\$5.5 million on exploration at the property by Jan. 31, 2018.

Though industrial minerals are Teck's mainstay, the diversified miner is investigating gold prospects in the Yukon Territory and Alaska. 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 exploring. During 2013 Teck completed soil sampling, prospecting and mapping and drilled eight holes for 1,500 meters on these claims. In Alaska, Teck has an exploration alliance with Millrock Resources Inc. on Estelle, a gold-dominant project about 170 kilometers (105 miles) northwest of Anchorage. Teck opted to table exploration at Estelle in

CASH AND SHORT-TERM DEPOSITS: C\$2.1 billion (June 30, 2014) WORKING CAPITAL: C\$3.1 billion (June 30, 2014) MARKET CAPITALIZATION: C\$13.2 billion (Sept. 30, 2014)

3300 - Bentall 5, 550 Burrard St. Vancouver, B.C. Canada, V6C 0B3 Tel: 604-699-4000 Fax: 604-699-4750 www.teck.com

#### NORTHWEST TERRITORIES

# TerraX Minerals Inc.

TXR: TSX V

PRESIDENT AND CEO: Joseph Campbell VICE PRESIDENT, EXPLORATION: Tom Setterfield **CHIEF FINANCIAL OFFICER: Stuart Rogers** 

TerraX Minerals Inc. is focused on exploration of its Yellowknife City Gold Project, a 93.5-square-kilometer (36.1 square miles) land package immediately north of the Northwest Territories capital. The property consists of five claim groups that TerraX has assembled since early 2013. The company's 2014 exploration focused on the Northbelt property, which covers 13 kilometers (eight miles) of strike on the northern extension of the geology that hosts the historical Giant and Con gold mines. The Northbelt property is host to multiple shears that are the recognized hosts for gold deposits in the Yellowknife camp and contains innumerable gold showings and historic high grade drill results. A winter program that got underway in March, marks the first drilling at Northbelt since 1996. During this program, TerraX drilled 14 holes totaling 2,305 meters, including four holes at the Homer Lake base metal target (1,001 meters), four holes on Crestaurum (533 meters), and five holes on the northern extension of the Barney Shear (751 meters). The company followed this up with another 14 holes drilled during the summer. Drilling at Homer Lake tested a 400-meter-long electromagnetic anomaly with an interpreted steep westerly dip that had been identified by airborne surveying in 2013 and continues for a further 1,000 meters to the south as a weaker electromagnetic anomaly. TNB14-004, the best of the four holes drilled at Homer Lake during the winter program, cut 71 meters of sulfide mineralization, including 3.42 meters of massive sulfides grading 3.41 grams per metric ton gold, 69.3 g/t silver, 3.67 percent lead and 3.17 percent zinc. Three of the holes drilled at Crestaurum were designed to twin historic drill holes for which no drill core is available and confirmed the correlation with historic drill results.

Highlights include 10.02 meters grading 4.17 g/t gold in hole TNB14-011. During its summer drill program TerraX closed in on high grade mineralization at Crestaurum, including 3.1 meters of 13.8 g/t gold in TNB14-015 and 2.9 meters of 33.6 g/t gold in TNB14-019. In 2013, TerraX recovered core from 74 drill holes drilled by Giant Mines Ltd. in 1985. TerraX was able to re-sample and re-assay this core, including 5.0-meter intercept grading 62.9 g/t gold. A further 117 holes were drilled into the Crestaurum Zone between 1945 and 1980 over a strike length of 1,400 meters for which drill collar locations were found in the field but for which no drill core has been recovered by TerraX. Based on this information, TerraX drilled a total of 12 holes this year (three in winter and nine this summer) to verify historical information from drill logs and possibly allow these 117 drill holes to be incorporated into a future NI 43-101 resource estimate. TerraX said drilling at the winter drilling at the Barney zone was purely exploratory and designed to test the interpreted northern strike extension of historically drilled mineralization. TNB14-010 cut multiple zones of mineralization at this Barney North Extension, including a central zone of 12.5 meters grading 1.40 g/t gold, 20.3 g/t silver and 1.69 percent lead. The company completed another five holes at Barney during the summer, four of which were wedged off of holes drilling in 1995 and 1996. One such hole, NB95-16W1, cut 22.4 meters grading 6.35 g/t gold. NB95-16W3, wedged 200 meters down the same hole, cut 45.7 meters grading 1.56 g/t gold. The company said these and historical intercepts support the theory that the Barney Shear zone is an extension of the shears that supported the Giant and Con mines. In late September, TerraX raised roughly C\$2.1 million to fund a winter drill program at the Yellowknife City gold project.

CASH AND SHORT-TERM DEPOSITS: C\$1.66 million (July 31, 2014) WORKING CAPITAL: C\$860,768 (July 31, 2014; completed C\$2.1 million in September) MARKET CAPITALIZATION: C\$102.8 million (Sept. 30, 2014)

1066 West Hastings Street, 23rd Floor Vancouver, B.C., V6E 3X2 Tel: 604-689-1749 Fax: 604-648-8665 www.terraxminerals.com

#### NUNAVUT

#### **TMAC Resources Inc.**

EXECUTIVE CHAIRMAN: Terry MacGibbon
CHIEF EXECUTIVE OFFICER: Catharine Farrow
VICE PRESIDENT, EXPLORATION AND GEOSCIENCE: Dave King

TMAC Resources Inc. is a privately held, Canadian-based mineral exploration focused solely on the exploration, development and mining of its Hope Bay gold project in the Kitikmeot region of Nunavut. TMAC acquired the Hope Bay project from Newmont Mining Corp. in 2013. The project blankets most of the 80-kilometer- (50 miles) long Hope Bay greenstone belt, located within the Bathurst structural block of the northeast Slave Structural Province. Newmont Mining acquired the property in 2007 and subsequently upgraded the infrastructure including air strips, fuel storage, camps, ports, a nearly completed processing plant in South Africa and underground Doris development until placing the project in care and maintenance in 2011. As part of its acquisition, TMAC inherited more than C\$800 million worth of exploration data, development, and infrastructure from previous operators. With extensive infrastructure already in place and permitting well advanced, the new owner of Hope Bay is working towards de-risking the project and putting it into production. Following a \$78 million private placement, the TMAC Board of Directors approved a C\$61 million 2014 work program for Hope Bay that includes exploration, engineering, environmental permitting and completion of a pre-feasibility study. On the exploration front, six rigs are expected to churn out 57,000 meters of drilling in 2014. Much of the work will be conducted at Doris and Madrid, two of the projects most advanced deposits. TMAC CEO Catharine Farrow said, "Intersections of highgrade gold mineralization at depth over mineable widths in the later part of the 2013 drilling program at both Doris and Madrid South confirmed the high potential for the discovery of additional mineral resources at Hope Bay." Four rigs began drilling at Madrid South in late April and two larger rigs initiated drilling on Doris targets in May. The company has also reopened the Doris portal and ramp to facilitate future underground mapping, underground drilling and mine design. In addition, work has begun on environmental permitting of the Madrid and Boston trends for advanced exploration, engineering and project execution planning throughout 2014. The

company plans to carry out a pre-feasibility study by early 2015.

CASH AND SHORT-TERM DEPOSITS: C\$14.1 million (March 31, 2014)
WORKING CAPITAL: C\$4.9 million (March 31, 2014; completed C\$77.8 million
private placement in May)

372 Bay Street, Suite 901 Toronto, ON M5H 2W9 Tel: 416-628-0216 www.tmacresources.com

#### ALASKA

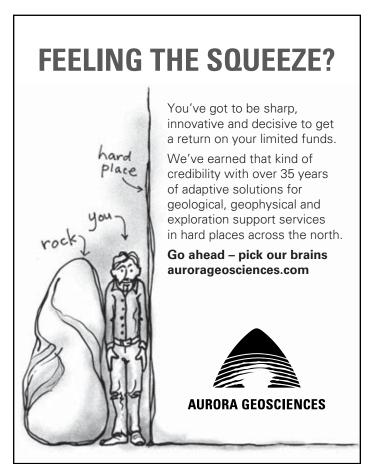
#### **Ucore Rare Metals Inc.**

UCU: TSX.V



PRESIDENT AND CEO: Jim McKenzie CHIEF OPERATING OFFICER: Ken Collison VICE PRESIDENT, BUSINESS DEVELOPMENT: Mark MacDonald

Ucore Rare Metals Inc. carried out 2014 exploration programs at both its Bokan-Dotson Ridge rare earth elements project in Southeast Alaska and Ray Mountain REE-tin project in the Interior region of the state. A C\$7.8-million private placement completed in April, along with C\$2.8 million of working capital Ucore had on the books at the end of March, is anticipated to provide ample funds to meet the company's needs into 2015, including a C\$2.5-million drill program at Bokan Mountain. Late in 2013, Ucore published an updated resource for the Dotson Ridge deposit at Bokan Mountain that outlines an indicated resource of 2.9 million metric tons averaging 0.614 percent (39.7 million metric tons) total rare earth oxides and an inferred resource of 2 million metric tons averaging 0.605 percent (26.6 million pounds) TREOs. Roughly 40 percent of the TREOs are the higher valued heavy rare earths, many of which are considered critical to the green energy, defense and high-technology sectors. The smaller of two rigs drilling at Bokan during 2014 focused on upgrading inferred resources to the indicated category by infill drilling of the rare earths deposit. The larger rig drilled multiple deep holes with the goal of expanding the resource to depth, as well as completing a number of geotechnical holes and groundwater monitoring wells to



obtain supplementary data for use in the engineering and permitting of the project. This field work is part of a larger program focused on collecting the last bits of information needed to complete a plan of operation that can be submitted for permitting and finalize a feasibility study scheduled for delivery in 2015. The feasibility study builds upon a 2012 preliminary economic assessment that anticipates an underground mine feeding 1,500 tons of ore to a 750-metric-tons-per-day mill and a state-of-the-art processing facility at Bokan Mountain. The operation outlined in the PEA envisions the production of 2,250 metric tons of rare earth oxides per year during the first five years of full production; including an annual output of 95 metric tons of dysprosium oxide, 14 metric tons of terbium oxide, and 515 metric tons of yttrium oxide. The ability to run a mill half the size of the ore being mined is due to an x-ray sorter that will reject half the feed as REE-barren waste prior to milling. By halving the material, the sorter is essentially doubling the mill head grade. Another 50 percent of the material is slated to be removed via magnetic separation between the mill and leaching circuit. While the PEA envisions a small, temporary facility to store tailings during the early stages of development, at a certain point the mine will consume all of the tailings produced to

As Ucore presses ahead at Bokan, the company has crews investigating its Ray Mountains REE-tin property located roughly 110 miles (175 kilometers) northwest of Fairbanks. This program included re-sampling and assay testing of key locations recently reported by the Alaska Geological Survey, and earlier U.S. Bureau of Mines work in the area. Rare earths and associated metals such as tin have been identified in the alluvial outwash of the Ruby granitic batholith where the Ray Mountain claims are located. The target metals are contained in heavy minerals such as monazite, xenotime, cassiterite, wolframite and zircon, which are widespread throughout the region. When Ucore staked the Ray Mountain claims in 2011, it noted that the prospective heavy mineral placers found there can be effectively concentrated via conventional gravity separation and processing methods using only water as the separation medium. The company also pointed out that the technology to process a monazite-xenotime placer concentrate for contained REEs has long been known elsewhere in the world and poses no new metallurgical challenges.

CASH AND SHORT-TERM DEPOSITS: C\$8.5 million (June 30, 2014) WORKING CAPITAL: C\$8.7 million (June 30, 2014) MARKET CAPITALIZATION: C\$50.4 million (Sept. 30, 2014)

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#### YUKON TERRITORY

# Victoria Gold Corp.

VIT: TSX.V



CHAIRMAN: T. Sean Harvey
PRESIDENT AND CEO: John McConnell
EXECUTIVE VICE PRESIDENT: Mark Ayranto

Victoria Gold Corp. is focused on the exploration and development of its Dublin Gulch property in central Yukon Territory. The Eagle gold deposit at Dublin Gulch is permitted to begin mine construction. According to a feasibility study completed in 2012, an open-pit mine and valley heap leach operation at Eagle would produce 192,000 ounces of gold annually for roughly nine years, based on probable reserves of 92 million metric tons averaging 0.78 grams per metric ton (2.3 million ounces) gold. Including indicated and inferred resources, the Eagle deposit contains an estimated 6.3 million ounces of gold. While the company has permits in hand to begin development of Eagle Gold, the company's 2014 work focused on exploration of the Olive zone. Located about 2.5 kilometers (1.5 miles) northeast of Eagle Gold, the Olive zone has the potential to add at least 10 million metric tons of higher grade material to the mine plan at Eagle. Olive has long been known to host high-grade gold veins. Victoria first drilled the zone in 2010, cutting 20.3 meters grading 1.93 grams per metric ton gold and 41.1 meters of 0.96 g/t gold in hole DG10-384C. A small drill program completed in 2011 and 11 holes drilled in 2012 continued to confirm the potential of the Olive zone. To follow up on this potential, Victoria launched a 3,000-meter, phase-1 2014 program in May. This initial phase of drilling included 20 holes, three of which were used solely for metallurgical testing. Highlights from this drilling include 69.7 meters of 2.29 g/t gold in hole DG14-584C; 96.1 meters of 1.22 g/t gold in DG14-586C; 99 meters of 1.02 g/t gold in DG14-588C; 35.3 meters of 1.67 g/t gold in DG14-590C; and 89.6 meters of 1.18 g/t gold in DG14-600C.

Victoria engaged Kappes Cassidy & Associates to complete metallurgical testing on Olive samples. Initial tests included 96-hour bottle roll tests on three composite oxide and three composite sulfide samples. All samples were tested using a crush size to match the proposed crushing facility at Eagle. While the 61 percent recovery on the oxide samples is less than recoveries on Eagle ore, Victoria said the higher gold grades at Olive more than offsets the lower recoveries, netting a higher recovered grade from Olive. Following the success of this initial phase of drilling and metallurgical work, Victoria began a 5,000-meter phase-2 program in late July. The phase-2 program aims to provide sufficient drilling to be able to update the Eagle feasibility study to include a mine plan with additional ore from Olive. In addition to infill and step-out exploration drilling, the phase 2 program included geotechnical drilling to develop a feasibility study level mine plan and additional metallurgical testing for feasibility study level gold recovery engineering.

CASH AND SHORT-TERM DEPOSITS: C\$12.2 million (May 31, 2014) WORKING CAPITAL: C\$19 million (May 31, 2014) MARKET CAPITALIZATION: C\$42.5 million (Oct. 1, 2014)

Suite 303 - 80 Richmond St. West Toronto, Ont. Canada M5H 2A4 Tel: 416-866-8800 • Fax: 416-866-8801 www.vitgoldcorp.com

#### YUKON TERRITORY

# Wellgreen Platinum Ltd.

WG: TSX.V

PRESIDENT AND CEO: Greg Johnson SENIOR VP AND COO: John Sagman VP, CORPORATE DEVELOPMENT: Rob Bruggeman



GREG JOHNSON

Wellgreen Platinum Ltd. (formerly Prophecy Platinum) is endeavoring to develop a mine at its namesake platinum group metals-copper-nickel project located near the Alaska Highway in southwestern Yukon Territory. A preliminary economic assessment prepared for the Wellgreen project in 2012 outlines plans for a 32,000-metric-tons-per-day operation producing 1.96 billion pounds nickel, 2.06 billion pounds copper and 7.12 million ounces platinumpalladium-gold in concentrate over a 37-year of mine life. The company, however, has been busy expanding the resource since the publication of this scoping-level study. In July, the company updated the 2011 resource for which the economic assessment was based with 40,000 meters of new drilling and re-sampled historic core. As a result, the measured and indicated resources at Wellgreen have increased to 330 million metric tons at 1.67 g/t platinum-equivalent in a pit constrained resource containing 5.53 million ounces of 3E (platinum-palladium-gold), 1,894 million pounds of nickel and 1,021 million pounds of copper. With an expanded resource as its basis, an updated PEA scheduled for completion by the end of 2014 will investigate the economics of starting with a lower mill throughput that initially targets higher grade ore. The current mineral resource estimate includes a 72-metricton higher grade component of the measured and indicated resources grading 2.49 g/t platinum-equivalent containing 2.13 million ounces of 3E with 527 million pounds of nickel and 462 million pounds of copper. In addition to the updated resource, the upcoming PEA will benefit from improved metal recoveries. Metallurgical test work using conventional flotation shows improved recoveries for all major metals versus the 2012 PEA, including increases of 35 percent for platinum and 13 percent for nickel. In addition to the measured and indicated resources, the Wellgreen project has 846 million metric tons of inferred resources containing 13.8 million ounces of 3E (platinum-palladium-gold), 4,431 million pounds of nickel and 2,595 million pounds of copper. Wellgreen said its 2014 exploration program is testing higher grade expansion targets, as well as to confirm the continuity of the broad, higher grade mineralization bands at and near the current deposit. Though this provides significant upside and the Wellgreen property hosts numerous exploration targets along an 18-kilometer strike (11 miles) strike, the company's primary focus is to advance the known deposit towards development. Following the PEA, Wellgreen Platinum is planning to complete a prefeasibility study in 2015 and a feasibility study in 2016.

CASH AND SHORT-TERM DEPOSITS: C\$5.9 million (June 30, 2014) WORKING CAPITAL: C\$4.4 million (June 30, 2014) MARKET CAPITALIZATION: C\$56.2 million (Oct. 1, 2014)

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At Lynden, we understand that plans change but deadlines don't. That's why we proudly offer our exclusive Dynamic Routing system. Designed to work around your unique requirements, Dynamic Routing allows you to choose the mode of transportation — air, sea or land — to control the speed of your deliveries so they arrive just as they are needed. With Lynden you only pay for the speed you need!



