





THE TEAM THAT DELIVERS

Safety Health Environment Quality



CONTENTS





Partner with GCI » 877.411.1484 | GCI.com/industrial-telecom

ALASKA EXPLORERS

Coeur Mining	86
Constantine Metal Resources	
Constantine ivietal Resources	50
Coventry Resources	28
Freegold Ventures	30
Hecla Mining	88
Kinross Gold	89
Millrock Resources	29
Peak Gold	24
Sumitomo Metal Mining Pogo	86
Trilogy Metals	28
BC EXPLORERS	

Colorado Resources	84
IDM Mining	
Pretium Resources	
Seabridge Gold	.40
Skeena Resources	.43
Teck Resources	.42

NWT EXPLORERS

Canadian Zinc	.79
Dominion Diamond	.76
Kennady Diamonds	.74
Nighthawk Gold	.77

BUILT ARCTIC TOUGH

Alaska's Source For Mobile Water Pumps





S EquipmentSourceInc.com

Sales Rentals Parts



Mining Explorers

Released November 2016

Mining Explorers is a special annual supplement to North of 60 Mining News, which is owned by Petroleum Newspapers of Alaska LLC. To order additional copies of this special publication, contact Marti Reeve, special publications director, at mreeve@petroleumnews.com.

SHANE LASLEY

PUBLISHER & NEWS EDITOR

ROSE RAGSDALE

CONTRIBUTING EDITOR

MARY MACK

CHIEF EXECUTIVE OFFICER

SUSAN CRANE ADVERTISING DIRECTOR

DENIES CADDUST

RENEE GARBUTTCIRCULATION MANAGER

MARTI REEVE SPECIAL PUBLICATIONS DIRECTOR

STEVEN MERRITT

PRODUCTION DIRECTOR

TOM KEARNEY

ADVERTISING DESIGN

HEATHER YATES

BOOKKEEPER



MAPMAKERS ALASKA

CARTOGRAPHY

JUDY PATRICK

CONTRACT PHOTOGRAPHER

MAILING ADDRESS:

PO Box 231647 Anchorage, AK 99523-1647 Phone: (907) 522-9469 Fax: (907) 522-9583 E-mail:

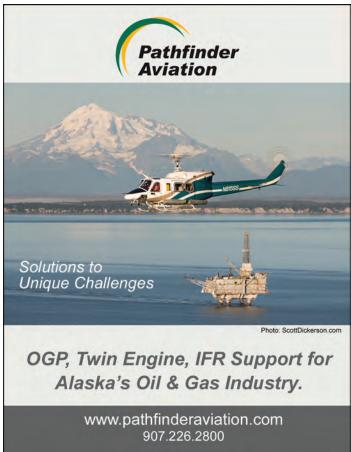
publisher@miningnewsnorth.com Web Page: www.miningnewsnorth.com

On the cover:

The notoriously cyclical mining sector has been through many ups and downs since this car carried its first load of high-grade ore at Keno Hill, a historic silver district in the Yukon where Alexco Resource continues to find deposits of high-grade silver (page 83). A new bull market is on the horizon for mining explorers.

Photo by Mitchell Heynen

Printed by Journal Graphics, Portland, Oregon



CONTENTS

North Arrow Minerals TerraX Minerals Inc	
NUNAVUT EXPLORERS	
Agnico-Eagle Mines	66
Aston Bay Holdings	78
Auryn Resources	
Nordgold	67
Peregrine Diamonds	79
Sabina Gold & Silver	78
TMAC Resources	63
YUKON EXPLORERS	
Alexco Resource	83
Atac Resources	ээ
Atac Resources	
	52
Goldcorp	52 82
GoldcorpGolden Predator Mining	52 82 80
GoldcorpGolden Predator MiningGoldstrike Resources	52 82 80
Goldcorp	52 82 54 81
Goldcorp	52 82 54 81
Goldcorp	52 82 54 81 81

continued on page 8

UNRIVALED SUPPORT



- Industry-Leading Customer Service
 - Highly Experienced Local Staff
 - Broadest Product Line

NC MACHINERY



800.478.7000 www.ncmachinery.com

Anchorage 907.786.7500

Dutch Harbor 907.581.1367

Fairbanks 907.452.7251

Juneau 907.789.0181 Prudhoe Bay 907.659.9600

Wasilla 907.352.3400

Alaska's largest supplier of Hose, Fittings, and Rigging accessories is proud to support our states mining industry.









Hydraulic, Industrial & Arctic Grade Hose Specialists • Domestic Wire Rope, Chain & Synthetic Sling Fabrication • Hydrostatic Pressure Testing & Certification Petroleum Handling Equipment • Oilfield Fittings & Accessories Hydraulic Component Repair • Sheet Rubber, Gasket Material & Adhesives

Proud to be Employee Owned.





Alaska Rubber

& RIGGING SUPPLY

ANCHORAGE • FAIRBANKS • KENAI • WASILLA

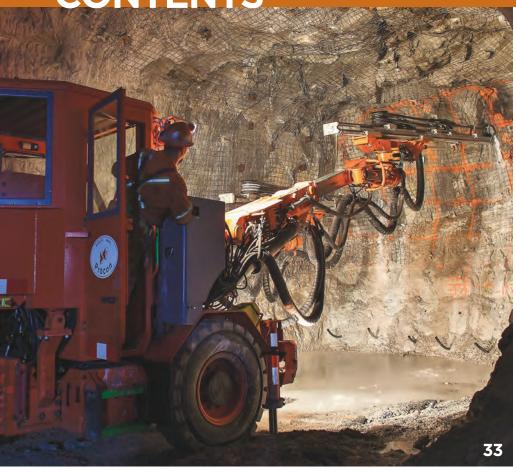
www.alaskarubber.com

Ontinental 3
CONTITECH



Powering Business Worldwide

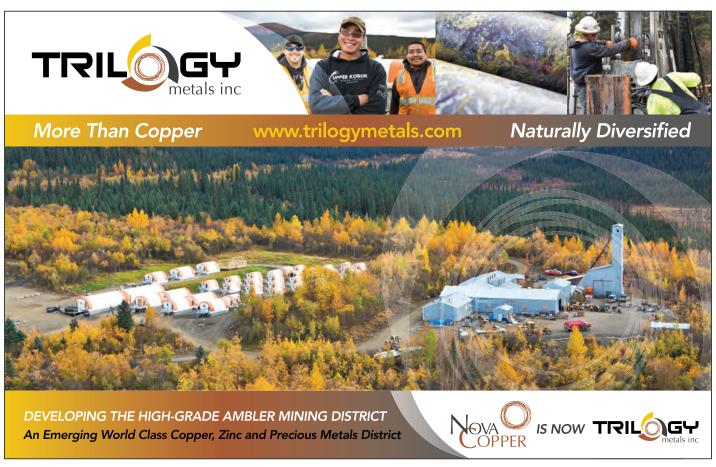
CONTENTS



GUEST COLUMNS

GOEST COLOMINS
Ed Fogels, Alaska
EXPLORATION OVERVIEWS
Alaska 13 British Columbia 33 Northwest Territories 69 Nunavut 58 Yukon Territory 47
MAPS
Alaska
AD INDEX

Advertisers.....90



Coffee, gold wake mining explorers

The glimmer of gold and robust Coffee provided North of 60 mining explorers with a much needed pick-me-up in 2016.

At the dawn of the year, Alaska and northern Canada's mining sectors were being dragged down by a long and grueling bear market from five years of sinking metals prices that weighed heavily on the market value and sentiment of explorers.

Unfortunately, these bearish conditions cut across both precious and base metals.

Gold entered 2016 at US\$1,082 per ounce, more than 40 percent off the US\$1,900/oz. high set in 2011. Copper started the year at around US\$2 per pound,

down around 55 percent from the US\$4.50/lb. price of five years earlier. Even zinc, expected to be the one bright spot for the mining sector, was selling for a disappointing US70/lb at the onset of 2016.



SHANE LASLEY

citing continued slow economic growth in China and a strengthening U.S. dollar, most market analysts at the time didn't see the plight of the mining sector improving much in 2016.

These analysts, however, did not foresee gold prices rocketing 25 percent in the first half of 2016 or a major producer swooping in to buy a robust gold property in the heart of the Yukon Territory for more than half-abillion dollars.

There are two indicators that differentiate bear and bull markets, optimism and price trends, and by spring the stock prices and sentiment of North of 60 mining explorers were turning upward.

This bullish-leaning sentiment was not reserved only for gold explorers but was felt by all the companies seeking to unlock the vast and underexplored mineral potential across Alaska and Canada's North.

Or as Millrock Resources President Greg Beischer put it, "The tide is rising, and it is floating all boats."

If the golden tide had not already floated Alaska and northern Canada's mining exploration companies to a bull market, the May 12 news that Goldcorp Inc. would buy Kaminak Gold Corp. in an all-shares deal worth north of C\$500 million was the final lift the sector needed.

Goldcorp's purchase, which provided the major an opportunity to expand and de-

velop the Coffee gold project in the Yukon, encouraged mining investors and re-invigorated mineral explorers.

While the boost provided by gold and Coffee was a bit too late for many mining explorers to fully set sail during the 2016 season, more than 40 were able to carry out million-dollar-plus programs in Alaska, Yukon, Northwest Territories, Nunavut and northern British Columbia during 2016.

The golden tide ebbed a bit since mid-2016, however, many analysts consider gold's rise as the first wave of an overdue long bull market for the industry.

Through all of the ebbs and flows of the notoriously cyclical mining markets, North of 60 Mining News will be here to keep you informed on the mineral exploration companies discovering the future of Alaska and Canada's North.

Thank you, and I hope you enjoy this eighth edition of our annual Mining Explorers magazine.

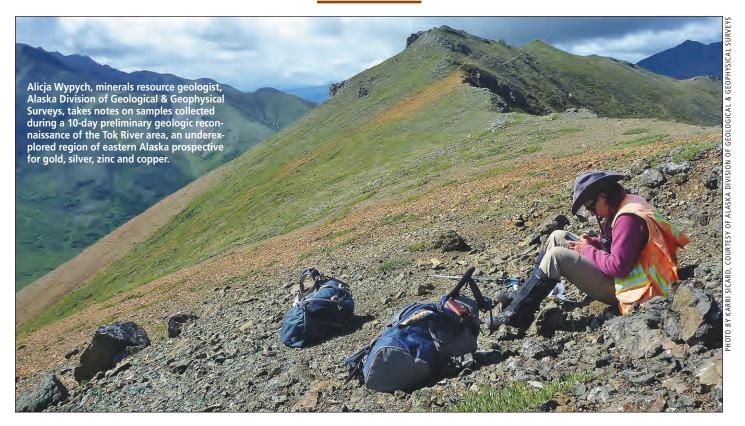
— Shane Lasley, publisher, North of 60 Mining News



Arctic Catering and Support Services provides base and remote camp setup and operations, the full range of logistics and management services, hotel operations and management, and support for drill ships and platforms. For experience and quality service, give us a call, we'd love to find a way to support your operations.



(907) 562-5588 • ArcticCatering.com



Mining brightens Alaska economy

Despite tight budgets, state agencies provide good data to mining sector

By ED FOGELS

Special to Mining News

The State of Alaska's mining industry continues to be a bright spot for Alaska's economy during difficult fiscal times.

Thanks to our world-class natural resource endowment, investors continue to be interested in new exploration and development opportunities in Alaska, and our large mines are still running strong.

Recently, our new Natural Resources Commissioner, Andy Mack, had the opportunity to visit the Fort Knox mine. This visit was a great oppor-

tunity for Commissioner Mack to become familiar with the operations of a large metal mine, and also to gain an insight into how Alaska's strong regulatory and permitting process works for the mineral sector.

So far, the fiscal 2017 state budget reductions have not had a significant impact on our permitting staff, but we are concerned about maintaining the funding necessary to monitor federal planning and permitting, which can have a significant impact on the mineral

industry in Alaska.

Further, to maintain our current level of service, DNR will need to look at opportunities for additional streamlining and updating our fee structures. It will be very difficult to continue some key functions within DNR without new revenue to support them.

I want to take this opportunity to commend the excellent work on many fronts by the Division of Geological & Geophysical Surveys over the past year. The division does an outstanding job of responding to mining industry requests, producing relevant and valuable information that stimulates exploration. When companies invest, they produce revenue for the state in the form of mining claim fees and rentals and benefit the economy by creating jobs and spending money in Alaska.

During the past year, the mining industry used DGGS geophysical and geological maps and reports in announced discoveries of a porphyry copper-gold deposit in Livengood. DGGS also released data in 2016 at the request of industry that resulted in the location of 32,000 acres (12,950 hectares) of mining claims in the Bonnifield mining district. Other notable mineral publications by the division include a preliminary report on mineral occurrences in the Tok

DOOSAN



RENTAL SOLUTIONS EXCLUSIVELY AT CRAIG TAYLOR EQUIPMENT

CraigTaylorEquipment.com

FAIRBANKS SOLDOTNA WASILLA ANCHORAGE 907.452.1192 907.262.5977 907.376.3838 907.276.5050

FOGELS continued from page 10

River area and eight geochemistry reports containing almost 1,000 new analyses.

Despite the loss of state funding for airborne geophysical surveys during FY2016, DGGS obtained funding to fly a large fixedwing survey in the Tanacross quadrangle, and smaller helicopter surveys at Icy Cape, and the Yukon River bridge crossing. DGGS is planning another large, U.S. Geological Survey-funded fixed-wing survey at the Canadian border.

This calendar year, the DGGS-run Geologic Material Center in Anchorage received a steady influx of new materials. Since opening in its new, larger location in July 2015, the center has received more than 20,000 boxes of additional drill and surface samples. These have been inventoried, curated, shelved and added to the database, a feat that would not have been possible without the increased operational efficiencies of the new facility. With legislation passed this year, the GMC will soon be instituting a fee-for-services program to fund facility maintenance and operation.

This year, the Division of Mining, Land & Water processed 305 placer mining applications, 65 suction dredge authorizations, and 48 hardrock exploration permits. Notably, 240 of the placer permits, 55 of the suction dredge authorizations and 44 of the hardrock exploration permits were for operations on state land.

Other notable activities in 2016 include the ongoing state and federal permitting process for the Donlin Gold project in the Yukon Kuskokwim region and the Chuitna Coal project near Beluga. The Corps of Engineers is the lead agency for the National Environmental Policy Act review of both projects. The draft EIS for Donlin

"It will be very difficult to continue some key functions within DNR without new revenue to support them."

—Ed Fogels, deputy commissioner,

Alaska Department of Natural Resources

was released to the public in November 2015 and a final EIS is anticipated to be released at the beginning of 2017. The draft Supplemental EIS and state and federal permit applications and draft decisions for Chuitna are currently scheduled for the early second quarter of 2016, with final decisions anticipated in 2017.

The Donlin Gold Project has the potential to bring significant economic relief to one of Alaska's poorest regions. This project could become one of the largest gold mines in the world, employing up to 3,000 workers during construction, and then 1,000 to 1,400 people to operate the mine for 27-plus years. A project of this magnitude has many permitting challenges, and the State has a solid team of mining experts working closely with the project to ensure that the design and construction of the operation would meet our strong environmental standards.

At DNR, we rely on good, science-based information and data to support our permit coordination and decisions. We are also pleased that on the front end, we have been able to continue to provide good information to the mineral industry and the public to support future investment in Alaska. We wish all explorers the best of luck in the year ahead!

Ed Fogels is deputy commissioner of the Alaska Department of Natural Resources.



Mineral exploration comes to life

New players join investigation of compelling geology across Last Frontier

By SHANE LASLEY Mining News

ineral exploration spending in Alaska hit an apex of US\$365 million in 2011, but as venture capital for mining explorers dried these expenditures plummeted 78 percent to US\$80 million in 2015.

However, rising gold prices and a loosening of venture capital in 2016 seems to have marked an end to a painfully long bear market for mining explorers in Alaska.

"After taking head shots for the past four years, the industry suddenly came to life over the past month, with new budgets, new players and new targets invigorating Alaska's mining scene," Avalon Development President Curt Freeman penned in his July column for North of 60 Mining News.

Richly endowed frontier

From deposits averaging 20 percent zinc in the northwest to high-grade volcanogenic massive sulfide deposits in the Southeast Panhandle and a plethora of world-class deposits in between, Alaska is considered one of the most richly endowed mining jurisdictions in the world.

This high regard for mineral-rich geology in the Last Frontier is reflected in Fraser Institute's Survey of Mining Companies, where global mining executives ranked Alaska among the top five jurisdictions on the planet for seven years running, including a second-place showing in the most recent survey.

While the survey results are subjective, this consistent strong endorsement by the global mining community speaks volumes about the state's mineral potential.

"The geology of Alaska is compelling," said Millrock Resources President and CEO Greg Beischer.

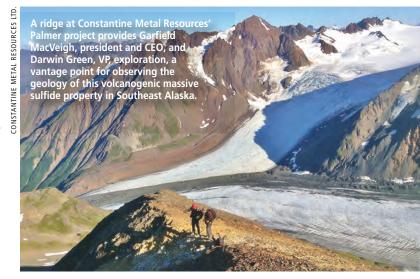
Alaska's reputation as a place to find world-class deposits has not necessarily translated into dollars spent on exploration.

"Geologists want to come here – they know there are more Pebble deposits, they know there are more Donlin Creek deposits – but the perception is that it is a really tough place to permit a mine," Beischer added.

The same mining executives that collectively consider Alaska the second-richest mineral jurisdiction rank the state 59th, right below Zimbabwe, when it comes to uncertainty concerning environmental regulations.

The U.S. Environmental Protection Agency's attempt to utilize its presumed authority under the federal Clean Water Act to proactively veto or place restrictions on permits needed to develop the world-class Pebble copper-gold-molybdenum project seems to weigh heavy on the minds of miners considering the regulatory climate in Alaska.

"The EPA's effort to circumvent the law and stop Pebble at all costs has had significant negative ramifications on mining devel-



opment in Alaska," observed a mining manager responding to the Fraser survey.

Peak Gold in Interior

Alaska's Interior region continues to be a hot destination for mining explorers. In fact, roughly half of the exploration spending in the 49th State was invested in seeking gold and associated minerals across this 300-mile stretch of the Tintina Gold Belt that runs from the Yukon border west. This includes two of the biggest exploration projects in the state, Tetlin and Pogo.

With a budget of US\$11 million aimed at expanding the goldand copper-rich skarn deposits at Tetlin, joint venture partners Royal Gold Inc. and Contango Ore Inc. laid claim to Alaska's largest exploration program for 2016.





ALASKA OVERVIEW continued from page 13

Discovered by Contango Ore CEO Brad Juneau in 2008, Tetlin is an expansive property situated just south of the Alaska Highway near the town of Tok that hosts a number of promising exploration targets. The most advanced such target is Peak, a skarn deposit with the equivalent of 1.2-million ounces of gold at Peak, when accounting for the value of the copper and silver present in the deposit, according to a resource calculation completed in 2014.

Intrigued by the Peak deposit and larger potential at Tetlin, Royal Gold signed on to earn up to a 40 percent joint venture interest in the project by investing up to US\$30 million by October 2018.

Peak Gold, the resulting joint venture funded and operated by Royal Gold, has already invested nearly US\$18 million on expanding this deposit.

The drilling this investment funded seems to have traced a roughly 2,000-meter arc of contiguous high-grade skarn mineralization. This would be roughly three times the footprint of the Peak deposit described in the 2014 resource. One hole drilled in this expansion area cut three gold-rich intercepts, including 38.88 meters averaging 51.62 grams-per-metric-ton gold from a depth of 14.5 meters – the best intercept at Tetlin in terms of high-grades over broad widths.

About 100 miles northwest of Tetlin, the Pogo Mine is celebrating its 10th anniversary of operations and, considering the high-grade gold deposits and prospects it has discovered in recent years, the underground mine has more such celebrations in its future.

"Our exploration department is doing a great job – we are finding more resource every day," said Pogo General Manager Chris Kennedy.

At least five high-grade gold zones – Liese, East Deep, North, Fun and South Pogo – have been discovered within a mile of the mill and are contributing ore to the mill or are expected to in the future.

"So, we are going to be there for a while," Kennedy said.

To ensure this long tenure, Sumitomo Metal Mining Pogo – a joint venture between Japanese firms Sumitomo Metal Mining Company (85 percent) and Sumitomo Corp. (15 percent) – has allotted healthy exploration budgets in recent years, including US\$10 million in 2016.

West of Pogo

From Pogo to the Livengood region, about 150 miles west, a number of companies are exploring compelling gold properties near the road system in Interior Alaska.

Stone Boy Inc., the exploration company credited with discovering the high-grade gold at Pogo, continues to seek new deposits in the larger Pogo area.

Owned by subsidiaries of Sumitomo Metal Mining (95 percent) and Sumitomo Corp. (5 percent), Stone Boy has been exploring Interior Alaska since 1991 and currently holds four properties in the general area of the Pogo Mine – Ink, Monte Cristo, Skippy and Shaw.

In recent years, the Ink claims, located about 15 miles (24 kilometers) southeast of Pogo, has been the Japanese firm's primary focus. This work has been completed in partnership with Japan



You never know who's watching.

Cyber attacks are becoming more targeted. Today, 76 percent of websites are vulnerable to cyber attacks, yielding profitable results for those who breach your network.

Let AT&T monitor your network instead of hackers.

Speak with an AT&T representative about Network Security solutions today.

907-264-7387 1-800-955-9556



Source: Symantec Internet Security Threat Report, Volume 20 © 2016 AT&T Intellectual Property. All rights reserved. AT&T, the Globe logo and other marks are trademarks and service marks of AT&T Intellectual Property and/or AT&T affiliated companies. All other marks contained herein are the property of their respective owners. This document is not an offer, commitment, representation or warranty by AT&T and is subject to change.



ALASKA OVERVIEW continued from page 15

Oil, Gas and Metals National Corporation (JOGMEC), which holds an 18.23 percent interest in the property.

Yuki Beppu, the geologist in charge of Sumitomo Metal Mining America's exploration in Alaska, said exploration at Ink has focused on the Brink core zone, a bulk-tonnage gold deposit similar to Kinross Gold's Fort Knox Mine.

The 29 holes drilled at Brink through 2015 had traced the core zone over an area measuring at least 500 meters wide, 1,700 meters long and to a depth of 500 meters. The best hole cut 514.4 meters averaging 0.427 g/t gold.



ALASKA LAND STATUS, INC.

- Due Diligence Mineral Title Examination Land Status Research
- Land & Claim Management Expertise In Business Since 1988

David S. Manzer, Landman dmanzer@aklandstatus.com

Tel: (907) 563-8882 Fax: (907) 563-8883 5381 Tudor Top Circle Anchorage, AK 99507-1631 Stone Boy's other promising gold property, Monte Cristo, is located some 40 miles (64 kilometers) west of Pogo.

The Naosi zone, a gold-silver-antimony prospect within the larger Monte Cristo property, had previously been one of the primary exploration targets of the Stone Boy project. In 2011, the partners released results from drilling Naosi, including; 7.92 meters of 7.8 g/t gold, 19.7 g/t silver and 0.1 percent antimony; and 22.83 meters grading 4.2 g/t gold, 48 g/t silver and 0.17 percent antimony.

From 2008 through 2012, Stone Boy drilled 79 holes at Naosi, outlining the deposit for about 1,500 meters along strike and to a depth of about 500 meters.

During a presentation in Anchorage late in 2015, Beppu offered an invitation to companies interested in joining the search for another gold mine in the Pogo region.

Great American Minerals Exploration Inc. has quietly consolidated ownership of its Uncle Sam property, a 26,639-acre land position immediately north of Monte Cristo.

"Game," as the privately held Nevada corporation is commonly known, first discovered gold on the Uncle Sam property in 1998 and has held onto a position in the region ever since.

Game President and CEO Dennis McDowell further expanded Uncle Sam by cutting a deal on the Monte Cristo property immediately to the south.

Northern Empire Resources Corp., an exploration property formed as a restructuring of Prosperity Goldfields in 2014, is seeking gold at Richardson, a large land package about five miles southwest of Monte Cristo.

The 2016 program at Richardson included soil sampling, trenching, prospecting, geophysics and re-logging of historic core holes, with the goal of delineating drill targets.

Northern Empire also owns the adjacent Hilltop gold property, which it optioned to Sonora Metals Corp. in 2015.

In the Fairbanks area, Kinross Gold's Fort Knox Mine celebrated two major milestones in 2016 – 20 years in operation and the pouring of the seven-millionth-ounce of gold produced at the iconic open-pit mine. According to the latest published report, mining at this open-pit operation just north of Fairbanks is slated to end in 2019. Considering that Fort Knox is the second-lowest cost and among the highest-producing gold operations in Kinross' portfolio, it is likely the company will bring in other resources surrounding the pit and in nearby deposits into an extended mine plan.

"Kinross' exploration is focused on brownfield projects around existing operations, and we continue to look for ways to further extend our operation," Fort Knox General Manager Eric Hill explained. "We believe Alaska is an attractive mining jurisdiction and a good place to do business – we have successfully operated Fort Knox for 20 years, and the mine is now 12 years beyond our original plan."

Kinross is also carrying out early-stage exploration on a large block of claims in the Circle Mining District about 80 miles (130 kilometers) north of Fort Knox.

Only about four miles (seven kilometers) north of Fort Knox, Freegold Ventures Ltd. is sitting on a 6-million-ounce bulk-ton-nage gold deposit on its Golden Summit property.

In May, Freegold published a preliminary economic assessment that considers a very low-cost 20,000-metric-tons-per-day operation – heap leach for the oxide and bi-oxidation for the sulfide material – that produces about 2.4 million oz. of gold over a 24-year mine life.

Freegold's 2016 exploration program focused on Shorty Creek, a 26,000-acre copper-gold project in the Livengood region of Interior Alaska.

Following the acquisition of Shorty Creek in mid-2014, Freegold has identified two large porphyry targets at Shorty Creek, Hill 1835 and Hill 1710. This year's drilling targeted both.

About 45 miles (70 kilometers) southwest of Shorty Creek, Endurance Gold Corp. completed a small drill program at its Elephant Mountain project, a property drilled by Placer Dome Inc. in 1992. The best of the 10 historical holes drilled cut 99.4 meters of 0.51 g/t gold. In recent years, Endurance has refined drill targets with mapping and sampling across this road accessible property.

Australian invasion

While it is not uncommon for Australian mining companies to be drawn to Alaska's vast and underexplored mineral potential, no less than three Down Under exploration companies had active drill programs in Southcentral Alaska during 2016.

Perth-based Coventry Resources Inc. is among these companies coming north during the Australian winter.

"Coventry believes there is exceptional potential to discover new economic mineral deposits in Alaska, and indeed that it is likely there are still multiple world-class mineral deposits to be discovered there," Coventry President and CEO Mike Haynes told Mining News. "We are also attracted by what we believe to be very encouraging geopolitical conditions that are supportive of exploration for, and development of, mineral resources."

The Australian explorer points to Caribou Dome, a road-acces-



sible high-grade copper property about 155 miles north of Anchorage, as a prime example of Alaska's potential.

"(W)e believed that the project was very much under-explored, and that in light of the geological style of the mineralization, there was considerable potential to delineate additional mineralization of similar high-grade by undertaking further exploration," Haynes explained.

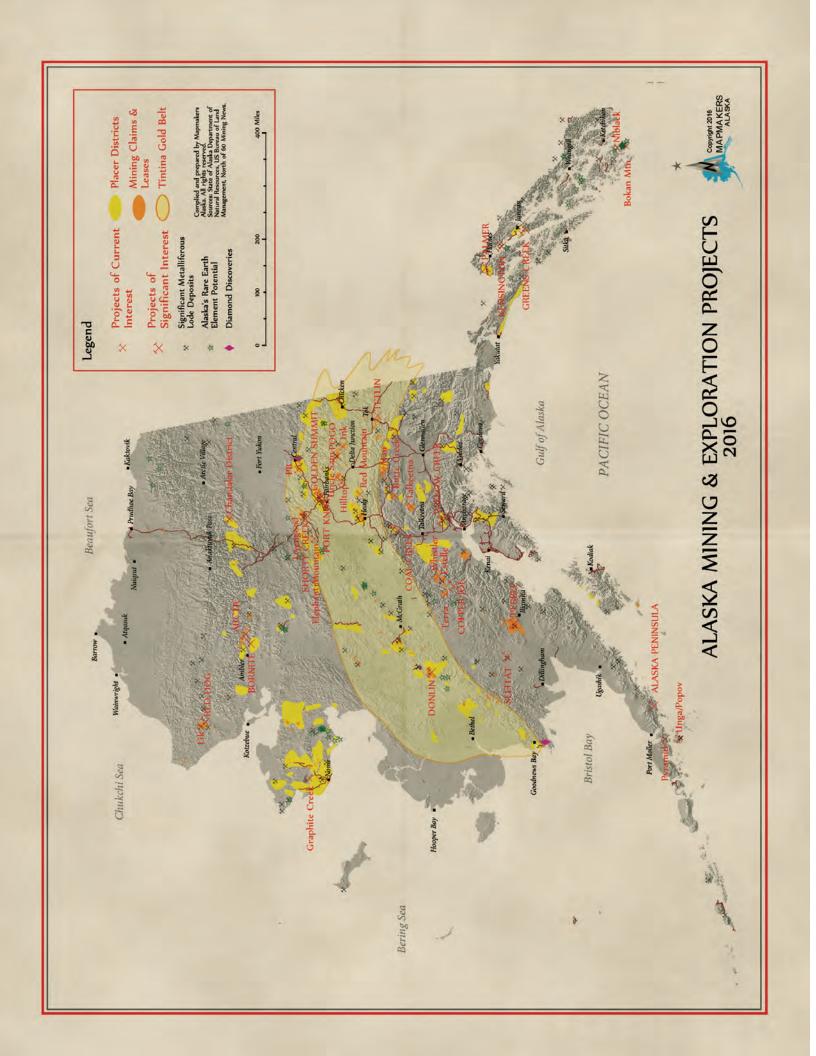
Coventry's 2016 program of ground geophysics, drilling, mapping and soil sampling has gone a long way towards proving this theory.

At the end of 2015, Vista Minerals Ltd., a privately held mineral exploration out of Australia, cut a deal to earn an 80 percent joint venture interest in Millrock Resources' Stellar property.

Located just 10 miles northeast of Caribou Dome, the Stellar claims cover the Zackly copper-gold skarn deposit and surrounding lands considered prospective for porphyry copper-gold deposits.

Roughly 12,200 meters of historical drilling at Zackly has outlined a non-NI 43-101-compliant resource of 218,944 oz. of gold,















COMMITTED TO SUSTAINABILITY. WORKING TOWARD PROSPERITY.







NOVAGOLD | SOLID. SECURE. GOLDEN.

1.866.669.6227 | novagold.com

The Yukon-Kuskokwim Region is as beautiful as it is remote; as diverse as it is vast. Visit **novagold.com/info** to see our new video series on the challenges and opportunities local residents face – and learn how we're working together to ensure a brighter future for everyone.

ALASKA OVERVIEW continued from page 17

1.19 million oz. of silver and 66.9 million lbs. of copper contained in a deposit of 1.2 million metric tons grading 6.03 g/t gold, 33 g/t silver and 2.7 percent copper.

Another Australia-based explorer, White Rock Resources Ltd., is on the hunt for a large zinc-silver-lead-gold-copper deposit at Red Mountain, a volcanogenic massive sulfide property about 55 miles (34 kilometers) north of Caribou Dome.

Since cutting a deal in February to acquire full ownership of Red Mountain, White Rock began compiling and interpreting the data from exploration spanning four decades.

The company said VMS deposits typically occur in clusters and the known deposits already identified within the Red Mountain project – Dry Creek and West Tundra Flats – is providing valuable clues to where to find others within the larger Red Mountain area.

Historical drilling at Dry Creek cut 4.6 meters grading 23.5 percent zinc, 531 g/t silver, 8.5 percent lead, 1.5 g/t gold and 1 percent copper; and one hole at West Tundra Flats cut 1.3 meters grading 21 percent zinc, 796 g/t silver, 9.2 percent lead, 10.2 g/t gold and 0.6 percent copper.

"White Rock has been able to identify numerous additional targets by aggressively interrogating historic geochemical and geophysics data," said White Rock CEO Matt Gill. "The process has encouraged us that the Red Mountain project could realize several new discoveries and stamp the district as a significant VMS camp."

To cover this broader VMS-prospective area, White Rock staked 114 state of Alaska mining claims, which more than doubles the company's land holdings at Red Mountain.



1.800.659.0147 www.pnwgroup.com

The Leader in Specialty Containers

Cargo Containers / ISO Tanks Half High Bins - Containment Containers Flatracks & Platforms / Transportation Consultants

Since 1980, PNW Equipment, Inc. (PNW) has been at the forefront of the marine cargo container industry. PNW has expanded its customer base and products from servicing the Alaskan barge lines to include specialty containers for the mining, waste, energy, aerospace and environmental companies.

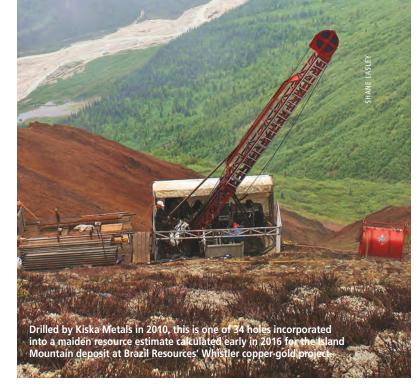








Lease - Sell - New - Used - Custom



Whistler area

Australians are not the only explorers who see rich potential along the southern slopes of the Alaska Range.

Where these majestic mountains arc southwest, Brazil Resources Inc. is re-evaluating Whistler, a copper-gold project it acquired from Kiska Metals in 2015.

This fresh investigation started at Whistler's namesake deposit.

According to an updated estimate prepared for Brazil Resources, the Whistler deposit hosts 79.2 million metric tons of indicated resource containing 1.28 million oz. gold, five million oz. silver and 302 million lbs. copper; and 145.8 million metric tons of inferred resource with 1.85 million oz. gold, 8.2 million oz. silver and 467 million lbs. copper.

In April, Brazil Resources published a maiden resource for Island Mountain, which is located about 14 miles south of the Whistler deposit.

Incorporating 34 of the holes drilled by Kiska, Island Mountain is estimated to contain 25.75 million metric tons of indicated resource with 438,000 oz. gold, 960,000 oz. silver and 34.07 million lbs. copper. Additionally, the deposit hosts 69.23 million metric tons of inferred resources with 1.12 million oz. gold, 2.38 million oz. silver and 91.59 million lbs. copper.

"In addition to the Island Mountain and Whistler deposits, there are several other porphyry centers –Raintree West, Raintree North, Raintree South, Rainmaker and Cirque – with mineralized intersections similar to these deposits," said Brazil Resources President and CEO Garnet Dawson.

Brazil plans to expand the resources identified in the outcropping deposits, as well as investigate the size potential of some of these more hidden outlying targets.

Just south of the Whistler property, Kiska continues to explore for copper-gold-molybdenum porphyry deposits at Copper Joe.

First Quantum Minerals can earn 51 percent interest in Copper Joe by investing US\$5 million in exploration of the property by the end of 2017. Mapping and geophysical work carried out by Kiska and First Quantum in 2015 defined two compelling porphyry targets – Evening Star and Morning Star.

A magnetotelluric geophysical survey conducted in 2015 iden-

tified a 1,400-meter-wide anomaly at Evening Star that is coincident with a larger zone of intense phyllic alteration at surface.

In August, the partners drilled one 800-meter-deep hole into the core of the Evening Star anomaly.

Copper, gold in the west

The aptly named Western Alaska Copper & Gold Company completed the first drill program in 34 years at its Round Top porphyry project in the Illinois Creek mining district near Galena.

Western Alaska Copper & Gold founder and President Kit Marrs was part of the Anaconda Minerals team that discovered and drilled Round Top in the 1980s.

This early work made a number of discoveries across the district that includes a porphyry copper-gold target at Round Top;
TG and TG North, high-grade brecciated silver-gold-lead-zinc vein prospects less than a mile northwest of Round Top; Honker, a high-grade gold prospect on separate group of claims about 13 miles to the west; and Illinois Creek, a gold-silver deposit situated about six miles south of Honker.

While the Illinois Creek property was eventually developed into a mine that produced roughly 130,000 oz. of gold and 500,000 oz. of silver from 1997 until 2003, the other prospects have gone largely unnoticed.

This lack of attention worked out well for Marrs, who was able to nab full and unencumbered ownership of the mineral rights to Round Top, TG and Honker by simply staking state of Alaska mining claims over the prospects in 2008.

Since that time, Western Alaska Copper & Gold has steadily built upon the historical exploration with geophysics, sampling, mapping and prospecting in preparation for this year's drilling.

In Southwest Alaska, Redstar Gold Corp. continued exploration of high-grade gold at its Unga project, which is home of the historic Apollo gold mine on an island just south of the Alaska Peninsula.

The 2016 exploration focused primarily on identifying new drill targets at the Shumagin prospect of its Unga gold project on the Alaska Peninsula, where past trenching and drilling has traced high-grade gold-silver veins for more than 1,200 meters along strike and to a depth of 330 meters.

The program also included mapping and drill targeting at Empire Ridge, the southwest extension of the Apollo Mine. Up to 157 grams-per-metric-ton silver were collected in exposed vein gossans in this area.

In August, Eric Sprott agreed to acquire 30 million Redstar shares through a non-brokered private placement of up to 41 million shares at C10 cents each.

"The company will begin plans to initiate its next drilling program on the high-grade Shumagin gold zone at our 100 percent controlled Unga gold project in Alaska," Redstar President and CEO Peter Ball said at the time.

About 10 miles (16 kilometers) north of Unga, CopperBank Resources Corp. is exploring its San Diego Bay copper-gold-molybdenum porphyry prospect on lands leased from Aleut Native Corp. There has been no historical drilling and limited field work at San Diego Bay, which is located about four miles (seven kilometers) east of the company's Pyramid copper-molybdenum deposit.

Exceptional Northwest

From the Ambler Mining District to the Red Dog Mine area, Northwest Alaska is known for hosting large and exceptionally high-grade deposits of zinc, copper and precious metals.



Upper Kobuk Mineral Projects – a partnership between Trilogy Metals Inc. (formerly NovaCopper) and NANA Corp., the Alaska Native regional corporation that represents the Iñupiat of Northwest Alaska – are exploring some 353,000 acres of land that blanket most of the Ambler District.

"(W)e believe the Ambler mining district represents a unique opportunity in the global copper space – not to mention our significant resources of zinc, gold and silver!" said Trilogy Metals President and CEO Rick Van Nieuwenhuyse.

Arctic, the most advanced deposit on the UKMP property, hosts 1.95 billion lbs. copper, 2.6 billion lbs. zinc, 610,000 oz. gold, and 45.3 million oz. silver.

This year, Trilogy Metals invested US\$5.5 million at UKMP – a budget identical to 2015 – that continued the collection of data needed to complete a prefeasibility study for an open-pit mine at the Arctic deposit, while continuing to seek areas to expand upon the more than eight billion pounds of copper it has identified there and at Bornite, a second world-class deposit that lies a mere 16 miles to the south.

NANA is also a partner in the Red Dog Mine, another rich deposit on its lands about 180 miles (290 kilometers) northwest of Arctic.





Drilling by Trilogy Metals and previous explorers, including this hole completed by Novagold Resources in 2007, has outlined a high-grade massive sulfide deposit at Arctic that contains 1.95 billion pounds copper, 2.6 billion lbs. zinc, 610,000 ounces gold and 45.3 million oz. silver.

ALASKA OVERVIEW continued from page 21

Teck Resource Ltd., the operator of Red Dog, continues to add years to the mine by upgrading high-grade resources in nearby deposits to reserves and seeking out new deposits in the larger Red Dog area of Northwest Alaska.

Anarraaq-Aktigiruq, situated on state mining claims roughly eight miles northwest of current operations at Red Dog, is among the high-quality 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.

Teck also holds a 50 percent stake in Lik, a zinc deposit about six miles west of Anarraaq being advanced by Zazu Resources Ltd.



In 2014, Zazu published a preliminary economic assessment that envisions a 5,500 metric-ton-per-day mill processing ore from an open-pit mine at Lik South, one of two deposits that make up the project. Over an initial nine-year mine life, this operation is anticipated to mill 17.1 million metric tons of ore averaging 7.7 percent zinc, 2.6 percent lead and 47 g/t silver.

Southeast underground

Coeur Mining Inc.'s endeavor to delineate and develop the high-grade Jualin gold deposit at Kensington was one of the biggest exploration stories in Southeast Alaska this year.

The 12,400-acre Kensington property is divided into two blocks – Kensington, which is where Coeur has been mining since resumption of operations at the Southeast Alaska mine in 2010, and Jualin, which hosts a deposit with higher grade gold.

Surface drilling has delineated 289,000 tons of inferred resource averaging 0.619 oz. /t (179,000 oz.) gold, about triple the grades currently being mined at Kensington.

Underground development and drilling to further define this resource and ready the deposit for mining has been a key focus at Kensington this year.

"We're ... investing about \$40 million at Kensington to drill and develop significantly higher grade gold oz. there," explained Coeur Mining President and CEO Mitchell Krebs.

An inaugural reserve estimate for Jualin is expected by the end of 2016 and first ore is expected to reach the mill at Kensington in mid-2017.

South of Kensington and near the capital city of Juneau, Hecla Mining Company continues to add to the high-grade silver reserves at Greens Creek.

Going into 2016, Greens Creek had 7.21 million tons of reserves averaging 12.3 oz. /ton (88.7 million oz.) silver; 0.09 oz. /ton (677,000 oz.) gold; 8.1 percent (582,640 tons) zinc; and 3 percent (218,400 tons) lead.

The Idaho-based miner credits much of its success in recent years to the roughly 60 million oz. of low-cost silver recovered at Greens Creek since the company acquired full ownership of the underground silver mine in 2008.

"Greens Creek continues to drive Hecla's strong, consistent production performance," said Hecla President and CEO Phillips Baker, Jr.

To ensure this trend continues, the company is focused on building reserves and finding new deposits at the.

At the northern end of the panhandle, Constantine Metal Resources Ltd. and Dowa Metals & Mining Co. Ltd. is advancing exploration at Palmer.

The Glacier Creek deposit at Palmer hosts 8.125 million metric tons of inferred resources averaging 1.41 percent (252.6 million pounds) copper, 5.25 percent (940.4 million lbs.) zinc, 0.32 grams per metric ton (83,600 oz.) gold and 31.7 g/t (8.3 million oz.) silver for the RW and South Wall zones.

Waiting for approvals to build a road to access the lower expansion areas of this deposit, Constantine and Dowa investigated nearby targets beyond the VMS deposit this year.

"We are excited to be stepping out beyond the immediate resource and begin testing other high-quality prospects that surround the known deposit," said Constantine President and CEO Garfield MacVeigh.

With the goal of developing another quality underground mine in Southeast Alaska, the partners will return to further expand and upgrade the Glacier Creek deposit in 2017. •







Peak Gold accelerates into 2016

Royal Gold, Contango Ore make exciting connections at Tetlin

By SHANE LASLEY Mining News

While many of Alaska's mining explorers were riding the brakes on their promising projects going into 2016, Royal Gold and Contango Ore put their figurative foot to the accelerator at the high-grade Tetlin gold project near Tok, an eastern Alaska community at a junction of highways that lead from Canada to Fairbanks and Anchorage.

Neither of these companies are your prototypical mineral explorer. Texas-based Contango Ore came to Alaska seeking natural gas and discovered metals instead.

Denver-based Royal Gold usually opts to fund exploration



"We really like the Royal Gold people, and we really like the joint venture and how it is functioning."

-Contango Ore CEO Brad Juneau

through royalty purchases and stays away from becoming directly involved in exploration.

"(I)n my tenure here, we haven't been attracted to do any exploration ourselves," said Royal Gold Vice President of Development and Operations Bill Heissenbuttel.

This unlikely duo, however, came together early in 2015 to form Peak Gold, a limited liability joint venture company operated by Royal Gold to follow up on the exploration success that Contango Ore had realized at Tetlin over the previous six years.

Despite (or due to) the uncharacteristic nature of this partnership, Peak Gold was one of the first Alaska mineral explorers out of the gate in 2016, launching an US\$11 million exploration pro--gram at Tetlin in February.

Stars align

Contango Ore President and CEO Brad Juneau was not seeking gold when he ventured into Alaska in 2008. Instead, his privately held company, Juneau Exploration L.P., was investigating the natural gas potential of a large land package owned by the Tetlin Village Council, an Alaska Native group.

Juneau's exploration of Tetlin did not turn up much in the way of natural gas potential, but the Texas oilman was convinced the roughly 675,000-acre property was prospective for more solid minerals, such as gold and copper.

To confirm his hunch, Juneau set out to find a geologist familiar with Alaska and willing to take a look at this geologically unknown property. While dubious that an important mineral deposit was hiding in plain sight, Fairbanks-based geologist Curt Freeman agreed to take a look at the property.

It did not take long for Freeman and his team at Avalon Development to get excited about the discovery potential of this enigmatic property. Over the next couple of years, Avalon and Contango Ore identified numerous precious and base metal targets across what is now a roughly 774,000-acre (313,234 hectares) land package made up of the original lands that Juneau leased from Tetlin Village and adjoining state claims the Texas-based company staked to cover similar prospective lands to the west.

While the property turned out to be rife with prospects worthy of serious geological investigation, by 2012 the search was narrowed to a zone in the heart of the Tetlin lease named Peak, after co-founder and original CEO of Contango Ore, Kenneth Peak.

By the end of the 2013 exploration season, 6 million metric tons of indicated resources averaging 3.46 grams-per-metric-ton (664,112 ounces) gold, 11 g/t silver and 0.25 percent copper had been identified at Peak. Additionally, the calculation published early in 2014 included 3.9 million metric tons of inferred resources averaging 2.07 g/t (256,000 oz.) gold, 14.28 g/t silver and 0.23 percent copper. In total, this equates to 1.2 million oz. of gold when you calculate in the value of the copper and silver.

As it turns out, Peak is a unique type of skarn deposit that was formed when metal-laden magmatic fluids came in contact with carbonate-enriched sandstones, causing the metals to quickly drop out and result in high-grade concentrations of gold and copper.

Attracted by the growth potential of this relatively high-grade gold deposit situated along the Alaska Highway and an Alaskabased support network led by Avalon Development, Royal Gold agreed to become an active partner in Tetlin exploration early in 2015.

Royal Gold VP Heissenbuttel said "a lot of the stars come together" at Tetlin, a situation that led to the royalty company's decision to become actively involved in exploration of the intriguing gold project.

Peak Gold, the resulting limited liability joint venture forged between Contango Ore and Royal Gold, completed US\$6.8 million of exploration in 2015, a program that expanded the breadth and depth of the Peak deposit as well as discovering Peak North, a seemingly parallel zone of mineralization with similar grades and thicknesses about 250 meters to the north.

"We really like the Royal Gold people, and we really like the joint venture and how it is functioning," Juneau told Mining News. "They have done everything they said they would do, and are very straightforward and open."

The Contango Ore CEO said Royal Gold's contribution to Tetlin goes beyond the nearly US\$20 million the Denver-based royalty company will have invested in the project by the end of 2016.

"The folks at Royal Gold have definitely made a material impact, both with their capital and their work," he said.

About to get exciting

Going into 2016, the Peak Gold partners had their sights set on expanding North Peak, a deposit not included in the 2013 Tetlin resource but extensively drilled in 2015.

By the end of the winter program, 19 holes had been drilled at



Tetlin

Results from this drilling continued to return some impressive intercepts at North Peak, including:

- Six mineralized intercepts in TET16192, including 13.27 meters averaging 49.19 g/t gold, 4.5 g/t silver and 0.035 percent copper from a depth of 78.5 meters;
- Three mineralized intercepts in TET16204, including a silverrich 1.82-meter zone averaging 16.34 g/t gold, 328.4 g/t silver and 0.157 percent copper from a depth of 60.95 meters; and,
- A 43.43-meter intercept in TET16206 averaging 3.6 g/t gold, 2.08 g/t silver and 0.108 percent copper from a depth of 78.5 meters.

The most intriguing and potentially the most important intercept of the winter program, however, came in TET16210, a hole drilled about 200 meters southeast of North Peak and 200 meters northeast of the Peak deposit.

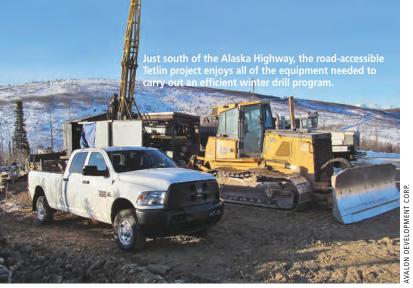
This wildcat hole cut two mineralized intercepts, including 43.96 meters averaging 3.28 g/t gold, 30.6 g/t silver and 0.402 percent copper.

"The winter drilling program was successful in expanding the known limits of both the Peak and North Peak zones, and perhaps most importantly found new, significant mineralization in its first drill hole in the Connector zone that may lead to a better understanding of the relationship between Peak and North Peak and possible further expansion of the mineral system," explained Juneau.

Encountering grades and thickness remarkably similar to those identified in both Peak and North Peak, going into summer it seemed that Royal Gold and Contango Ore might be on their way to a continuous deposit much bigger than previously imagined.

"I think it is starting to get really exciting out there," Juneau said at the time.





PEAK GOLD continued from page 25

Making the connection

As soon as the snow melted and the ground dried, the Peak Gold partners set out to prove their idea that the Peak, Connector and North Peak zones link up to form a roughly 2,000-meter arc of contiguous high-grade skarn mineralization. This would be roughly three times the footprint of the Peak deposit outlined in a resource estimate calculated in 2013.

By late June, the first holes supporting this notion began to roll in.

Highlights from North Peak include:

 TET16211 cut four mineralized intercepts, including 10.31 meters averaging 3.5 g/t gold from a depth of 16.11 meters;

A LEADER IN ENVIRONMENTAL CONSULTING IN ALASKA FOR OVER 38 YEARS

ABR inc.

Fisheries & Aquatic Sciences

Wetland Delineations & Functional Assessments

Vegetation & Habitat Mapping

Soils Surveys & Analysis

Wildlife Surveys

Endangered Species Support

Permitting & Agency Consultations

NEPA Documentation

Ecological Restoration & Mine Reclamation

GIS Mapping & Analysis

P.O. Box 80410 Fairbanks, AK 99708 907-455-6777

P.O. Box 240268 Anchorage, AK 99524 907-344-6777



As soon as the snow melted and the ground dried, the Peak Gold partners set out to prove their idea that the Peak, Connector and North Peak zones link up to form a roughly 2,000-meter arc of contiguous high-grade skarn mineralization. This would be roughly three times the footprint of the Peak deposit outlined in a resource estimate calculated in 2013.

- \bullet TET16220 cut three mineralized intercepts, including 26.03 meters averaging 4.67 g/t gold from a depth of 30.2 meters; and
- TET16221 cut four mineralized intercepts, including 17.92 meters averaging 8.23 g/t gold from a depth of 21.61 meters.

All three highlighted intercepts were to the southeast of North Peak, in the direction of the Connector zone.

Hole 211 was drilled adjacent to 210, and holes 220 and 221 were drilled about 200 meters northeast of the Connector discovery hole.

As nice as these intercepts were, they paled in comparison to what came back from the assay labs in mid-August, including the best intercepts ever drilled at Tetlin when you consider the very high gold grades across long lengths.

- \bullet TET16235, drilled about 150 meters northwest of the Connector discovery hole, cut three gold-rich intercepts, including 38.88 meters averaging 51.62 g/t gold from a depth of 14.5 meters.
- \bullet TET16237, drilled about 70 meters north of 235, cut five gold intercepts, including 14.19 meters averaging 45.33 g/t gold from a depth of 9.75 meters.
- TET16227, drilled about 100 meters northeast of 235 cut two gold intercepts, including 10.75 meters averaging 18.62 g/t gold from a depth of 21.56 meters.

"The new core holes show that gold mineralization is present from the Connector hole to North Peak, and hole TET16235 in this newly delineated area has the highest amount of gold grade (times) thickness drilled to date," said Juneau.

This drilling also linked North Peak to Connector, leaving only a small gap east and north of the Peak deposit. This drilling also linked North Peak to Connector, leaving only a small gap east and north of the Peak deposit in what appears to be one contiguous skarn deposit that folds in a tight arc.

At the same time, drilling northwest of the main deposit is extending the deposit in that direction.

"We continue to refine the exploration model and, with new drilling in West Peak, are testing for mineralization zones which are connected to the Main Peak deposit," the Contango Ore CEO said.

Highlights from West Peak include five mineralized intercepts in TET16218, including 15.01 meters averaging 7.1 g/t gold from a depth of 191.47 meters; and two mineralized intercepts in TET16219, including 9.9 meters of 1.37 g/t gold from a depth of 37.65 meters

All of the drilling completed since Royal Gold joined the project – more than 150 holes – will be included in a Peak-Connector-North Peak resource slated for completion early in 2017.

With the strong connections made over the past two years – both between the Peak Gold partners and the Peak zone deposits – Juneau is enthusiastic about the prospects for Tetlin.

"We are really, really excited about the future," said the petroleum engineer turned mining executive. •



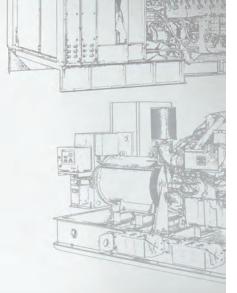
You Need a Partner That Knows What It Takes to POWER ALASKA.

UNMATCHED SERVICE.

At Pacific Power Group, we know that your onsite utility power needs are critical to keeping your business operating at full-power during the frigid winters and warm summers.

With decades of experience serving the communities of Alaska, Pacific Power Group has the expertise to power your business with MTU Onsite Energy diesel and natural gas generators plus preventative maintenance plans that keep all gensets brands up and running.

We help your business solve the toughest onsite power challenges through time-tested, industry leading power systems and a veteran, local service team that knows Alaska. Contact our team today to learn more.



For More Information or Service on Your Generator:

907.290.2575

www.PacificPowerGroup.com/Power-Generation



EXPLORERS AT A GLANC



Trilogy Metals Inc.

(formerly NovaCopper Inc.)



TSX/NYSE-MKT: TMQ 🕋



CHAIRMAN: Gerald McConnell PRESIDENT AND CEO: Rick Van Nieuwenhuyse **EXPLORATION BUSINESS MANAGER:** Frank Gish

While its name has changed, Trilogy Metals Inc.'s goal remains the same - unlock the potential of the world-class base and precious metals deposits at its Upper Kobuk Mineral Projects in Northwest Alaska. The company's former name, NovaCopper, spoke to the some 8.5 billion pounds of copper identified so far at UKMP, but it did not describe the natural diversity provided by the zinc, silver, gold, lead and cobalt that also report to the resources at Arctic and Bornite, two high-grade deposits found along the length of the roughly 353,000-acre UKMP land package that blankets the Ambler Mining District. Arctic, the most advanced of the UKMP deposits, hosts 23.85 million metric tons of indicated resource averaging 3.26 percent (1.71 billion lbs.) copper, 4.45 percent (2.34 billion lbs.) zinc, 0.76 percent (400 million lbs.) lead, 0.71 grams per metric ton (550,000 oz.) gold, and 53.2 g/t (40.8 million oz.) silver. Additionally, this volcanogenic massive sulfide deposit encompasses 3.63 million metric tons of inferred resource averaging 3.22 percent (239 million lbs.) copper, 3.84 percent (285 million lbs.) zinc, 0.58 percent (43.2 million lbs.) lead and 0.59 g/t (60,000 oz.) gold. A roughly 3,000-meter drill program at Arctic was the biggest ticket item of a US\$5.5 million exploration program carried out at UKMP this year. It included the last bit of infill drilling needed to upgrade the resource prior to completing a prefeasibility study for developing an open-pit mine at this copper- and zinc-rich VMS deposit. The drilling also collected data needed to finalize the in-pit geotechnical (pit slope stability), hydrology and metallurgical studies for the PFS. Trilogy plans to collect the final data for the PFS – primarily geotechnical work needed to refine locations for a power plant, mill, waste-rock pile, stockpiles and tailings facilities during the 2017 program.

Though Trilogy has not drilled Bornite since 2013, the company has been able to efficiently expand the resource of this large copper deposit by re-logging and re-sampling core drilled by Kennecott more than four decades ago. This work has been so effective that in April 2016, Trilogy reported a 173 percent increase to the in-pit indicated resource at Bornite. Using a 0.50 percent copper cutoff grade, Bornite now encompasses 40.5 million metric tons of in-pit indicated resources averaging 1.02 percent (913 million pounds) copper; and 84.1 million metric tons of inferred resources averaging 0.95 percent (1.8 billion lbs.) copper. Additionally, at a 1.50 percent copper cutoff grade, Bornite is estimated to contain 57.8 million metric tons of below-pit inferred resources averaging 2.89 percent (3.7 billion lbs.) copper. While already world-class in terms of size and grade, the various zones of Bornite are open to expansion in several directions. The most compelling area is a 1,000-meter-wide stretch of continuing high grades along the northern front. Hole RC13-0220, the most northeasterly hole drilled at Bornite, cut three very high-grade intervals from 877: 5.9 meters of 6.66 percent copper; 9.9 meters of 2.48 percent copper; and 19.7 meters of 2.24 percent copper. Hole RC13-0224, drilled about 800 meters west of hole 220, cut five high-grade intercepts from 579 meters: 19.5 meters of 3.02 percent copper; 16.8 meters of 2.36 percent copper; 39.5 meters of 2.37 percent copper; 8.6 meters of 3.26 percent copper; and 6.5 meters of 7.7 percent copper. Trilogy is considering a drill program for Bornite in 2017.

CASH AND SHORT-TERM DEPOSITS: US\$9.2 million (Aug. 31, 2016) WORKING CAPITAL: US\$12.5 million (Aug. 31, 2016)

MARKET CAPITALIZATION: US\$78.9 million (Sept. 28, 2016)

1950 - 777 Dunsmuir St. Vancouver, BC V7Y 1K4 Tel: 604-638-8088 www.trilogymetals.com

ALASKA



Coventry Resources Inc.

ASX:CYY M



CHAIRMAN: Mark Bojanjac **PRESIDENT AND CEO:** Michael Haynes CHIEF FINANCIAL OFFICER: Ian Cunningham

Coventry Resources Inc. is an Australiabased explorer focused on expanding zones of high-grade copper at Caribou Dome, a road-accessible property located about 155 miles north of Anchorage, Alaska. Upon cutting a deal to acquire an 80 percent stake in Caribou Dome early in 2015, Coventry began poring over historical exploration data collected at the project, including results from 95 surface and underground drill holes completed primarily in the 1960s. Highlights from this historical work include:



Hole CD15-14 cut an intercept topping 16 percent copper at Coventry Resources' Caribou Dome project in Alaska.

18.1 meters averaging 9.34 percent copper from a depth of 22.7 meters and 15.4 meters averaging 7.01 percent copper from underground. Most of the historical drilling tested lenses four, five and six with the idea that they would support a small high-grade underground mine. A historical reserve of 550,000 short tons averaging 5.84 percent copper was calculated for the Caribou Dome deposit in 1970. Coventry's initial investigations of the property have discovered zones that indicate the potential to significantly expand the highgrade copper deposit. Coventry began exploring this potential with a 2015 program that included 4,300 meters of drilling; induced polarization surveys centered on the known mineralization; and an extensive soil sampling program. Highlights from the 22 holes drilled at and around the Caribou Copper deposit in 2015 include: 14.1 meters averaging 9.9 percent copper; seven meters averaging 6.8 percent copper; and 3.5 meters averaging 9.3 percent copper. The soil sampling revealed an extensive copper-in-soil anomaly over the entire 7,000 meters of strike tested, including a highly prospective area northeast of the deposit. One rock chip sample collected at Kopis, a 1,000-meter-long trend previously known as Menel, returned 9.1 percent copper. Following up on the successful 2015 IP survey, Coventry completed a similar geophysical program that extended coverage to the northeast. This work refined drill targets at Kopis and the Trojan anomaly further northeast, each of which cover 1,100-meters of strike. These anomalies, as well as zones at the original Caribou Dome deposit, were targets of a 6,250-meter drill program completed this year. The company also collected about 800 soil samples over a more than 5,000-meter-long prospective area on the far northeastern side of the property. These samples returned assays of up to 0.17 percent copper from a prospect known as Senator, which is about 6.8 miles (11 kilometers) northeast of the Caribou Dome deposit. Select rock chip samples from outcrops in the area have returned up to 12.1 percent copper. Coventry has staked 26 claims to extend coverage over the new prospective region and follow-up work is being planned.

Coventry also holds Uncle Sam, another Alaska property located some 40 miles (64 kilometers) west of the Pogo gold mine. The company leased this gold exploration property to Great American Mineral Exploration Inc. on a 10-year term with the option to buy.

CASH AND SHORT-TERM DEPOSITS: C\$2.1 million (June 30, 2016; closed AU\$1.8 million financing Aug. 26)

MARKET CAPITALIZATION: AU\$10.1 million (Sept. 28, 2016)

Suite 9, 5 Centro Ave. Subiaco, Western Australia 6008 Tel: 61-8-9226-2027 www.coventryres.com

ALASKA & BRITISH COLUMBIA



Millrock Resources Inc.

TSX.V: MRO TSX.V: MRO



PRESIDENT AND CEO: Gregory Beischer CHIEF EXPLORATION OFFICER: Philip St. George **CHIEF FINANCIAL OFFICER:** Keith Granberry

As a project generator, Millrock Resources Inc. is leveraging the notoriously cyclical mining markets to its advantage by acquiring promising mineral properties at rock bottom prices when the bears reign and ready them for robust exploration when the bulls run. "This is the exact time Millrock has been

waiting for all along," Millrock President and CEO Gregory Beischer told Mining News. "We have stuck rigorously M to our model, and



here we are now ... taking advantage of the tremendous opportunities that are in front of us." Among these opportunities was the ability to orchestrate a series of deals to acquire three properties – Todd Creek, Poly and Oweegee Dome - that blanket roughly 217 square miles (562 square kilometers) of the Golden Triangle in northern British Columbia. Todd Creek, which lies immediately south of Pretium Resources Inc.'s Brucejack project, shows the potential for precious metals-rich volcanogenic massive sulfide deposits similar to the historic Eskay Creek Mine located 37 miles (60 kilometers) to the northwest. Poly, located about six miles (10 kilometers) southeast of Todd Creek, is prospective for both volcanogenic massive sulfide and epithermal gold deposits. Oweegee Dome, which lies immediately northeast of the Brucejack property, is prospective for the gold-vein, porphyry copper-gold and polymetallic VMS deposits for which the Golden Triangle is renowned. In June, Millrock added to its Golden Triangle land position with the acquisition of Willoughby, a high-grade gold-silver property located five miles (eight) kilometers south of Poly. Beischer said Millrock is "optimistic about the likelihood of finding partners to fund exploration on these projects." In preparation for such a partner, the projectgenerating team has compiled, digitized, organized and carried out quality control on the tomes of data available for these properties.



GREG BEISCHER

Millrock's Alaska portfolio includes eight properties prospective for gold and copper. Late in 2015, a subsidiary of Australia-based Vista Minerals Pty Ltd., entered into a joint venture agreement on Millrock's Stellar goldcopper property. Located in Southcentral Alaska, the Stellar claims covers the Zackly copper-gold skarn deposit and surrounding lands considered prospective for porphyry copper-gold deposits. A historical 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 gramsper-metric-ton gold and 2.69 percent copper has been calculated for the 1,000-meter-long Zackly deposit, and the skarn mineralization occurs over a strike length of more than 3,000 meters.

Millrock's Alaska portfolio also includes: Apex El Nido, a high-grade gold project in Southeast Alaska; West Pogo, a gold property adjacent to Sumitomo Metal Mining's Pogo Mine; Alaska Peninsula, a large package of Alaska Native-owned lands that blankets a classic island-arc environment prospective for porphyry copper-gold-molybdenum systems; Humble, a porphyry-style copper-gold prospect in Southwest Alaska; AUDN, a porphyry copper-gold prospect comparable to the Pebble deposit located about 55 miles (90 kilometers) to the northeast; and Liberty Bell, a road-accessible project about 70 miles (115 kilometers) south of Fairbanks that is prospective for copper-gold porphyry and associated gold deposits.

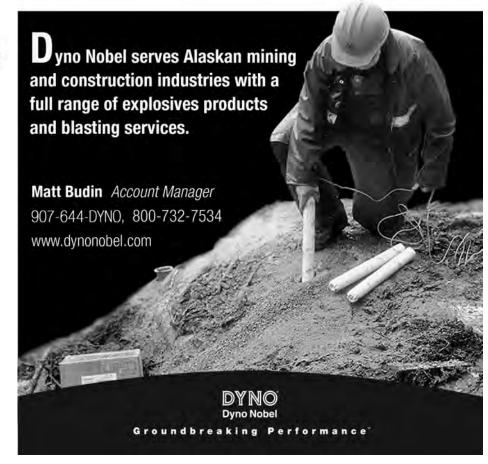
Millrock also holds a large portfolio of gold projects in northern Mexico. Exploration on two of these properties - Los Chinos and Los Cuarentas – is being funded by Centerra Gold Inc.

CASH AND CASH EQUIVALENTS: C\$2.7 million (June 30, 2016)

WORKING CAPITAL: C\$3.6 million (June 30,

MARKET CAPITALIZATION: C\$21.4 million (Sept. 28, 2016)

P.O. Box 200867 719 E 11th Ave., Suite C Anchorage, AK 99520 Tel: 907-677-7479 www.millrockresources.com





Constantine Metal Resources Ltd.

TSX.V: CEM 🚮



PRESIDENT AND CEO: Garfield MacVeigh VP, EXPLORATION: Darwin Green



Over the past four years, Constantine Metal Resources Ltd. has been able to carry out roughly US\$20 million of exploration at its Palmer copper- and zinc-rich volcanogenic massive sulfide project in Southeast Alaska. This steady exploration through the recent downturn in mining markets was made possible by a timely partnership with Dowa Metals & Mining Co. Ltd. At the onset of 2013, Dowa and Constantine inked a deal that provides the Tokyo-based smelting and mining company with the opportunity to earn a 49 percent stake in the Palmer project by investing US\$22 million over a four-year span. In addition to funding exploration, these expenditures include US\$1.25 million in payments to Constantine over the earn-in period. This, along with any other option payments and management fees received, allowed the junior to avoid raising money during the bear market, while advancing its flagship asset. Most of the work over the previous three years has focused on expanding the existing resource at Glacier Creek, a region of the Palmer project that consists of five inter-related subzones of massive sulfide mineralization. In 2015, Constantine published an inferred resource of 8.125 million metric tons averaging 1.41 percent (252.6 million pounds) copper, 5.25 percent (940.4 million lbs.) zinc, 0.32 grams per metric ton (83,600 ounces) gold and 31.7 g/t (8.3 million oz.) silver for the RW and South Wall zones. The 2016 program, however, investigated exploration targets beyond the deposit but within 3,000 meters of the resource. This includes drilling at HG, an untested zone of intense VMS alteration exposed in a drainage situated roughly 1,000 meters east of the deposit; Cap, a silver-rich massive barite sulfide target where past drilling has intersected 134 g/t silver over 23.2 meters and 31 g/t silver over 90.6 meters; and a strong conductor anomaly located 1,000 meters north of the resource where mineralized boulders grading up to 16.1 percent zinc and 13.2 g/t silver have been identified. Constantine President and CEO Garfield MacVeigh said, "The new exploration drilling will occur in parallel with important advanced exploration work that is focused on evaluating the high-grade RW and South Wall resources that are open to expansion in multiple directions." This work includes environmental, hydrogeology and engineering studies required to advance the Palmer to the next stage. In August, the company received permits needed to build 2.5 miles of road that will provide access to up to 40 new drill sites in the lower part of the resource area as well as staging areas for helicopter and ground-supported exploration activities at the copper- and zinc-rich polymetallic deposit. Construction began this fall and is expected to be completed early in the 2017 field season. Going into 2016, Dowa had invested roughly US\$16.2 million in exploration at Palmer and intends to earn its 49 percent stake in the property by the end of 2016. Any unspent funds at year's end will be deposited in an account to cover initial joint venture cash calls. Following formation of the JV and use of the carry-over funds, Constantine and Dowa will fund the project in proportion to their ownership interest.

CASH AND SHORT-TERM DEPOSITS: C\$600,000 (June 23, 2016) WORKING CAPITAL: C\$350,000 (June 23, 2016) MARKET CAPITALIZATION: C\$12.3 million (Sept. 28, 2016)

Suite 320 - 800 West Pender St. Vancouver, BC V6C 2V6 Tel: 604-629-2348 www.constantinemetals.com

Freegold Ventures Ltd.



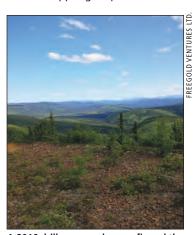
Freegold Ventures Limited

TSX: FVL 🚮

PRESIDENT AND CEO: Kristina Walcott VP, EXPLORATION AND DEVELOPMENT: Alvin Jackson

After raising C\$7.3 million in May, Freegold Ventures Ltd. returned to work at its Shorty Creek and Golden Summit projects in Interior Alaska. The company kicked off drilling at Shorty Creek, a 26,000-acre porphyry copper-gold project located near Livengood, in July. Since securing a long-term lease with Fairbanks-based Gold Range Ltd. in 2014, Freegold has carried out systematic geophysics and soil sampling over two target areas - Hill 1835 and Hill 1710. Drilling in 2015 further demonstrated the copper-gold potential at

Shorty Creek. Three of the four holes drilled at Hill 1835 in 2015 intersected quartz feldspar porphyry, supporting the idea that this area may host a significant porphyry copper-gold deposit. The best hole, SC15-03, cut 91 meters averaging 0.71 percent copper-equivalent. Results indicate that a magnetic high situated roughly 250 meters southwest of hole 15-03 hosts the highest grade copper mineralization. Collared about 125 meters southwest of SC 15-03, the first hole of the 2016 drill program, SC 16-01, cut 434.5 meters averaging 0.12 g/t gold, 7.46 g/t silver and 0.36 percent copper. This broad intercept included a higher-grade interval of 207 meters grading 0.16 g/t gold, 9.6 g/t silver and 0.45 per-



A 2016 drill program has confirmed the porphyry copper-gold potential of Freegold Ventures' Shorty Creek project in Interior Alaska.

cent copper. The bottom 12 meters of the hole averaged 0.145 g/t gold, 9.67 g/t silver and 0.55 percent copper, or 0.82 percent copperequivalent - indicating expansion of higher grade mineralization at depth. The second target of the program, Hill 1710, is situated roughly 2,500 meters northwest of Hill 1835. A series of magnetic highs identified at Hill 1710 blanket a 6,000- by 1,500-meter area with high coincident (up to 669 parts per million) copper and (up to 235 ppm) molybdenum in soil geochemistry.

In May, Freegold published a preliminary economic assessment for its Golden Summit property located four miles (seven kilometers) north of Kinross Gold's Fort Knox gold mine. The PEA evaluates a 20,000 metric-ton-per-day operation – 10,000 tpd heap leach facility to process the oxide material and 10,000 tpd bio-oxidation plant for the sulfide material - that averages around 96,000 oz. of gold annually over a 24-year mine life. Initial capital costs for this mine are forecast to total only US\$88 million and another US\$348 million for life-of-mine sustaining costs. Freegold plans to continue to expand the oxide resource at Golden Summit with shallow drilling.

CASH AND SHORT-TERM DEPOSITS: C\$6.2 million (June 30, 2016) WORKING CAPITAL: C\$5.1 million (June 30, 2016) MARKET CAPITALIZATION: C\$29.0 million (Sept. 28, 2016)

P.O. Box 10351 888 - 700 West Georgia St. Vancouver, BC V7Y 1G5 Tel: 604-662-7307 www.freegoldventures.com

COMING SPRING 2017



Investigating

THE STRONG BUSINESS AND ECONOMIC **CONNECTIONS BETWEEN ALASKA AND WASHINGTON**

North by Northwest

North by Northwest is an annual full color magazine that investigates the strong business and economic connections between Alaska and Washington.

Though these Pacific Rim states are geographically 500 miles apart at their nearest points, from an economic standpoint it is hard to discern where one state ends and the other begins. Whether it be Alaskafocused businesses with their headquarters in Seattle: Washington fishermen making their annual migration north to Alaska's world renowned fisheries; or vital supplies being delivered to Anchorage via Puget Sound ports, the economic border between these Pacific Rim states is nearly indistinguishable.

To advertise, please contact:

Susan Crane, advertising director

Phone: 907-770-5592 Fax: 907-522-9583

Email: scrane@petroleumnews.com

For more information, please contact:

Marti Reeve, special publications director

Phone: 907-522-9469 Fax: 907-522-9583

Email: mreeve@petroleumnews.com

Shane Lasley, editor Phone: 907-229-6289 Fax: 907-522-9583

Email: publisher@miningnewsnorth.com

An annual magazine published by Petroleum News & North of 60 Mining News





B.C. mining proves resilient

Mineral explorers spent C\$272 million in 2015 despite tough markets

By MIN. BILL BENNETT Special to Mining News

British Columbia is internationally recognized as a center of expertise in mineral exploration and mining, and is home to the world's largest concentration of professional geoscientists – hosting more than 700 mineral exploration and mine development companies

But it's no secret that the past few years have been tough for the

mineral exploration and mining industry, not only in B.C. or Canada, but across the world. The recent global downturn has put operations at a number of British Columbia mines at risk, with some being forced to reduce production and employee levels.



BILL BENNETT

However, even in today's challenging context, B.C.'s mineral exploration and mining industry continues to prove its resilience. Mineral exploration has grown exponentially since 2001, and

our province saw \$272 million spent on mineral exploration in 2015, more than 11 times higher than the amount spent in 2001. Also in 2015, B.C. accounted for approximately 19 percent of all exploration spending in Canada; in 2001 that figure was less than six percent.

B.C. recognizes the importance of having access to public geoscience, which encourages oil, gas and mineral development, and we're the only province in Canada that uses an industry-led, non-profit society that works in partnership with industry, academia, government, First Nations and communities – Geoscience BC – to assist in the delivery of public geoscience. Thanks to the work of the British Columbia Geological Survey and Geoscience BC, our province saw 39,531 mineral and placer exploration claims comprising more than 8.55 million hectares (21.14 million acres) in 2015.

Not only does B.C. continue to see consistently high investment in exploration, but we have a number of permits being processed in preparation for the future turnaround in commodity prices. Currently, our province has more than 20 projects moving through the

Helicopter Charters
Exploration | Survey | Slung Cargo | Tours | Film

(907) 745-5701
helicopter@LFAV.com www.LFAV.com
1415 N. Local 302 Rd., Suite C, Palmer, AK 99645

environmental assessment and permitting processes, not to mention several other promising projects in the development stage, doing their best to find the money to move forward and catch the next commodities wave.

In addition, spending on advanced mine development projects remains strong, which is a positive sign that investors remain confident in the long-term potential of B.C. In fact, B.C. has five new mines today that we did not have in 2011, and is seeing two more new mines being constructed right now: Pretivm Resources' Brucejack project, an underground gold and silver mine with a capital cost of \$750 million; and JDS Silver's Silvertip project, a \$50 million high-grade, silver-lead-zinc mine located just south of the Yukon border. None of these new mines would exist but for the efforts of the exploration sector.

And B.C. coal is set to play a big role in the clean-energy movement. Over 95 percent of coal mined in B.C. is high-quality steel-making coal which will be used in the future manufacturing of electric cars, wind towers and solar farms.

Our government understands that mineral exploration and mining requires public policies and infrastructure that encourage, facilitate and support a successful industry. This is why we work alongside industry to ensure B.C. remains a competitive jurisdiction with policies that win investments. B.C. has a stable political climate, our corporate taxes are among the lowest in Canada – we've reduced corporate income taxes by 33 percent and small business taxes by 44 percent since 2001 – and our triple-A credit rating saves taxpayers millions of dollars on government's borrowing costs.

And in this competitive investment world, investors evaluate the efficiency of a jurisdiction's permitting and regulatory systems before risking venture capital. B.C. now offers a streamlined review and approval process, making it more efficient than ever to set-up operations. Our government continues to take strategic steps to ensure timely permitting in order to prepare for the next upswing in the mineral and coal development cycle, while honoring our commitment to responsible and sustainable resource development.

Finally, we continue to work to strengthen relationships with aboriginal communities, leaders and organizations. First Nations involvement in resource development is becoming the norm in B.C., not the exception – we are working constructively with First Nations in British Columbia to develop a shared vision for land and resource use, and manage resources in a sustainable and culturally-sensitive manner.

Mineral exploration and mining brings jobs and wealth to our communities. Every new mine and expansion brings new wealth for all of us, and the mineral exploration sector is a vital part of the economic health of B.C. Our government will continue to do everything it can to ensure the mineral exploration and mining industry continues to bring economic prosperity to every region of our province.

The Hon. Bill Bennett is minister of Energy and Mines for the Province of British Columbia.



A drill taps into one of the gold-rich zones at Colorado Resources' KSP project in the heart of northwest British Columbia's Golden Triangle region.

British Columbia Exploration **2016**

B.C. exploration turns north

As precious metals prices climb, explorers flock to Golden Triangle

By SHANE LASLEY Mining News

hen judging the health of global mineral exploration, British Columbia seems to be the perfect model.

In 2015, roughly C\$272 million was invested in discovering and delineating mineral deposits in B.C., down some C\$66 million from 2014. This 19.5 percent drop is in lockstep with the decline in global mineral exploration budgets for the same period, according SNL Metals & Mining's World Exploration Trends report. Likewise, B.C. exploration decreased about 60 percent from the record C\$680 million invested in the province in 2012, compared with about a 57 percent decline globally during the same period.

Climbing gold and silver prices, along with a renewed interest in zinc and copper, has sparked a flood of exploration in the westernmost Canadian province.

Northwest BC's Golden Triangle, in particular, has emerged from the prolonged bear market as one of the hottest destinations on the planet for mining explorers,

"The Golden Triangle is truly one of the world's most prolific and best-mineralized slices of the earth's crust," said Millrock Resources Inc. President and CEO Greg Beischer.

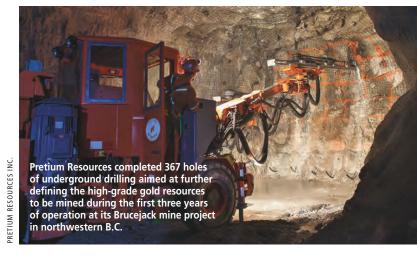
In addition to a rich mineral endowment, this region enjoys strong infrastructure thanks in large part to the 2014 completion of the Northwest Transmission Line, an industrial-grade power line that runs through the Golden Triangle.

"The NTL delivers affordable, reliable and clean power to an area that's never before had access to the grid, unlocking the economic potential of northwest British Columbia and supporting new jobs and investment in mining," said BC Energy and Mines Minister Bill Bennett.

Golden slice

Home to Pretium Resource Inc.'s Brucejack high-grade gold mine project and Seabridge Gold Inc.'s world-class KSM coppergold project, it is no wonder the Golden Triangle slice of the earth's crust is attracting so much attention.

Pretium is on pace to begin producing more than 400,000



ounces of gold per year from the exceptionally high-grade Valley of the Kings deposit at its Brucejack property in 2017.

According to an updated estimate published in July, Valley of the Kings now encompasses 16.4 million metric tons of measured and indicated resources grading 17.2 g/t (9.1 million oz.) gold.

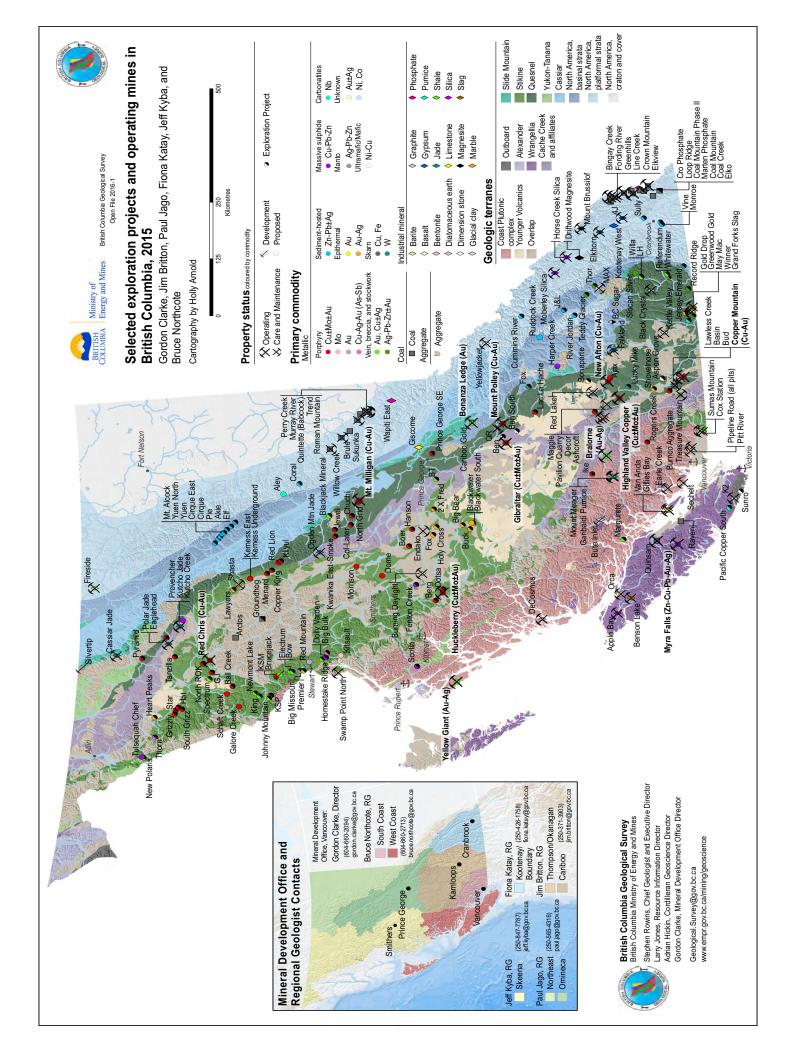
As Pretium closes in on opening the Brucejack Mine, the company continues grassroots exploration seeking porphyry- and epithermal-style mineralization across the wider property.

Immediately west of Brucejack, Seabridge continues to add to the already world-class copper-gold reserves found in a series of zones at its KSM property.

Four of these zones-Kerr, Sulphurets, Mitchell and Iron Cap - encompass enough proven and probable reserves to support a 55-year mine that would average 508,000 oz. of gold, 147 million lbs. of copper, 2.2 million oz. of silver, and 1.1 million lbs. of molybdenum annually, according to a prefeasibility study completed in 2012.

Much of the exploration since the PFS has targeted deep targets below these zones.

One such target, Deep Kerr, hosts 1.01 billion metric tons of





B.C. EXPLORATION continued from page 33

inferred resource at Deep Kerr 0.53 percent (11.8 billion pounds) copper and 0.35 g/t (11.3 million ounces) gold.

"In the three years since its discovery, Deep Kerr has taken its place among the world's largest gold-copper deposits," said Fronk. "The shape of the deposit continues to support cost-effective block-cave underground mining methods and the updated resource estimate has been carefully constrained by this mining method."

This year, the company carried out roughly 10,000 meters of drilling designed to expand the block cave shapes that confine the Deep Kerr resource by as much as 800 meters.

An updated PFS that restates the mineral resources for all of the zones at KSM by employing both open-pit and block-cave mining methods was completed in September.

While expanding the enormous bulk tonnage deposits at KSM, Seabridge is investigating high-grade gold targets at Iskut, a property the company acquired through an all-shares buy out of SnipGold Corp.

Following the transaction, Seabridge launched a roughly 3,000 meters targeting some of the high-grade prospects gold-silver-copper property located roughly 30 kilometers (19 miles) northwest of KSM

"This year's objective is to determine which of the many known targets has the best potential, in preparation for a much larger program next year," Fronk said.

Seabridge also added the KSP property to its portfolio when it acquired SnipGold.

Colorado Resources Ltd., which has an option to earn up to an 80 percent interest in KSP, completed extensive drilling of this expansive northwestern B.C. gold project in 2016.

Two other large copper-gold projects situated in the northern margins of the Golden Triangle, Galore Creek and Schaft Creek, are idling at the permitting threshold.

A feasibility study completed in 2011 envisions a mine at Galore Creek producing 6.2 billion lb. of copper, 4 million oz. of

gold and 65.8 million oz. of silver over an 18-year span.

With copper prices trending down since completion of the study, joint venture partners Novagold Resources Inc. and Teck Resources Ltd. have been content with maintaining the project and optimizing a mine plan until global markets stabilize and the demand for copper rebounds.

This year's work focused on project mine planning and design; waste rock and water management; and a generalized tunneling practice study to evaluate access and material handling.

The Schaft Creek Joint Venture – 75 percent Teck and 25 percent Copper Fox Metals Inc. – carried out a C\$700,000 program at Schaft Creek, a copper-gold-silver-molybdenum project located about 50 kilometers (30 miles) northeast of Galore Creek.

A feasibility study completed in 2012, detailed a mine for Schaft Creek that would churn out 4.88 billion lb. of copper, 4.21 million oz. of gold, 214.9 million lb. of molybdenum and 25.1 million oz. of silver over the course of 21 years.

Teck, which joined Schaft Creek shortly after the feasibility study, has since been funding work aimed at optimizing the project. The 2016 program focused primarily on updating the resource model for the project with an emphasis on gaining a better understanding of the precious metals content of the de-

For the time being, the Schaft Creek JV has withdrawn the Schaft Creek project from the Environmental Assessment process and removed the project from the queue to be connected to the Northwest Transmission Line.

Entire spectrum

From grassroots investigations of mineral deposits freshly exposed by receding glaciers to programs aimed at establishing modern operations at the site of past-producing mines, the next generation of Golden Triangle exploration projects colors the entire spectrum.

Speaking of Spectrum, under the direction of legendary

B.C. EXPLORATION continued from page 35

Golden Triangle explorer Ron Netolitzky, Skeena Resources Ltd. is advancing a growing number of highly prospective gold, copper and now silver properties in the Golden Triangle – Spectrum, Snip, GJ and Porter Idaho.

The adjoining Spectrum and GJ projects are located about midway between Schaft Creek and Imperial Metals Corp.'s Red Chris copper-gold mine.

After completing 17,356 meters of drilling in 61 holes at Spectrum in 2015, Skeena published a maiden resource for the Central zone, one of 13 known gold prospects across the 3,580-hectare (9,514 acres) property.

This year, the company drilled another 10,000 meters at Spectrum.

"The focus for this season's work program will be to further expand the gold-copper resource with wide-spaced drilling, and to begin to define resources on other high-priority gold and gold-copper targets at Spectrum that have had little or no drilling to date," explained Netolitzky.

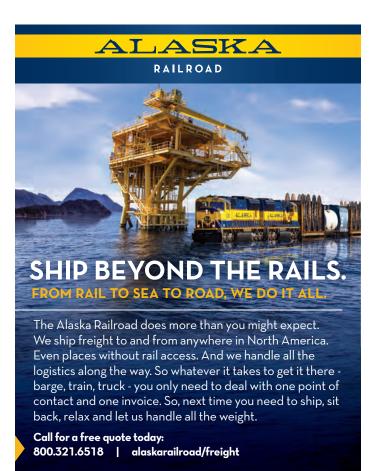
Skeena also had drills turning at Snip, a high-grade gold property being acquired from Barrick Gold Corp.

In the 1990s, Barrick produced roughly 1 million ounces of gold from ore at the Snip Mine that averaged 27.5 g/t gold.

While Snip is new to Skeena's portfolio, the company's leadership is intimately familiar with the history and geology of this Golden Triangle property.

In fact, Netolitzky's contributions to the discoveries of the Snip and Eskay Creek gold mines played a large role in getting him inducted into the Canadian Mining Hall of Fame.

Closing a deal to acquire the property in March, Skeena iden-



tified a number of high-grade gold targets for a 6,000-meter drill program launched at Snip in August.

"We are excited to renew exploration for additional mineralized shoots in a large shear structure which already demonstrated the presence of a million-ounce, high-grade deposit," the legendary mine finder said.

Skeena's Golden Triangle portfolio also includes GJ, a property adjacent to Spectrum that hosts 133.67 million metric tons of measured and indicated resource containing 940.23 million lb. of copper and 1.56 million ounces gold; plus 53.69 million metric tons of inferred resource containing 312.53 million lb. of copper and 570,000 oz. gold has been estimated for the deposits.

Skeena also added high-grade silver to its portfolio with the purchase of Mount Rainey Silver Inc., a private company that owns the high-grade Porter Idaho silver property overlooking the town of Stewart, at the southwestern corner of the Golden Triangle.

About 15 kilometers (nine miles) northeast of Stewart, IDM Mining Ltd. is closing in on a feasibility study for developing an underground mine at its Red Mountain gold-silver project.

An updated preliminary economic assessment published in July details a 1,000-metric-ton-per-day mill producing 70,000 oz. of gold and 194,000 oz. of silver annually over an initial five-year mine-life.

This year, IDM completed about 5,300 meters of underground drilling in a phase-1 program aimed at upgrading some of the inferred resources so that they can be brought into the mine plan. Also, a mapping and sampling program across the broader property turned up some intriguing high-grade gold-silver-molybdenum mineralization at Lost Valley, a prospect located about 4,000 meters southwest of the underground resource.

Immediately east of the Red Mountain property, Millrock Resources acquired Willoughby one of four gold and copper properties the project generator has picked up over the past year.

Historic drill intercepts at Willoughby include: 20.5 meters of 25 grams per metric ton gold and 184.2 g/t silver in a hole drilled in 1989; and 2.9 meters of 398 g/t gold and 199.4 g/t silver in a hole drilled in 1995.

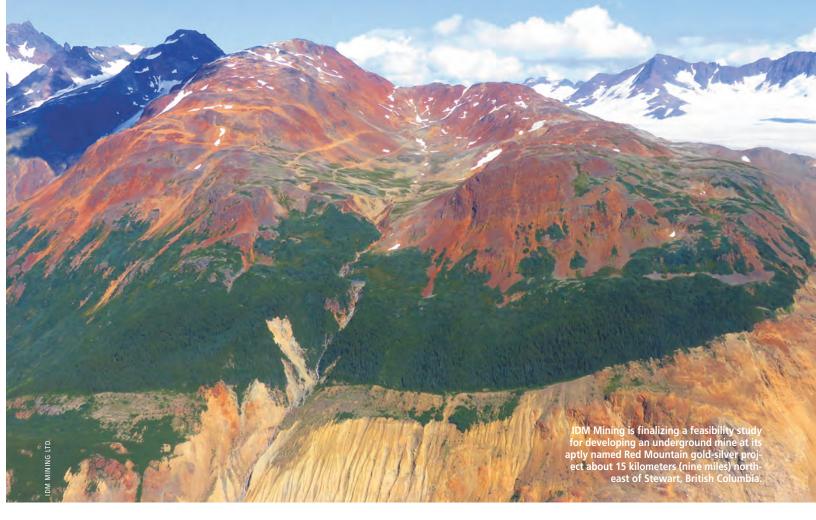
"Glaciers have been rapidly receding over the years since the last exploration drilling work was done in 1995. Much more may now be visible and accessible," explained Millrock CEO Beischer.

Millrock's Golden Triangle portfolio includes: Poly, a volcanogenic massive sulfide and epithermal gold property about eight kilometers (five miles) north of Willoughby; Todd, a property that spans an area between Poly and Brucejack that is prospective for precious metals-rich VMS deposits similar to the historic Eskay Creek Mine; and Oweegee Dome, a gold-copper property immediately north of Brucejack.

In anticipation of bringing on partners to advance its Golden Triangle portfolio, the project generator has compiled, digitized, organized and carried out quality control on the tomes of data available for these properties.

Aben Resources Ltd. is another company that accumulated a sizeable land package in the Golden Triangle this year. This property, dubbed Forrest Kerr, blankets nearly 30,000 hectares covering more than 45 kilometers of the Forrest Kerr Fault, from Colorado Resources' KSP property north.

Upon consolidating this extensive land package, which involved individual agreements three vendors plus staking of open claims, Aben compiled all of the historical work into a single database. This was followed by fieldwork to identify drill targets at Forrest Kerr, particularly in the area where the Galore



Creek access road passes through the north end of the property.

Beyond the triangle

South of the Golden Triangle, Dolly Varden Silver Corp. spent much of this past year fending off takeover bids from companies with an eye for the high-grade silver- deposits found across its namesake property.

Situated about 60 kilometers (35 miles) southeast of Stewart, the Dolly Varden property hosts 3.07 million metric tons of indicated resource averaging 321.6 g/t (31.8 million oz.) silver in four deposits. Dolly Varden, the highest grade of the four, hosts 10.5 million ounces of this silver in 522,000 metric tons averaging 625.1 g/t.

The four deposits also host 10.8 million ounces of silver at a grade of 373.3 g/t silver in the inferred category.

Within hours of the August 2015 publishing of this resource, Skeena Resources made a bid to buy-out Dolly Varden.

Characterizing the all-shares offer valued at roughly C\$4.2 million "highly opportunistic," Dolly Varden countered with an offer Skeena deemed unrealistic.

Hecla Mining Company, which provided Dolly Varden with a C\$1.5 million loan to carry out a drill program at the high-grade silver property late in 2015, made its own bid for the junior this year.

With roughly 19.8 percent of Dolly Varden shares under its control, Hecla attempted to buy the balance in an all-shares deal worth about C\$12 million.

Again, Dolly Varden rejected its suitor but did not rule out considering an offer by Hecla in the future.

In July, Dolly Varden closed a C\$7.2 million financing. Roughly C\$2.5 million raised was used to pay back a loan from

Sprott Private Resource Lending and others that ultimately paid monies owed to Hecla. Much of the balance was used to fund exploration at Dolly Varden.

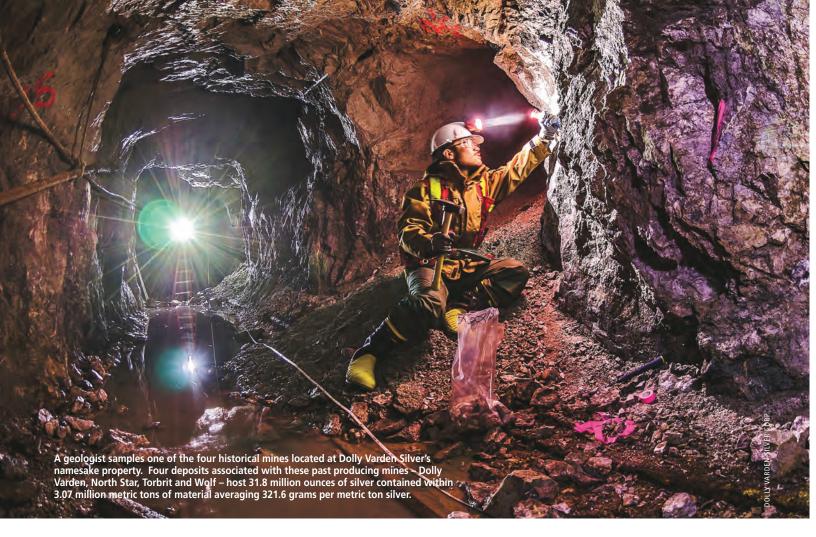
"It was a more complex process to become debt-free than anticipated, but Dolly Varden is finally debt-free," said interim Dolly Varden President and CEO Rosie Moore. "With field programs planned for this year and next, we look forward to creating further value for all shareholders."

To the north of the Golden Triangle, Carmax Mining Corp. completed a program aimed at collecting the data needed to complete a PEA for its Eaglehead porphyry copper-gold project.

According to a 2012 calculation, 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)

continued on page 39







ALASKA MINING Professional attitude. Well-maintained

fleet. Reliable service. These are some of the reasons our mining customers are saying, "We're happy to be doing business with Crowley." Find out how Crowley can fuel your business - call or visit us today.

CrowleyFuels.com | 907.777.5505













B.C. EXPLORATION continued from page 37

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.

The 2016 program at Eaglehead included metallurgical work, re-analysis of historical core and geophysical studies.

"On completion of the 2016 work program, Carmax would like to be in a position to make a decision on commencing a preliminary economic assessment of the Eaglehead porphyry copper deposit," explained Carmax President Jevin Werbes.

In September, Copper North completed a small drill program at Thor, a porphyry copper-gold project about 300 kilometers (185 miles) southeast of Eaglehead.

Zinc-rich Kechika

East of the Golden Triangle, Canada Zinc Metals Corp. continues its exploration along a band of properties that blankets 79,870 hectares (197,359 acres) of the zinc-rich Kechika Trough in north-central B.C

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 roughly 140 kilometers (85 miles) northwest of Akie.

According to a calculation completed in May, Cardiac Creek hosts an indicated resource of 19.6 million metric tons grading 8.2 percent (3.54 billion lb.) zinc, 1.6 percent (685 million lb.) lead and 13.6 g/t (8.6 million oz.) silver; and an inferred resource of 8.1 million metric tons grading 6.8 percent (1.21 billion lbs.) zinc, 1.2 percent (207 million lb.) lead and 11.2 g/t (2.9 million oz.) silver.

Canada Zinc is considering the potential of developing a decline to further drill deep targets from underground.

In 2013, Teck Resources and Korea Zinc Co. Ltd. entered into an agreement to option three of Canada Zinc's regional properties that stretch northwest from Akie – Pie, Cirque East and Yuen. Under this agreement the Teck-Korea Zinc joint venture can earn up to 70 percent interest in these contiguous claim blocks by investing C\$8.5 million in them by 2019.

Through 2015, the partners had invested C\$1.3 towards the earn-in.

Teck and Korea Zinc completed a preliminary 2016 exploration program that included: geological mapping, prospecting and rock sampling over the highest ranking targets across 18.5-kilometer- (11.5 miles) area; 7.3-line-kilometers (4.5 miles) of ground gravity surveys; and soil sampling. This work finalized targets for a roughly 1,000-meter drill program completed at the end of the field season.

Canada Zinc hopes the zinc-rich deposits on these extensive holding will help supply a predicted global shortage in the galvanizing metal.

"The drilling on the Pie and Yuen properties represents a noteworthy step forward in the advancement of these two properties and will showcase the potential of the company's significant mineral tenure that comprises the Kechika Regional project," said Canada Zinc President and CEO Peeyush Varshney.

Meanwhile, mining explorers across British Columbia hope that the strengthening zinc market is the first stage of a renaissance in exploration in the province and around the globe. •

NEW DISCOVERIESfor new generations







The alchemy of turning paper to gold

Seabridge Gold transforms investor dollars into in-ground resources

Bv SHANE LASLEY

Mining News

eabridge Gold Inc. has a straightforward strategy for exploring its projects in British Columbia and Northwest Territories - transform paper currency into gold.

"At Seabridge, we like to think of ourselves as modern alchemists - turning cash into gold," Seabridge Chairman and CEO Rudi Fronk explained during an August interview with The Gold Report. "Over the (p)ast 17 years, we have used cash from our shareholders to fund acquisitions and exploration of

gold projects in Canada with the aim of increasing gold ownership per share as measured by our ounces of gold resources and reserves in the ground relative to our shares outstanding."

With 60.1 million ounces of gold – along with 253.2 million oz. silver, 13.63 billion pounds of copper and 285 million lbs. of molybdenum – in measured and indicated resources, this strategy seems to be paying off for Seabridge and its shareholders.



RUDI FRONK

Expanding Deep Kerr

The lion's share of the cash-turned-to-gold is located in a series of porphyry zones found at the KSM gold-copper project in northwestern British Columbia.

Four of the zones at KSM – Kerr, Sulphurets, Mitchell and Iron Cap – contain 2.2 billion metric tons of proven and probable reserves averaging 0.55 grams per metric ton (38.8 million oz.) gold, 0.21 percent (10.2 billion pounds) copper, 2.6 g/t (183 million oz.) silver, and 42.6 parts per million (207 million lbs.) molvbdenum.

These reserves support a 53-year mine that would average 540,000 oz. of gold, 156 million lbs. of copper, 2.2 million oz. of silver, and 1.2 million lbs. of molybdenum annually, according to a prefeasibility study published in September.

While this already would make KSM a long-lived world-class mine, the project encompasses nearly as much gold in resources not included in the mine-plan as are in the reserves.

Much of this added resource is found in Deep Kerr and Iron Cap Lower, two zones discovered after completion of the PFS.

In March, Seabridge published an updated resource estimate for Deep Kerr that includes 1.01 billion metric tons of inferred resource grading 0.53 percent (11.8 billion lbs.) copper and 0.35 g/t (11.3 million oz) gold.

"In the three years since its discovery, Deep Kerr has taken its place among the world's largest gold-copper deposits," explained Fronk. "The shape of the deposit continues to support cost-effective block-cave underground mining methods and the updated resource estimate has been carefully constrained by this mining method."



Seabridge Gold adds to the stacks of core from current and historical drilling at the company's newly acquired Iskut gold property in northwestern B.C.

Seabridge Gold Corp. SEABRIDGE GOLD

SEA:TSX / SA:NYSE 🕋



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

PROPERTIES WITH MINERAL(S) EXPLORED:



KSM (Kerr-Sulphurets-Mitchell), British Columbia: Gold-Copper Iskut, British Columbia: Gold-Silver-Copper Courageous Lake, Northwest Territories: Gold

CASH AND SHORT-TERM DEPOSITS: C\$24.1 million (June 30, 2016) WORKING CAPITAL: C\$23.2 million (June 30, 2016) MARKET CAPITALIZATION: C\$796.9 million (Sept. 28, 2016)

106 Front St. East, Suite 400 • Toronto ON M5A 1E1 Tel: 604-684-8725 • www.seabridgegold.net

This year, the company carried out a roughly 10,000-meter drill program designed to expand the block cave shapes that confine the Deep Kerr resource by as much as 800 meters, which could increase the mining rate from this higher grade deposit.

The first two holes 2016 holes expanded Deep Kerr over considerable distances to the south.

K-16-51, located about 125 meters south of the current resource limits, cut multiple zones including 119 meters averaging 0.44 g/t gold and 0.45 percent copper and 187 meters averaging 0.33 g/t gold and 0.46 percent copper. K-16-52 cut 231 meters grading 0.31 g/t gold and 0.47 percent copper about 500 meters to the south of K-16-51.

With grades consistent with the inferred resource, these holes are expected to expand the known resource in the shape and orientation required to optimize the proposed block cave mine plan for Deep Kerr.

"This year's drill program has been carefully designed to expand and optimize the prospective mine plan at Deep Kerr and thereby improve the KSM project's potential economics," said Fronk. "Overall, Deep Kerr is once again demonstrating that it has very few equals for size and grade."

An updated PFS that restates the mineral resources for all of the zones at KSM by employing both open-pit and block-cave mining methods is slated for completion this year.

Additionally, the study will incorporate a preliminary economic assessment that considers the inclusion of the Deep Kerr and Lower Iron Cap zones into KSM mine sequencing.

Lower Iron Cap hosts 163.8 million metric tons of inferred resources averaging 0.59 g/t (3.1 million oz.) gold and 0.27 percent (961 million lbs.) copper.

High-grade Iskut

Iskut, a property about 30 kilometers (19 miles) northwest of KSM, is another place Seabridge believes it can employ its alchemistic strategy of transforming cash into gold.

The company got its hands on the 286-square-kilometer (110 square miles) Iskut gold-silver property by acquiring the property's owner, SnipGold Corp. in an all-share deal that closed in June.

To complete the buyout, Seabridge issued 695,277 shares, at an exchange ratio of one Seabridge share for 63 outstanding SnipGold shares.

Prior to launching a 3,000-meter drill program at Iskut, Seabridge set out to clean up historical mine areas on the property, especially surrounding the past-producing Johnny Mountain Mine. This proactive remediation further bolstered an excellent working relationship between Seabridge and the Tahltan Central Government, the administrative governing body of the Tahltan First Nations.

"We have a strong interest in the remediation of the Johnny Mountain mine site on our traditional territory," explained TCG President Chad Day. "We expect to work closely with Seabridge to ensure that Tahltan citizens benefit from this work and that we are kept fully informed of the progress that is being made in the planned clean-up programs."

Iskut hosts two historical high-grade mines – Snip and Johnny Mountain – that were in operation for stints from 1988 to 1999.



Geologists Howard Marcus (left) and Shawn Vandekerkhove (right) inspect core at Iskut, a high-grade gold project Seabridge Gold added to its portfolio when it purchased SnipGold in 2016.

Johnny Mountain, which operated in 1988-1990 and briefly in 1993, produced 90,517 oz. of gold, 19,818 oz. of silver and 2.22 million lbs. of copper from 249,097 metric tons of ore.

The Snip Mine is reported to have produced 1 million oz. of gold from ore with a recoverable grade of 24.5 g/t gold during the 1990s.

In addition to high-grade targets, Iskut hosts Bronson Slope, a porphyry deposit with 186.9 million metric tons of measured and indicated resources averaging 0.36 g/t (2.16 million ounces) gold; 0.122 percent (502.7 million lbs.) copper; and 2.19 g/t (13.17 million oz.) silver.

While gaining a better understanding of this KSM-like deposit is of interest to Seabridge, the primary objective of the C\$3 million program carried out in 2016 is to investigate Iskut's high-grade potential.

"In our view, Iskut could host extensive district-scale porphyry-style mineral systems similar to our nearby KSM project. These systems would account for the Iskut property's numerous gold and copper mineral occurrences. However, at Iskut, unlike at KSM, these systems appear to be largely intact from top to bottom, not eroded or faulted away. If so, this would mean that the epithermal tops of the porphyry systems, which typically host high-grade precious metals, could remain intact near surface," Fronk said. "These are the kinds of occurrences we are targeting."

High-grade gold targets around the Johnny Mountain Mine seem to be of particular interest to Seabridge.

Considerable historical data compiled by previous owners and re-interpreted by Seabridge's exploration team formed the basis for a 3,000-meter drill program that was launched at Iskut in August. To further inform the program, Seabridge crews re-logged and sampled old drill core, much of which had not been previously analyzed. A magnetotelluric geophysical program to identify altered structures and extensive hydrothermal alteration associated with mineralization in the target areas is also underway.

The company said the results from this year's work will be used to design a much larger program for 2017.

More gold in NWT

With 6.5 million oz. of gold in 91 million metric tons averaging 2.2 g/t gold, Seabridge's Courageous Lake project in Northwest Territories is second only to KSM in terms of undeveloped gold reserves in Canada.

In 2012, Seabridge published a prefeasibility study for Courageous Lake that detailed a mine that would produce an average of 385,000 ounces of gold annually at cash operating costs of \$780 per ounce and a mine-life of 15 years.

The reserves that support the PFS represent only about two kilometers (1.25 miles) of a 53-kilometer (33 miles) greenstone belt blanketed with mining claims and leases owned by Seabridge.

A C\$8.5 million exploration program seeking another deposit along the greenstone belt turned up Walsh Lake in 2012. Early in 2014, the company announced 4.62 million metric tons of inferred resource averaging 3.24 g/t (482,000 oz.) gold for Walsh Lake.

With KSM, and now Iskut, as the best options to turn cash into gold, Seabridge has not completed any additional significant exploration at Courageous Lake over the past couple of years.

EXPLORERS AT A GLA

ALASKA & BRITISH COLUMBIA



Teck Resources Ltd.

TCK: NYSE/ TCK.B: TSX 🕋



CHAIRMAN: Norman Keevil PRESIDENT AND CEO: Don Lindsav SENIOR VP, EXPLORATION: Alex Christopher

Zinc and copper are among the top commodities sought by Teck Resources Ltd. In Alaska, this work is dedicated to extending the life of the Red Dog Mine by upgrading

high-grade zinc resources near the current mine area and seeking out new deposits across land sur-

rounding the Northwest Alaska operation. Going into 2015, Red Dog had 56.6 million metric tons of ore in reserves, averaging 14.6 zinc, 4.1 percent lead and 73.8 grams per metric ton silver. This year, Teck began development of Qanaiyaq, a near-surface deposit that lies to the south of the mined out Red Dog main pit. This high-grade deposit hosts 7.4 million metric tons of reserves averaging 24.7 percent zinc and 6.9 percent lead, according to calculations posted early in 2015. The first higher grade ore from this deposit

is expected to be fed into the Red Dog mill by early 2017, which will help offset future grade declines in the current Aggaluk pit. Teck has recently shifted the primary focus of its exploration from near-pit deposits at Red Dog to deposits and prospects



DON LINDSAY

across 224,000 acres of highly prospective lands in the larger Red Dog region. Anarraag-Aktigirug, situated roughly eight miles (13 kilometers) northwest of the current operations, is among the high-quality targets Teck is pursuing. Discovered in 1999, Anarraag hosts an inferred resource of about 19 million tons grading 15.8 percent zinc, 4.8 percent lead, and 2.1 oz/t silver. High-grade intercepts from this deposit include 11.2 meters of 34.2 percent zinc, 11.5 percent lead and 382 g/t silver; and 42 meters of 18.3 percent zinc, 4.5 percent lead, and 82 g/t silver. Teck also holds a 50 percent stake in Lik, a zinc deposit about six miles (10 kilometers) west of Anarraaq being advanced by Zazu Resources Ltd.

In Yukon Territory's Selwyn Basin and the Kechika Trough of northern British Columbia, Teck and joint venture partner Korea Zinc Co. have been investigating zinc prospects for about two decades. In 2013, Teck cut a deal with Canada Zinc Metals Corp. to explore the Pie, Yuen and Cirque East properties, which lie adjacent to Teck and Korea Zinc's Cirque property in the Kechika Trough. Under the agreement, Teck can earn up to a 51 percent interest in the properties by spending C\$3.5 million on exploration by the end of Sept. 2017, a stake that can be increased to 70 percent by investing an additional C\$5 million by 2019. Teck and Korea Zinc completed a preliminary 2016 exploration program that included: geological mapping, prospecting and rock sampling over the highest ranking targets across 18.5-kilometer- (11.5 miles) area; 7.3-linekilometers (4.5 miles) of ground gravity surveys; and soil sampling. This work finalized targets for a roughly 1,000-meter drill program completed at the end of the field sea-

Teck (75 percent) is in a joint venture with Copper Fox Metals Inc. (25 percent) to explore and develop the Schaft Creek coppergold project in B. C.'s Golden Triangle region. A 2013 feasibility study outlined a 130,000metric-ton-per-day open-pit mine operating for 21 years at Schaft Creek based on proven and probable reserves of 940.8 million metric tons averaging 0.27 percent copper, 0.19 grams per metric ton gold, 0.018 percent molybdenum and 1.72 g/t silver. A C\$700,000 program carried out at Schaft Creek in 2016 focused primarily on updating the resource model for the project with an emphasis on gaining a better understanding of the precious metals content of the deposit. Teck also holds a 50 percent interest in Galore Creek, a



huge porphyry copper-gold mine project in the Golden Triangle.

CASH AND SHORT-TERM DEPOSITS: C\$1.27 billion (June 30, 2016) WORKING CAPITAL: C\$2.49 billion (June 30, 2016) MARKET CAPITALIZATION: US\$10.9 billion (Sept. 28, 2016)

3300 - Bentall 5, 550 Burrard St. Vancouver, BC, V6C 0B3 Tel: 604-699-4000 www.teck.com

BRITISH COLUMBIA



Skeena Resources Ltd.

TSX.V: SKE 📷



CHAIRMAN: Ron Netolitzky PRESIDENT AND CEO: Walter Coles, Jr. VP, EXPLORATION: J. Rupert Allan

Under the direction of legendary mining explorer Ron Netolitzky, Skeena Resources Ltd. is investigating the gold and copper potential of three highly prospective properties in the Golden Triangle region of British Columbia - Spectrum, Snip and GJ. In April, Skeena published a maiden resource for Spectrum, a gold-copper project about 37 kilometers (23 miles) west of Imperial Metals' Red Chris Mine. The Central zone at Spectrum hosts 8.95 million metric tons of indicated resource averaging 1.04 grams per metric ton (290,000 ounces) gold, 6.58 g/t (1.8 million oz.) silver and 0.11 percent (20.8 million pounds) copper. Additionally, the deposit hosts 22.63 million metric tons of inferred resource averaging 1.03 g/t (750,000 oz.) gold, 3.85 g/t (2.8

million oz.) silver and 0.11 (54.9 million lbs.) copper. Netolitzky considers this initial calculation a bit premature due to the lack of drilling in areas of the Central zone with known mineralization.



One such area is a newly recognized panel of porphyry gold-copper mineralization that partially overlaps and extends west of the Central zone. A roughly 10,000-meter drill program completed at Spectrum this year included some 6,000 meters of resource drilling in the Central zone and 4,000 meters of drilling at other targets.

Skeena also carried out more than 6,000 meters of drilling at the historic Snip Gold Mine project that it optioned from Barrick Gold Corp. in March. Skeena Chairman Netolitzky was a 2015 inductee to the Canadian Mining Hall of Fame, largely due to his role in realizing the potential of the Snip and Eskay Creek deposits in northwestern B.C., both of which were developed into mines. The underground mine at Snip produced 1.1 million ounces of gold from 1.25 million metric tons of ore averaging 27.5 g/t gold from 1991 to 1999. Barrick closed the operation when gold was about US\$300/oz. Skeena believes that current gold prices and the vastly improved infrastructure - run-of-river hydro power and an all-season access road now within 20 kilometers (12.5 miles) of the project-should increase the viability of mining the remaining zones and high-grade gold targets at Snip. Skeena has the option to acquire a 100 percent interest in Snip by issuing 3.25 million shares to Barrick and investing C\$2 million on exploration, which is covered by the 2016 program. Barrick retains a 1 percent net smelter return royalty and, upon Skeena delineating 2 million ounces of gold at the property, Barrick has the right to purchase a 51 percent joint venture interest in Snip by reimbursing three times Skeena's cumulative expenditures.

In 2015, Skeena cut a deal to buy full ownership of the GJ coppergold property from Teck Resources Ltd. and NGEx Resources Inc. Situated along the east border of Spectrum, GJ is crossed by Highway 37, several forestry roads and winter trails, and the 287 kilovolt North-



west Transmission Line, linking the Red Chris mine to the B.C. powergrid. At the onset of 2016, Skeena reported the Donnelly and North Donnelly deposits at GJ now host 133.67 million metric tons of measured and indicated resources averaging 0.32 percent (940.23 million pounds) copper and 0.36 g/t (1.56 million ounces) gold. In addition, 53.69 million metric tons of inferred resource grading 0.26 percent (312.53 million lbs.) copper and 0.33 g/t (570,000 oz.) gold has been calculated for the deposits.

In September, Skeena expanded its Golden Triangle portfolio through the acquisition of Mount Rainey Silver Inc., a private company that owns Porter Idaho, a northwestern British Columbia project that hosts two known silver-bearing vein systems about 2,000 meters apart on opposite sides of Mount Rainey. Porter Idaho hosts a historical indicated resource of 394,700 metric tons grading 868 g/t (11 million oz.) silver, 3.37 percent lead and 1.41 percent zinc; and an inferred resource of

In September, Skeena expanded its Golden Triangle portfolio through the acquisition of Mount Rainey Silver Inc., a private company that owns Porter Idaho, a northwestern British Columbia project that hosts two known silver-bearing vein systems about 2,000 meters apart on opposite sides of Mount Rainey.

88,900 metric tons grading 595 g/t (1.7 million oz.) silver.

In July, Skeena acquired the past-producing underground Blackdome Gold Mine in southwestern British Columbia through an allshares buy-out of Sona Resources Corp.

CASH AND TERM DEPOSITS: C\$5 million (June 30, 2016) WORKING CAPITAL: C\$4.2 million (June 30, 2016) MARKET CAPITALIZATION: C\$77.8 million (Sept. 28, 2016)

675 West Hastings St., Suite 611 • Vancouver, BC V6B 1N2 Tel: 604-684-8725 www.skeenaresources.com



Guest Column

2016 brings late season surge

Mineral explorers get boost from Goldcorp's interest in Coffee project

Special to Mining Explorers

ineral exploration in Yukon Territory began 2016 much like it finished 2015. Challenging equity market conditions and cautious investors meant junior exploration companies started the season conservatively. Then the mid-May announcement of Goldcorp's (www.goldcorp.com) interest in Kaminak Gold's (http://kaminak.com) Coffee property prompted a significant boost to Yukon's mineral industry. By the time Kaminak shareholders approved the C\$520 million deal in July, companies across the territory were expanding its field programs and making good deals due to increased interest by investors.

While much of the industry excitement revolved around Gold-corp's interest in Yukon, other advanced exploration projects had success as well. In January 2016, after its 2015 field program on the newly acquired Kudz Ze Kayah property, BMC Minerals (http://bmcminerals.com) announced an updated resource on the ABM deposit and the discovery of the Krakatoa deposit. Combined resources of the ABM and Krakatoa deposits are 20.8 metric tons of 6.4 percent zinc, 2.0 percent lead, 0.9 percent copper, 145 grams-permetric-ton silver, 1.4 g/t gold; a 50 percent increase of the resource in one season's work. In 2016, BMC will complete more than 15,000 meters of exploration and definition diamond drilling while working towards the completion of a pre-feasibility study.

Victoria Gold Corp. (www.vitgoldcorp.com) performed an impressive amount of exploration on its Dublin Gulch property, drilling 20,000 meters on the higher grade Olive and Shamrock zones, two kilometers (1.24 miles) from the Eagle Gold deposit. Vic-

toria also conducted grassroots exploration on several other properties and has been active corporately, positioning itself for construction of its fully permitted Eagle mine.

Alexco Resource Corp. (www.alexcoresource.com) continued exploration work on its Keno Hill property with 15,500 meters of diamond drilling on the high-grade core of the Bermingham deposit. With the price of silver looking up, Alexco is also preparing for a return to production by collaring a new portal into the recently discovered Flame & Moth deposit, which is adjacent to the existing mill.

Rockhaven Resources (www.rockhavenresources.com) diamond drilled 8,000 meters at the Klaza property focusing on both expanding and defining resources, as well as testing existing geophysical and geochemical anomalies across the property.

Atac Resources Ltd. (www.atacresources.com) focused on its Rackla Gold project in 2016. They filed a favourable preliminary economic assessment for the Tiger deposit in the Rau Trend and completed phase-one rotary air blast drilling and phase-two diamond drilling on the Orion zone in the Nadaleen Trend.

With the price of gold remaining strong through the summer and equity markets taking note of the Goldcorp deal, junior mining companies were able to raise funds to advance their projects, particularly gold projects. Golden Predator (www.goldenpredator.com) processed a 750-metric-ton bulk sample from the Sleeping Giant vein on its 3Aces property early in 2016 and continued exploring the property through the year with nearly 4,000 meters of drilling planned. At the past-producing Brewery Creek mine, Golden Pred-

ator was busy conducting 1,600 meters of geotechnical and metallurgical drilling near former pits to evaluate the remaining gold mineralization.

Banyan Gold (www.banyangold.com) plans to complete 800 meters of drilling for metallurgical testing as well as conduct soil sampling and trenching at the Hyland Gold Project in southeast Yukon.

Strategic Metals Ltd. (www.strategicmetalsltd.com) continued generative work on its extensive portfolio of Yukon properties. Highlights to date include 5,000 meters of diamond drilling split between the Hartless Joe, Hopper and Mars properties.

Goldstrike Resources (www.goldstrikeresources.com) was active on its flagship Plateau Gold property diamond drilling 1,500 meters on the Goldstack zone. Successful prospecting also doubled the length of Yellow Giant gold trend to more than 50 km.

Independence Gold Corp. (www.ingold.ca) did 3,000 meters of reverse circulation drilling on the Boulevard property, which is contiguous with Goldcorp's Coffee property. Independence also conducted rotary air blast drilling geophysical surveying and geochemical sampling on other properties in central Yukon.

Klondike Gold (www.klondikegoldcorp.com) has had a productive season exploring its Klondike Goldfields property, doubling its land position by acquiring 1,125 claims, diamond drilling 5,000 meters and conducting a 230 line-kilometer ground magnetic survey.

Grassroots explorers also were active across the territory with companies staking nearly 5,000 new claims to the end of August. Total claims in good standing in Yukon remains at over 200,000.

More than 80 projects were active across the territory in 2016, and exploration expenditures are estimated to total C\$60 million and development expenditures at C\$20 million, similar to the amounts in 2015. Exploration activity is mostly gold focused with 75 percent of exploration programs exploring for gold, while the remaining 25 percent is split between lead, zinc, copper, nickel, silver, platinum group metals and jade exploration.

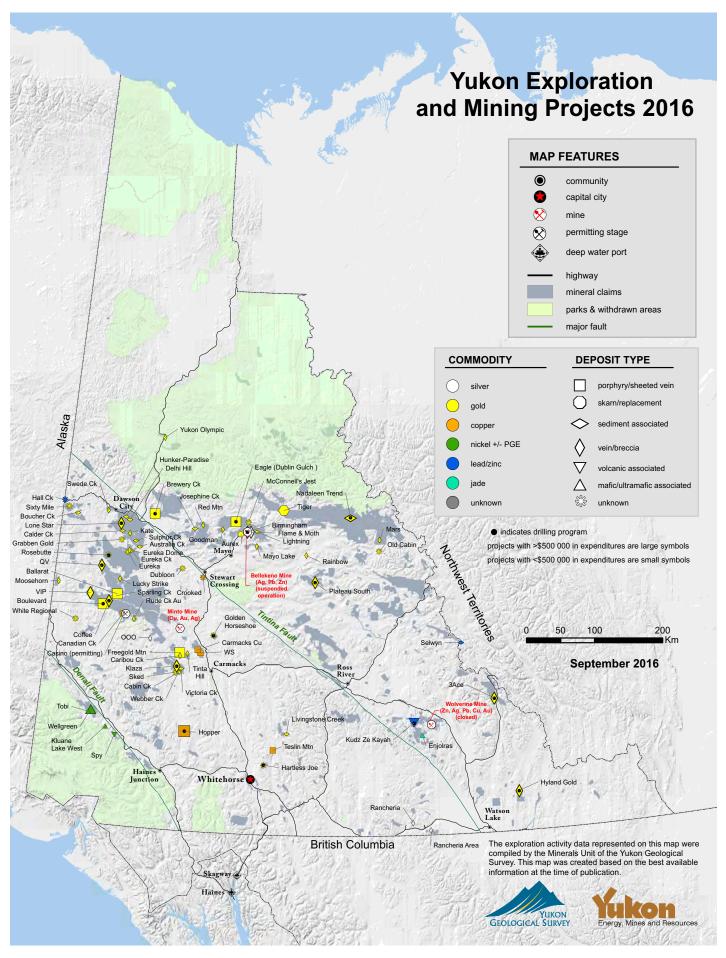
Yukon currently has one operating hardrock mine, Capstone Mining Corp.'s Minto copper-gold-silver mine. Production at Minto in 2016 is better than planned. At the end of the second financial quarter, the Minto mine had produced 10,615 metric tons of copper. Mining continues in the Minto North pit, with copper grades above 2 percent and should result in a significantly higher production for the second half of the year. Underground mining is planned to extend into the third quarter, to take advantage of high-grade underground ore. Low copper prices have forced the company to consider long-term closure options and production beyond 2017 is dependent on the price of copper.

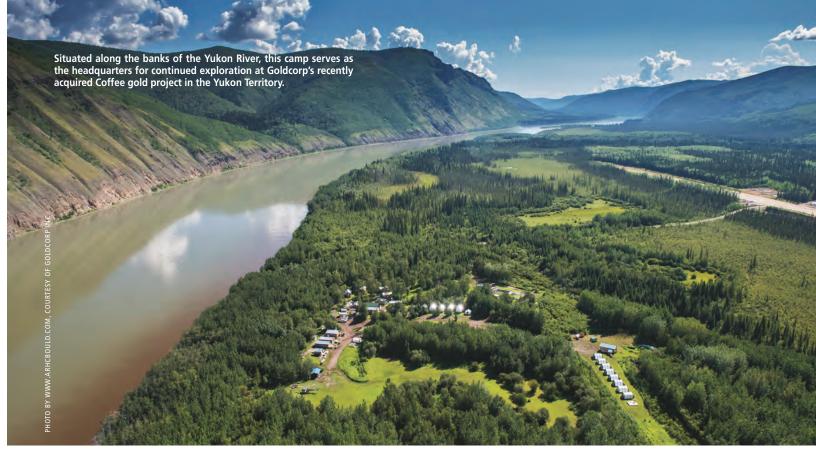
Funding for the fully-subscribed Yukon Mineral Exploration Program (www.geology.gov.yk.ca/ymep) remained at C\$1.4 million in 2016. The Government of Yukon recognizes that a successful minerals industry is dependent on high-quality geo-scientific information. Through the Yukon Geological Survey

(www.geology.gov.yk.ca), the Yukon government continues to support the industry by generating and compiling geological data to form the foundation that allows for better decision-making by industry. Bedrock mapping is a key component of this, and the 2016 projects included mapping in the Hyland map sheet in southeast Yukon, Aishihik Lake area in southwest Yukon, and the Lake LaBerge and Tay River areas in central Yukon. Other projects include a metallogenic study of the mineralizing potential of Jurassicaged plutons in Yukon, and airborne geophysical surveys in the Livingstone placer district and Frances Lake area.

This article was submitted by the Yukon Geological Survey, Department of Energy, Mines and Resources, Government of Yukon.







Yukon Exploration 2016

Goldcorp grabs Coffee project

Half-billion-dollar buyout of Kaminak signals turnaround in mining markets

By SHANE LASLEY Mining News

ike a gong proclaiming the end of the long and arduous bear ■market for North of 60 mining explorers, the May 12 news that Goldcorp Inc. would buy Kaminak Gold Corp. for roughly C\$500 million reverberated from Yukon Territory throughout the North.

While the rich lure of developing a mine at Kaminak's robust Coffee gold project lured Goldcorp to the Yukon, it was the exploration potential and the ability to permit and build a mine that convinced the producer to expand into the territory.

"Coffee is located within a politically stable jurisdiction and provides us with an opportunity to add high-quality ounces to our development pipeline at low all-in sustaining costs," Goldcorp President and CEO David Garofalo said at the time.

Even before Goldcorp made its move, Yukon was considered one of the best places on the planet to seek and develop a mine.

In the latest Fraser Institute Survey of Mining Companies, global mining executives ranked the westernmost Canadian territory as the 12th-best jurisdiction in the world when both mineral endowment and mining policies are considered.

The Yukon Mineral Exploration Program, an ongoing terri-

tory funded incentives program aimed at encouraging more investment in mineral exploration across the Yukon, is contributing to both sides of the equation.

Paying individuals up to C\$25,000 and corporations up to C\$40,000, this year YMEP awarded up to C\$1.4 million to 80 prospectors and exploration companies with early stage mineral exploration projects in the Yukon.

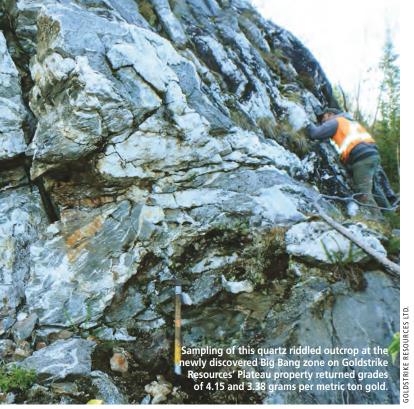
It was this program that allowed iconic prospector Shawn Ryan to fund the prospecting that led to the discovery of Coffee and a number of other deposits and prospects in the White Gold district - an investment that is paying off through the development of a major mine in the territory.

If Goldcorp is successful in its planned expansion and development of Coffee, Yukon's reputation is expected to grow in the coming years.

Validating White Gold

After Goldcorp's move, a number of resident junior exploration companies reminded current and would-be investors of their own land positions and work programs in the gold-rich swath of central Yukon where Coffee is located.

continued on page 48



YUKON EXPLORATION continued from page 47

Independence Gold Corp. has particularly strong bragging rights. Not only does this exploration company own a property right next door to Coffee, the junior also gained nearly C\$2 million in exploration funds from Goldcorp. As a result of this flow-through financing, Goldcorp now owns 19.9 percent of its neighbor in the region known as the White Gold District.

"We view this investment as a validation of our exploration results as well as positive encouragement for the White Gold District in the Yukon," said Independence Gold President and CEO Randy Turner.

Independence used the cash to explore an array of Yukon gold projects, which includes Boulevard, immediately southwest of Coffee; Rosebute, another White Gold property about 60 kilometers (35 miles) to the north; and Moosehorn, a property blanketing a rich placer gold area next to the Yukon-Alaska border.

With rising gold prices and interest in the White Gold District, Nevada Zinc Corp. is allocating additional resources to VIP, a large gold property situated immediately west of Boulevard.

"While our focus project continues to be our highly prospective Lone Mountain Zinc Project in Nevada, we are extremely encouraged to see the recent entrance by Goldcorp into the Coffee

Pacific Rim Geological Consulting, Inc.



P.O. Box 81906
Fairbanks, AK
Office: 907 458-8951
Cell: 907 388-6607
Fax: 907 458-8511
bundtzen@mosquitonet.com
www.pacrimgeol.com

Thomas K. Bundtzen, President

Creek area of Yukon," said Nevada Zinc President and CEO Bruce Durham.

Tucked in a corner between the 48-kilometer- (30 miles) long Coffee property to the north and Western Copper and Gold Corp.'s Casino copper-gold project to the east, Cariboo Rose Resources Ltd.'s Canadian Creek property shows attributes similar to both. In 2016, the company completed a trenching program over a large soil anomaly that has gold traits similar to those found at Coffee.

Drilling at Canadian Creek in the 1990s cut long sections of low-grade gold, including 55 meters averaging 0.72 g/t gold. More recent drilling cut three meters of 3.46 g/t gold.

The most recent program, completed by Cariboo Rose in 2011, consisted of extensive soil geochemical and magnetometer surveying with 5,589 soil samples collected, excavator trenching, and select induced polarization surveying.

Across the Yukon River and about 14 kilometers (nine miles) northeast of Coffee, Stakeholder Gold Corp. has nabbed the expertise of renowned prospector Shawn Ryan to investigate two promising gold prospects on its Ballarat property.

Thanks to a combination of savvy prospecting, quality soil sampling and modern geophysics, Ryan is responsible for the discovery of Coffee and a number of White Gold deposit and prospects.

"It's fun; it's a good game," the self-taught prospector told Mining News during a 2009 interview at his cabin on the outskirts of Dawson City. "What I try to do is use intuition and prove it with science."

Ryan has put that same intuition and focus into GroundTruth Exploration Inc., an innovative exploration company that is planning and executing the exploration at Ballarat.

This year's work at Ballarat includes refining previously identified drill targets at the Northwest zone and gaining a better understanding of the Eastern zone, a gold anomalous area that is particularly intriguing to Ryan.

GroundTruth is applying a number of new exploration technologies it has developed to the work at Ballarat and at other exploration projects in the White Gold District.

"We are going to use science and technology; and this will help us move ahead in this ... whole new era in the Dawson-White Gold District," Ryan said.

During an initial phase of 2016 exploration at Ballarat, GroundTruth further detailed both zones with soil sampling; bedrock interface sampling using the GT Probe, a track-mounted rig that is quicker and less expensive than trenching; geophysics; and detailed topographical imagery with a drone.

Encouraged by what the program identified in the Eastern zone, an area that lies near a proposed road to access the Coffee Gold project, a second phase of geophysical and GT Probe surveying was completed there.

Ballarat is located immediately southwest of Kinross Gold Corp.'s White Gold project, the site of the Ryan discovery that sparked an exploration rush to the district.

At the end of 2015, 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. This resource has remained unchanged in recent years.

In August, Arcus Development Group Inc. gained full ownership of four White Gold properties – Dan Man, Touleary, Green Gulch and Shamrock – previously held under a joint venture with Atac Resources Ltd.

Home of the Klondike

Some 20 million oz. of placer gold has been recovered from the streams around Dawson City, yet a significant hard-rock source of this alluvial aurum has yet to be revealed. The aptly named Klondike Gold Corp. continues to seek this elusive lode.

This year, the company carried out a C\$750,000 program that included around 50 shallow holes targeting quartz vein arrays with visible gold or significant gold values that outcrop from its Dominion and Lone Star properties that lie above the gold-rich streams in the Klondike.

In August, the company cut a deal to acquire an additional 223 square kilometers (55,000 acres) Klondike area mining claims from Gimlex Enterprises Ltd., a privately owned Dawson-area business that has been placer mining in the area since 1984.

"This acquisition consolidates ownership of the Klondike district into one contiguous district-spanning claim group for the first time," said Klondike Gold President and CEO Peter Tallman.

In addition to a large and prospective land package, the purchase included 24 years of exploration data on the property. Additionally, former Gimlex President Tara Christie joined the Klondike Gold board of directors.

"The opportunity to draw upon their multigenerational experience in the Klondike district will be a strategic asset to help guide the next phases of exploration," Tallman said.

Klondike said a comprehensive work program will be designed once the exploration data has been merged and compiled.

About 55 kilometers (34 miles) east of Dawson City, Golden Predator Mining Corp. is revisiting its plans to resume mining at Brewery Creek, a past-producing heap leach operation where more than 278,000 oz. of gold was produced from seven near-surface oxide deposits between 1996 and 2002.

A roughly 1,600-meter drill program completed this year focused at three pits –Golden, Lucky and Kokanee – where historical data indicates significant oxide gold mineralization remains unmined.

This drilling focused primarily on collecting metallurgical and engineering data needed to update and complete a mine design for permitting.

A preliminary economic assessment completed in 2014 details a heap-leach operation at Brewery Creek that would recover 372,000 ounces of gold over nine years. This plan includes mining 10.2 million metric tons of open pit material with an average grade of 1.35 g/t gold and reprocessing of 4.1 million metric tons of material from the old heap leach pad averaging 0.77 g/t.

Around Keno

While Dawson City is legendary for its placer gold, it is rich lodes of high-grade silver that put Keno City to the east on the map.

Alexco Resource Corp. plans to continue to build on this tradition with the resumption of mining at its Keno Hill Silver property, a 233.5-square-kilometer (57,700 acres) land package that blankets more than 35 historical mine sites.

The company began commercial production at the Bellekeno mine on the property in 2011 but temporarily suspended operations in 2013 due to low silver prices.

While mining has idled, the company has not.

This year, Alexco completed a roughly 14,000-meter surface drill program to expand upon high-grade silver at its Bermingham deposit, where one 2015 hole cut 4.98 meters (true width) averaging $7,462~{\rm g/t}$ silver.

This exploration and preliminary development work being car-



ried out at the future Flame & Moth Mine is positioning Alexco for resumed operations on higher silver prices.

"Clearly, we are encouraged by the continued strength of the silver markets and, pending results of our Bermingham drilling program we will be well-positioned to consider redevelopment options at Keno Hill," explained Alexco President and CEO Clynt Nauman.

About 30 kilometers (19 miles) northwest of Keno, Victoria Gold Corp. is closing in on the development of a mine at the Eagle Gold deposit on its Dublin Gulch property.

A feasibility study completed in 2012 envisions an open-pit mine and valley heap leach operation at Eagle Gold that 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 oz.) gold.

While this project is shovel ready, including all of the major permits needed for development, Victoria is continuing to seek

continued on page 50









Specialized Steel Solutions for the Mining & Recycling Industries

For more than 50 years, Astralloy Steel Products has been providing innovative and cost effective wear, impact and abrasion resistant steel solutions

- Specialized Plate
- Alloy Plate
- Round Alloy Bar



www.astralloy.com

Toll-free: 1.866.587.6970 Sales: 724.230.5100 sales@astralloy.com

Astralloy Steel Products is a wholly-owned subsidiary of Nucor Corporation, the largest producer of steel in the United States.

YUKON EXPLORATION continued from page 49

new sources of gold to expand the project.

This year, the company completed an extensive two-phase drill program at Olive-Shamrock, a pair of adjacent deposits about 2,500 meters northeast of Eagle Gold. The company said these deposits have the potential to enrich Eagle project economics through the addition of higher-grade ore, increased flexibility in mine planning and lowering capital intensity from shared infrastructure.

Reserves calculated for the Olive portion of these deposits have been incorporated into an updated feasibility study for Eagle Gold

Completed in September, this study envisions a 33,700-metrictons-per-day mine encompassing two open pits, Eagle and Olive, producing 190,000 ounces of gold annually over 10 years of mine

A second phase of delineation drilling at Olive-Shamrock began in August.

About 70 kilometers (45 miles) northeast of Dublin Gulch, Atac Resources Ltd. is considering a small but high-grade mine at Tiger, a deposit located at the western end of the company's roughly 185kilometer- (115 miles) long Rackla Gold property.

An updated preliminary economic assessment published in May estimates a seasonal hybrid heap-leach and agitated tank carbon-in-leach plant processing oxide ore from Tiger would produce roughly 302,300 oz. of gold over a six-year mine life from ore averaging 3.81 g/t gold.

Atac has applied for permits to build a 69-kilometer (43 miles) tote road to the Rau Trend and Tiger gold deposit.

"The future development of the Tiger deposit would bring critical infrastructure, including tote road access, to the Rackla Gold



2016 Annual Convention & Trade Show

Mining Alaska: The Gold Standard with a Silver Lining

November 6-12, 2016 Dena'ina Center Anchorage, Alaska

To see the full convention details and to register today visit: www.alaskaminers.org project," said Atac President and CEO Graham Downs.

Atac's 2016 exploration included additional soil sampling, trench and mapping coverage at Airstrip, a 10-square-kilometer (2,500 acres) gold anomaly located about 3,500 meters south of

In addition to work around Tiger, Atac continues to explore the Nadaleen trend, a 30-kilometer- (20 miles) long subset of Rackla where the first Carlin-style gold was discovered in the Yukon. Drilling in this region of the Rackla property targeted Orion, a zone discovered in 2015.

Downs described the 47.2 meters averaging 3.79 g/t gold encountered in the Orion discovery hole as "the most significant drill intersection to date within the 18-square-kilometer Anubis cluster of targets."

In addition to Anubis, Atac has defined five zones of Carlintype gold mineralization - Conrad, Osiris, Sunrise, Isis and Isis East – and more than 40 geochemical anomalies along the Nadaleen trend.

Cantex Mine Development Corp. carried out a small talus sampling and trenching program at North Rackla, an early-stage gold project immediately north of Rackla. The company followed up this work with a late season drill program.

About 75 kilometers south of the Rackla property, Goldstrike Resources Ltd. continues to explore Plateau South, a property that is gaining fame for the multiple zones of abundant visible gold that has been found there.

Bonanza, the latest such zone, was discovered while prospecting and mapping an area about 4,000 meters from Goldstack, one of the three primary gold zones along a 25-kilometer- (16 miles) trend at Plateau South.

Initial mapping of a 20-meter outcrop at the Bonanza zone has identified two distinct sets of veining containing coarse visible gold spanning the entire breadth of exposed quartz veins.

"The discovery of this new gold rich zone has significantly expanded the known extent of this new district-scale gold system," said Goldstrike Director Trevor Bremner.

The first hole of the 2016 drill program at Plateau, PSGS-16-01, cut 45.5 meters averaging 6.05 g/t gold in the Goldstack zone. The company said this hole contains the most abundant visible gold seen in drill core to date on the property.

Goldstrike's 2016 exploration at Plateau is part of a planned five-year program that is slated to include up to 20,000 meters of drilling in 200 holes and up to 100 trenches.

Southeast Yukon

Along the Cantung Mine Road in southeastern Yukon Territory, Golden Predator is defining a high-grade gold deposit on its 3 Aces project and is seeking other similar deposits across the 225-squarekilometer (55,600 acres) property.

The company got an early start to this work by collecting a 750ton bulk sample from the Sleeping Giant zone at 3 Aces in February and March.

Concentrates from processing of 87.8 dry tons of the bulk sample material resulted in the pouring of a doré bar containing 81.4 oz. of gold and 7.77 oz. of silver.

In August the company kicked off a C\$4 million second phase of exploration that included: soil sampling; structural mapping; geophysics; trenching; exploration drilling; additional bulk sampling; and installation of a bridge that connects Sleeping Giant to the Cantung road.

In addition to lowering costs with road access to the high-grade gold property, this work is designed to further outline the extent of the known mineralization while seeking other high-grade gold veins at 3 Aces.

Closing a C\$1.2 million financing and naming a new CEO in August, Banyan Gold Corp. has resumed exploration at its Hyland gold property, situated about 130 kilometers (80 miles) south of 3 Aces.

"We are pleased with the strong market response to fill our financing in time for Banyan to execute the 2016 field program at the Hyland project," explained Tara Christie, Banyan's new president and CEO.

While this far eastern section of the Yukon has its fair share of gold, the Selwyn basin in this region is better known for its zinc potential.

About 100 kilometers (60 miles) northwest of 3 Aces, Selwyn Chihong Mining Ltd., has slowed it plans for developing a world-class zinc mine at its Selwyn project.

The China-based company was previously targeting 2021 for the start of production, but early in 2016 said it is postponing these plans by at least a year.

The company attributed the delay to lower-than-expected zinc prices.

If put into operation at the scale anticipated, the mine proposed for Selwyn is expected to produce roughly 912,000 metric tons of zinc concentrate and 219,000 metric tons of lead concentrate per year.

South of White Gold

In southwestern Yukon, Rockhaven Resources Ltd. completed 8,422 of drilling aimed at areas that could expand and upgrade resources considered in a recent preliminary economic assessment for its Klaza gold-silver property.

The PEA envisions a 1,500-metric-tonper-day flotation-pressure oxidation-leach process plant producing 630,000 oz. gold, 11.4 million oz. silver, 52.46 million pounds zinc and 51.23 million lbs. lead over a 14year mine life.

Strategic Metals Ltd. investigated OOO, a silver-gold property about 50 kilometers (30 miles) northwest of Klaza.

Chip sample results from one hand dug trench at OOO retuned 570 g/t silver, 2.76 percent lead, 0.08 g/t gold over 6.4 meters; and 106 g/t silver, 0.84 percent lead and 0.03 g/t gold over 9.6 meters. Rock samples collected by prospectors elsewhere on the property have returned up to 6.54 g/t gold.

Strategic also drilled three properties in southwestern Yukon - Hartless Joe, a goldsilver property located 25 kilometers (16 miles) northeast of Whitehorse, Mars property, located 80 kilometers (50 miles) north of Hartless Joe; and Hopper, a gold-rich

skarn target about mid-way between Whitehorse and Klaza.

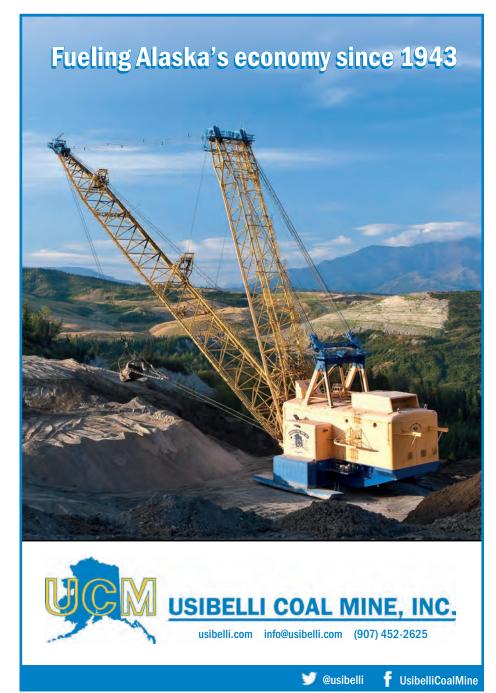
Wellgreen Platinum Ltd. continues work aimed at optimizing its namesake project just south of the Alaska Highway.

An updated preliminary economic assessment prepared for the Wellgreen project in 2015 outlines plans to start off with a 25,000-metric-tons-per-day operation for the first five years and then scaling up to a 50,000/tpd operation for another 20 years.

This mine is anticipated to average 89,518 ounces of platinum; 103,471 oz. palladium; 15,890 oz. gold; 73.1 million pounds nickel; 55.3 million lb. copper; and 3.4 million lb. cobalt annually for the first 16 years of operation.

This summer the company completed a 2,500-meter drill program targeting areas with the potential to add to the overall resource at Wellgreen; upgrade inferred resources; expand a starter pit considered in the PEA; and test continuity of high-grade zones previously encountered.

"The metallurgical test work initiated earlier this year and the 2016 field program will continue to de-risk the project in order to efficiently realize the full potential of this unique asset," explained Wellgreen President and CEO Diane Garrett.





Goldcorp grabs a robust Coffee

Major buys Kaminak; eyes feasible mine, larger White Gold potential

By SHANE LASLEY
Mining News

When Kaminak Gold Corp. cut a deal with Shawn Ryan, an enterprising prospector in Yukon Territory, to option the Coffee gold project in 2009, the exploration company had a hunch it nabbed the best property in the emerging White Gold district. After six years of diligent and well-executed exploration, the junior's intuition may have been confirmed by Goldcorp Inc.'s willingness to cut a half-billion-dollar all-shares deal to get its hands on the exciting Yukon Territory gold property.

"This transaction is the culmination of years of hard work by our technical and management teams and is a strong value proposition to all our shareholders," commented Kaminak Chairman John Robins.

Goldcorp's buyout of Kaminak came on the heels of a January feasibility study that details an open-pit, heap-leach gold operation at Coffee producing 184,000 ounces of gold annually over a 10-year mine life at all-in sustaining costs of US\$550/oz. The relatively low-cost operation is expected to repay the C\$317

million of capital needed to develop the mine in just two years. Located in a mining-friendly Canadian territory, Coffee fit the

bill for Goldcorp.

"Coffee is located within a politically stable jurisdiction and provides us with an opportunity to add high-quality ounces to our development pipeline at low all-in sustaining costs," said Goldcorp President and CEO David Garofalo. "With our strong financial position and mine construction expertise, we see significant potential to deliver value for all partners and stakeholders."

The significant gold potential across the land package Gold-corp inherited with the purchase of the Coffee, along with the wider prospectivity of Yukon's famed White Gold district, sweetens the pot for the gold producer.

"With the acquisition of Kaminak and its Coffee project, Goldcorp has inherited a very prospective land package with over 60,000 hectares (150,000 acres) that demonstrates potential for near mine discoveries with mineralization remaining open along strike and at depth and the potential for the discovery of a major new mineral system," Garofalo added.

Robust Coffee

Ryan, who rose to mining fame on the discovery of the nearby White Gold property that triggered an exploration rush to Yukon, always thought that Coffee, another of his discoveries, could one day be the bigger find.

"Coffee is going to be White's twin or big brother," the selftaught prospector told Mining News in 2009. "It's the same size system ... but the intensity of the anomaly is 30 percent (soil) to 40 percent (rocks) higher."

Following an initial season of sampling and trenching, Kaminak drilled the first-ever holes in Coffee in 2010 - and the results lived up to Ryan's expectations.

CFD-001, the maiden hole at Coffee, cut 15.5 meters averaging 17.07 grams per metric gold starting at just 15 meters down. The very next hole cut five significant gold-bearing intersections: 11.95 meters of 3.95 g/t gold; five meters of 4.89 g/t gold; 14 meters of 2.11 g/t gold; 2.75 meters of 4.31 g/t gold; and 4.1 meters of 2.96 g/t gold.

From these first two holes, Kaminak proceeded to drill 16 separate and distinct gold discoveries outlining 63.7 million metric tons of indicated resources averaging 1.45 g/t (2.97 million oz.) of gold and 52.4 million metric tons of inferred resources averaging 1.31 g/t (2.1 million oz.) gold.

The roughly 3 million oz. of gold in the indicated resource formed the basis of the feasibility study that detailed an economically robust Coffee gold mine, even at the relatively low gold price going into 2016.

"This feasibility study firmly establishes the Coffee project as one of the world's best undeveloped gold projects by value and margin that works in the current gold-price environment," said Eira Thomas, who was president and CEO of Kaminak during negotiations with Goldcorp. "The Coffee project further benefits from being a simple, open pit, heap-leach mining opportunity, situated near infrastructure that delivers low all-in sustaining costs and pays back capital in under two years."

The relatively low capital costs, healthy economic returns and high potential offered by Coffee lured Goldcorp to the Yukon.

Adding to Coffee's value was the good relationship Kaminak has built with Yukoners during the past seven years.

"We are very excited about the Coffee project the Kaminak team has done an excellent job in consulting, engaging with the First Nations and the Yukon government. We look forward to our future engagement with the First Nations and different stakeholders in creating what we believe will be a long and lasting partnership," the Goldcorp's Garofalo told shareholders, including those brought onboard through the all-shares buyout of Kaminak.

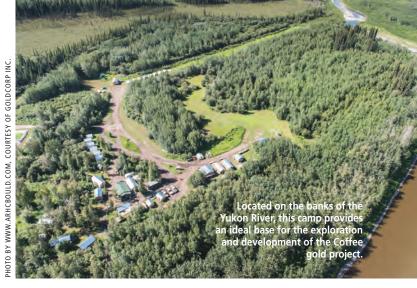
Beyond the mine

Accelerating an already robust exploration and development plan laid out by Kaminak before the acquisition, Goldcorp is wasting no time advancing its newly acquired Yukon gold asset.

A couple weeks before the May announcement of its pending acquisition by Goldcorp, Kaminak unveiled a C\$29 million budget for advancing Coffee towards development. Nearly half (C\$13.9 million) was allocated to mine permitting; another C\$6.2 million to predevelopment and advanced engineering; and C\$5 million was earmarked for exploration.

At the time, Kaminak anticipated it could gather all permits required to begin construction at Coffee somewhere around mid-2018. Anticipating a roughly 18-month construction period, the company was targeting first gold from the project by the end 2019.

The company, meanwhile, set out to explore significant expan-



Goldcorp Inc.



G:TSX / GG:NYSE 🚮



CHAIRMAN: lan Telfer PRESIDENT AND CEO: David Garofalo **EXECUTIVE VP, CORPORATE DEVELOPMENT: Russell Ball**

PROPERTIES WITH MINERAL(S) EXPLORED: Coffee, Yukon Territory: Gold



CASH AND SHORT-TERM DEPOSITS: US\$328 million (June 30, 2016) WORKING CAPITAL: US\$504 million (June 30, 2016) MARKET CAPITALIZATION: US\$14.13 billion (Sept. 28, 2016)

Park Place, Suite 3400-666 Burrard St. • Vancouver, B.C. V6C 2X8 Tel: 604-696-3000 • www.goldcorp.com

sion potential at Coffee, both proximal to the 2.16 million oz. of gold reserves set to be mined and across the rest of the property.

Priority targets for the initial phase of exploration that began early in June included expansion drilling at Supremo T3 and Latte, two mineralized structures that jointly contribute gold reserves in the current mine plan; systematic testing of early stage drill discoveries and over gold-in-soil anomalies proximal to the proposed Coffee Gold mine; and the testing of priority outlying gold-in-soil anomalies with trenching or drilling.

Goldcorp is picking up where Kaminak left off.

"For the balance of 2016, we expect to invest approximately US\$15 million with a focus on exploration, permitting, infrastructure upgrades and basic engineering," Garofalo told investors and analysts during a July 27 presentation of Goldcorp's second-quarter results.

"The drilling program is expected to follow up on targets from peripheral to existing resources and reserves, test potential gaps in the resource models and the numerous near surface oxide mineralization targets which have been identified with gold and silver anomalies while also investigating the potential for additional highgrade sulfide mineralization at depth," the Goldcorp CEO added.

The gold miner's investigation in Yukon has already spilled beyond Coffee.

In June, the new Coffee owner bought 10.88 million shares of Independence Gold Corp., a junior explorer with several gold properties in the Yukon, including a promising project that wraps around the western edge of Coffee.

The C\$1.96 million investment gives Goldcorp a 19.99 percent stake in the junior and a foothold in any discoveries made a few short miles south and west of the coming Coffee gold mine.

EXPLORERS AT A GLANC

YUKON TERRITORY / BRITISH COLUMBIA



Independence Gold Corp.

TSX-V: IGO 📶



PRESIDENT AND CEO: Randy Turner VP, EXPLORATION: David Pawliuk **SENIOR GEOLOGIST: David Gale**



Independence Gold Corp. is exploring a growing portfolio of gold projects in Yukon Territory and British Columbia. Boulevard, a gold property that lies immediately south and west of Goldcorp Inc.'s recently acquired Coffee gold mine project, has been a primary exploration focus in recent years. Goldcorp, which acquired Coffee through a C\$500-million buy-out of Kaminak Gold Corp., also acguired a 19.99 percent interest in Independence Gold buy purchasing 10.88 million shares of that company through a private placement in June. The C\$1.96 million raised in this financing primarily went towards exploration at Boulevard and Rosebute, two of the nine properties in the company's Yukon portfolio. In July, Independence launched a 2,946-meter reverse circulation drill program that tested four targets at Boulevard - Denali, Sunset, Sunrise and Kahiltna. Denali is a 1,200-meter-long multi-element geochemical anomaly located about 12 kilometers (seven miles) west of the Coffee gold deposit. This year's drilling at Denali followed up on a hole drilled in 2015 that cut 4.25 grams per metric ton gold across 6.1 meters. In August, Independence Gold announced the discovery of Kahiltna, a 1,200-meter-long gold-arsenic-antimony soil anomaly located 750 meters north of and subparallel to Denali. Sunrise-Sunset, a 2,400meter-long multi-element soil anomaly located about nine kilometers (six miles) south of the Coffee deposit, also was targeted by drilling. Hole BV15-31, drilled at Sunrise last year, cut 1.52 meters averaging 8.8 g/t gold and 29 meters of 3.21 g/t gold. The 2016 drilling at the Sunrise-Sunset target was oriented to the southeast to test the relationship between southwest striking quartz veins and gold min-

Following its program at Boulevard, Independence completed 12 rotary air blast drill holes at the Hudbay zone on the Rosebute property. Taku Gold Corp., which optioned Rosebute to Independence in May, intersected 6.2 g/t gold over five meters; 1.2 g/t gold over 10 meters; and 1.5 g/t gold over 20 meters in trenches dug at the Hudbay zone in 2012. Ground magnetic surveys completed this year identified a network of faults cutting perpendicular to three north-trending gold-in-soil anomalies at Hudbay. The company said this fault-soil anomaly layout is similar to Kinross Gold's Golden Saddle deposit 37 kilometers (23 miles) to the south.

Independence also continued early stage exploration at Moosehorn, a property situated roughly 130 kilometers (80 miles) south of Dawson City, and five kilometers (three miles) east of the Yukon-Alaska border. Moosehorn hosts a gold-arsenic soil anomaly located in an area that drains into multiple placer gold creeks. Independence completed two more soil sampling grids, which extended the gold anomaly to about 1,400 meters in length. The company also encountered subsurface gold in three trenches, 527 meters, dug at the prop-

Independence also owns the 3Ts gold-silver property about 20 kilometers (12.5 miles) south of New Gold Inc.'s Blackwater project in central British Columbia.

CASH AND SHORT-TERM DEPOSITS: C\$6.8 million (June 30, 2016) WORKING CAPITAL: C\$6.7 million (June 30, 2016) MARKET CAPITALIZATION: C\$15 million (Sept. 28, 2016)

Suite 1020 - 625 Howe St. • Vancouver, BC, V6C 2T6 Tel: 604-687-3959 • www.ingold.ca

YUKON TERRITORY



Stakeholder Gold Corp.



PRESIDENT AND CEO: Christopher Berlet VP, EXPLORATION: John Nebocat TECHNICAL MANAGER: Shawn Ryan

Stakeholder Gold Corp. has nabbed the expertise of renowned Yukon prospector Shawn Ryan to explore the potential of the Ballarat gold project in the Yukon Territory. Ryan, who discovered Kinross Gold's White Gold project and Goldcorp's Coffee project, typically works only on his own properties. However, he made an exception for Ballarat, which lies across the Yukon River from Coffee and just southeast of White Gold. Planned and executed by GroundTruth Exploration Inc., an innovative exploration company founded by Ryan, an initial phase of the 2016 program at Ballarat started with a drone-generated, high-resolution topographic survey of the entire property. The drone survey was followed up with detailed geological mapping; induced polarization - DC resistivity surveys at the two primary gold zones, Northwest and Eastern; testing of the Northwest zone with GroundTruth's exclusive GT Probe, a

track-mounted rig that drives a probe to collect a sample of the soil-bedrock interface; and conventional soil sampling at the Eastern zone. The Eastern zone lies within 500 meters of a proposed road that would link the Coffee Gold project to Yukon's road sys-

The Eastern zone lies within 500 meters of a proposed road that would link the Coffee Gold project to Yukon's road system near Dawson City to the north.

tem near Dawson City to the north. Stakeholder Vice President of Exploration John Nebocat said, "This could add significant upside potential and provide meaningful logistical advantages should an economic deposit be discovered here." Though Eastern was the least advanced of the two zones at Ballarat, it was the most intriguing to Ryan. Soil sampling during the phase-1 program expanded Eastern from a series of interesting ridge samples to a prospect measuring more than 700 meters by 300 meters. Two float rock samples collected from Eastern returned 0.759 g/t and 0.587 g/t gold. The company followed up with geophysics and GT Probe testing of Eastern during the phase-two 2016 program. The phase-one program at Northwest included soil sampling that confirmed the continuity of gold-in-soil anomalies already identified and extended the zone to the northeast. Stakeholder drilled five holes at the Northwest zone in 2012. Results from the phase-one program, however, indicate that the main target lies to the north and northwest of that drilling. Northwest and Eastern were both targets of GT RAB drilling, a trackmounted rig similar to the GT Probe that carries a rotary air blast

Stakeholder also holds 10 claims about five kilometers (three miles) east of the Coffee gold deposit and enclosed by Goldcorp's claims.

CASH AND SHORT-TERM DEPOSITS: C\$446,000 (June 30, 2016) WORKING CAPITAL: C\$215,000 (June 30, 2016; closed a C\$1.2 million financing on Sept. 2)

MARKET CAPITALIZATION: C\$11.7 million (Sept. 28, 2016)

1612 – 44 Victoria Street Toronto, ON M5C 1Y2 Tel: 416-525-6869 www.stakeholder.com

YUKON TERRITORY





TSX-V: ATC MI



PRESIDENT AND CEO: Graham Downs VP, EXPLORATION: Julia Lane **CHIEF OPERATING OFFICER:** Ian Talbot

Atac Resources Ltd.'s 2016 program included work at both the Rau and Nadaleen trends on its Rackla gold project, an extensive land package that stretches roughly 185 kilometers (114 miles) eastwest across central Yukon Territory. At Rau, a 20kilometer-long (12.5 miles) trend towards the western end of the Rackla project, Atac is focused on potential development of the Tiger oxide deposit and exploring similar targets in the area. In May, the company reported an updated preliminary economic assessment for Tiger that investigates the use of an agitated tank carbon-in-pulp leaching process to recover gold from the highly oxidized material found there. The PEA estimates a mine at Tiger would produce roughly 302,300 ounces of gold in a six-year mine life from ore averaging 3.81 grams-per-metric-ton gold. Estimated pre-produc-



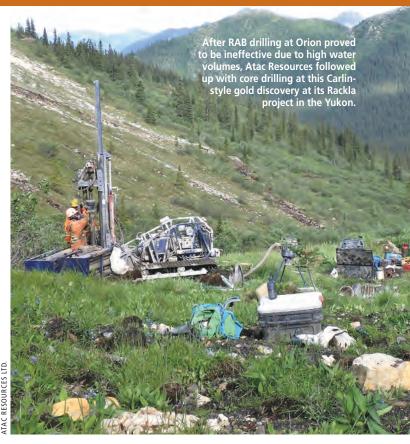
GRAHAM DOWNS



tion capital costs for this operation are C\$109.4 million and life-ofmine sustaining capital costs are expected to be C\$8.3 million. Atac has applied for permits to build a 63-kilometer (43 miles) road to Tiger, which would branch off the Hanson Lake Road west of Keno City. Atac kicked off its 2016 exploration at the Rau trend with geologic mapping, test pitting, trenching, soil sampling and prospecting at Airstrip, a large gold-in-soil anomaly discovered in 2015. Located about 4,000 meters south of Tiger, the Airstrip anomaly covers some 11.5 square kilometers (2,840 acres). The initial evaluation program also included seven shallow rotary air blast drill holes at two priority targets at Airstrip. Near-surface gold mineralization was encountered at both of these sites, including one 13.7-meter intercept of 1.43 grams per metric ton gold in hole ASR-16-006. Atac said the first-pass drill results are very encouraging at Airstrip and warrant further drilling. The company also completed detailed prospecting at a previously underexplored gold-in-soil anomaly situated 125 meters from the southeastern limit of the proposed Tiger deposit pit. Ten out of 21 oxide float composite grab samples collected over a 150-meterlong area upslope of the east end of the Tiger deposit returned values greater than one g/t gold, with the most notable sample returning 18.3 g/t. "The recently identified oxide mineralization is a major development as this new area has potential to add oxide gold ounces directly adjacent to the eastern end of the proposed Tiger deposit open-pit," said Atac President and CEO Graham Downs.

At the Nadaleen trend, located about 90 kilometers (55 miles) east of Tiger, Atac followed up on the Orion target, where the 2015 discovery hole cut 47.24 meters of 3.79 g/t gold. Similar RAB drilling this year was not. "RAB drilling in 2015 proved to be an effective tool for quickly and cost-effectively localizing the source of gold mineralization in bedrock. However, the volume of groundwater encountered in the 2016 RAB drilling was unexpected and the phase-1 RAB drill results are not considered to be either accurate or reliable," explained Atac Vice President of Exploration Julia Lane. With too much water for the RAB drill, the company used a diamond drill to finish up the 2016 program at Orion. The first hole of this program, a deeper twin to the discovery hole, cut 61.29 meters averaging 2.75

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) Ltd., a geological consulting firm with extensive knowledge and exploration expertise in the Yukon Territory and northern British Columbia.

CASH AND SHORT-TERM DEPOSITS: C\$17 million (June 30, 2016) WORKING CAPITAL: C\$17.5 million (June 30, 2016) MARKET CAPITALIZATION: C\$72.5 million (Sept. 28, 2016)

Suite 1016 - 510 West Hastings St. Vancouver, BC, V6B 1L8 Tel: 604-687-2522 www.atacresources.com

PROVIDING GENERAL CONTRACTOR SERVICES TO THE MINING INDUSTRY





Guest Column

A land of opportunities

Profitable mining projects are still being developed through the commodity downturn in Nunavut

By MIN. MONICA ELL-KANAYUK

For Mining Explorers

Endowed with some of the largest undeveloped mineral belts in the world, investment in public geoscience has shown the potential of Nunavut. The 2 million square kilometers (772,000 square miles) of the territory is geologically diverse and offers the potential for many commodities, including gold, diamonds, uranium, iron, base metals, nickel and platinum, making it an attractive destina-

tion for exploration. Although many new discoveries are yet to be made, existing mineral discoveries are costly to develop and launching exploration campaigns in the jurisdiction requires adequate financial backing.

As a high-cost jurisdiction to operate in, one avenue where new government programs can assist industry is with investments in infrastructure. Partnerships with regional Inuit associations, communities, the private sector and the federal



MONICA ELL-KANAYUK

government are beginning to show results. Scheduled to be in service in 2017, Iqaluit will be home to a new C\$300 million airport to support growing air traffic carrying passengers and cargo that arrive in the capital. A C\$85 million marine port and sealift facility for Iqaluit is receiving support from all levels of government and could be in operation by 2020, which would significantly lower costs and risk of new project developments in the region. A cooperation agreement for the Grays Bay Road and Port project was signed this

year between the Government of Nunavut and the Kitikmeot Inuit Association with a goal of building a new deep water port on the north coast at Grays Bay, and a 325-kilometer all-season road to the NWT-Nunavut border. This road would link with the existing Contwoyto-to-Yellowknife winter road, which would connect the Kitikmeot region to the national highway system. This transportation corridor would enable base metal mining projects to become a reality once infrastructure is in reach to transport large amounts of construction materials, equipment and supplies as well as to export mineral concentrates.

For 2015, about C\$215 million in expenditures for exploration and deposit appraisals occurred in Nunavut and preliminary estimates are for C\$567 million of mineral production from the territory, dominated by gold (Natural Resources Canada data).

MMG Resources Inc. continues to examine its base metal properties at Izok Lake and High Lake. Indicated resources at Izok are 14.4 million metric tons of ore grading 12.9 percent zinc and 2.5 percent copper and at High Lake, which lies close to the proposed Grays Bay Road, 17.2 million metric tons grading 3.4 percent zinc and 2.3 percent copper is indicated from three mineralized zones.

The Government of Nunavut continues to work cooperatively with various regulatory agencies to ensure that projects receive the attention needed as they work their way through the permitting process. Currently, Agnico Eagle Mines Ltd. received approval for expanding the size of the Vault Pit at the Meadowbank mine, enabling continued gold production until 2018. More than 2 million

ounces of gold have been produced from Meadowbank since 2010 and close to 35 percent of the company's work force comes from Baker Lake and neighboring communities. The company was permitted this year for construction of a 60-kilometer (37 miles) all-season road from Meadowbank to its new Amaruq gold project where an inferred resource of 3.7 million oz. of gold has been identified. Gold continues to dominate the exploration and mineral development in the territory. Sabina Gold and Silver Corp. is seeking approval for its Back River gold project which contains 5.3 million oz. of measured and indicated resources and is currently in the permitting process. Auryn Resources is exploring for gold in the Committee Bay Belt following the discovery of several important occurrences by previous operators, including more than 1.6 million oz. of inferred and indicated resources at Three Bluffs. Nordgold is exploring the Pistol Bay trend near Whale Cove for gold as well.

Chidliak on southern Baffin Island is the most advanced diamond project in Nunavut. Peregrine Diamonds Ltd. released a favorable preliminary economic assessment for the first phase of development at Chidliak. It is projected that 11.6 million carats of diamonds could be recovered over a 10-vear mine life from two kimberlite deposits on the property. In addition to Peregrine's project, exploration for diamonds in the territory is experiencing a revival. North Arrow Minerals Inc. and Dunnedin Ventures Inc. are examining kimberlite prospects in the Kivalliq region this year, and Crystal Exploration Inc. is exploring in the Kitikmeot region.

Baffinland Iron Mines Corp. commenced operations on northern Baffin Island in September 2014. It is the only iron mine and bulk commodity producer in the territory. The company is mining from Deposit No. 1 at Mary River which contains proven reserves of 160 million metric tons of highgrade ore. About 4 million metric tons per year are anticipated to be produced during the early revenue phase. Ore is stockpiled at Milne Inlet and the first open-water shipment of ore by bulk carrier to Germany took place in August 2015. Regular shipments of iron ore have continued in 2016. In February, Baffinland applied to regulators for allowing additional ore shipments and expansion of the port facilities under a phase 2 proposal which would see a total of 12 million metric tons per year leaving Milne Inlet.

Following a successful application and review process, Agnico Eagle received a

project certificate for the Meliadine gold project near Rankin Inlet. Mine development however, will see a moderate delay with a new potential start-up date currently expected in 2020. Where development is on track, TMAC Resources received delivery at Hope Bay of equipment and machinery for its ore processing plant in August. At present, the Hope Bay deposits contain 3.2 million ounces of recoverable gold.

Construction of facilities at the mine complex is nearing completion, and the company anticipates entering commercial gold production from its underground Doris North deposit in early 2017. This will raise

the number of operating mines to three, one in each region of Nunavut.

The mining industry brings employment and career opportunities for residents of Nunavut and provides much-needed economic benefits to families where the cost of living is high. Compared to other parts of Canada and the globe, grades of new gold, diamond and uranium discoveries are among the highest in the world. With these exploration and development successes, the outlook for Nunavut is promising.

The Hon. Monica Ell-Kanayuk is minister of Economic Development and Transportation for the Government of Nunavut.



Inuit-owned and highly experienced in delivering on multiple fronts:

CONSTRUCTION AND MINING SERVICES

- All-Weather Roads & Runways
- Contract Mining
- Dams & Frozen Core Dams
- Earthworks & Site Development
- Exploration Support

- Ice Roads & Runways
- Large Diameter Drilling
- Mine Reclamation -Care & Maintenance
- Remote Infrastructure Planning
- Site Services & Crushing

nunalogistics.com

LEADING PRODUCTS

- Industrial Lighting
- Concrete Cloth
- Mining Release Agent
- Portable Flooring Systems

nunainnovations.com

TRAINING TECHNOLOGIES

- Program Development
- Contract Training for: Heavy Equipment -Field & Simulator



Nunavut Exploration 2016

Working ahead of the curve

Large programs by major miners spur Nunavut's 2016 exploration season

By SHANE LASLEY
Mining News

unavut seems to be ahead of the curve when it comes to recovering from the global downturn in mineral exploration spending. An estimated C\$202.5 million was invested in unlocking this Canadian territory's mineral potential in 2015. This 28 percent increase over the C\$158 million invested in 2014 came at a time when most jurisdictions around the world were continuing a four-year trend of sharp drops in mineral exploration.

While early estimates have Nunavut giving up some ground in 2016, a handful of big programs will help it top Canadian North destinations for mining explorers in terms of dollars spent.

"Among the three territories, Nunavut is expected to see the most exploration spending, the bulk of which will be done by

senior companies," The Conference Board of Canada wrote in its summer report on the territories.

Nearly gold mines

With their eyes set on developing new gold mines, individual programs by TMAC Resources Inc. and Agnico Eagle Mines Ltd. combined for more than C\$100 million of exploration spending in Nunavut during 2016.

TMAC Resources is on the final leg of developing a mine at its Hope Bay gold project in the Kitikmeot region of western Nunavut.

"We remain on track and on budget with our progress to advance the Hope Bay Project towards commercial production in early 2017," TMAC CEO Catharine Farrow told shareholders in August.

Oftentimes, a project on its last push toward production will

set aside exploration until operations are established. This, however, is not the case for TMAC and the Hope Bay Mine project.

In July, this soon-to-be gold producer announced a C\$56.5 million budget for an 18-month exploration and development program at Doris BTD (below the dyke), a deeper zone of high-grade gold adjacent to where mining has begun at Hope Bay.

Highlights from early 2016 drilling at Doris BTD include: 17.7 meters of 35 g/t gold in hole TM50003; 2.6 meters of 25.4 g/t gold in hole TM50007; 5.3 meters of 50.6 g/t gold in hole TM50010; and two meters of 97.7 g/t gold in TM50011.

"Management believes these results could significantly expand the current five-year mine life at the Doris mine and dramatically affect global reserves ... resources and annual gold production at Hope Bay," said Farrow.

Hope Bay currently hosts 14.19 million metric tons of proven and probable reserves averaging 7.7 g/t (3.5 million oz.) gold. Most of this gold (2.6 million oz.) is located in the Doris and Madrid deposits at the northern end of the Hope Bay property, with the balance found at Boston, a deposit about 40 kilometers (25 miles) to the south.

According to a pre-feasibility study completed in 2015, the Hope Bay mine is expected to produce 3.2 million ounces of gold over a 20-year mine life.

While TMAC geared up for initial production, Sabina Gold and Silver Corp. suffered a setback in its quest to develop a mine at Back River, a gold project about 125 kilometers (80 miles) south of Hope Bay.

After completing two feasibility studies for the Back River project in 2015 – one for a 6,000-metric-tons-per-day mill and a second that investigated starting with a less capital intensive 3,000-metric-tons-per-day operation – Sabina submitted an environmental impact statement for the financially robust but less capital-intensive project to the Nunavut Impact Review Board late in 2015.

While waiting on the NIRB determination, the company carried out a spring exploration program that tested three targets at Goose – Convergence, Kogoyok and Hivogani – one of several properties that comprise the larger Back River proj-

While all of the new gold zones were showing potential as sources of additional gold in the area of deposits slated for development, an NIRB recommendation With their eyes set on developing new gold mines, individual programs by TMAC Resources Inc. and Agnico Eagle Mines Ltd. combined for more than C\$100 million of explorations spending in Nunavut during 2016.

against advancing Back River to permitting dealt a blow to Sabina's plans.

In its report to the Nunavut Minister of Indigenous and Northern Affairs, the Review Board indicated that the Back River proposal could be reconsidered once uncertainties about effects the project might have on caribou and climate change were addressed.

Sabina contends that the NIRB findings are not consistent with the evidence provided and do not consider the local support for developing a mine at Back River. As such, the company believes there are strong grounds for the minister to reject the Review Board's recommendation and refer it back to the NIRB to consider terms and conditions for a project certificate.

As TMAC and Sabina worked to advance new mines in the Kitikmeot region,

Agnico Eagle invested heavily into defining and expanding deposits that will provide additional feedstock for its mill at the Meadowbank gold mine in the Kivalliq region of southeastern Nunavut.

This year, Agnico is carrying out more than 125,000 meters of drilling at Amaruq, a satellite gold project about 50 kilometers (31 miles) northwest of Meadowbank.

Going into 2016, Amaruq had 16.9 million metric tons of inferred resources averaging 6.05 g/t (3.3 million ounces) gold. About 89 percent of this resource is found at Whale Tail, a deposit that is currently seen as an initial source of Amaruq ore to be trucked to Meadowbank, and the balance is hosted in the IVR and Mammoth 1 zones.

By the end of June, Agnico had completed 77,517 meters of drilling in 338 holes at Amaruq this year.

Nearly half of the phase 1 drilling for 2016 targets zones at the IVR deposit. Results have encouraged Agnico to consider the V zones at IVR – a series of parallel quartz vein structures immediately north of Whale Tail – to be a potential second source of open-pit ore at Amaruq.

Most of the balance of the phase 1

continued on page 61



ENVIRONMENT, HEALTH & SAFETY SERVICES FOR THE MINING INDUSTRY

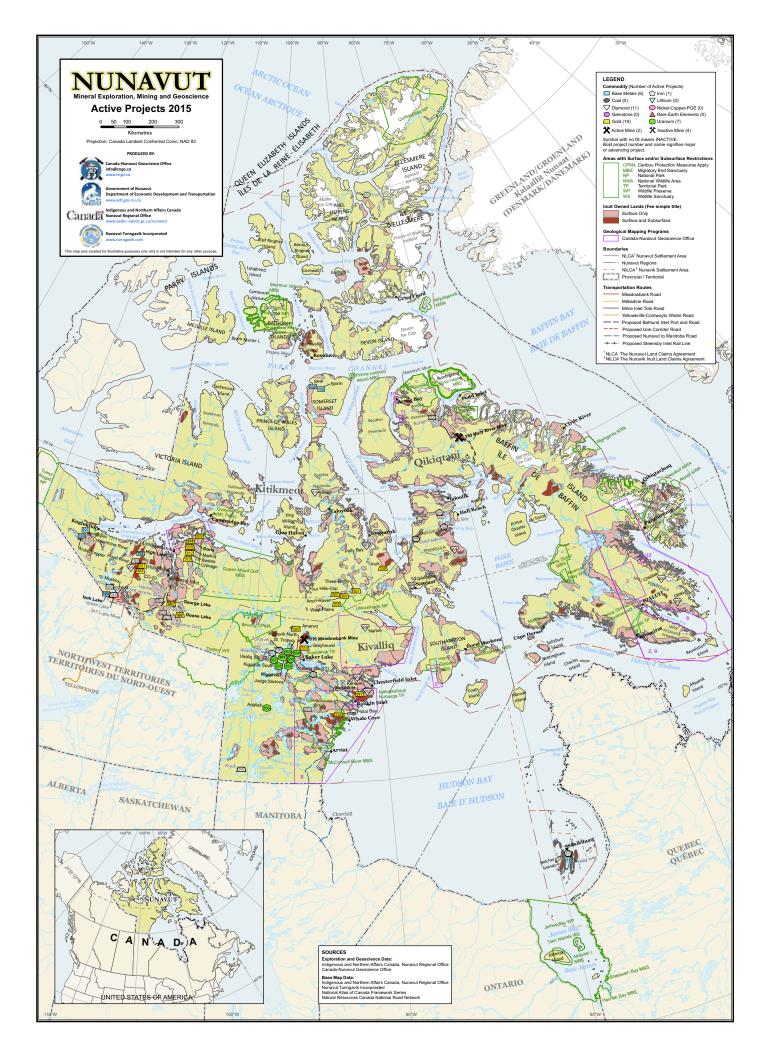
With expertise in Environmental, Geochemical, Industrial, Mineralogical and Metallurgical services, SGS is able to provide the most comprehensive offering for minesite investigations.

NA.ENVIRONMENTAL@SGS.COM WWW.SGS.COM/ALASKA

SGS IS THE WORLD'S LEADING INSPECTION, VERIFICATION, TESTING AND CERTIFICATION COMPANY.

WHEN YOU NEED TO BE SURE





NUNAVUT EXPLORATION continued from page 59

drilling targeted Whale Tail and zones immediately adjacent to the deposit.

Expanding Whale Tail and determining whether the V zones could become a second source of ore at Amaruq were the primary goals of a 50,000-meter second phase of 2016 drilling at

Agnico also began construction of a 62-kilometer (38 miles) road linking Amaruq to Meadowbank. The company was issued permits to begin this important haul route in March and expects to have it completed in 2017.

The company, meanwhile, has applied for permits to develop an exploration ramp and potentially collect a bulk sample at Whale Tail as well as submitted applications for permits needed for commercial production at the satellite deposit.

"We would expect to receive the permit in about two years' time, which would allow us to start production at Amaruq and start shipping to Meadowbank in 2019," Agnico President and CEO Sean Boyd said in August.

Agnico also continued to invest in exploration at Aura Silver Resources Inc.'s Greyhound property some 35 kilometers (22) miles) south of Meadowbank.

This year's program included mapping, prospecting and ground magnetic surveys.

At Meliadine, a gold project about 25 kilometers (15 miles) from the town of Rankin Inlet, Agnico advanced roughly 3,700 meters of underground development in 2016.

A technical study completed at the end of 2014 considers a mine for Meliadine that would produce roughly 350,000 oz. per year gold, based on extracting 1.39 million metric tons of proven and probable reserves averaging 7.44 g/t (3.3 million oz.) gold contained in the project's Tiriganiaq and Wesmeg deposits.

Boyd said management plans to present the board of directors "with recommendations on the entire Nunavut platform including Meliadine and Amaruq" early in 2017.

Earlier stage gold

In addition to Hope Bay, Back River and Amarug, several earlier stage gold projects in Nunavut were targeted by mineral explorers this year.

About 180 kilometers (110 miles) northeast of the Meadowbank Mine, Auryn Resources Inc. continued to drill new gold discoveries identified at Committee Bay, a gold property that now blankets more than 380,000 hectares (939,000 acres) of the Committee Bay Greenstone Belt.

"The Committee Bay project represents one of the largest, high-grade gold endowed greenstone belts in the world with several preliminary gold discoveries to date," touted Auryn President and CEO Shawn Wallace.

Three Bluffs, the most advanced of the targets at Committee Bay, hosts 4.32 million metric tons of indicated resource averaging 4.91 g/t (683,000 oz.) gold; and 5.52 million metric tons of inferred resource averaging 5.43 g/t (965,000 oz.) gold.

Auryn, however, is focusing its exploration on understanding the larger potential of its expansive property.

"Our approach, in combination with the belt-wide reconnaissance exploration will be to put Auyrn in a solid position for the potential discovery of multiple high-grade gold deposits," explained Auryn Chief Geologist Michael Henrichsen.

Following up on these targets, the company completed 10,000 meters of drilling at Anuri and West Plains, both at the south-



Auryn Resources completed roughly 10,000 meters of rotary air blast drilling focused on the Anuri and West Plain targets, both located towards the southwest end of its enormous Committee Bay gold property in Nunavut.

western end of the property.

During a spring program, Auryn collected airborne geophysical data at Anuri, a prospect that lies about midway along Auryn's roughly 280-kilometer (175 miles) land package at Committee Bay. The company said the information from these magnetic, electro-magnetic surveys, coupled with drone imagery, and geochemical datasets has identified high-priority drill targets at Anuri.

Some 80 kilometers (50 miles) south of Agnico Eagle's Meliadine mine project, Nordgold is exploring similar gold mineralization at Pistol Bay.

Nordgold – a Netherlands-based gold producer – has been investing in Northquest Ltd.'s exploration of this 861-square-kilometer (332 square miles) property that blankets a trend of gold occurrences that extends 90 kilometers (55 miles) inland from Hudson Bay.

A maiden resource published in April outlines 7.79 million metric tons of inferred resource averaging 2.95 g/t (739,000 oz.) gold for Vickers, the most advanced deposit at Pistol Bay.

Following the completion of the resource estimate and technical report, Nordgold, which already owned more than half of Northquest's outstanding shares, offered to buy out the remaining shares of the Toronto-based explorer.

As of August, Nordgold owned roughly 97.6 percent of Northquest.

Howizter, a priority outlying target identified in the Pistol Bay technical report, was a priority exploration target for 2016.

Based on the results of sampling in 2015, it is now believed that Howitzer could be a larger and higher grade zone than Vickers.

Silver Range Resources Ltd., a company that transitioned its business model from exploring silver-zinc deposits in Yukon Territory to a project generator seeking gold, acquired a number of properties in Nunavut this year.

In July, Silver Range announced a deal with the privately held Panarc Resources to acquire seven gold properties, including four in Nunavut. Three of these properties - Esker Lake, Gold Bugs and Bling - collectively known as the Park Place Gold project, are iron formation hosted gold targets in the Contwoyto Lake – Back River area of Nunavut. The fourth – Hard Cash – is greenstone lode gold prospect in southwestern Nunavut.

Shortly following the deal with Panarc, Silver Range staked the more gold properties in Nunavut - Itchen, Happy Thought

continued on next page



and Grumpy. The Itchen claims blanket nine gold targets about 78 kilometers (48 miles) west of the past-producing Lupin gold mine. Happy Thought and Grumpy are located near where a new road is being planned in the Kitikmeot region of western Nunavut.

Izok Corridor

The Nunavut government and Nunavut Resources Corp., a subsidiary of Kitikmeot Inuit Association, have signed a memorandum of understanding to build a port at Grays Bay on Coronation Gulf and a 350-kilometer (220 miles) road that links the deep-water arctic seaport to Contwoyto Lake, near the area of the Izok Lake zinc-copper mine project being advanced by MMG Ltd.

KIA, which is eligible for federal money that could help fund large portions of the project, is expected to build and own the port and road project.

It is hoped that the road would eventually be extended as an all-season road that follows the route of the ice road that currently services the diamond-rich areas of Northwest Territories, linking Nunavut's arctic coast to Yellowknife and Canada's road system.

MMG's Izok Corridor project consists of two deposits along the proposed route: High Lake, located about 50 kilometers (30 miles) south of the port; and Izok Lake at near the southern end of the proposed road.

High Lake hosts a resource of 17 million metric tons averaging 3.4 percent zinc and 2.3 percent copper; and Izok Lake has a mineral resource of 14.8 million metric tons averaging 12.8 percent zinc and 2.5 percent copper.

MMG submitted a project description to the Nunavut Impact Review Board to initiate the environmental review and permitting process for its Izok Corridor projects in 2012 but has since stalled the permitting and development process due to the high cost of establishing infrastructure.

All three of Crystal Exploration Inc.'s diamond projects in Nunavut - Hood River, Contwoyto and Muskox - are located near the proposed Izok Corridor road.

Early in 2016, Crystal drilled three holes at Muskox, a property located near the past-producing Jericho diamond mine. The best hole returned 1.13 carats of diamonds per metric ton.

In September, the company completed prospecting, till sampling, mapping, and ground geophysical surveys on all three of its properties with a particular focus on Muskox.

Island exploration

On Baffin Island, Peregrine Diamonds Ltd. is proposing the

construction of a 160-kilometer (100 miles) road that links its Chidliak diamond project to Iqaluit, the capital of Nunavut.

In July, Peregrine published results from a preliminary economic assessment that envisions an open-pit diamond mine with an initial life of roughly 10 years by mining the upper reaches of the CH-6 and CH-7 kimberlite pipes at Chidliak. Production would start at the CH-6, a kimberlite with 4.64 million metric tons of inferred resource averaging 2.45 carats per metric ton (11.39 million carats) diamond to a depth of 260 meters; followed by CH-7, a kimberlite with 5.99 million metric tons of inferred resource averaging 0.85 c/t (4.23 million carats) diamonds to a depth of 240 meters. Both resources remain open at depth.

This proposed mine, which is forecast to average of 1.2 million carats of diamonds per year from kimberlite averaging 1.67 c/t, demonstrates robust economics and is expected to pay back the C\$434.9 million of development capital in just two years.

"We are very pleased with the results of this preliminary economic assessment, which clearly establishes Chidliak as one of the premier undeveloped diamond resources, located in one of the world's safest and most supportive jurisdictions for responsible mining development," said Peregrine Executive Chairman Eric Friedland.

Building the road, however, is a priority.

"The road in is a critical piece of infrastructure, and we need that prior to commencement of construction to minimize our construction capital costs," Peregoodoff explained.

On the north end of Baffin Island, Baffinland Iron Mines Corp. is proposing a second phase of development for its Mary River iron mine that includes building a railway that would connect the mine to Milne Port north of the mine, where iron ore is loaded on ships bound for Europe.

The initial phase of development involved the shipping of roughly 3.5 million metric tons of iron ore per year from the northern Baffin Island project. A ship loaded with the first 53,624 metric tons of iron ore from this phase set sail for Germany in August 2015.

The second phase of development anticipates up to 12 million metric tons of iron ore being shipped out of Milne Port each year. This would include more infrastructure, including dock expansion and the proposed rail to transport the ore.

"Baffinland has determined the incorporation of a railway is an integral facet of the phase-2 proposal due to a number of environmental, technical and economic benefits," the iron miner explained in a letter to the Nunavut Impact Review Board.

About 350 kilometers (215 miles) west of Mary's River, Aston Bay Holdings Ltd. is exploring Storm Copper, an expansive property that blankets mineralized showings along a more than 100-kilometer- (60 miles) stretch of Somerset Island.

Following a late-2015 deal to acquire full ownership of Storm from Commander Resources Ltd., Aston Bay reached an agreement with BHP Billiton Ltd. to fund exploration of the copper property.

BHP Billiton can earn a 75 percent interest in Storm, by investing at least C\$40 million on exploration at the project within nine years, including a minimum of C\$2.5 million over the first two years. "This new partnership is a testament to the exploration potential at the Storm Copper Project," said Aston Bay CEO Benjamin Cox.

With deals such as this, Nunavut can look forward to senior companies continuing to be large contributors to mineral exploration spending across the vast and rich territory for years to



Approaching golden destination

TMAC Resources enters final leg of developing Nunavut's next gold mine

Bv SHANE LASLEY Mining News

MAC Resources Inc. is closing in on the final destination on the "path to production" at its Hope Bay gold project in northwestern Nunavut.

"We remain on track and on budget with our progress to advance the Hope Bay Project towards commercial production in early 2017," TMAC CEO Catharine Farrow informed shareholders in August.

TMAC acquired Hope Bay, a 1,100-squarekilometer (425 square miles) property that blankets most of the 80-kilometer- (50 miles) long Hope Bay greenstone belt in the Kitikmeot region, from Newmont Mining Corp. in 2013.

According to a pre-feasibility study completed in 2015, the Hope Bay mine is expected to produce 3.2 million ounces of gold over a 20-year mine life.

By leveraging the existing advanced infrastructure at Hope Bay, the PFS estimates that the robust economics of mining the high-grade gold at the project would result in a 1.7-year payback of the modest C\$206 million in initial capital needed to bring the Hope Bay Mine into production.

While this plan allows TMAC to bootstrap Hope Bay into production, the company has its sights set on a bigger prize.



TERRY **MACGIBBON**



CATHARINE

TMAC Resources Inc.

TMR:TSX am





EXECUTIVE CHAIRMAN: Terry MacGibbon **CHIEF EXECUTIVE OFFICER:** Catharine Farrow VP, EXPLORATION AND GEOSCIENCE: Dave King

PROPERTIES WITH MINERAL(S) EXPLORED: Hope Bay, Nunavut: Gold

CASH AND SHORT-TERM DEPOSITS: C\$37.2 million (June 30, 2016) WORKING CAPITAL: C\$54.1 million (June 30, 2016; raised an additional C\$60 million in July)

MARKET CAPITALIZATION: C\$1.52 billion (Sept. 28, 2016)

95 Wellington St. West • P.O. Box 44, Suite 1010 • Toronto, ON M5J 2N7 Tel: 416-628-0216 • www.tmacresources.com

"The cash flows from early mining support the ramp-up of production at sites progressively further south in the belt and support exploration for significant additional mineralization along the belt," TMAC Executive Chairman Terry MacGibbon said upon release of the study. "With three deposits already scheduled for production in the PFS, excellent potential to expand and grow those known deposits and discover new deposits along the 80-kilometer-long gold belt, we are truly at the early stages of building Canada's next great gold mining camp."

continued on next page



TMAC continued from page 63

Expanding the cornerstone

The 2015 pre-feasibility study is based on 14.19 million metric tons of proven and probable reserves averaging $7.7~{\rm g/t}$ (3.5 million oz.) gold. Most of this gold (2.6 million oz.) is located in the Doris and Madrid deposits at the northern end of the Hope Bay property, with the balance found at Boston, a deposit about 40 kilometers (25 miles) to the south.

From expanding the reserves encompassed by these three deposits to the discovery of new trends, the Hope Bay property pro-



vides ample targets for building the great gold mining camp envisioned by MacGibbon.

TMAC is already building this camp by expanding Doris, the cornerstone deposit were mining at Hope Bay has begun.

In June, the company reported that underground drilling from Doris had cut high-grade gold in a deeper zone dubbed BTD, short for below the dyke.

Highlights from this drilling focused on the below the dyke zones include: 17. 7 meters of 35 g/t gold in hole TM50003; 5.3 meters of 50.6 g/t gold in hole TM50010; and two meters of 97.7 g/t gold in TM50011.

The BTD zones identified so far are below a roughly 100-meter thick layer of diabase, dark-colored igneous rock that underlies the Doris North deposit.

TMAC believes the Doris North BTD exploration areas have the potential to add significant high-grade gold ounces to the Doris deposit mineral resources with continued drilling and underground development.

"We are excited by the initial results of our underground drilling program as we begin to explore and define mineralization on the Doris deposit below the diabase dyke. Management believes these results could significantly expand the current five-year mine life at the Doris mine and dramatically affect the global reserves and resources and annual gold production at Hope Bay," said TMAC CEO Farrow.

This excitement is reflected in the C\$56.5 million budget TMAC has set aside for exploring and developing Doris BTD over an 18-month period that started in July. This spending includes C\$30.5 million for direct exploration and development expenditures; C\$14.5 million for related equipment and site infrastructure costs; and C\$11.5 million for working capital, including fuel.

The first results from this drilling continued to cut similar zones of high-grade gold, including: 4.2 meters of 43.6 g/t gold in hole

TM50019a; 13.2 meters averaging 26.7 g/t gold in hole TM50025; 5.1 meters of 50 g/t gold in hole TM50027; and 4.3 meters of 68.9 g/t gold in hole TM50030.

"These positive results clearly demonstrate the significant exploration and development potential below the dyke at Doris and represent another milestone in the evolution of the Doris Mine," said Farrow. "As we transition to production at the end of this year, it also establishes the annual process of replacing ore mined and begins the work of adding additional ounces of gold to Hope Bay's global gold resources."

To realize this potential, TMAC is gearing up for 1,200 meters of underground development to explore extensions and mine this deeper Doris deposit.

Golden destination

As exploration and development crews dig deeper to higher grade zones below Doris, construction crews are putting the finish touches on the mill building and other surface infrastructure needed to begin scaling up a 2,000-metric-ton-per-day operation capable of producing 183,000 oz. of gold per year.

This work has been hitting all of the milestones along the path to production. One of the most critical was the safe and successful delivery of the processing plant, which was shipped from Australia. As

CONSTANTINE
Palmer Project

Celebrating **10 years** of responsible and sustainable mineral exploration.



"TMAC remains focused on executing this critical stage in our evolution as we build the first gold mine in what we believe to be Canada's next gold mining district."

-TMAC CEO Catharine Farrow

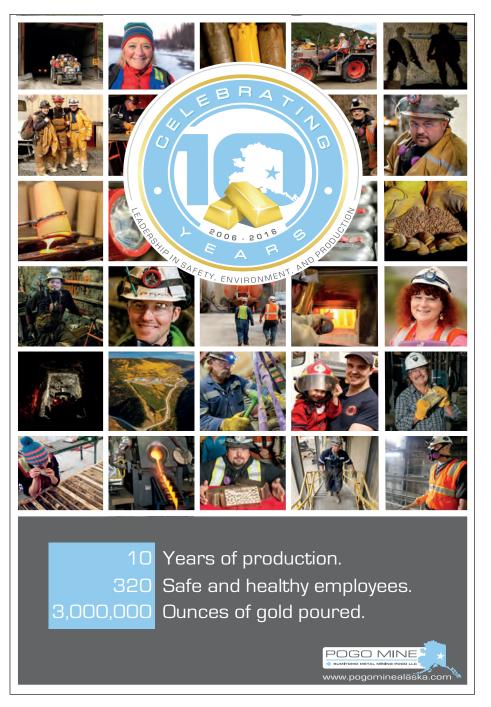
crews were putting the finishing touches on the mill building in August, a ship carrying the processing plant arrived at the Canadian Arctic gold mine.

By the end of the year, TMAC plans to have 110,700 metric tons of high-grade ore

stockpiled that contains 55,600 oz. of gold. With the infrastructure in place and a pile of nearly half-ounce-per-metric ton-ore to feed the mill, TMAC will go into 2017 ready to become Nunavut's next gold mine.

Given the exploration potential across the larger Hope Bay property, reaching the final destination of the path to production may just be a milestone along a greater journey for the Nunavut gold producer.

"TMAC remains focused on executing this critical stage in our evolution as we build the first gold mine in what we believe to be Canada's next gold mining district," Farrow said.



EXPLORERS AT A GLANCE

NUNAVUT/BRITISH COLUMBIA



Agnico Eagle Mines Ltd.

TSX/NYSE: AEM AM



VICE CHAIRMAN AND CEO: Sean Boyd PRESIDENT: Ammar Al-Joundi SENIOR VP. EXPLORATION: Alain Blackburn

Agnico Eagle Mines Ltd. took healthy strides in 2016 towards developing Amarug as a satellite to its Meadowbank gold mine in Nunavut. The company acquired Amaruq, a previously undrilled gold property about 50 kilometers (31 miles) northwest of Meadowbank, in 2013 and by the end of 2015 had already outlined 16.9 million metric tons of inferred resource averaging 6.05 grams of gold per metric ton (3.3 million ounces) gold. About 89 percent of this resource is found in a deposit known as Whale Tail; the balance is hosted in the IVR and Mammoth 1 zones. With the goal of having material ready to send to Meadowbank by the end of

The initial phase of this program, which ran from



2018, Agnico completed roughly 125,000 meters of drilling at Amaruq during two phases ried out in 2016.



SEAN BOYD



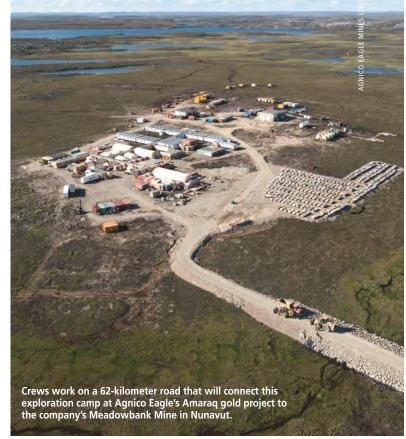
AMMAR **AL-JOUNDI**



ALAIN **BLACKBURN**

February through June, involved 77,517 meters of drilling. Almost half of this drilling, 36,545 meters in 152 holes, targeted zones at the IVR deposit. Results have encouraged Agnico to consider that the V zones at IVR – a series of parallel quartz vein structures immediately north of Whale Tail - to be a potential second source of open-pit ore at Amaruq. The largest of the V zones structures identified through July has been traced for about 1,000 meters along strike and to a depth of nearly 400 meters. Highlights from phase-1 drilling include: 9.4 meters of 15.5 g/t gold from a depth of 18 meters in hole AMQ16-706; 11.1 meters of 14 g/t gold from a depth of 221 meters in AMQ17-766; and 15.5 g/t gold across 5.4 meters starting at a depth of 349 meters in AMQ16-833. Another 24,820 meters in 103 holes were drilled at Whale Tail. Much of the phase-1 drilling at Whale Tail was oriented to help ascertain the geometry and thickness of the ore shoot there, which plunges from surface to a depth of at least 430 meters. One such hole, AMQ16-688, cut 31.2 meters of 5.0 g/t gold above the ore shoot (from a depth of 143 meters) as well as two intercepts within the shoot; 12.1 meters of 10.7 g/t gold from a depth of 209 meters, and 18.1 meters of 13.5 g/t gold from a depth of 246 meters. Shallow drilling east of Mammoth Lake, in an area where the Whale Tail and Mammoth mineralization merges, has infilled the westernmost Whale Tail deposit. Highlights from drilling in this westernmost part of the deposit include: 15.1 meters of 3.1 g/t gold from a depth of 34 meters in hole AMQ16-690; and 13.6 meters of 5.7 g/t gold from a depth of 21 meters of AMQ16-722. The phase 1 drilling at the V zones and Whale Tail deposit is being incorporated into an updated resource estimate for Amaruq. The initial phase of 2016 drilling also included nine holes for geotechnical and metallurgical testing needed for engineering studies. Expanding Whale Tail and determining whether the V zones could become a second source of ore at Amaruq were the primary goals of a 50,000-meter second phase of 2016 drilling at Amaruq.

To support exploration and be ready to transport ore, Agnico began construction of a 62-kilometer (38 miles) road linking Amaruq to Meadowbank early in 2016. By the end of June, roughly 13.3 kilo-



meters (8.3 miles) of this road had been completed and the company anticipates having it finished next year. The company, meanwhile, has applied for permits to develop an exploration ramp and potentially collect a bulk sample at Whale Tail as well as permits needed for commercial production at the satellite deposit.

At Meliadine, another Nunavut gold project about 25 kilometers (15 miles) from the town of Rankin Inlet, Agnico advanced roughly 3,700 meters of underground development in 2016. A technical study completed at the end of 2014, considers a mine for Meliadine that would average roughly 350,000 oz. of gold per year based on extracting 1.39 million metric tons of proven and probable reserves averaging 7.44 g/t (3.3 million ounces) gold. The property also hosts 3.3 million oz. of gold in measured and indicated mineral resources and 3.5 million oz. of gold in inferred mineral resources. Internal studies to evaluate the potential of extending the mine life, increase annual production and improve project economics at Meliadine are expected to be completed by the end of 2016. Meliadine is currently slated to begin production in 2020.

Agnico is also exploring near-mine exploration upside at Aura Silver Resources Inc.'s Greyhound property located 32 kilometers (20 miles) south of Meadowbank. In 2014, Agnico Eagle entered into an option agreement to earn an initial 51 percent interest in a portion of Greyhound by paying Aura C\$250,000 and investing C\$1.75 million in exploration by the end of May 2017, a stake that can be raised to 70 percent with additional expenditures. The 2016 program included prospecting and ground magnetic surveys.

CASH AND SHORT-TERM DEPOSITS: US\$473.7 million (June 30, 2016) WORKING CAPITAL: US\$781.4 million (June 30, 2016) MARKET CAPITALIZATION: C\$16.08 billion (Sept. 28, 2016)

145 King St. East, Suite 400 Toronto, ON M5C 2Y7 Tel: 416-947-1212 www.agnicoeagle.com

TSX.V: AUG M

NUNAVUT & BRITISH COLUMBIA

Auryn Resources Inc.





EXECUTIVE CHAIRMAN: Ivan Bebek PRESIDENT AND CEO: Shawn Wallace **CHIEF GEOLOGIST:** Michael Henrichsen

Raising C\$14.9 million in May, a well-funded Auryn Resources Inc. anticipated 2016 exploration of its expansive Committee Bay gold project in Nunavut. Three Bluffs, the most advanced of the targets at Committee Bay, hosts 4.32 million metric tons of indicated resource averaging 4.91 grams-per-metric-ton (683,000 ounces) gold; and 5.52 million metric tons of inferred resource averaging 5.43 g/t (965,000

oz.) gold. After a thorough review of the historical data surrounding this deposit, Auryn identified a 4,000-meter-long trend of gold mineralization in rocks and tills. Additionally, a re-inversion of the induced polarization and magnetic geophysical surveys has identified a previously unrecognized continuation of the structure that hosts the deposit 5,000 meters to the east. The identification of this structure has provided potential to expand the deposit significantly. Before kicking off its summer program, Auryn staked 162,000 hectares (400,000 acres) of claims at the Committee Bay project, expanding the land package to



Geologists collect soil samples at Auryn Resources' expansive Committee Bay gold project in Nunavut.

more than 380,000 hectares (939,000 acres). The summer exploration program, which got underway in June, included roughly 11,000 meters of rotary air blast drilling focused on the Anuri and West Plain targets, both located towards the southwest end of the Committee Bay property, as well as regional till sampling across the entire 300kilometer- (185 miles) long Committee Bay project. Anuri consists of a more than 20-kilometer- (12.5 miles) long corridor of elevated goldin-tills. During its spring program, Auryn collected airborne geophysical data at Anuri. The company said the combination of magnetic, electro-magnetic, drone imagery, and geochemical datasets has identified high-priority drill targets at Anuri. A number of past holes drilled at West Plains have tapped nice intercepts of high-grade gold including: 8.7 meters of 14.76 g/t gold drilled in 2004; eight meters of 13.14 g/t gold drilled in 2006; and 25.1 meters of 4.1 g/t gold in a hole drilled in 2011. Auryn says drilling shows that West Plains is mineralized for more than 1,800 meters, and the prospect is open for another 11 kilometers (6.8 miles) along strike.

In addition to its work in Nunavut, Auryn bought a high-grade gold property in British Columbia. In September, the company closed an all-share acquisition of Homestake Resource Corp. valued at C\$8.9 million. Homestake's key asset is Homestake Ridge, a high-grade gold project in northwestern British Columbia. According to a 2013 calculation, the three main deposits at Homestake hosts 604,000 metric tons of indicated resource averaging 6.4 grams per metric ton (124,000 oz.) gold; 48.3 g/t (939,000 oz.) silver; and 0.18 percent (2.4

million pounds) copper. Additionally, these deposits host 6.77 million metric tons of inferred resource averaging 4.2 g/t (911,000 oz.) gold; 93.6 g/t (20.37 million oz.) silver; and 0.11 percent (16.3 million lbs.) copper.

Auryn also owns gold-silver and copper-gold exploration properties in southern Peru.

CASH AND SHORT-TERM DEPOSITS: C\$11.3 million (June 30, 2016) WORKING CAPITAL: C\$10.7 million (June 30, 2016) MARKET CAPITALIZATION: C\$200.6 million (Sept. 28, 2016)

600 -1199 West Hastings St. • Vancouver, BC, V6E 3T5 Tel: 778-729-0600 • www.aurynresources.com

NUNAVUT



Nordgold

LSE: NORD A



CHIEF EXECUTIVE OFFICER: Nikolai Zelenski **EXPLORATION DIRECTOR:** Howard Golden **EXPLORATION MANAGER (NORTHQUEST): David Smith**

Nordgold - a European gold producer with operations in Russia, Kazakhstan, Burkina Faso and Guinea – is applying its arctic experience to the Pistol Bay gold project in Nunavut. Since at least 2014, Nordgold has become increasingly more involved with exploration at Pistol Bay through its investments in Northquest Ltd., a Toronto-

based junior that is advancing the 861square-kilometer (332 square miles) property that blankets 90 kilometers (55 miles) of the Pistol Bay trend, a series of surface-gold occurrences and zones that runs west from Hudson Bay. In April, Nordgold, which already



With five gold mines in Russia, Nordgold has the experience to explore and mine sub-arctic gold deposits such as those found at the Pistol Bay project in Nunavut.

owned more than half of Northquest's outstanding shares, offered to buy all of the remaining shares at C25.3 cents each. Northquest countered with an offer of C26 cents per share, which has been accepted by Nordgold. As of mid-August, Nordgold owned roughly 97.6 percent of the Pistol Bay owner. According to a maiden resource published in April, the Vickers zone at Pistol Bay hosts 7.79 million metric tons of inferred resource averaging 2.95 g/t (739,000 ounces) gold. In addition to the initial resource, the technical report also describes 16 other gold occurrences on the Pistol Bay property at which there has been little drilling. One such occurrence, Howitzer, is a priority exploration target for 2016. Based on results of sampling in 2015, it is now believed that Howitzer could be a larger and higher grade zone than Vickers. The 2016 program also includes some drilling targeting extension of the Vickers deposit.

CASH AND SHORT-TERM DEPOSITS: US\$342.8 million (June 30, 2016) WORKING CAPITAL: US\$280.1 million (June 30, 2016) MARKET CAPITALIZATION: US\$1.3 billion (Sept. 28, 2016)

5th Floor, 6 St. Andrew Street London, UK EC 4A 3AE • Toronto, Ont. Tel: 31-20-406-4480 • www.nordgold.com

Unlocking mineral potential in NWT

Government supports future investment and growth in mining industry

By MINISTER WALLY SCHUMANN

Special to Mining Explorers

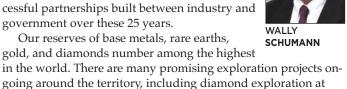
As the summer's midnight sun gives way to aurora-filled winter night skies, seasons are once again changing in Canada's Northwest Territories.

And, much like the seasons, our resource industries are also in a time of transition.

The NWT celebrates 25 years of diamonds this year with the opening of De Beers and Mountain Province's Gahcho Kué, the world's largest new diamond mine, which is ex-

pected to pour more than C\$6 billion into our economy over its lifetime.

Projects also are underway to extend the productivity and mine life of existing diamond mines. Ekati's Jay Pipe has been approved, as has Diavik A21, a further testament to the successful partnerships built between industry and government over these 25 years.



Additional mines are built or proposed, waiting for investment and market conditions to return. These include Canadian Zinc's Prairie Creek project and Fortune Minerals' Nico, a project with a huge cache of minerals to power the clean economy of the future.

Kennady North and TerraX's Yellowknife City gold project.

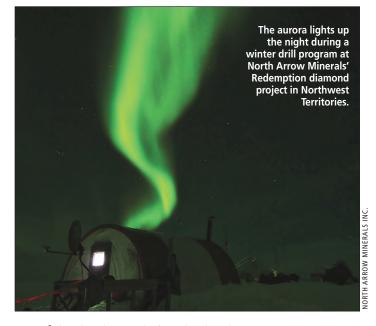
NWT residents are supportive of mining. A recent public opinion survey shows that around 80 percent of NWT residents feel positively about mining and exploration; a good omen for future projects.

Yet the NWT's vast 1.3 million square kilometers (336,787 square miles) of land remain relatively unexplored. With hundreds of defined mineral deposits, and a fraction of exploration completed compared with other jurisdictions, its likely many metric tons of minerals remain to be discovered.

There has never been any doubt that we have the potential to build and sustain a strong mineral industry well into the future.

What defines this moment in the NWT mining sector is the actions we are taking to improve our investment landscape and to secure the future of our industry.

Government actions and investments are guided by the NWT Mineral Development Strategy, which outlines our continuing commitment to the mining sector and the many innovative initiatives we are pursuing to position our territory for future investment and growth. It places us ahead of the curve – and in the elite company of some of the most progressive mining jurisdictions in the world.



With localized control of our land and resource regimes now fully secured, the Government of the Northwest Territories has begun work to create a homegrown, leading edge mineral resources act to help modernize and align our regulatory environment with the priorities and realities of today's Northwest Territories.

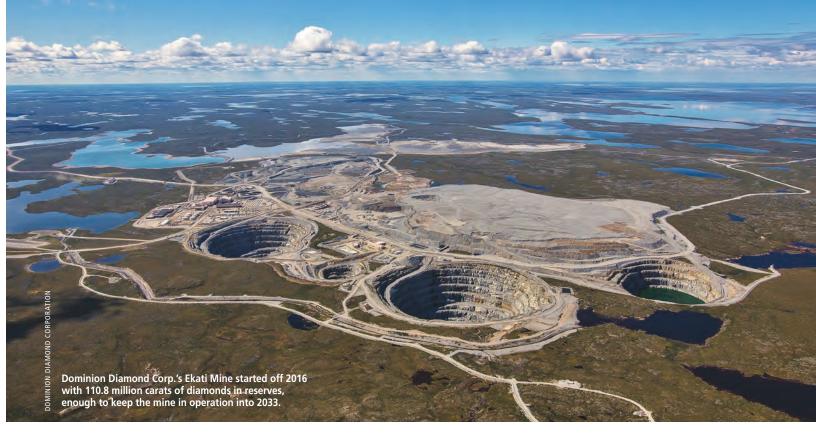
To defray the impact of the market transition, junior exploration companies and prospectors can qualify for direct investment from the highly successful Mining Incentive Program, which has already provided more than C\$1 million to promising projects since its inception three years ago. TerraX, now a leader in NWT exploration, is a beneficiary of this program.

And, the NWT is a leader in building the strong, defined environment of Aboriginal engagement and participation that exists in its mining sector, working in partnership with Aboriginal governments to share in the decision-making, knowledge and benefits of the resource industries and ultimately building a stronger foundation for the industry.

We're taking the necessary steps, in this time of reduced activity, to prove our potential, political will and progressive approaches.

Today's Northwest Territories has what's needed to advance solid mineral projects: the resource supply to fuel the future of the international economy; the political stability to ensure the security of investment capital; and the support of its governments and people to grow and sustain new projects.

Wally Schumann is minister of Industry, Tourism and Investment for the Government of the Northwest Territories.



Northwest Territories Exploration 2016

Unlocking NWT's potential

Territory, explorers seek to build upon \$50 billion diamond foundation

BV SHANE LASLEY Mining News

hile most mining jurisdictions have seen sharp drops in mineral exploration spending, such investments in Northwest Territories has largely held steady at about C\$100 million annually during the past five years. As a result, this diamond-rich territory accounted for roughly 7 percent of mineral exploration spending in Canada in 2016, compared with only about 2 percent in 2011.

The ultimate measure of mineral exploration success is not the amount of exploration dollars spent each year, but whether that investment results in discoveries of viable mines. Three successful operations in Northwest Territories - Diavik, Ekati and Snap Lake - produced 10.95 million carats of diamonds valued at roughly C\$1.73 billion in 2015.

"The mining sector is the single-largest private sector employer in the NWT and contributes more than a billion dollars to the territory's GDP annually," said Northwest Territories Premier Robert McLeod.

Mining's healthy contribution to the Northwest Territories economy traces its roots to the relentless pursuit by prospector Charles Fipke, who discovered diamonds near Lac de Gras in

"This year, our diamond mines surpassed \$50 billion in total mineral value produced in these 25 years," said McLeod.

Not resting on its laurels, the Northwest Territories government has a number of programs aimed at ensuring mining continues to provide a solid foundation for its economy going into the future:

Mining Incentive Program, which provides C\$400,000 in funding each year to prospectors and companies for mineral exploration in the territory;

Assessment Work Incentive, a two-year program that increases the exploration credit applied to mineral claim assessments by 50 percent; and

Unlocking Our Potential, an increased marketing and promotional campaign to attract additional private sector investment to mineral exploration and development in the territory.

"The Government of the Northwest Territories recognizes that maintaining the health of the sector is crucial for the wellbeing of NWT residents and the strength of the territorial economy, particularly as we face fiscal challenges at home and a difficult economic climate internationally," explained McLeod.

Diamonds dominate

Like all of Canada's North, Northwest Territories is rich in a wide array of metals and minerals. Diamonds, however, will continue to dominate the mining scene in Northwest Territories for the foreseeable future.

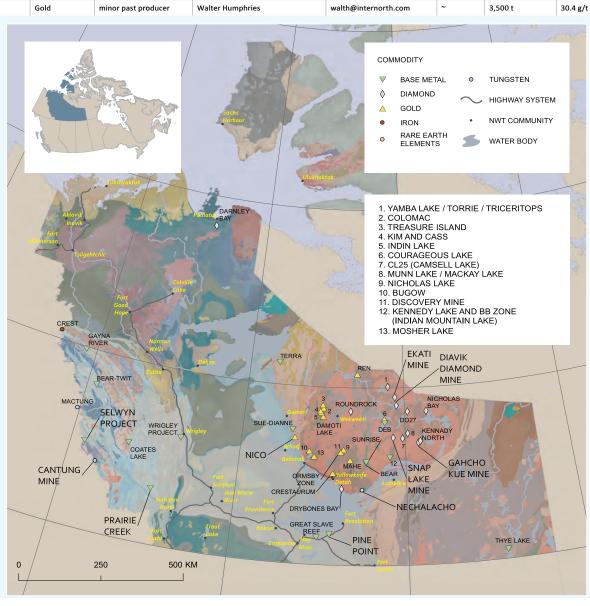
Canada is the world's third-largest diamond-producing nation by value, of which 81 percent are mined in Northwest Territories.

"It's encouraging to see that we maintained our high value of

continued on page 71

Significant Mineral Deposits of the Northwest Territories, Canada

PROJECT NAME	COMMODITY	STATUS	PROJECT OWNER / MANAGER	WEBSITE AND/OR E-MAIL ADDRESS	*RESOURCE CATEGORY	**TOTAL RESOURCE	*** GRADE
DIAVIK DIAMOND MINE	Diamond	producer	60% Rio Tinto / 40% Dominion Diamond	www.diavik.ca	Prv +Prb	18.7 Mt	2.8 ct/t
EKATI MINE	Diamond	producer	89.9% Dominion Diamond Corp. ; 11.1% Stewart Blusson	www.ddcorp.ca	Prv + Prb	71.3 Mt	1.56 ct/t
GAHCHO KUE MINE	Diamond	ramping up production	51% De Beers Canada Inc.; 49% Mountain Province Diamonds Inc.	www.angloamerican.com	Prb	33.8 Mt	1.54 ct/t
SNAP LAKE MINE	Diamond	production suspended; care and maintenance	De Beers Canada Inc.	www.angloamerican.com	Prb	5.7 Mt	1.26 ct/t
CANTUNG MINE	Tungsten	production suspended; care and maintenance	North American Tungsten Corp. / Government of Canada	www.natungsten.com	Prb	1.82 Mt	0.81% WO ₃
NECHALACHO	Rare Earth Elements, Beryllium	drilled	Avalon Advanced Materials Inc.	www.avalonadvanced materials.com	Prv; Prb	3.68 Mt; 10.9 Mt	1.73% TREO (0.47% HREO); 1.69% TREO
NICO	Cobalt, Bismuth, Gold	drilled	Fortune Minerals Ltd.	www.fortuneminerals.com	Prv + Prb	33 Mt	1.03 g/t Au, 0.11% Co, 0.14% Bi
PRAIRIE CREEK	Zinc, Lead, Silver	drilled	Canadian Zinc Corp.	www.canadianzinc.com	Meas + Ind	8.7 Mt	9.5% Zn, 8.9% Pb, 136 g/t Ag
SELWYN PROJECT	Zinc, Lead, Silver	drilled	Selwyn Chihong Mining Ltd.	www.selwynchihong.com	Ind	185.6 Mt	5.20% Zn, 1.79% Pb
BUGOW	Gold	drilled	Aurora Geosciences (Pending)	www.silverrangeresources.	~	70,000 t	10.29 g/t
CAMP	Gold	drilled	Crown Land	miners@gov.nt.ca	~	46,400 t (N Zone); 11,840 t (S Zone)	13.7 (N Zone); 12 g/t (S Zone)
COLOMAC	Gold	past producer	Nighthawk Gold Corp	www.nighthawkgold.com	Inf	36.973 Mt	1.65 g/t
COURAGEOUS LAKE	Gold	past producer	Seabridge Gold Inc.	www.seabridgegold.net	Prv; Prb	12.3 Mt; 78.8 Mt	2.41 g/t; 2.17 g/t
CRESTAURUM	Gold	past producer	TerraX Minerals Inc.	www.terraxminerals.com	~ Ind + Inf	145,150 t	7.54 g/t
DAF	Gold	minor past producer	Walter Humphries	walth@internorth.com	~	3,500 t	30.4 g/t



NWT EXPLORATION continued from page 69

(diamond) production last year despite challenging market conditions," NWT and Nunavut Chamber of Mines President Gary Vivian said in late June.

The suspension of operations at De Beers Canada's Snap Lake mine late in 2015 and a June fire temporarily knocking the Ekati processing plant out of operation is expected to deal a blow to Northwest Territories diamond output for 2016.

"The unexpected closure of the Snap Lake mine and the Ekati mine fire are going to affect 2016 figures, and we are really looking forward to the opening of the NWT's newest diamond mine, Gahcho Kué in the coming months," added Vivian.

Despite the fire, recent developments at Ekati are encouraging for the future of the mine and diamond production in Northwest Territories.

In late April, Dominion Diamond Corp., which operates and owns majority interest in Ekati, reported that its share of the reserves at Ekati was 110.8 million carats of diamonds, enough to keep the mine in operation into 2033.

As the company gears up to begin developing Jay, where the majority of these reserves are located, the company is continuing its search for other deposits that will extend the mine beyond 2033. The work includes expanding upon the 35.2 million metric tons of indicated resources averaging 0.3 carats per metric ton (9.8 million carats) diamonds identified below the previously mined Fox pit. With hopes of identifying higher grade material below this resource, drilling collected a 925-metric-ton sample from the underground target early in 2016.

In late September, the processing plant at Ekati was brought back online. Dominion said the cost to repair the facility was roughly US\$15 million.

Dominion also owns a 40 percent stake in the Diavik Mine. In 2014, Rio Tinto plc, which holds the other 60 percent interest in the mine, approved development of A-21, a kimberlite pipe with 10 million carats of diamonds. Slated to begin production in 2018, A-21 is currently expected to contribute to Diavik's diamond output for six years.

This year's ramp-up operations at the Gahcho Kué diamond mine, a joint venture between De Beers Canada (51 percent) and Mountain Province Diamonds' (49 percent), was a passing of the torch of sorts.

Keeping a staff of roughly 120 workers for environmental monitoring and other care and maintenance tasks at recently shuttered Snap Lake Mine, De Beers transferred much of the remaining seasoned workers to Gahcho Kué, a new operation about 80 kilometers (50 miles) to the east.

In the months following the transfer, Gahcho Kué steadily checked off milestones on its way to commercial production.

"Successful plant commissioning and the start of ramp-up to production at the world's largest new diamond mine is a major achievement for the Gahcho Kué joint venture and a tribute to the operating partner De Beers Canada," Mountain Province President and CEO Patrick Evans.

Even before the official opening of Gahcho Kué in September, two large gem-quality diamonds, a 12.1-carat diamond and a 24.65-carat stone, has been recovered from Northwest Territories' newest diamond mine.

Gahcho Kué is anticipated to produce 53.4 million carats of diamonds over a 12-year mine-life, according to a 2014 feasibility study.

On the horizon

Northwest Territories' next diamond mine may be on the horizon, both literally and figuratively, from Gahcho Kué.

Just seven short kilometers (4.5 miles) northeast of Canada's newest diamond mine, Kennady Diamonds Inc. is rapidly expanding Kennady North, a diamond project tracking toward being Northwest Territories next diamond mine.

Kennady's exploration on its namesake project has focused on building a resource along the Kelvin-Faraday kimberlite corridor, a region of the property that trends northeast from Gahcho Kué and hosts Kelvin and Faraday kimberlite bodies. The company hopes to establish a resource along this corridor of 13 million to 16 million metric tons of kimberlite averaging upwards of 2.5 carats per ton.

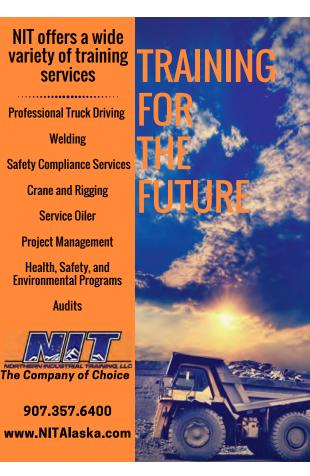
After spending the last couple of years expanding Kelvin, this year's exploration focused on exploring three kimberlites at Faraday, which is located about 2,500 meters to the northeast of the more advanced kimberlite body.

"Our systematic approach to expanding the Faraday bodies is exactly the same as that which expanded Kelvin to its present size. We have no doubt that as we continue additional kimberlite will be discovered with this exploration," said Kennady Diamonds President and CEO Rory Moore.

Kennady plans to have a preliminary economic assessment prepared for its namesake project by the end of 2016 and, if things continue to look good, initiate a feasibility study for building Northwest Territories next diamond mine at Kennady North in 2017.

Canterra Minerals Corp., one of the five exploration compa-

continued on next page





NWT EXPLORATION continued from page 71

nies to receive a Northwest Territories Mineral Incentive Program grant, is focused on diamond exploration in the area between and around the Snap Lake and Gahcho Kué mines.

The C\$34,575 grant Canterra received from the incentive program went towards exploration of Prism, a diamond prospective property located about 25 kilometers (16 miles) south of Snap Lake.

In June, Canterra reported the acquisition of CL-25, a single claim that hosts two kimberlite pipes. Located about 30 kilometers (19 miles) east of Snap Lake, CL-25 is surrounded by claims that make up the company's larger Gwen property.

"CL-25 will be one of our primary target(s) for exploration over the next year, and we look forward to advancing it," said Canterra President and CEO Randy Turner.

Proxima Diamonds Corp., another incentive program grant recipient, is private diamond explorer that invested roughly C\$300,000 on the continued exploration of Northwest Territories diamond properties in 2016, including three high-priority targets between Snap Lake and Gahcho Kué, and four surrounding the Ekati and Diavik mines in the Lac de Gras region.

North Arrow Minerals Inc., which received a C\$66,000 grant, completed a 28-hole drill program at Redemption, a diamond project located in the Lac de Gras district about 32 kilometers (20 miles) southwest of the Ekati Mine.

North Arrow also holds a joint venture interest in the aptly named Lac de Gras property, which is located about 20 kilometers (12.5 miles) southwest of the Diavik Mine. Dominion, North Arrow's Lac de Gras JV partner, approved a C\$1.3 million exploration budget for the project in 2016. This program included data compilation, airborne geophysical surveys and groundwork.

Panarc Resources, a privately held prospect generator associated with Aurora Geosciences Ltd., was another company that leveraged funds provided via the Northwest Territories Mineral Incentive Program to explore for diamonds in the territory.

Golden legacy

Before diamonds were discovered in Northwest Territories, the historic Con and Giant mines churned out roughly 14.2 million ounces of gold near the capital city of Yellowknife.

Today, TerraX Minerals Inc. is reviving this legacy with an exploration program that is uncovering a multimillion-ounce gold camp at its Yellowknife City Gold Project, a 118-square-kilometer (45.5 square miles) land package that extends both north and south from the capital city.

"The Yellowknife gold district was historically one of the highest grade gold districts in Canada, and our exploration results have shown that the district has much more to offer," said TerraX President Joe Campbell. "Until TerraX's recent consolidation of the district, it had not been explored with a district-scale coordinated program using modern techniques. This fresh approach has resulted in a number of new high-grade gold discoveries, and we expect to continue to find more of the same this year."

To date, most of the company's exploration success has been along the "core gold area" of the Northbelt property, which extends north from Yellowknife and the historic mines. TerraX says the six veins and shear zones it has discovered along this 10-kilometer- (six miles) long core area – Mispickel, Sam Otto, Barney, Herbert-Brent; 20 Shear and Crestaurum – are indicative of a larger mineralized system.

Discovery drilling at Mispickel during a winter 2016 program cut 8.6 meters averaging 12.87 g/t gold and 7.3 meters of 23.6 g/t gold. Encouraged by these results, the company drilled five more holes at Mispickel at the end of the winter program. The best intercept of this second round of drilling encountered eight meters of 60.6 g/t gold down dip on the same section as the discovery.

In July, TerraX reported the start of a 27,000-meter drill program to be undertaken at the Yellowknife project over an 18-month span.

This drilling will be a combination of extension drilling on known mineralized zones such as Mispickel; aggressive step-out holes along the structures hosting known zones, such as a 5,000-meter trend hosting Mispickel; and drilling focused on generating new discoveries.

This year, Silver Range Resources Ltd. acquired full ownership of seven gold properties, including the Up Town gold project about five kilometers (three miles) northwest of Yellowknife, from Panarc Resources. As part of the deal, which involved the issuance of 10 million shares, Panarc President Mike Power took over as the new president and CEO of Silver Range.

This deal signaled a transition away from Silver Range's focus on exploring for silver – zinc deposits in the Yukon to a project generative business model targeting gold projects.

True to this model, Silver Range completed a program of mapping, prospecting and geophysical surveys at Uptown Gold prior to optioning the property to Rover Metals Corp. in August.

Throughout the summer, the project generator added to its portfolio of gold projects in Northwest Territories. These new properties include: Itchen, a property that blankets nine documented gold targets 78 kilometers (49 miles) southwest of the historic Lupin gold mine; Hare, a high-grade gold property some 460 kilometers (285 miles) northeast of Yellowknife; and Sparta, kilometers (50 miles) northeast of Yellowknife.

Roughly 200 kilometers (125 miles) north of Yellowknife, Nighthawk Gold Corp. completed a 10,000-meter drill program targeting higher grade near-surface gold at its Indin Lake project.

In 2013, Nighthawk reported an inferred mineral resource estimate for Indin Lake of 39.8 million metric tons averaging 1.64 grams per metric ton (2.1 million ounces) gold. Roughly 2 million ounces of this gold resource is found at Colomac and Goldcrest, parallel trends on the property.

More than half of this year's drill program targeted Colomac, with the balance targeting the main resource area at Goldcrest and Goldcrest North, an isolated zone of near-surface mineralization located about 600 meters to the northeast.

Lithium-bearing pegmatites

While diamonds and gold glimmered in 2016, pegmatites with lithium and an array of associated technology metals are growing targets for Northwest Territories explorers.



A summer drill program at TerraX Minerals' Yellowknife City gold project focused largely on Mispickel, an exciting new gold zone first drilled early in 2016.

With at least three companies – 92 Resources Corp., Clean Commodities Corp. (formerly Athabasca Nuclear Corp.) and Equitorial Exploration Corp. – picking up lithium properties, this important rechargeable battery ingredient emerged as a hot exploration commodity in the territory this year.

The potential of lithium-bearing pegmatites within the Yellowknife area was first recognized in the mid-1950s. In addition to the lithium mineral, spodumene, these pegmatites in Northwest Territories are known to host other specialty-metals such as tin, beryllium, tantalum and niobium.

In March, 92 Resources cut a deal to acquire Hidden Lake, a property roughly 40 kilometers (25 miles) northeast of Yellowknife that is prospective for spodumene-bearing pegmatites.

Despite the introduction of low-cost production from lithium brine deposits, 92 Resources said spodumene-bearing pegmatites continue to be an important supply of lithium, and this hard-rock source is expected to grow with demand for the technology metal.

Five samples collected during an initial phase of 2016 exploration at Hidden Lake returned an average grade of 2.54 percent lithium oxide. Additional sampling and mapping were carried out during a second phase of exploration that began in August.

The Li property, which Equitorial acquired from Strategic Metals Ltd., is located in western Northwest Territories, adjacent to the Yukon border. The Li property hosts the Little Nahanni Pegmatite Group, a swarm of lithium-cesium-tantalum pegmatite dykes.

Channel samples across outcrops have assayed up to 1.59 percent lithium oxide over 10 meters and drilling has cut intervals grading 1.2 percent lithium oxide over 10.94 meters and 0.92 percent lithium oxide over 18.27 meters.

Prior to selling Li, Strategic completed a two-week program of mapping, prospecting and channel sampling designed to evaluate grade, size and density of lithium-bearing pegmatite dykes within four of the dyke swarms on the property.

The Phoenix project, acquired by Clean Commodities, hosts the Big Bird and Curley lithium-rich pegmatites about 70 kilometers (45 miles) southeast of the Diavik Diamond Mine.

Big Bird has been mapped over a 1,280-meter strike length with observable outcrop widths ranging from eight meters to greater than 80 meters. Past drilling at Big Bird returned 1.24 percent lithium oxide over 34.3 meters. The Curlew pegmatite has been mapped over a strike length of 400 meters with widths up to 20 meters. Past drilling at Curlew returned 1.72 percent lithium oxide over 14.87 meters.

Canada is the world's third-largest diamond-producing nation by value, of which 81 percent are mined in Northwest Territories.

Coming cobalt, zinc mines?

While it is early days for Northwest Territories' lithium prospects, two projects hoping to supply the world with technology, base and precious metals are much further advanced.

Fortune Minerals Ltd. is seeking ways to fund development of its Nico gold-cobalt-bismuth-copper project in Northwest Territo-

Nico hosts 33 million metric tons of reserves, which is enough to support a 21-year mine that produces 41,300 oz. of gold, 1,615 metric of cobalt, 1,750 metric tons of bismuth and 265 metric of copper annually.

Fortune plans to develop Nico as a vertically integrated project complete with a mine and concentrator in the Northwest Territories and refinery in Saskatchewan.

While gold is currently the dominant metal at Nico, cobalt is a close second.

Driven primarily by cobalt's use in lithium-ion rechargeable batteries, the market for this technology metal has grown significantly over the past two decades.

Former Northwest Territories Minister David Ramsay, who joined Fortune's board of directors in April, said, "Having a reliable Canadian solution to the impending supply deficit for cobalt will be critical to global electronics companies that need cobalt to make lithium-ion batteries used to power portable electronic devices, electric vehicles and stationary storage cells."

Fortune, which has the permits needed to develop a mine at Nico, is working on options for financing the construction of this Northwest Territories operation.

In January, Fortune delivered a battery-grade cobalt sulfate produced from concentrates originating from Nico to a potential customer.

Canadian Zinc Corp. is closing in on developing its Prairie Creek zinc-lead silver mine in Northwest Territories.

In March, the company published results from an updated preliminary feasibility study for the pending mine.

The 2016 PFS outlines a mine that would produce an average of 60,000 metric tons of zinc concentrate and 55,000 metric tons of lead concentrate per year – containing roughly 86 million pounds of zinc, 82 million lb. of lead and 1.7 million ounces of silver.

While first production at Prairie Creek is likely still a couple of years away, some of the world's top zinc smelters are lining up for concentrates from the future Northwest Territories mine.

Korea Zinc, the world's largest zinc smelter, and Boliden, which has five smelters in northern Europe, have signed memorandums of understanding with Canadian Zinc for the offtake and sale of 40,000 to 70,000 metric tons of zinc concentrates and 20,000 to 25,000 metric tons of lead concentrates from Prairie Creek per year.

"These offtake arrangements with two of the pre-eminent smelting companies in the world, confirming the marketability of Prairie Creek's zinc and lead concentrates, represent a major step forward in the development of the Prairie Creek Mine and move Canadian Zinc closer to production," said Canadian Zinc Chairman and CEO John Kearney.

It also is a step towards adding zinc, lead and silver to the value of Northwest Territories' burgeoning mining sector. ●



Next NWT diamond mine emerges

Kennady Diamonds begins PEA for kimberlite within sight of Gahcho Kué

By SHANE LASLEY Mining News

With Canada's newest diamond mine looming on the horizon in Northwest Territories, crews at the Kennady North project about seven kilometers (4.5 miles) to the southwest, do not have far to look for inspiration.

It is not serendipitous that Gahcho Kué – a mine being ramped up to commercial production by De Beers Canada (51 percent) and Mountain Province Diamonds Inc. (49 percent) – and Kennady North are within eyesight of each other. In fact, Kennady Diamonds Inc. was spun out of Mountain Province in 2012 for the sole purpose of identifying and delineating a next-generation diamond mine at Kennady North.

Over the ensuing four years, Kennady Diamonds has taken long strides in achieving its lofty goal.

This work includes identification of four kimberlites along a 3,000-meter-long corridor at Kennady North that is on trend and northeast of Gahcho Kué. Kelvin, the most advanced of these diamond-rich kimberlites, is now at a stage where feasibility of developing a mine can be considered.

"Following the recent closing of a C\$48 million non-brokered private placement, Kennady Diamonds is fully funded to the end of 2017 when we expect to be in a position to make a decision to build the first mine at Kelvin," Patrick Evans said at the end of 2015.

Going into 2016, Evans was serving as president and CEO of

Kennady Diamonds Inc.

KDI:TSX-V



CHAIRMAN: Jonathan Comerford PRESIDENT AND CEO: Rory Moore DIRECTOR: Tom McCandless

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

CASH AND SHORT-TERM DEPOSITS: C\$18.2 million (June 30, 2016) WORKING CAPITAL: C\$17.3 million (June 30, 2016) MARKET CAPITALIZATION: C\$191 million (Sept. 28, 2016)

161 Bay St., Suite 2315 • Toronto, ON M5J 2S1 • Tel: 416-640-1111

both Kennady and Mountain Province.

"At a time when most believed that the Kennady North project had few prospects, Patrick assembled a team to resume exploration at Kennady, which has resulted in the discovery of four kimberlite pipes within the Kelvin-Faraday corridor," Kennady Diamonds Chairman Jonathan Comerford reflected.

Given this success, Kennady North's leadership decided it was time to loosen its ties to the parent company, appointing two independent directors and bringing on Rory Moore, an executive with three decades of diamond experience not tied to Mountain Province or Kennady, as president and CEO.

On the horizon

Kennady has its sights set on identifying roughly 15 million metric tons of resource along the Kelvin-Faraday corridor with grades of at least 2 carats per ton.

A 433-metric-ton bulk sample collected from the southeast lobe of the Kelvin kimberlite early in 2015 provided evidence that such a goal is within reach. This sample returned 893 carats of commercial size diamonds, or about 2.02 carats per metric ton. Of these, 35 were larger than one carat, including a 4.42 carat stone valued at \$1,603 per carat.

While meeting Kennady's hoped-for minimum in terms of grade, evidence suggests that the shallow end of the southeast lobe where the sample was collected is lower grade than the overall kimberlite average.

Two smaller samples from the north lobe of the Kelvin kimberlite returned higher grades – a 2.67 metric ton sample averaging 3.4 c/t of commercial sized diamonds and 0.93 metric ton sample grading 3.55 c/t.

To gain a better understanding of the overall grade, Kennady North collected a 612-metric-ton bulk sample from Kelvin during a 2016 winter drill program that ran from January through April.

Primarily sourced from the north lobe of the Kelvin kimberlite, this sample returned 1,278 carats of commercial-sized, or 2.09 c/t. Of these, 44 were larger than one carat, including a 3.43 carat white/colorless transparent octahedral twin with no inclusions.

"One of the key observations to emerge from our Kelvin bulk sampling programs is the remarkable consistency in overall diamond grade across the full extent of the body, despite the geological complexity within the body. This is a positive attribute from both an evaluation and a mining perspective," said Moore.

In addition to providing the information needed for a resource estimate, this bulk sample will push the total parcel of diamonds collected from Kelvin to 2,171 carats, enough for accurate revenue modeling of the kimberlite.

With this information, JDS Energy and Mining can put the finishing touches on a preliminary economic assessment for Kelvin, expected to be finished by the end of 2016.

Coming into view

While collecting the information needed to begin considering de-



veloping Kelvin, excitement is building for three kimberlites discovered below Faraday Lake, about 2,500 meters to the northeast.

The 10,712 meters of drilling completed in the Faraday area during the winter program focused on Faraday 1 and 3, apparently adjacent kimberlite pipes that may have a deeper connection.

"The newly discovered Faraday 3 body continues to grow in size with each drill hole, and it appears that Faraday 1 and Faraday 3 may be joined at depth as they approach the shore line of Faraday Lake," Moore said, shortly after taking over in May.

A 0.743-metric-ton sample of Faraday 1 kimberlite returned 4.17 c/t commercial grade diamonds.

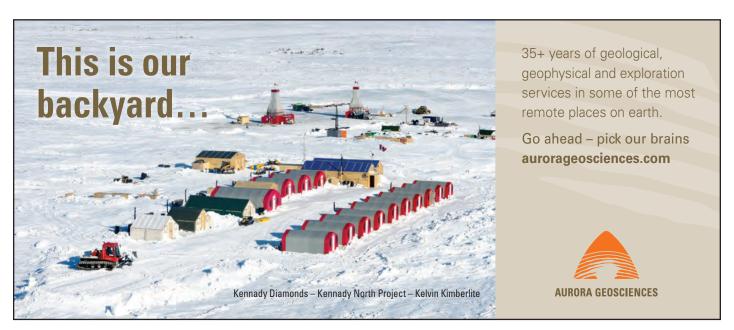
Tracing Faraday 1 and 3 towards the lakeshore during the winter program has allowed drilling to continue to trace these diamond bearing pipes from land when drilling resumed in the summer.

"The focus of our summer program is to define the extension of the Faraday bodies to the northwest as they extend from beneath Faraday Lake toward the shore," Moore explained. "We established in the last few drill holes of the winter drilling program that the Faraday 1 and 3 kimberlites merge at depth, and we are excited to determine whether the Faraday bodies have north-limb extensions similar to that defined at Kelvin. The systematic drilling planned for the summer will ultimately determine the size and shape of these bodies."

While one rig focused on the Faraday 1-3 complex, a second rig drilling during the summer targeted Faraday 2.

A 7.96-metric-ton sample collected from Faraday 2 in 2015 averaged 3.31 carats per ton commercial grade diamonds

With 9,561 meters of drilling completed at Faraday this summer and a bulk sample of these kimberlites planned for 2017, more mines could be coming into view along the northeastern horizon of the Kelvin-Faraday corridor. ●



XPLORERS AT A GLANG

NORTHWEST TERRITORIES



Dominion Diamond Corp.

TSX/NYSE: DDC



CHAIRMAN: James Gowans

CHIEF EXECUTIVE OFFICER: Brendan Bell **CHIEF OPERATING OFFICER:** Chantal Lavoie

Dominion Diamond Corp. sorts and sells diamonds it receives through its substantial interests in the world-class Ekati and Diavik mines in Northwest Territories about 300 kilometers (190 miles) north of Yellowknife. The company operates the Ekati Diamond Mine through an 88.9 percent ownership of the project's Core zone as well as a 65.3 percent ownership in the Buffer zone. As of the end of April, Dominion's share of the reserves at Ekati was 110.8 million carats of diamonds, enough to keep the mine in operation into 2033. Most of the reserves are found at Jay, a deposit the company approved for construction in July. Assuming the completion of early works permitting in 2016, Dominion plans to begin mining and processing Jay kimberlite by late 2022. The Ekati mine suffered a setback in June, when a fire damaged the processing plant. The recovery plant was down for three months and costed about US\$15 million to



repair. 2016 exploration at Ekati focused on the deep drilling below the Fox kimberlite open pit. Going into CORPORATION 2016, 35.2 million metric tons of indicated resources aver-

aging 0.3 carats per metric ton (11.5 million carats) diamonds had been identified below the Fox pit. This year's drilling aims to gain a better understanding of the grade of material below this resource, with the hope that grades will increase at depth. Some 925 metric tons of samples have been recovered from the Fox deep drilling program and results are due before the end of the year.

Dominion also owns a 40 percent stake in the Diavik Mine. In 2014, Rio Tinto plc, which holds a 60 percent interest in the mine, approved development of A-21, a kimberlite pipe with 10 million carats of diamonds. Production from A-21 is slated for late 2018. This pipe is currently expected to deliver ore to the mill at Diavik for six years.

Dominion also holds a 55 percent joint venture interest Lac de Gras, a large diamond exploration property located roughly 40 kilometers (25 miles) south of Ekati and about 20 kilometers (12.5 miles) southwest of Diavik. Dominion approved a C\$1.3 million 2016 exploration budget for Lac de Gras. This work included data compilation, airborne geophysical surveys and ground work. As a result of fully funding this program, Dominion's interest in the JV is expected to in-

MINERAL OPPORTUNITIES Dovon-owned lands offer a full spectrum of precious metal, base metal and REE mineral exploration opportunities. For further information, Jeff Filut at filutj@doyon.com

crease to 61 percent. The company is also re-evaluating data from historical exploration at Glowworm Lake, a large exploration property that lies east of Ekati and is fully owned by Dominion.

In September, Dominion sold its downtown Toronto office building for C\$84.8 million. The company also sold a 186 carat gem quality diamond recovered from the Pigeon kimberlite at Ekati for US\$2.8

CASH AND CASH EQUIVALENTS: US\$245.9 million (July 31, 2016) WORKING CAPITAL: US\$428.9 million (July 31, 2016) MARKET CAPITALIZATION: US\$321.79 million (Sept. 28, 2016)

P.O. Box 4569, Station A Toronto, Ontario M5W 4T9 Tel: 416-362-2237 www.ddcorp.ca

NORTHWEST TERRITORIES & NUNAVUT



North Arrow Minerals Inc.

TSX.V: NAR 7





North Arrow Minerals Inc. has seven diamond exploration projects in Canada - Qilalugaq, Mel and Luxx in Nunavut; Lac de Gras and Redemption in Northwest Territories; Pikoo in Saskatchewan; and Timiskaming in Ontario. In March, North Arrow launched a 28-hole (1,577 meters) drill program at Redemption, a diamond project located in the Lac de Gras district of NWT about 32 kilometers (20 miles) southwest of the Ekati Mine. This program, which targeted geophysical anomalies within the central part of the property, did not encounter bedrock kimberlite. North Arrow later relinquished its option with Arctic Star Exploration Corp. to earn an interest in Redemption. North Arrow did, however, retain a 55 percent interest in one of the Redemption claims. This claim, combined with 13 claims North Arrow staked to cover a kimberlite cluster to the east of Redemption, makes up the Loki diamond project. In addition, Dominion Diamond Corp. approved a C\$1.3 million exploration budget for Lac de Gras, a joint venture diamond exploration project owned 55 percent by Dominion and 45 percent by North Arrow. The 2016 program included data compilation, airborne geophysical surveys and ground work. As a result of this program, which was fully funded by Dominion, North Arrow expects its interest in the JV to be diluted to 39 per-

In April, North Arrow reported encouraging results from a 2015 till sampling program aimed at narrowing down the bedrock source of two kimberlite indicator mineral trains at the Mel diamond project located roughly 250 kilometers (155 miles) northeast of the community of Naujaat (Repulse Bay) which is where the company's Qilalugaq project is located. Following positive results from this sampling, North Arrow has decided to apply for permits to drill targets at the up-ice end of the kimberlite trains.

North Arrow also cut a deal in May to sell two lithium properties – Torp Lake, Nunavut, and Phoenix, NWT – to Athabasca Nuclear Corp. Torp Lake hosts the McAvoy lithium-rich pegmatite contained in the mineral spodumene and Phoenix hosts the Big Bird and Curley lithium-rich pegmatites. In exchange for the lithium properties, North Arrow received 2.5 million Athabasca Nuclear shares and warrants to purchase 1 million additional shares at C20 cents each for two years.

CASH AND CASH EQUIVALENTS: C\$1.6 million (July 31, 2016)

WORKING CAPITAL: C\$1.9 million (April 30, 2016) MARKET CAPITALIZATION: C\$8.7 million (Sept. 28, 2016)

789 West Pender St., Suite 960 Vancouver, BC, V6C 1H2 Tel: 604-668-8355 www.northarrowminerals.com

NORTHWEST TERRITORIES



TerraX Minerals Inc.



TSX-V: TXR 📷

CHAIRMAN AND CEO: Joseph Campbell **PRESIDENT: Stuart Rogers** VP, EXPLORATION: Tom Setterfield

TerraX Minerals Inc. is carrying out year-round exploration aimed at unlocking a multimillion-ounce gold camp at its Yellowknife City Gold Project, which extends north and south of the capital of Northwest Territories. Blanketing the same geological trend that hosts the historic Con and Giant mines, which produced a combined 14.2 million ounces of gold, the company's 118-square-kilometer (45.5 square miles) Yellowknife property blankets a region known for yielding deposits of a scale and grade to be among Canada's great gold camps. To date, most of the company's exploration success has been along the "core gold area" of the Northbelt property, which extends north

from Yellowknife and the historic mines. TerraX says the six veins and shear zones it has discovered along this 10-kilometer- (six miles) long core area -Mispickel, Sam Otto, Barney, Herbert-Brent; 20 Shear and Crestaurum - are indicative of a larger mineralized system. In February, the company began a 7,310-meter winter drill pro- Yellowknife City Gold Project, NWT. gram that investigated a



TerraX carries out year-round drilling at its

number of the core area targets. This program started with four holes at Mispickel, a zone at the north end of the core gold area that had never previously been drilled. All of the holes cut multiple zones of sulfide mineralized veins and replacement style sulfide mineralization, and three had visible gold. Hole TWL16-001 cut 8.6 meters of 12.87 grams per metric ton gold in the main zone at Mispickel and 11.32 meters of 2.14 g/t gold in the footwall of the zone. Hole TWL16-002 cut 7.3 meters of 23.6 g/t gold in the main zone. Encouraged by these results, the company drilled five more holes at Mispickel at the end of the winter program. The best intercept of this second round of drilling encountered eight meters of 60.6 grams per metric ton gold in hole TWL16-016. Winter drilling at Sam Otto, a zone not previously tested by TerraX, tapped wide and persistent zones of lower grade gold mineralization. Hebert-Brent, a zone first drilled by TerraX in 2015, was the target of 19 relatively shallow holes during the winter program that tested the interpreted plunge and strike extensions of mineralized zones exposed on surface. Barney, AES, Pinto and VSB were other zones tested during the winter drilling. In July, the company announced the start of a 27,000-meter drill program that will run into 2017. This extensive program includes a combination of extensional drilling on known mineralized zones such as Mispickel; aggressive step out holes along the structures hosting known zones, such as a 5,000-meter trend hosting Mispickel; and drilling focused on generating new discoveries. The 2016 work at Yel-

lowknife also included surface exploration mapping, prospecting and LiDAR surveys at Southbelt, the portion of the project that stretches south form Yellowknife City; and mapping, prospecting at Wash Lake, Mispickel and Sam Otto zones.

CASH AND SHORT-TERM DEPOSITS: C\$11.5 million (Aug. 31, 2016) WORKING CAPITAL: C\$8.4 million (July 31, 2016; raised C\$7.5 million

MARKET CAPITALIZATION: C\$83 million (Sept. 28, 2016)

1066 West Hastings St., 23rd Floor Vancouver, BC, V6E 3X2 Tel: 604-689-1749 www.terraxminerals.com

NORTHWEST TERRITORIES



Nighthawk Gold Corp.

TSX.V: NHK M

PRESIDENT AND CEO: Michael Byron **CHIEF FINANCIAL OFFICER:** Michael Leskovec

Nighthawk Gold Corp. continued to advance exploration at its 200,000-acre Indin Lake gold property with a 8,390-meter drill program looking to add higher grade near surface gold to the project's resource. Located roughly 200 kilometers (125 miles) north of Yellowknife, Northwest Territories, the Indin Lake property hosts a number of gold deposits, including the historical Colomac open-pit mine, which produced 527,908 ounces of gold during the 1990s. In 2013, Nighthawk reported an inferred mineral resource estimate of 39.8 million metric tons averaging 1.64 grams per metric ton (2.1 million ounces) gold. Roughly 2 million ounces of this gold resource is found at Colomac and Goldcrest, parallel trends of dikes and sills. With three smaller and slightly lower grade deposits across the larger Indin Lake property accounting for the balance. 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. Colomac Main, where the historical mining took place, is part of a roughly 6,000-meter long north-south trend of prospective area that has been divided into six zones. More than half of this year's drill program targeted Colomac. Drilling within Colomac Zone 1.5 followed up on 52.5 meters of 7.78 g/t gold cut in hole C14-06 and 32.95 meters of 4.19 g/t gold in hole C15-04B. Highlights from 2016 drilling at Zone 1.5 include: 52.07 meters (40 meters true width) of 7.72 grams per metric ton gold in hole C16-03; 31.45 meters (25 meters true width) of 4.14 g/t gold in hole C16-01; and 39.6 meters (32 meters true width) of 2.38 g/t gold in hole C16-01B. Nighthawk said drilling continues to reinforce the growth potential of Zone 1.5. "We are extremely encouraged with our drilling at Colomac's Zone 1.5. We have not only proven that distinct higher grade domains clearly exist at Colomac, but that they can be sizable bodies of relatively predictable geometry and great continuity," said Nighthawk President and CEO Michael Byron. Drilling also targeted other zones at Colomac and Goldcrest, a parallel trend about 250 meters west of Colomac.

CASH AND SHORT-TERM DEPOSITS: C\$245,797 (April 30, 2016) WORKING CAPITAL: C\$320,444 (April 30, 2016; closed C\$6 million financing in June)

MARKET CAPITALIZATION: C\$63.1 million (Sept. 28, 2016)

150 York St., Suite 410 Toronto, ON, M5H 3S5 Tel: 647-260-1247



NUNAVUI

Sabina Gold & Silver Corp.







PRESIDENT AND CEO: Bruce McLeod VP, PROJECT DEVELOPMENT: Wes Carson VP, EXPLORATION: Angus Campbell

Sabina Gold & Silver Corp. is endeavoring to evolve from a successful mining explorer to a mid-tier gold producer by developing its Back River gold project in western Nunavut. The company completed two feasibility studies for the Back River project in 2015. The first, published in May, demonstrated that a 6,000-metric-ton-per-day operation returned compelling economics but requires significant initial capital. As a result, a second feasibility study was undertaken to investigate starting with a 3,000-metric-ton-per-day mine focused on Goose, one of the properties that comprise the larger Back River project. At a gold price of US\$1,150 per ounce, the smaller operation would average 198,100 ounces of gold per year over an 11.8-year mine life at a cost of US\$534 per oz. Sabina submitted an environmental impact statement for this less capital-intensive project to the Nunavut Impact Review Board late in 2015. While waiting on the NIRB determination, the company carried out spring exploration program that tested three targets on the Goose property - Convergence, Kogoyok and Hivogani. The discovery hole at Convergence, 16GSE500, cut 3.7 meters averaging 3.84 grams per metric ton gold. A total of four holes were drilled at Convergence. Another 10 holes were drilled at Kogoyok, a prospect discovered in 2015. Highlights from 2016 drilling include 2.3 meters of 2.62 g/t gold in hole 16GSE492 and 1.9 meters of 2.37 g/t gold in 16GSE494. The best intercept of two holes drilled at Hivogani was one meter of 2.68 g/t gold in hole 16GSE509. While all three targets are in very early stages of exploration, Sabina is encouraged by the discovery of new gold zones in proximity to deposits slated for development. The company, however, was dealt a setback when the NIRB delivered a report to the Minister of Indigenous and Northern Affairs that recommends against advancing the Back River project to the permitting phase until more information is provided to address uncertainties regarding effects, predictions and mitigation measures, particularly with respect to caribou and climate change. Sabina contends the review board's report does not fully consider local support for Back River gold or fully recognize the socio-economic benefits offered by Back River: and it reaches conclusions that are not consistent with the evidence submitted by experts on monitoring and mitigation measures. Sabina said it is confident that it can address the concerns raised in the NIRB report.

In addition to Back River, Sabina owns a significant silver royalty on Hackett River, a silver-rich volcanogenic massive sulfide project about 45 kilometers (28 miles) west of Back River; Wishbone, a group of claims that blanket a prospective extension of the Hackett River greenstone belt; and three gold properties in Ontario.

CASH AND SHORT-TERM DEPOSITS: C\$43 million (June 30, 2016) WORKING CAPITAL: C\$44.2 million (June 30, 2016) MARKET CAPITALIZATION: C\$303.6 million (Sept. 28, 2016)

#202 - 930 West 1st St. Vancouver, BC, V7P 3N4 Tel: 604-998-4175 www.sabinagoldsilver.com

NUNAVUT



Aston Bay Holdings Ltd.

TSX-V: BAY (M)



PRESIDENT AND CEO: Benjamin Cox **EXECUTIVE VP AND COO:** Thomas Ullrich **CONSULTING GEOLOGIST: Michael Dufresne**

Aston Bay Holdings Ltd. is focused on unlocking the copper and zinc potential of its Aston Bay property on northwest Somerset Island, Nunavut. Late in 2015, Aston Bay cut a deal with Commander Resources Ltd. that consolidated this 395,000-hectare (976,066 acres) land package that covers the Storm Copper and Seal zinc projects. In return, Commander now owns about 20 percent of Aston Bay shares. After gaining full ownership of the property, Aston Bay Holdings cut a C\$40 million deal with BHP Billiton Ltd. to explore Storm Copper, which blankets mineralized showings along a more than 100-kilometer- (60 miles) stretch of Somerset Island. Under terms of an option

agreement signed by the companies in May, this investment will earn BHP Billiton a 75 percent interest in Storm, a stratabound deposit with copper mineralization that comes to the surface. The property - along with the Seal zinc deposit that lies about 20 kilometers (12.5 miles) to the west - has been explored off and on, mostly by Teck Resources Ltd., since the 1960s. A total of 97 holes were drilled at the Storm and Seal deposits between 1995 and 2001. Highlights of the historical Storm drilling include 110 meters of 2.45 percent copper from surface; and 56 meters of 3.07 percent copper from a depth of 12.2 meters. In July, Aston Bay launched a

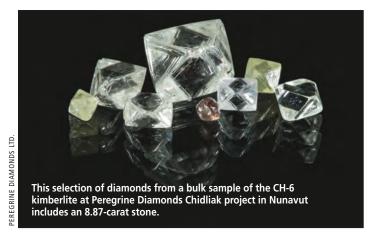
Late in 2015, Aston Bay cut a deal with Commander Resources Ltd. that consolidated this 395.000-hectare (976,066 acres) land package that covers the Storm Copper and Seal zinc projects.

C\$4 million exploration program funded by BHP Billiton. This work, aimed at testing high-priority drill targets and advancing other targets for future drilling, included roughly 2,000 meters of drilling; relogging of existing core; mapping; soil sampling; and prospecting. "As the operator of the project, Aston Bay is excited to test high-priority targets, while advancing additional targets for future drill programs," said Aston Bay COO Thomas Ullrich. Highlights from historical drilling at Seal include 18.8 meters of 10.58 percent zinc and 28.7 grams-per-metric-ton silver from 51 meters; and 30.8 meters of 5.11 percent zinc and 23 g/t silver from 101 meters.

CASH AND SHORT-TERM DEPOSITS: C\$218,488 (June 30, 2016) WORKING CAPITAL: C\$74,201 deficit (June 30, 2016; subsequent to the end of the quarter Aston Bay closed a C\$1.8 million financing, and received a C\$325,000 payment from BHP)

MARKET CAPITALIZATION: C\$21.4 million (Sept. 28, 2016)

1701 E. Evergreen Blvd Suite B Vancouver, WA 98661 Tel: 360-262-6969 www.astonbayholding.com



NUNAVUT & NORTHWEST TERRITORIES



Peregrine Diamonds Ltd.

TSX: PGD 🕋



EXECUTIVE CHAIRMAN: Eric Friedland PRESIDENT AND CEO: Tom Peregoodoff **CHIEF GEOSCIENTIST:** Jennifer Pell



Peregrine Diamonds Ltd. continues to focus on the exploration and potential development of its Chidliak diamond project located roughly 120 kilometers (75 miles) north of Iqaluit, the capital of Nunavut. Since 2008, 71 kimberlites have been identified on the 748,000-hectare (1.85 million acres) Chidliak property, eight of which are considered to be potentially economic. In July, the company published results from a preliminary economic assessment for an initial phase of development at two of these kimberlite pipes, CH-6 and CH-7. The PEA envisions an open-pit diamond mine with a life of roughly 10 years. Production would start at the CH-6, a kimberlite with 4.64 million metric tons of inferred resource averaging 2.45 carats per metric ton (11.39 million carats) diamond to a depth of 260 meters, followed by CH-7, a kimberlite with 5.99 million metric tons of inferred resource averaging 0.85 c/t (4.23 million carats) diamonds to a depth of 240 meters. Both resources remain open at depth. Highlights from the phase-1 PEA base case include: an after-tax net present value (7.5 percent discount) of C\$ 471.2 million and an after-tax internal rate of return of 29.8 percent; after-tax payback period of two years. The mine is projected to produce an average of 1.2 million carats of diamonds per year from kimberlite averaging 1.67 c/t. The capital costs to build this mine are estimated to be C\$ 434.9 million, including C\$ 56.7 million in contingency. Pre-production capital includes the construction of a 160-kilometer (100 miles) road to Igaluit. To advance Chidliak further, Peregrine plans to complete a C\$10 million to C\$15 million drilling and bulk sampling program at the project during the 2017 winter season. The objectives of the proposed program are to collect additional kimberlite from CH-6 for micro-diamond sampling; and upgrade inferred resources at the CH-6 and CH-7 kimberlites to the higher confidence indicated resource category. Peregrine President and CEO Tom Peregoodoff said, "As we develop Chidliak further, we expect to identify further upside to the economics of the project through optimization studies of the phase-one mine, including the expansion of the CH-6 resource to depth and through the development of a potential, phase 2 resource expansion from the numerous other kimberlites on the property, of which six currently show economic potential." Peregrine has full ownership of Chidliak, including all of the diamond marketing and sales rights, and there are no non-government royalties or other encumbrances on diamond production.

Peregine's portfolio also includes: Qilaq, a diamond and metals project adjacent to Chidliak; Nanuq and Nanuq North, diamond projects north of Rankin Inlet, Nunavut; and the Lac de Gras project, a group of three diamond properties in Northwest Territories. The company also holds prospecting licenses that cover six separate diamond project areas in Botswana.

CASH AND SHORT-TERM DEPOSITS: C\$4.5 million (June 30, 2016) WORKING CAPITAL: C\$4.1 million (June 30, 2016) MARKET CAPITALIZATION: C\$79.7 million (Sept. 28, 2016)

World Trade Centre 654 – 999 Canada Place Vancouver, BC, V6C 3E1 Tel: 604-408-8880 www.pdiam.com

NORTHWEST TERRITORIES



Canadian Zinc Corp.



CZN: TSX

CHAIRMAN, PRESIDENT AND CEO: John Kearney VP, EXPLORATION AND COO: Alan Taylor

VP, PERMITTING AND ENVIRONMENTAL AFFAIRS: David Harpley

Three years of work to optimize its Prairie Creek zinc-lead silver mine project in Northwest Territories is paying off for Canadian Zinc Corp. In March, this optimization work resulted in an updated and improved pre-feasibility study. A resource calculated late in 2015 outlined 8.7 million metric tons of measured and indicated resources averaging 8.9 percent zinc, 9.5 percent lead and 136 grams-per-metric-ton silver; a 32 percent increase compared to the last resource calculation in 2012. Based on the increased resource, the PFS outlines a mine that would produce an average of 60,000 metric tons of zinc concentrate and 55,000 metric tons of lead concentrate (containing roughly 86 million pounds of zinc, 82 million lbs. lead and 1.7 million ounces silver) per year. Using a base case metal price of US\$1/lb. for both zinc and lead, and US\$19/lb. for silver, the operation is anticipated to produce a post-tax net present value (8 percent discount) of C\$302 million and post-tax internal rate of return of 26 percent. Canadian Zinc has ready buyers for the metals anticipated to be produced at Prairie Creek; signing memorandums of understanding with two major smelters to acquire between 40,000 and 70,000 metric tons of zinc concentrates; and 20,000 to 25,000 metric tons of lead concentrates per year. Korea Zinc signed up to buy 20,000 to 30,000 wet metric tons of zinc sulfide concentrates; 15,000 to 20,000 wet metric tons of lead sulfide concentrates; and 5,000 metric tons of lead oxide concentrates per year, for a minimum period of five years from the date of startup of its Prairie Creek Mine. Boliden, which has five smelters in northern Europe, signed up to buy at least 20,000 dry metric tons and up to 40,000 dry metric tons of zinc sulfide concentrates per year. In July, Canadian Zinc raised C\$10.2 million to fund feasibility, development and exploration programs for the Prairie Creek project; as well as exploration at its zinc-lead projects in Newfoundland. Canadian Zinc is weighing the benefits of completing a definitive feasibility study for Prairie Creek, a move that would enhance the company's ability to secure bank financing for C\$216 million in capital costs needed to finish developing the zinc mine.

CASH AND SHORT-TERM DEPOSITS: C\$1.1 million (June 30, 2016) WORKING CAPITAL: C\$1 million (June 30, 2016; raised C\$10.2 million in July)

MARKET CAPITALIZATION: C\$72.5 million (Sept. 28, 2016)

1710 - 650 West Georgia St. Vancouver, BC V6B 4N9 Tel: 604-688-2001 www.canadianzinc.com



YUKON TERRITORY



Goldstrike Resources Ltd.

TSX-V: GSR 🚮



CHAIRMAN, PRESIDENT AND CEO: Terry King **CHIEF OPERATING OFFICER: William Chornobay CHIEF GEOLOGIST:** Trevor Bremner

Goldstrike Resources Ltd. continues to find new zones of visible gold across its 3.500-hectare (8.650 acres) Plateau South property in the Yukon Territory. The most recent such discovery was made at a zone called Bonanza, which is located about 4,000 meters away from and along trend with the Goldstack zone, one of the three primary gold zones along a 50-kilometer- (31 miles) trend at Plateau South. In July, the company reported that initial mapping of a 12- by 20-meter outcrop at Bonanza zone identified the most pervasive coarse visible gold seen in bedrock on the Plateau property to date, and has returned grab samples up to

436.4 g/t gold. Further investigations of the area turned up a second high-grade showing, Bonanza North, about 100 me-



ters north of the initial discovery. A third showing was found on trend and 160 meters southeast of Bonanza North. The 2016 exploration discovered at least five other new zones - Goldback, Goldbar, Gold Standard, Goldworks and Big Bang. Follow-up mapping, prospecting and ground geophysics are planned to delineate drill targets at these new zones. "These new discoveries have significantly expanded the known extent of this new district-scale gold system, said Goldstrike Director Trevor Bremner. Upon receiving a five-year advanced exploration permit for Plateau in June, Goldstrike said it plans to complete up to 20,000 meters of drilling in 200 holes and up to 100 trenches over the next five years. In September, assay results from the 2016 portion of this program began to trickle in. PSGS-16-01, drilled at the Goidstack zone, cut 45.5 meters averaging 6.05 g/t gold. The company said this hole contains the most abundant visible gold seen in drill core to date at Plateau, a property with no shortage of VG. Goldstrike said the 11 holes drilled at Goldstack through early September show that within the mineralized zone the gold is hosted in parallel vertical fractures similar to the orientation of the highgrade veins identified at Bonanza. In addition to Plateau, Goldstrike holds a number of gold properties in Yukon, including the Lucky Strike project in the White Gold district.

CASH AND SHORT-TERM DEPOSITS: C\$3.6 million (June 30, 2016) WORKING CAPITAL: C\$3.4 million (June 30, 2016) MARKET CAPITALIZATION: C\$44.4 million (Sept. 28, 2016)

1300-1111 West Georgia Street Vancouver, B.C. Canada V6E 4M3

Tel: 604-681-1820 Fax: 604-681-1864

www.goldstrikeresources.com

YUKON TERRITORY



Wellgreen Platinum Ltd.

TSX: WG 🚮



CHAIRMAN: Myron Manternach PRESIDENT AND CEO: Diane Garrett SENIOR VP AND COO: John Sagman

Wellgreen Platinum Ltd. is endeavoring to develop a mine at its namesake platinum group metals-copper-nickel project located near the Alaska Highway in southwestern Yukon Territory. Towards this goal, the company completed a C\$14.1 million financing early in 2016. Electrum Strategic Opportunities Fund, the sole subscriber to the private placement, purchased 70.5 million Wellgreen shares at C20 cents per share. The company raised another C\$2 million in a separate private placement at C30 cents per share. An updated preliminary economic assessment prepared for the Wellgreen project in 2015 outlines plans to start off with a 25,000-metric-tons-per-day operation for the first five years and then scale up to a 50,000-tpd operation for another 20 years. This mine is anticipated to average 89,518

ounces of platinum; 103,471 oz. palladium; 15,890 oz. gold; 73.1 million pounds nickel; 55.3 million lb. copper; and 3.4 million lb. cobalt annually for the first 16 years of operation before decreasing output towards the end of the planned mine life. As designed, the metals would be contained in a concentrate that would be sent to a nickel sulfide smelter. The concentrates would be shipped by truck to ports in either Haines

An updated preliminary economic assessment prepared for the Wellgreen project in 2015 outlines plans to start off with a 25,000metric-tons-per-day operation for the first five years and then scale up to a 50,000-tpd operation for another 20 years.

or Skagway, Alaska. In April, Wellgreen published results from a 25hole winter program that targeted down-dip extensions and higher grade mineralization at the Far West, West, Central, East and Far East zones. In addition to updating the resource, a portion of the core is being used for further metallurgical testing. Results from this program, as well as from previous drill programs conducted late in 2014 and summer 2015, will be incorporated into an updated geological deposit model that is intended to form the basis of a pre-feasibility study. In July, the company began a 2,500-meter drill program targeting areas with the potential to expand the overall resource at Wellgreen; upgrade inferred resources; expand a starter pit considered in the PEA; and test continuity of high-grade zones previously encountered. The company is also completing metallurgical studies to optimize the recovery circuit; and investigate the idea of creating separate copper and nickel concentrates.

CASH AND SHORT-TERM DEPOSITS: C\$15.2 million (Aug. 11, 2016) WORKING CAPITAL: C\$13.5 million (June 30, 2016; closed a C\$2 million financing in July)

MARKET CAPITALIZATION: C\$97.3 million (Sept. 28, 2016)

Suite 915-700 West Pender St. Vancouver, BC V6C 1G8 Tel: 605-569-3690 www.wellgreenplatinum.com

Strategic Metals Ltd.

TSX: SMD (m)



PRESIDENT AND CEO: W. Douglas Eaton **CHIEF OPERATING OFFICER:** lan Talbot **CHIEF FINANCIAL OFFICER:** Larry Donaldson



Strategic Metals Ltd. has more than 100 mineral properties in the Yukon, making it the largest claim holder in the territory. These properties, along with projects it has in neighboring Northwest Territories and northern British Columbia, are prospective for gold, silver, lead, zinc, copper, tin, tungsten, vanadium and lithium. The company started off its 2016 exploration by acquiring additional information at some of its most prospective gold projects in Yukon. The work included trenching at OOO, a silver-gold property located midway between Goldcorp Inc.'s Coffee gold project and Rockhaven Resources Ltd.'s Klaza gold-silver project. Chip sample results from one handdug trench include 570 grams per metric ton silver, 2.76 percent lead, 0.08 g/t gold over 6.4 meters; and 106 g/t silver, 0.84 percent lead and 0.03 g/t gold over 9.6 meters. These highlighted intervals are sepa-

rated by a 5.6-meter area of weakly mineralized rocks. Several rock samples collected by prospectors from elsewhere on the OOO property have returned between one and 6.54 g/t gold. In August, the company began a second phase of exploration with drilling at Hartless Joe, a gold-silver property located 28 kilometers (17 miles) northeast of Whitehorse. This drilling targeted the King and Queen showings, where trenching during

The company started off its 2016 exploration by acquiring additional information at some of its most prospective gold projects in Yukon.

the phase-1 program returned chip samples averaging 44.3 gramsper-metric-ton gold across 2.1 meters and 462 g/t gold across 0.4 meters, respectively. Strategic also drilled the Hopper and the Mars properties as part of the phase-2 program. The primary target at Hopper, located along the Aishihik road in southwestern Yukon, is a gold-rich skarn horizon that was intercepted in two 2015 drill holes. Located 350 meters apart, these intercepts graded 43.6 g/t gold over one meter and 12.15 g/t gold over 2.65 meters. The skarn horizon is believed to have a shallow dip and the mineralization is open in all directions. Drilling at the Mars property, located 40 kilometers (25 miles) north of Hartless Joe, tested an extension of a 2004 drill intercept that averaged 6.44 g/t gold over 4.57 meters.

As a prospect generator, Strategic identifies and stakes promising projects and completes initial exploration to confirm the geologic potential of its targets. The company then seeks partners to advance the projects and shares in the blue-sky potential via shareholdings or royalty interests. Through this strategy, the prospect generator holds an 8.3 percent interest in Atac Resources Ltd., which is expanding Carlin-style gold deposits at its Rackla Gold project; a 41.4 percent stake in Rockhaven Resources Ltd., which has identified large goldsilver zones at the Klaza property; and a 16.5 percent interest in Silver Range Resources Ltd., a company that recently shifted its focus to generating gold projects in Northwest Territories, Nunavut and Nevada.

CASH AND SHORT-TERM DEPOSITS: C\$23 million (June 30, 2016) WORKING CAPITAL: C\$39 million (June 30, 2016) MARKET CAPITALIZATION: C\$56 million (Sept. 28, 2016)

1016-510 West Hastings St. Vancouver, BC V6B 1L8 Tel: 604-687-2522 www.strategicmetalsltd.com

Rockhaven Resources Ltd.

RK: TSX-V mi





Rockhaven Resources Ltd. focused its 2016 exploration program on further defining and expanding the high-grade gold-silver resources at Klaza with the aim of bolstering the outcome of a preliminary economic assessment prepared for the project in southern Yukon Territory. Including the 56 holes drilled in 2015, Klaza now hosts 9.42 million metric tons of inferred resource grading 4.48 grams per metric ton (1.36 million ounces) gold, 89.02 g/t (26.96 million oz.) silver, 0.75 percent (155.4 million pounds) lead and 0.95 percent (197.8 million lbs.) zinc. The average

life-of-mine operating cash costs are estimated to be US\$652 per gold-equivalent oz. produced, after factoring in the credits for the other metals produced, and total allin sustaining cost is anticipated to be US\$966 per gold-equivalent oz. Additional metallurgical work, resource expansion and infill drilling are areas with the potential to enhance the economics of mining



Drilling expands gold-silver deposits at Rockhaven's Klaza project, Yukon.

Klaza. In early August, Rockhaven had wrapped up the 2016 field program, which included 8,427 meters of drilling in 44 holes; 800 meters of excavator trenching; and an induced polarization geophysical survey. Early results from this work revealed the discovery of the Stroshein zone, a high-grade gold structure that lies between partially delineated resource blocks in the eastern portion of the Klaza vein system. Assays from early drilling at Stroshein include 23 g/t gold over 0.59 meters in hole 295; and 25.9 g/t gold over 0.51 meters within a broader zone of 5.29 g/t gold over 3.09 meters in hole 300. Rockhaven said the IP survey identified a large, intense chargeability anomaly that corresponds with an area of known porphyry-style copper-gold-molybdenum mineralization. Drilling this anomaly, however, turned up a new zone of highgrade gold named Rex. KL-16-314, the first hole drilled at Rex, cut 1.39 meters of 5.9 grams per metric ton gold, 1.74 g/t silver and 0.006 percent copper from 32.61 meters; 1.42 meters of 10.55 g/t gold, 44.7 g/t silver and 0.315 percent copper from 39.75 meters; and 1.48 meters of 7.74 g/t gold, 23.9 g/t silver and 0.641 percent copper from 57 meters. "The fortuitous discovery of multiple, closely spaced veins in an underexplored part of the property further demonstrates the vast untested potential of the Klaza project," said Rockhaven CEO Matt Turner. "Much work still has to be done to fully evaluate the Kelly porphyry target, and fortunately this work can be done in conjunction with the further exploration of the Rex zone." Rex lies 1,100 meters south of the Eastern BRX zone, the closest of the zones in the current mineral resource.

Rockhaven 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) Ltd., a geological consulting firm with extensive knowledge and exploration expertise in the Yukon Territory and northern British Columbia.

CASH AND SHORT-TERM DEPOSITS: C\$2.3 million (June 30, 2016) WORKING CAPITAL: C\$1 million (June 30, 2016)

MARKET CAPITALIZATION: C\$26.6 million (Sept. 28, 2016)

Suite 1016 - 510 West Hastings St. • Vancouver, BC V6B 1L8 Tel: 604-688-2568 • www.rockhavenresources.com

YUKON TERRITORY



Golden Predator Mining Corp.

TSX.V: GPY (M)



CHAIRMAN: William Sheriff CEO: Janet Lee-Sheriff **CHIEF GEOLOGIST: Mike Burke**

Golden Predator Mining Corp. focused its 2016 exploration on 3 Aces and Brewery Creek, two of the company's five mineral properties in the Yukon Territory. At 3 Aces, a high-grade gold project located in southeastern Yukon, the company completed a roughly 750-ton bulk sample of high-grade vein material from the Ace of Spades (formerly Sleeping Giant) vein. In August, the company reported the recovery of 81.4 ounces of gold and 7.77 oz. of silver from the processing of 87.8 dry tons of the bulk sample material. Golden Predator received C\$139,062 from the sale of the precious metals. In addition to bulk sampling, Golden Predator completed a 31-hole reverse circulation drill program at Ace of Spades during an initial phase of exploration. Highlights from the program include: 2.28 meters grading 96.78 g/t gold from a depth of 3.51 meters; 11.43 meters grading 31.89 g/t from a depth of 12.8 meters; and 10.36 meters of 14.3 g/t gold from a depth of 10.06 meters. In addition to impressive gold grades, this drilling demonstrates the high-grade veins continue and seem to be getting thicker at depth. In early August, Golden Predator reported a C\$4 million second phase of exploration at 3 Aces that included collection of 4.800 soil samples: detailed resistivity-induced polarization surveys to identify quartz veins and structural targets that may not be exposed to the surface within a roughly 10square-kilometer (2,450 acres) central core area of the 225-square-kilometer (55,600 acres) property. Within the first two weeks of this program, the company had discovered visible gold at Jack of Spades, a quartz vein

A newly installed bridge provides road access to 3 Aces, allowing for lower cost, year-round exploration of this high-grade gold project in southeastern Yukon.

about 100 meters east of the Ace of Spades vein and 1,100 meters northeast of the Ace of Hearts (formerly Main Discovery) vein. Observations of mineralization at Jack of Spades, as well as the other veins, have identified structures and conditions that will provide better targeting for the potential discovery of additional high-grade vein zones. By early September, this program had discovered 11 previously unknown mineralized veins. A second phase of exploration that began in October includes at least 3,500 meters of reverse circulation and 400 meters of core drilling designed to collect large volume samples to accurately estimate grades in the veins containing coarse visible gold at Ace of Spades. To lower costs and ease yearround access, the company also constructed bridge over the Little Hyland River along with six kilometers (3.7 miles) of road into

the core area.

At Brewery Creek, the site of a past-producing gold mine located 55 kilometers (34 miles) east of Dawson City, Golden Predator completed roughly 1,600 meters of engineering and metallurgical drilling focused on formerly producing pits where historical data indicates significant oxide gold mineralization remains unmined. A preliminary economic assessment completed in 2014 targets 10.2 million metric tons of open-pit material from eight deposits at an average grade of 1.35 g/t gold and reprocessing of 4.1 million metric tons of material located on the former heap leach pad at an average grade of 0.77 g/t. The operation is expected to produce 372,000 oz. of gold over a nine-year span. Golden Predator's portfolio of Yukon properties also includes Marg, a copper-leadzinc-gold-silver property about 40 kilometers (25 miles) east of Keno City; Grew Creek, an epithermal gold-silver property in southeastern Yukon; and Sonora Gulch, a copper-goldmolybdenum project 40 kilometers (25 miles) west of Capstone Mining's Minto Mine.

CASH AND SHORT-TERM DEPOSITS: C\$582,511 million (June 30, 2016)

WORKING CAPITAL: Deficit of C\$475,151 million (June 30, 2016; closed a C\$16.36 million financing in July)

MARKET CAPITALIZATION: C\$62.9 million (Sept. 28, 2016)

510-580 Hornby St. • Vancouver, BC V6C 3B6 Tel: 778-847-3351 www.goldenpredator.com



11401 Olive Lane, Anchorage, Alaska ▲ 907-522-4664 ▲ www.alaskaearthsciences.com



YUKON TERRITORY

Victoria Gold Corp.

EXCO

TSX-V: VIT (

CHAIRMAN: T. Sean Harvey PRESIDENT AND CEO: John McConnell **EXECUTIVE VICE PRESIDENT: Mark Ayranto**

Alexco Resource Corp.

TSX: AXR / NYSE-MKT: AXU



PRESIDENT AND CEO: Clynton Nauman

EXECUTIVE VP AND COO: Brad Thrall VP. EXPLORATION: Alan McOnie

Alexco Resource Corp. owns a number of mineral properties that blanket nearly the entire historic Keno Hill Silver District of central Yukon Territory, including the Bellekeno silver-zinc-lead mine. The company began commercial production at Bellekeno early in 2011. However, in 2013 the company temporarily suspended operations due to lower silver prices. Since the idling of the mill, Alexco has focused on exploration and development of some of the other deposits on the larger Keno Hill property. The company budgeted C\$3.3 million for a 15,500-meter surface drill program to expand upon the high-grade silver at Bermingham, a newly discovered deposit where silver grades are measured in kilograms per metric ton. One 2015 hole drilled in the high-grade Bear zone cut 4.98 meters (true width) averaging 7,462 g/t (7.46 kg/t) silver. The hole was drilled immediately to the northeast and adjacent to the previously outlined Bermingham deposit, which hosts 377,000 metric tons of indicated resource averaging 430 g/t (5.2 million oz.) silver. One hole drilled this year, K-16-0608, cut 7.5 meters true width of 2,715 g/t silver, including 2.4 meters of 6,391 g/t silver. A new Bermingham resource that includes the Bear zone is to be included in an updated preliminary economic assessment, which also will include revised and optimized development and mining plans for the company's Flame & Moth, Bellekeno and Lucky Queen deposits. In July, Alexco began preparations for the installation of an underground portal at the Flame & Moth mine, along with establishing necessary surface infrastructure to drive the first 20 meters of the production ramp, allowing for the resumption of development activities to begin at full-scale in the future. This ramp will ultimately be driven some 750 meters to the upper production levels of Flame & Moth, a deposit near the district mill that hosts roughly 585,000 metric tons of potentially mineable material grading 693 g/t silver, 5.35 percent zinc, 2.19 percent lead and 0.52 g/t gold. Alexco continues to monitor global markets as it assesses when to resume mining the expanding highgrade silver deposits across its Keno Hill Silver District property. "Clearly, we are encouraged by the continued strength of the silver markets and, pending results of our Bermingham drilling program we will be well-positioned to consider redevelopment options at Keno Hill," Alexco President and CEO Clynt Nauman said.

CASH AND SHORT-TERM DEPOSITS: C\$18.1 million (June 30, 2016) WORKING CAPITAL: C\$26 million (June 30, 2016) MARKET CAPITALIZATION: C\$212.7 million (Sept. 28, 2016)

Suite 1225, Two Bentall Centre 555 Burrard St., Box 216 Vancouver, BC V7X 1M9 Tel: 604-633-4888 www.alexcoresource.com

With a goal of bringing more gold into the mine plan for its Eagle Gold project, Victoria Gold Corp. ratcheted up exploration at its Dublin Gulch property in central Yukon Territory. This work focused on Olive-Shamrock, a pair of zones about 2,500 meters northeast of the main Eagle Gold deposit that had no resource estimate going into 2016. The company said Olive and the adjacent Shamrock deposit have the potential to enrich Eagle project economics by adding higher-grade ore, increasing flexibility in mine planning and lowering capital intensity from shared infrastructure. Olive and Shamrock were two separate zones about 300 meters apart. Linking and expanding these zones was the primary focus of a 12,000-meter phase-1 program launched in March. Highlights from the phase-1 program at Olive include: 45.8 meters of 2.48 grams per metric ton gold; 144.5 meters of 1.16 g/t gold; and 38.1 meters of 2.1 g/t gold. A maiden re-

YUKON TERRITORY

source calculated for Olive was incorporated into an updated feasibility study that outlines a technically viable and financially robust mine for Eagle Gold.

Completed in September, this study envisions a 33,700-metrictons-per-day mine encompassing two open pits, Eagle and Olive; a three-stage crushing circuit; two in-valley leach pads; and a gold recovery plant. This operation is anticipated to produce 190,000

With a goal of bringing more gold into the mine plan for its Eagle Gold project, Victoria Gold Corp. ratcheted up exploration at its Dublin Gulch property in central Yukon Territory.

ounces of gold annually over 10 years of mine life, based on 116 million metric tons of reserves averaging 0.67 grams per metric ton (2.66 million oz.) gold. "The results from this feasibility study highlight the exceptional quality of the Eagle Gold project," said Victoria President and CEO John McConnell. In May, Victoria Gold got a C\$24 million boost in cash and two significant new shareholders. Electrum Strategic Opportunities Fund L.P. subscribed to 60 million units offered by Victoria and Sun Valley Gold LLC to another 20 million units. Upon closing of the private placement, Electrum owns 13.5 percent of Victoria Gold's issued and outstanding shares while Sun Valley, already a significant shareholder, increased its ownership to around 17.9 percent. Kinross Gold Corp., Victoria's third-largest shareholder, holds about 12.5 percent of Victoria's shares. At the end of August, Victoria raised another C\$28.8 million in an offering underwritten by a syndicate of underwriters led by Raymond James Ltd. In addition to the major financings, Victoria raised C\$2.85 million specifically for funding a second phase of exploration focused on the Olive-Shamrock zone. "Eagle is a fully permitted project in a premier jurisdiction that can produce 200,000 oz. annually with high margins and a very attractive valuation. We also believe the current and future Olive-Shamrock drilling will continue to add to this valuation," McConnell said. The feasibility study anticipates one year of construction.

CASH AND SHORT-TERM DEPOSITS: C\$34.8 million (May 31, 2016; closed C\$2.8 million financing in June, closed C\$28.8 million financing in August)

WORKING CAPITAL: C\$28.2 million (May 31, 2016) MARKET CAPITALIZATION: C\$312.7 million (Sept. 28, 2016)

Suite 303 - 80 Richmond St. West • Toronto, ON M5H 2A4 Tel: 416-866-8800 • www.vitgoldcorp.com



BRITISH COLUMBIA



Colorado Resources Ltd.

TSX-V: CXO M



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



Colorado Resources Ltd. owns or has options on five properties that blanket more than 1,000 square kilometers of northwestern British Columbia. The junior's 2016 exploration focused primarily on KSP, a property the company is optioning from Seabridge Gold Inc. (Seabridge acquired the property as part of its June purchase of Snip-Gold Corp.) In June, Colorado kicked off drilling at the Inel zone at KSP, where the company's surface geological work, along with a review of historical drill logs, indicate at least three more than 1,000meter-long stacked target zones at Inel. Gold-in-soil anomalies upslope of the known mineralization show that other unidentified trends remain to be discovered. Drilling began in June and by the end of August, Colorado had already drilled 59 holes at (8,865 meters) at KSP. In early August, the company published results from the first 30 holes. A one-meter intercept in hole INDDH16-029 averaged165.5 grams per metric ton gold, 37.1 g/t silver and 2.5 percent zinc; part of a 25.7-meter section that averaged 9.24 g/t gold, 36.6 g/t silver and 3.3 percent zinc. Despite meeting its annual work requirements for KSP by the end of July, the company kept drilling with the goal of earning an initial 51 percent interest in the property by the end of the 2016 program. "The expanded and accelerated program will focus on follow up of the current drill results at Inel and also commence drilling on the Khyber target located 2 kilometers to the south of Inel," explained Colorado President and CEO Adam Travis. "There's plenty of room at Inel for more mineralization as our first-pass drilling has tested only about 13 percent of this impressive soil anomaly on a very broad pattern." Upon satisfying its initial earn-in requirements, Colorado has the right to earn up to 80 percent interest in KSP by investing another C\$4 million on work there within a year.

In April, Colorado acquired KingPin, a large copper-gold property immediately southwest of KSP that consists of 29,425 hectares (72,709 acres) of staked claims and 3,400 hectares (8,401 acres) purchased from a third party. This land package, which stretches southwest from KSP to the past-producing Granduc Mine, covers 35 British Columbia Minfile occurrences. Colorado's 2016 program investigated four of these historical mineral occurrences: Max, a cluster of 15 porphyry, veins and skarn targets that Colorado believes may have been under-appreciated for their gold potential; KingPin South, which hosts three known polymetallic-gold targets located in areas that have undergone significant glacial retreat since last worked and offer new areas to explore for vein targets; Boulder Creek, a cluster of nine occurrences in the southwest portion of KingPin that shows promise for vein and skarn targets; and KingPin West, which includes more than 15 kilometers (nine miles) of promising geology on trend from the KSP property. Colorado completed prospecting, mapping and sampling at KingPin this year.

Centerra Gold Inc., a Toronto-based company with two operating gold mines in Asia, funded a 2,000-meter drill program at Hearts Peaks, a high-grade gold-silver project located about 45 kilometers (30 miles) northeast of the past producing Golden Bear Mine. In the fall of 2015, Centerra entered into an option agreement to earn up to a 70 percent interest in this property that is also known as HP.

Colorado's portfolio also includes North Rok, a copper-gold property about 15 kilometers (10 miles) northwest of Imperial Metals' Red Chris Mine; and Hit a gold-copper property in southern British Columbia.

CASH AND SHORT-TERM DEPOSITS: C\$6.5 million (June 30, 2016) WORKING CAPITAL: C\$6.2 million (June 30, 2016) MARKET CAPITALIZATION: C\$18.8 million (Sept. 28, 2016)

110 - 2300 Carrington Road, West Kelowna, BC, V4T 2N6 Tel: 250-768-0849 www.coloradoresources.com

BRITISH COLUMBIA/YUKON TERRITORY



IDM Mining Ltd.

TSX.V: IDM M



EXECUTIVE CHAIRMAN: Michael McPhie PRESIDENT AND CEO: Rob McLeod

PROJECT MANAGEMENT, ENGINEERING: Wayne Corso

With the goal of finalizing a feasibility study for its Red Mountain project in northwestern British Columbia by early 2017, IDM Mining Ltd. completed roughly 5,300 meters of underground drilling during a phase-1 program aimed at upgrading and expanding the gold-silver deposit identified there. In April, the company published an updated resource for the project located 15 kilometers (nine miles) northeast of Stewart that includes 1.64 million metric tons of measured and indicated resource averaging 8.36 grams-per-metric-ton (441,500 ounces) gold and 26 g/t (1.38 million oz.) silver. An updated preliminary economic assessment published in July outlines plans for a 1,000 metric-tons-per-day mill producing 70,000 oz. of gold and 194,000 oz. of silver annually over an initial five-year mine-life. The study anticipates roughly US\$89 million in initial capital costs, and di-

rect mining costs of about US\$418/oz. gold, after credits for silver recovered. 2016 drilling included infill and step-out drilling in four zones that encompass the Red Mountain resource - Marc, JW, AV and 141. One hole, U16-1182, cut 6.3 meters averaging 9.91 g/t gold and 53.52 g/t silver to the south of Marc, an area previously thought to be closed to expansion. In addition to drilling, IDM completed mapping and sampling across its 17,000-hectare (42,000 acres) property that included the investigation of areas of newly exposed mineralization due to rapidly melting glaciers. This surface work turned up a zone of high-grade gold-silver-molybdenum mineralization at Lost Valley, a prospect located about 4,000 meters southwest of the underground resource at Red Mountain. Highlights from 66 rock samples collected at Lost Valley include: 38 g/t gold and 1,048 g/t silver; 49 g/t gold and 280 g/t silver; and 165 g/t gold and 371 g/t silver. The average grade of the 66 samples was 10.5 g/t gold, 81 g/t silver and 0.17 percent molybdenum. Follow-up work at Lost Valley discovered a high-grade goldsilver zone called Anda'adala'a Lo'op, or "money rock" in the language of the Nisga First Nation. As of late August, the Anda'adala'a Lo'op structure has been traced for 78 meters on surface. Seven lines of channel samples were cut across vein along 33 meters of the vein. These samples averaged 18.7 g/t gold and 61.4 g/t silver over an average width of 0.84 meters, with individual assays of up to 34.6 g/t gold and 183 g/t silver. "This discovery, which appears to be part of a stacked set is an obvious new drill target at Red Mountain," said IDM President and CEO Rob McLeod. "Recently exposed from the rapidly melting Cambria icefield, it emphasizes the stellar exploration potential at Red Mountain."

Beyond its work at Red Mountain, IDM has been busy analyzing data on some 308,000 hectares (761,000 acres) of Yukon Territory mining claims that it acquired from Oban Mining Corp. late in 2015. This extensive portfolio consists of 51 properties previously held by Ryan Gold Corp. An estimated C\$25 million of exploration has been carried out on these properties. Upon an initial review of the data, IDM prioritized three properties for follow-up: Pluto, a large gold property in southwestern Yukon; Mahtin, a property with intrusive-related gold that lies 50 kilometers (30 miles) north of Mayo; and Golden-Oly, a property in eastern Yukon with the markers of an intrusive-related or sediment hosted gold system. The company says the holding costs for the Yukon properties are low so it could leave them on care and maintenance, while it continues to work toward developing Red Mountain. Other options being considered include joint ventures; spin-outs into a Yukon-focused exploration company or selling the properties.

CASH AND SHORT-TERM DEPOSITS: C\$10.7 million (April 30, 2016) WORKING CAPITAL: C\$7.5 million (April 30, 2016) MARKET CAPITALIZATION: C\$45.5 million (Sept. 28, 2016)

1500-409 Granville St. • Vancouver, BC V6C 1T2 Tel: 604-681-5672 www.idmmining.com

BRITISH COLUMBIA





TSX/NYSE: PVG am

CHAIRMAN AND CEO: Robert Quartermain PRESIDENT: Joseph Ovsenek

CHIEF EXPLORATION OFFICER: Kenneth McNaughton

Pretium Resources Inc. is on pace to fire up operations at its bonanza grade Brucejack gold project in the fourth quarter of 2017. Upon reaching commercial production, the high-grade underground operation at Valley of the Kings is expected to produce 7.27 million ounces of gold over an 18-year mine life, or roughly 404,000 oz. of the precious metal annually, according to a feasibility study completed in

continued on next page



(Even underground)

Creative photography for Alaska's resource development industries



907.258.4704 www.judypatrickphotography.com

EXPLORERS AT A GLANCE continued from page 85

2014. Aiming to upgrade the confidence of resources to be mined during the first three years of operation, the company drilled 367 holes (63,740 meters) in the Valley of the Kings deposit at Brucejack in 2015 and 2016. As a result of this infill drilling, the Valley of the Kings measured resource increased by 58 percent to 3.5 million metric tons averaging 17 grams per metric ton (1.9 million ounces) gold, according to an updated resource published in July. Overall, the measured and indicated mineral resources in the Valley of the Kings now totals 16.4 million metric tons grading 17.2 g/t (9.1 million oz.) gold, a slight increase from the 15.3 million metric tons averaging 17.6 g/t (8.7 million oz.) that formed the basis for the feasibility study. In 2015, Pretium completed a US\$540 million construction financing package with Orion and Blackstone. With this financing, along with equity offering of US\$146.2 million equity offering this year, development of Brucejack is fully funded.

While on the cusp of graduating from explorer to producer, Pretium has not lost sight of its roots. In 2015, the company completed roughly 20,000 meters of drilling at grassroots porphyry/epithermal-style targets east of the nearly operational mine. Flow Dome, a zone about 1,000 meters east of the Valley of the Kings, and Kitchenview, a zone further to the northeast were among the targets tested. This year, the company has two drills following up on some promising areas across the wider Brucejack property.

In 2015, Pretium optioned the King Tut, Tuck and Silver Crown West properties from Teuton Resources Corp. for C\$1.8 million in cash payable over four years. Teuton will retain a 2 percent net smelter return royalty in the properties with no buyback. These gold-silver prospective properties lie south of Brucejack. Pretium also owns Snowfield, a bulk tonnage project north of Brucejack that 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.

CASH AND SHORT-TERM DEPOSITS: C\$371,620 (June 30, 2016) WORKING CAPITAL: C\$313,790 (June 30, 2016) MARKET CAPITALIZATION: C\$2.47 billion (Sept. 28, 2015)

2300 – 1005 Dunsmuir St. • Vancouver, B. C. V7X 1L4 Tel: 604-558-1784 www.pretivm.com



ALASKA



Coeur Mining Inc.



NYSE: CDE 🕋

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

Coeur Mining Inc. continues to improve operation performance at Kensington while seeking out and developing higher grade deposits at the Southeast Alaska mine. The 12,400-acre Kensington property is divided into two blocks - Kensington and Jualin - that trace their roots to two historical mines discovered at the turn of the 20th Century. The Main and Raven deposits, located in the Kensington block, hosted 560,000 ounces of gold in 2.83 million short tons of proven and probable reserves averaging 0.198 oz./ton gold at the end of 2015. Recent exploration, however, has focused on building reserves in a deposit on the Jualin side of the property that bests the historic average and is set to change the production profile of the Kensington Mine. According to a 2015 technical report, the Vein 4 deposit at Jualin contains 289,000 tons of inferred resource averaging 0.619 oz./t (179,000 oz.) gold, roughly triple the grades currently being mined at Kensington. Coeur began the roughly 7,000 feet of underground development needed to reach the Jualin deposit in 2015 and by July of this year, the company reported the development was about 50 percent complete. Coeur is carrying out a 12,000-meter or so underground drill program aimed at upgrading and expanding the Jualin resource. This work will primarily focus on the No. 4 vein but also will include drilling of No. 5, a deeper vein that Coeur has cut with drilling but for which it has not yet developed a resource. An inaugural reserve estimate for Jualin is expected by the end of 2016 and first ore is anticipated to reach the mill at Kensington in mid-2017. "We're ... investing about US\$40 million at Kensington to drill and develop significantly higher grade gold ounces there. But that's not expected to start impacting Kensington's production, cost and cash flow until late next year," said Coeur Mining President and CEO Mitchell Krebs. In 2018, gold production at Kensington is expected to reach 149,000 oz. Underground exploration this year also targeted the four zones within the Kensington Main deposit and the Raven vein.

CASH AND SHORT-TERM DEPOSITS: US\$257.6 million (June 30, 2016) WORKING CAPITAL: US\$286.6 million (June 30, 2016) MARKET CAPITALIZATION: US\$1.96 billion (Sept. 28, 2016)

104 S. Michigan Ave. Suite 900 Chicago, Illinois 60603 Tel: 312-489-5800 www.coeur.com

ALASKA



Sumitomo Metal Mining Pogo LLC

GENERAL MANAGER: Chris Kennedy **SENIOR MINE GEOLOGIST:** Dave Larimer



MINING DONE RIGHT

Sumitomo Metal Mining Pogo LLC – a joint venture between Japanese firms Sumitomo Metal Mining Company (85 percent) and Sumitomo Corp. (15 percent) – budgeted roughly US\$10 million to continue to expand upon the high-grade gold zones at and around its Pogo Mine in Interior Alaska in 2016.

continued on page 88

IT'S ALWAYS THE SMALL PIECES THAT MAKE THE BIG PICTURE

SUBSCRIBE AT MININGNEWSNORTH.COM OR CALL 907-522-9469





EXPLORERS AT A GLANCE continued from page 86

This follows a US\$15 million program in 2015 that further defined and expanded East Deep, North and South Pogo, three zones of high-grade gold mineralization adjacent to the current underground workings at the high-grade underground mine. This work also discovered Fun zone, yet another area of gold mineralization adjacent to the deposits being mined. Situated some 60 miles (100 kilometers) southeast of Fairbanks, Pogo began operation in 2006 by mining the Liese zone, three flat-lying, parallel quartz veins that carry highgrade gold. In 2010, SMM Pogo discovered East Deep, a twin to Liese. Geological and metallurgical evidence indicates that the Liese and East Deep zones were once a single body of gold-rich mineralization split by a wedge of gold-barren igneous rock (diorite) some 95 million years ago. The Pogo mill sits on this wedge, making mining of East Deep as convenient as the original zone. Today, the Pogo mill processes high-grade ore from both zones. While East Deep and Liese

Out of the ground and into the classroom.

Putting the power of Alaska's resources

into the hands of Alaska's students

www.akresource.org

601 E. 57th Place, Suite 104 Anchorage, AK 99518 907 276 5487 - T 907 276 5488 - F info@akresource.org

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. In 2014, SMM Pogo drove two drifts from the underground workings at East Deep to the North Zone. These exploration drives 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 Pogo exploration team has discovered another nearby mine zone called Fun, which is situated immediately north of Liese and west of North zone. One hole drilled into the Fun zone in 2016 cut 2.44 meters averaging 0.437 ounces per ton gold. With the goal of replacing the some 340,000 oz. of gold mined out of reserves, the Pogo exploration team continues to focus on expanding the Fun zone and other near-mine deposits surrounding the mill at the high-grade mine.

3204 International Street Fairbanks, AK 99701 Tel: 907-458-4003 www.smm.co.jp/E/csr/environment/pogo/



Hecla Mining Co.

NYSE: HL 🚮



PRESIDENT AND CEO: Phillips Baker Jr.

CHAIRMAN: Ted Crumley

SENIOR VP, EXPLORATION: Dean McDonald



Established in 1891, Hecla Mining Company has survived two World Wars, the Great Depression and numerous crests and troughs of a cyclical metals market that has sunk many of the silver miner's contemporaries over the past 125 years. Over this century-plus span, the Idaho-based miner has grown adept at navigating tumultuous markets in a way that enables the company to be well-positioned for smooth sailing in calm waters. "We have operated through many price cycles; from recessions and depressions to boom times, and it is a testament to the power of our projects and the strength of our team that we have weathered them all and are now a transformed company having recently seen the highest reserves and production of our history," said Hecla Mining Co. president and CEO Phillips Baker Jr. In 2016, the 125-year-old miner began to reap the rewards of its longstanding strategy of growing production during times of lower metal prices. Over the past 75 years, Lucky Friday has produced more than 155 million oz. of silver, along with healthy quantities of lead and zinc. Today, Hecla is taking this long-lasting mine to new depths by investing roughly US\$225 million in the No. 4 shaft, the largest capital project in Hecla's storied history. By reaching silver-rich miner-



alization 10,000 feet below the surface, the No. 4 shaft is expected to add more than 25 years of silver-rich resources to Lucky Friday. In 2013, the company purchased the Casa Berardi Mine in Quebec, an acquisition that tipped the balance of its metals profile from dominantly silver to slightly in favor of gold. Hecla is anticipating the Casa Berardi Mine to produce 145,000 ounces of gold during 2016, boosting the company's total gold production to roughly 233,000 oz. for the year. At mid-year, Hecla said it had six underground drills and two surface rigs turning as Casa Berardi. Much of Hecla's 2016 exploration focused on expanding existing deposits and defining new resources at San Sebastian, a past producing silver-gold mine in Mexico the company put back into production at the end of 2015. Going into 2016, this mine had 289,000 tons of proven and probable reserves, averaging 27.7 oz. per ton (8.0 million oz.) silver and 0.22 oz. /t (64,000 oz.) gold.

It is the Greens Creek Mine in Southeast Alaska, however, that has been the foundation of Hecla's growth since the company bought full ownership of the operation in 2008. Today, Greens Creek is one of the largest and lowest-cost primary silver mines on the planet - producing roughly 200 million oz. of silver and 1.5 million oz. of gold since its startup in 1989. The 8.5 million oz. of silver recovered at Greens Creek in 2015 helped propel Hecla's companywide silver production of 11.6 million oz. for the year, a new record for the 125-year-old company. After crediting the value of the gold, zinc and lead produced as by-products, the cost of mining an ounce of silver at Greens Creek was only US\$3.91 per oz. last year. This year, Hecla anticipates the mine will produce roughly 8.3 million oz. of silver at US\$5.00 per oz. At yearend 2015, Greens Creek had 7.21 million tons of reserves averaging 12.3 oz. /t (88.7 million oz.) silver; 0.09 oz. /t (677,000 oz.) gold; 8.1 percent (582,640 tons) zinc; and 3 percent (218,400 tons) lead. Definition drilling at Greens Creek focused largely on refining the resources of the 9A and NWW zones for conversion to reserves. This drilling confirmed the continuity and refined the geometry of a mostly vertical eastern limb of mineralization at 9A. Highlights include: 20.4 oz./t silver, 0.09 oz./t gold, 16.2 percent zinc and 5.2 percent lead over 17.5 feet; and 15.1 oz./t silver, 0.08 oz./t gold, 11.2 percent zinc and 4.1 percent lead over 15.6 feet. Drilling of the northern most targets of the NWW Zone cut 76.4 oz./t silver, 0.17 oz./t gold, 19.9 percent zinc and 4.4 percent lead over 10.2 feet; and 56.1 oz./t silver, 0.13 oz./t gold, 3.3 percent zinc, and 0.8 percent lead over 10.2 feet.

At mid-year, Hecla upped its 2016 exploration and pre-development budget to US\$19 million, an increase of US\$4 million.

CASH AND SHORT-TERM DEPOSITS: US\$143.6 million (June 30, 2016)

WORKING CAPITAL: US\$181.3 million (June

30, 2016)

MARKET CAPITALIZATION: US\$2.3 billion (Sept. 28, 2016)

6500 N Mineral Dr., Suite 200 Coeur d'Alene, ID 83815-9408 Tel: 208-769-4100 www.hecla-mining.com

ALASKA



Kinross Gold Corp.

NYSE: KGC / TSX: K.TO and



INDEPENDENT CHAIRMAN: John Oliver PRESIDENT AND CEO: Paul Rollinson **CHIEF OPERATING OFFICER:** Lauren Roberts (effective Jan. 1, 2017)

Kinross Gold Corp. celebrated two milestone events at its Fort Knox Mine in 2016. the seven-millionth-ounce of gold poured and

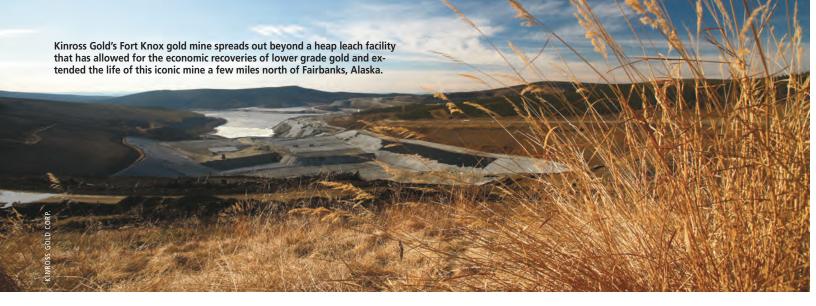
the 20-year anniversary of this Interior Alaska operation. Seeking to extend its



current operations with near-mine exploration is one of Kinross' primary objectives. "Kinross' exploration is focused on brownfield projects around existing operations, and we continue to look for ways to further extend our operation," Fort Knox General Manager Eric Hill said. "We believe Alaska is an attractive mining jurisdiction and a good place to do business - we have successfully operated Fort Knox for 20 years, and the mine is now 12 years beyond our original plan." When Kinross began mining at Fort Knox in 1996, the deposit had 4.1 million ounces of proven and probable gold reserves, enough to support the open-pit mine until 2008. Going into 2016, the mine continues to boast 2.02 million oz. of gold contained in 147.32 million metric tons of reserves averaging 0.4 grams per metric ton gold. According to a 2015 technical report, the mill portion of the operation would be phased out in 2017 and the last new ore would be stacked on the heap leach pad in 2019. Indications, however, are that a couple of years have been added to the life of the mine since that assessment. Above and beyond the mineral reserves that support the current mine plan, the area in and immediately surrounding the open-pit at Fort Knox contained 95.82 million metric tons of measured and indicated resources averaging 0.5 g/t (1.42 million oz.) gold at the end of 2015. This is a significant increase to both the tonnage and grade, compared with 75.9 million metric tons of measured and indicated resources, averaging 0.37 g/t (912,000 oz.) gold available to the mine a year earlier.

continued on next page





EXPLORERS AT A GLANCE continued from page 89

While the economic viability of mining these resources have not yet been calculated, which could raise them to reserve status, the increased tonnage and grade is a good sign that the mill may keep churning out gold for a while longer. The Gil gold property, located about five miles east of Fort Knox, and Gilmore, an area immediately west of the current mine plan are two such expansion targets.

The Gil gold property, located about five miles east of Fort Knox, is another source of potential ore to extend the life of the mine. Kinross, which had been participating in the exploration of Gil through a joint venture, purchased full ownership of this property adjacent to Fort Knox in 2011. According to the 2015 technical report for Fort Knox, Gil has 29.5 million metric tons of measured and indicated resources averaging 0.56 g/t (532,700 oz.) gold. Gilmore, an area immediately west of Fort Knox, is another prospect that could add to the mine's life.

This prospective expansion lies in an area previously withdrawn for use by the National Oceanic and Atmospheric Administration. Since gaining authorization in 2014, Kinross has been carrying out explo-

ration on these federal lands adjacent to the open-pit at Fort Knox. About 80 miles (130 kilometers) northeast of Fort Knox, Kinross is quietly carrying out early-stage gold exploration at its PB and NPB claims in the Circle Mining District.

The company also owns the White Gold property about 60 miles (95 kilometers) south of Dawson City, Yukon Territory. A 2008 discovery at this property sparked the recent Yukon gold rush, and Kinross picked up the project in 2010. At the end of 2015, 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. This resource has remained unchanged in recent years.

CASH AND SHORT-TERM DEPOSITS: US\$968.2 million (June 30, 2016) WORKING CAPITAL: US\$1.49 billion (June 30, 2016) MARKET CAPITALIZATION: US\$5.35 billion (Sept. 28, 2016)

25 York Street, 17th Floor • Toronto, ON M5J 2V5 Tel: 416-365-5123 • www.kinross.com

ADVERTISER INDEX

A	C-M	N-Z
ABR Inc	CONAM Construction	NAVA Regional Corp. 39 NC Machinery. .7 North by Northwest .31 Northern Industrial Training .71 North of 60 Mining News. .87 NOVAGOLD Resources .19 NUNA Logistics. .57 Pacific Power Group .27
Alaska Resource Education	Dyno Nobel 29 Equipment Source Inc. (ESI) .5 Fireweed Helicopters .45 Fountainhead Hotels .91 GCI .4 Hecla Greens Creek .23 Judy Patrick Photography .85 Last Frontier Air Ventures .32 Lynden .92 Millrock Resources .64	Pacific Rim Geological Consulting48Pathfinder Aviation6PNW Equipment20SGS North America59Soloy Helicopters22Sumitomo Metal Mining Pogo65Taku Engineering89Trilogy Metals8Usibelli Coal Mine51







CALL DIRECT - SAVE MORE!

Business Trip - Corporate & Government Rates, Free Airport Courtesy Vans **Business Meeting or Conference Facilities**

Personalized Guest Service • Convenient Locations

We've perfected the extended stay experience

Free WiFi access & 24 hour fitness centers

Locally owned in Fairbanks

Your First Choice! Call for best rates.

Reservations 800.528.4916

FountainheadHotels.com

Sophie Station Suites Wedgewood Resort **Bridgewater Hotel** Bear Lodge

Only pay for the speed you need... Dynamic Routing![™]





On time and on budget.

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!