

NORTH OF ▲ 60 MINING NEWS

- 3 For Sale: Alaska gold property
Contango ORE looks to cash in on 1.1M oz. discovery, 'blue sky' at Tetlin
- 13 Yukon seeks 'balance' in Peel
Miners, First Nations and conservationists dismayed at watershed plan
- 16 BC premier pursues EA reform
Far North jurisdictions cope with challenges of regulatory processes



Electricity generated from coal supplied by Usibelli Coal Mine runs about one-sixth the cost of diesel and less than half the cost of natural gas-fired power in Interior Alaska. State support for Alaska's coal industry as an important part of Alaska's energy strategy topped the list of recommendations in the Alaska Minerals Commission 2014 report. Page 6.

PHOTO BY CHRIS AREND, COURTESY OF USIBELLI COAL MINE INC.

A special supplement to Petroleum News

WEEK OF
February 23, 2014

Petroleum
news

Only pay for the speed you need... Dynamic Routing!SM

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!

DESTINATION: FAIRBANKS
ETA: 9:30 - 11:30 A.M.

S	M	T	W	T	F	S
31	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	1	2	3	4
5	6	7	8	9	10	11



ALASKA



LYNDEN
Innovative Transportation Solutions

www.lynden.com 1-888-596-3361

• A L A S K A

Contango ORE courts buyers for Tetlin

Texas-based explorer looks to cash in on 1.1-million-ounce gold-equivalent discovery and vast blue sky at Alaska property

By SHANE LASLEY
Mining News

Contango ORE Inc. co-founder Brad Juneau ventured to Alaska seeking natural gas; today, his Texas-based company is sitting on a gold-copper-silver deposit at its Tetlin project with an initial 1.1 million-ounce gold-equivalent resource and a 760,000-acre land package with enough “blue sky” potential to keep a mineral exploration company busy for decades.

Following five years of systematic exploration, Contango ORE Jan. 23 reported an indicated resource of 5.97 million metric tons averaging 3.46 grams per metric ton gold, 11 g/t silver and 0.25 percent copper for 783,115 gold-equivalent ounces at Tetlin’s Peak zone. Additionally, this skarn deposit has an inferred resource of 3.85 million metric tons averaging 2.07 g/t gold, 14.28 g/t silver, 0.23 percent copper for 332,969 gold-equivalent ounces.

Contango ORE President and CEO Brad Juneau said, “The combination of high gold grades – over 4 g/t gold-equivalent extending to the current surface – with easy road access make the Peak Zone one of Alaska’s most attractive new discoveries. Equally exciting is the fact that the Peak zone sits within, but covers less than 1 percent of, a 6.5-kilometer-by-5.5-kilometer multi-element soil anomaly known as the Chief Danny zone, where we expect further significant resources may be found going forward.”

Above and beyond the nearly certain



By the end of May, Contango Ore had three rigs systematically drilling the Peak zone at the Tetlin property in eastern Alaska, resulting in an initial 1.1-million ounce gold resource for the road accessible deposit situated a few miles south of the Alaska Highway near Tok.

expansion of the Peak zone and the potential that other similar deposits are lurking in the 13-square-mile Chief Danny area, geochemical and geophysical programs have identified at least a dozen outlying mineral prospects scattered across the more than 760,000-acre land package Contango ORE has assembled at Tetlin.

“While we are very happy with the resource we found, we certainly don’t expect that it is big enough to result in a sig-

nificant mine on its own, but it is something that shows the property is capable of delivering that quality resource and we believe that it can be much larger,” Juneau explained during a Jan. 31 interview with Mining News.

Despite the successes it has achieved at Tetlin, Contango ORE is ready to pass the reins to a mining company more adept at

developing a mine at Peak and uncovering the vast potential of the greater Tetlin property.

“We feel we have reached the stage of proving sufficient known resources and defined upside to attract a buyer for the company,” Juneau said upon releasing the initial resource.

see TETLIN PROJECT page 4

Contact North of 60 Mining News:

Publisher: Shane Lasley • e-mail: publisher@MiningNewsNorth.com
Phone: 907.229.6289 • Fax: 907.522.9583



North of 60 Mining News is a monthly supplement of the weekly newspaper, Petroleum News. It will be published in the fourth or fifth week of every month.

Shane Lasley	PUBLISHER & NEWS EDITOR	ADDRESS P.O. Box 231647 Anchorage, AK 99523-1647
Rose Ragsdale	EDITOR-IN-CHIEF (contractor)	
Mary Mack	CEO & GENERAL MANAGER	NEWS 907.229.6289 publisher@miningnewsnorth.com
Susan Crane	ADVERTISING DIRECTOR	
Heather Yates	BOOKKEEPER & CIRCULATION MANAGER	CIRCULATION 907.522.9469 circulation@petroleumnews.com
Bonnie Yonker	AK / INTERNATIONAL ADVERTISING	
Marti Reeve	SPECIAL PUBLICATIONS DIRECTOR	ADVERTISING Susan Crane • 907.770.5592 scrane@petroleumnews.com
Steven Merritt	PRODUCTION DIRECTOR	
Curt Freeman	COLUMNIST	Bonnie Yonker • 425.483.9705 byonker@petroleumnews.com
J.P. Tangen	COLUMNIST	
Judy Patrick Photography	CONTRACT PHOTOGRAPHER	FAX FOR ALL DEPARTMENTS 907.522.9583
Forrest Crane	CONTRACT PHOTOGRAPHER	
Tom Kearney	ADVERTISING DESIGN MANAGER	Several of the individuals listed above are independent contractors
Renee Garbutt	ADVERTISING ASSISTANT	
Mapmakers Alaska	CARTOGRAPHY	

NORTH OF 60 MINING NEWS is a monthly supplement of Petroleum News, a weekly newspaper. To subscribe to Petroleum News and receive the monthly mining supplement, call (907) 522-9469 or sign-up online at www.PetroleumNews.com. The price in the U.S. is \$98 per year, which includes online access to past stories and early access to Petroleum News every week. (Canada/Mexico subscriptions are \$185.95; overseas subscriptions are \$220) Or, just purchase the online edition of Petroleum News, which also includes the mining supplement and online access to past stories, for \$69 per year.

GROWING ALASKA

Can you dig it? Catch my drift?

April 7-13, 2014

Carlson Center
Fairbanks, Alaska

ALASKA MINERS ASSOCIATION

24th Biennial Mining Conference

Technical Sessions
Short Courses
Trade Show

Field Trips to Local Mines/Projects

More information available at www.alaskaminers.org

continued from page 3

TETLIN PROJECT

Texas oilman strikes gold

The business-savvy of an Alaska Native chief, keen observation of a Texas-based oilman, exploration skills of a seasoned geologist and a bit of serendipity led to the discovery of an initial 1-million-ounce high-grade gold deposit at the Tetlin project in eastern Alaska.

Juneau, a petroleum engineer with a knack for finding oil and gas deposits in the shallow waters of the Gulf of Mexico, was invited north to evaluate the oil and gas potential of 675,000 acres of Native lands that lie along the overland transportation artery that links Alaska to the rest of North America.

“Chief Danny Adams, who is the chief of Tetlin Village, invited me up there because there was talk of TransCanada laying a gas pipeline from Prudhoe Bay along the Alaska-Canada Highway to tie into the (North American) grid,” Juneau recounted.

The proposed route for the now tabled pipeline project would have passed through 26 miles (42 kilometers) of the Tetlin property. If his village’s land had natural gas,



TET1235 cut 4.5 meters averaging 67.8 grams per metric ton gold, 10.2 g/t silver and 0.36 percent copper at the Peak zone of the Tetlin project.

Chief Adams wanted to seize the opportunity to get it to market.

“Being the clever businessman that he is, he wanted someone to come up and look for natural gas. And, since I am in the natural

gas business, (I) was contacted by friends of the chief to go up and look at it,” Juneau recalled.

It did not take the Texas oilman long to realize that the geology wasn’t right for the

natural gas the Native village had hoped was there, but he did think it was prospective for minerals.

With metals exploration falling outside his expertise, Juneau turned to the Alaska Division of Geological and Geophysical Surveys to locate experts in Alaska’s complex mineral geology. Following up on a handful of leads provided by state geologists, Juneau convinced Curt Freeman, president of Fairbanks-based Avalon Development to take a look at what he discovered.

“He thought I was either an idiot or criminal, and wasn’t quite sure which,” Juneau recalled of his 2008 contact with Freeman.

While Freeman may have been skeptical of the Texas oilman’s claims, a prospective job just 200 paved road miles (323 kilometers) from his office was worth a look.

It did not take long for the seasoned geologist to realize that Juneau was neither an idiot nor a criminal, but rather a prepared mind that recognized the potential of Alaska’s newest gold-copper discovery.

Though Juneau was the one to identify Tetlin’s mineral potential, he is quick to give Freeman the credit for the discovery.

Juneau said Freeman and his team at Avalon Development handled every facet of the exploration at Tetlin from personnel and logistics to geological interpretation and orchestrating the successful exploration programs.

“I would be silly to take credit for anything other than finding and hiring Curt Freeman from Avalon,” the Contango ORE CEO told Mining News “All I did was take a lease, hire Curt and turn him loose – and funded him.”

Hitting the Peak

Seeking funds to advance his vision at Tetlin, Juneau turned to longtime associate and Contango Oil & Gas President Ken Peak, who did not shy away from investing the venture capital necessary to complete the extensive reconnaissance exploration required to reveal the potential of a large and previously unexplored property. And, his Texas-based company had the means to raise these funds during a period of uncertainty for the traditional mineral exploration sector.

Under Peak’s leadership, Contango Oil & Gas purchased Tetlin from Juneau, a move that funded the early stages of the project and provided a vehicle for the formation of Contango ORE.

From the reconnaissance programs carried out from 2009 through resource definition drilling in 2013, Contango ORE and its parent company have invested some US\$25 million on the systematic exploration pro-

The Nature Conservancy

Protecting nature. Preserving life.

nature.org

CORPORATE COUNCIL on the ENVIRONMENT

The Nature Conservancy is proud to collaborate with a wide range of partners to ensure Alaska’s lands and waters continue to support abundant salmon and wildlife populations. We thank these corporations for sharing our vision of a healthy and productive Alaska for many generations to come.

Lead Corporate Partners (\$25,000 & above)

Alaska Airlines & Horizon Air · Alaska Journal of Commerce
BP · ConocoPhillips Alaska Inc. · Petroleum News

THANK YOU

Corporate Partners

ABR Inc.
Alaska Business Monthly
Alaska Journal of Commerce
Alaska Rubber & Supply Inc.
Alaska Wildland Adventures
Bear Track Inn
Booz Allen Hamilton
Bristol Bay Native Corporation

Calista Corporation
Carlisle Transportation Systems Inc.
CIRI
Clark James Mishler Photography
CONAM Construction Company
Copper Whale Inn
Denali National Park Wilderness Centers Ltd.
Fairweather LLC

Flint Hills Resources Alaska
Jenner & Block LLP
Koniag Inc.
Northern Economics Inc.
Pacific Star Energy
Stoel Rives LLP
Trident Seafoods Corporation
Udelhoven Oilfield System Services Inc.

The mission of The Nature Conservancy is to conserve
the lands and waters on which all life depends.

715 L Street · Suite 100 · Anchorage, AK 99501 · alaska@tnc.org · 907-276-3133 · nature.org/alaska

see TETLIN PROJECT page 5

continued from page 4

TETLIN PROJECT

grams that led to the delineation of 1.1 million gold-equivalent ounces at the Peak deposit and the discovery of more than a dozen other prospects on which the company has yet had the opportunity to fully follow up at Tetlin.

It was in 2010, after two seasons of geochemical and geophysical programs which identified a number of promising targets across the large Tetlin property, that Contango Oil & Gas spun-out an independent company focused primarily on exploring Tetlin.

The newly formed Contango Ore opted to focus its initial drilling at Chief Danny, a nine-square-mile (23 square kilometers) prospect area that encompasses the Peak zone.

TET1105, the discovery hole at Chief Danny, cut 3.7 meters averaging 3.1 grams per metric ton gold, 300.2 g/t silver and 0.26 percent copper. TET1107 – drilled about 100 meters to the north – cut 6.4 meters grading 7.4 g/t gold, 4.9 g/t silver and 0.15 percent copper.

Encouraged by these results, Core revisited the Discovery zone in 2012.

After drilling four holes at the Discovery zone, Contango Ore drilled, in the parlance of the oil and gas industry, a wildcat hole at a geochemical-geophysical target some 500 meters to the northeast. This fifth hole of the 2012 program, TET1216, tapped the Peak zone.

The top 114 meters of TET1216 cut multiple layers of gold-copper-silver enriched mineralization, including: 25.8 meters averaging 7.83 g/t gold, 23.5 g/t silver and 0.05 percent copper; 6.7 meters averaging 3.5 g/t gold, 15.8 g/t silver and 0.54 percent copper; 13.7 meters averaging 2.77 g/t gold, 1.4 g/t silver and 0.05 percent copper; and 32.6 meters averaging 3.74 g/t gold, 2.6 g/t silver and 0.11 percent copper.

The grades and thicknesses improved over the next two holes drilled into the newly discovered Peak zone: TET1217 cut 49.1 meters averaging 11.22 g/t gold, 21.6 g/t silver and 0.09 percent copper, from a depth of 7.9 meters; and TET1218 cut 58.5 meters averaging 14.45 g/t gold, 9.1 g/t silver and 0.24 percent copper.

Particularly high-grade copper intercepts were encountered in the southeastern portion of the currently defined zone. Highlights of this drilling include 36.6 meters averaging 0.31 g/t gold 71.6 g/t silver and 1.11 percent copper from a depth of 118.9 meters in hole TET1238; and two thick copper-rich zones intercepted in hole TET1260 – 32.6 meters averaging 0.06 g/t gold, 28.7 g/t silver and 1.34 percent copper from a depth of 116.4 meters

With the 2012 drill program outlining a sizable zone of mineralization rich in gold, copper and silver, Contango ORE set its sights on establishing a maiden resource at this exciting discovery in 2013.

Peak, who was diagnosed with a brain tumor in 2012, did not survive to see the fruition of the Alaska mineral exploration company that he had helped create.

“Ken Peak was the man who took the project to the point of discovery, through his personal investment, steadfast leadership, and faith in Curt and his team,” Juneau

recalled. “Sadly Ken passed away last year, and hopefully the Peak Zone will grow into a substantial mine that would be worthy of his name.”

Maiden resource

Despite tough market conditions for more conventional exploration companies, Contango ORE, with ties to investors in the oil and gas industry, was able to raise US\$14.2 million to fund its 2013 exploration campaign.

With its coffers full, the company invested roughly US\$10.3 million on a program primarily aimed at establishing a maiden indicated resource at the Peak.

Highlights from the 69-hole drill program completed in 2013 include:

- TET13062 cut 64.8 meters averaging 13.1 g/t gold, 21 g/t silver and 0.48 percent copper;
- TET13063 cut 40.5 meters averaging 16.6 g/t gold, 36.1 g/t silver and 0.73 percent copper;
- TET13082 cut 87.6 meters averaging 4.03 g/t gold, 19.3 g/t silver and 0.30 percent copper;
- TET13088 cut 138 meters averaging 3.62 g/t gold, 11.4 g/t silver and 0.11 percent copper;
- TET13098 cut 84.4 meters averaging 4.99 g/t gold, 16.7 g/t silver and 0.17 percent copper;
- TET13100 cut 95.9 meters averaging 5.75 g/t gold, 6.9 g/t silver and 0.14 percent copper;
- TET13107 cut 159.3 meters averaging 7.01 g/t gold, 6.6 g/t silver and 0.10 percent copper;
- TET13110 cut 96.9 meters averaging 9.06 g/t gold, 4.3 g/t silver and 0.09 percent copper; and
- TET13117 cut 134.8 meters averaging 4.85 g/t gold, 2.9 g/t silver and 0.08 percent copper.

While expanding and establishing an inaugural resource at Peak, the 2013 program included the continued investigation of other zones with a similar geophysical and geochemical signature.

“The Peak zone stands out as one of those really highly conductive and magnetic zones, and if you look around nearby, there are a dozen other places that you should go look because they have a similar geophysical signature,” Freeman explained.

Some of these geophysical-geochemical targets are located within the larger Chief Danny area and in close proximity to the Peak zone that they resemble.

“In June 2013, we acquired new airborne data, and based on interpretation of these data, along with existing reconnaissance data, core data, and other data sources, we have identified several exploration leads both inside and outside the Chief Danny area, as well as a deeper target underneath the Peak zone,” Contango ORE explains.

Tors, a promising target about five miles (eight kilometers) east of Peak, and Chisana, a prospect situated about 7 miles (11 kilometers) further east, were two of the leads that were followed up on during 2013.

More than 1,400 augur soil samples were collected from Chief Danny, Tors and Chisana in 2013 – an effort that has refined drill targets at these prospects that stretch across the northern section of the Tetlin

see TETLIN PROJECT page 7



C

CHIULISTA
SERVICES, INC.

Remote Sites.
Renowned Service.

An industry leader in remote site services and rural Alaskan hire, Chiulista Services, Inc. can handle all your remote camp logistics: from set-up and management to catering and housekeeping. Chiulista embraces the Yup'ik meaning behind its name - “lead dog” - and sets the standards for providing crew comfort, safety, and efficiency while minimizing environmental impact.



Pacific Rim Geological Consulting, Inc.

Mailing address: P.O. Box 81906
Fairbanks, AK

Phone: 907 458-8951
Fax: 907 458-8511
bundtzen@mosquionet.com
www.pacrimgeol.com

Thomas K. Bundtzen, President



a proud subsidiary of
CALISTA CORPORATION
www.calistacorp.com

chiulista.com

• A L A S K A

Coal tops minerals commission wish list

Advisory group says coal provides a ready solution to high energy costs in Interior Alaska, asks lawmakers to help inform public

By SHANE LASLEY
Mining News

Coal is an abundant and readily available solution to the high cost of energy, the bane of operating mines, minerals development projects and residents in Interior Alaska, according to the Alaska Minerals Commission.

"We always hear about (natural) gas and we always hear about oil, but one of the things that has been taking the back seat is coal," Alaska Minerals Commission Chairman Bill Jefferies informed Alaska legislators during a Feb. 5 presentation.

The minerals commission is mandated to make recommendations to Alaska's governor and legislature on ways to mitigate restraints on the development of the state's minerals and coal.

"State support for the coal industry as an integral part of the state's overall energy strategy and for coal's value as an export asset" topped the commission's 2014 wish list.

Coal-generated electricity runs about one-sixth the cost of diesel and less than half the cost of natural gas-fired power in Interior Alaska, according to figures provided by Golden Valley Electric Association, the electrical utility for Interior Alaska. Despite the price differential, less than a third of the power in the region is fueled by coal.

This discrepancy is not due to a lack of good quality coal.

The United States Geological Survey estimates that Alaska hosts more than 6 trillion short tons of coal resources, enough to last the United States some 5,400 years at today's consumption levels. While much of this coal may never be economically viable to mine, Usibelli Coal Mine has an estimated 700 million tons of coal reserves located along the railway about 100 miles south of Fairbanks.

These reserves of low-sulfur sub-bituminous coal could fuel Interior Alaska's current electrical needs for roughly 200 years.

Jefferies told lawmakers that coal as a low-cost and abundant fuel source "is something we really need to take advantage of and start exploiting."

While an undeniably inexpensive and abundant fuel source in Alaska, coal has become a dirty word to many worried about the effects of coal-fired power gen-



The Usibelli Mine near Healy provides fuel for six coal-fired plants with the capacity to deliver 136 megawatts of low-cost electricity to Interior Alaska.

eration on the climate.

The Alaska Minerals Commission says this perception does not reflect the reality of modern coal-fired power plants.

According to figures compiled by the minerals commission, while coal use has tripled, emissions of dangerous pollutants from coal-based electricity generation have decreased by nearly 40 percent since the 1970s.

The Alaska Minerals Commission has asked for the state's help in informing the public about the environmental strides that have been made in utilizing the abundant and low-cost fuel source.

"I think everybody is aware that there is a perceived war on coal, but what we are not hearing is the strides the coal industry has made in cleaning up emissions from coal-fired plants," Jefferies told the lawmakers.

Getting off of oil

At US17 cents per kilowatt-hour, naphtha, a gasoline-like petroleum product produced at Flint Hills Resources Alaska's refinery in North Pole, accounts for 30 percent of power generation in the Interior. Diesel, another product of the refinery, fuels another 13 percent of the

electricity at around US30 cents per kw/h.

On Feb. 3, Flint Hills announced that it will close the refinery by June 1, cutting off the local fuel supply for the 180 megawatts of power generation at GVEA's North Pole power plants.

Golden Valley is seeking other sources of fuel for its naphtha- and diesel-fired generators. The cost of this alternative source of fuel will determine to what extent the refinery's closing will affect the price of electricity delivered to GVEA's Interior Alaska customers.

"The cost of power is directly based on our cost of fuel, and we will be working diligently to obtain another long-term source of fuel for our North Pole units at the lowest cost possible," the utility assured its customers in a Feb. 4 statement.

Golden Valley informed customers that it is actively pursuing the development of a natural gas trucking operation from the North Slope. Once enough of the cleaner burning fuel is available, the Interior Alaska utility could convert its diesel and naphtha generation facilities in North Pole, with a combined 180 MW of electrical generation capacity, to natural gas.

"We have been working our way off oil for a long time," said GVEA Chairman Bill Nordmark. "This just gives us more motivation to complete the projects we've started."

Roughly 18 percent of Golden Valley electricity in 2012 was generated at natu-

ral gas-fired power plants in Southcentral Alaska. At US11 cents per kWh, natural gas-generated power costs about twice that derived from coal but substantially less than the cost of power from naphtha and nearly a third that of diesel.

Healy Clean Coal

In addition to natural gas, GVEA has been endeavoring to add more coal to the mix, a move the Interior Alaska utility expects to help stabilize electricity rates, which have fluctuated with the oil market over the past several years.

Currently, the Usibelli Mine near Healy provides fuel for six coal-fired plants with the capacity to deliver 136 MW of electricity to Interior Alaska. At around US5 cents per kilowatt-hour, these coal-fired generators provided Golden Valley customers with by far the cheapest electricity in 2012, but it only accounted for roughly 30 percent of the region's power needs.

In December, Golden Valley finalized the purchase of the Healy Clean Coal Power Plant from the Alaska Industrial Development and Export Authority for about US\$44 million. The low emissions facility is fully built and sitting idle at the mouth of Usibelli's Healy mine.

The Interior Alaska utility has renamed the clean coal plant Healy Unit 2, due to its proximity to the 25 MW coal-burning plant known as Healy Unit 1.

By burning low-grade Usibelli coal in

see WISH LIST page 7

JOB ANNOUNCEMENT

ALASKA STATE GEOLOGIST

Chief Geologist- Division of Geological & Geophysical Surveys

The successful candidate will oversee the operations of the Division and manage the State's overall program of geologic research, analysis, and information distribution.

Required experience includes professional application of an advanced degree in the geological sciences and managerial experience overseeing teams of geologists with diverse academic backgrounds. Further information about the position and the Alaska Division of Geological & Geophysical Surveys can be found at:
<http://www.dggs.alaska.gov/>.

LAST FRONTIER AIR VENTURES

(907) 745-5701
39901 N. Glenn Hwy,
Sutton, AK 99764
helicopter@LFAV.com
www.LFAV.com

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

continued from page 6

WISH LIST

stages and adding limestone, Healy Unit 2 was engineered to significantly reduce nitrogen and sulfur oxide emissions. The original construction of the clean coal facility was completed in 1997 and testing ran through 1999, but the facility has sat idle ever since.

In a trade-off agreement with the U.S. Environmental Protection Agency, GVEA has agreed invest up to US\$88 million to retrofit the plant with state-of-the-art emission controls.

The electrical cooperative expects to have the low-emissions coal-fired power plant ready to provide 50 megawatts of power to the Alaska Railbelt electrical grid early in 2015.

Usibelli Coal Mines has floated the idea of a much larger mouth-of-mine coal-fired power plant, known as the Emma Creek Energy Project.

According to a plan presented to Alaska officials, the proposed 200-megawatt Emma Creek power plant would be built just north of Jumbo Dome, an 83-million-ton coal reserve recently put into operation by Usibelli.

If built, the Emma Creek power plant would burn some 1.5 million tons of coal per year from the adjacent mine and provide Alaska's railbelt customers with an



PHOTO BY CHRIS AREND, COURTESY OF USIBELLI COAL MINE INC.

Usibelli Coal Mine has an estimated 700 million tons of coal reserves located along the railway about 100 miles south of Fairbanks, enough to fuel Interior Alaska's current electrical needs for roughly 200 years.

additional 1.6 million megawatt-hours per year of relatively inexpensive coal-fired electricity.

Carbon dioxide limits proposed by EPA for new fossil fuel-fired power plants though, could derail the Emma Creek project while it is still in the conceptual stage.

The Alaska Minerals Commission's 2014 report recommends that Alaska lawmakers establish environmental policies that strike a balance between the need for affordable energy and sensible environmental protection requirements.

In addition to supporting the coal indus-

try, the commission urged lawmakers to continue state support for development of energy and transportation infrastructure; resource education in the classroom; and litigation against federal intervention regarding the management of Alaska's land, water and mineral resources. ●

continued from page 5

TETLIN PROJECT

lease.

Further afield, reconnaissance crews collected 368 stream sediment and pan concentrate samples across the Eagle property, 56,500 acres of state of Alaska mining claims extending west from the 675,000-acre Tetlin lease. While rudimentary, the visible gold in pan concentrates and copper in stream sediments is reminiscent to the early work that led to the discovery of the Peak zone, roughly 15 miles (25 kilometers) to the east.

Pan and stream sediment sampling have identified another nine targets south of Chief Danny that are in various stages of readiness, from pan samples begging for follow up to drill ready prospects.

Cashing in discovery

Contango ORE was founded on the philosophy that "virtually all the mining industry's value creation occurs through the discovery of mineral deposits that can be developed into a commercially viable ore body." But, unlike the oil and gas business from which Juneau and his company are rooted, there is a major money and time investment between discovery and recovery.

With more than 1 million ounces of gold outlined at Tetlin and ample evidence that this initial deposit likely only provides a peek at the property's potential, Contango ORE believes the Tetlin project is an attractive gold asset for a mining company.

"I have met with several industry executives and that seems to be widely accepted," Juneau told Mining News.

Contango ORE has secured the expertise of Petrie Partners Securities, a Colorado-based investment banking firm best known for its work in the oil and gas sector, to broker a deal with a mining company that can develop the Peak zone and realize the upside potential of the greater Tetlin property.

"We have a lot of faith in their ability to identify folks who will be able to do all that and help us craft a transaction where everyone benefits," Juneau said.

A merger, outright sale or joint venture are among the options being considered.

Petrie Partners will be tasked with nego-

tiating the unlimited potential of the Tetlin property.

When asked about putting a price on the 12-plus prospects identified on the Tetlin property, Juneau told Mining News, "I don't intend to give that away."

"I am sure buyers will have their own unique perspective on how they want to value that and approach that," he added.

With a number of mining companies already showing an interest in Tetlin, Contango ORE president and CEO believes it won't be long before his company has secured a deal on the exciting gold property.

"We are already started on marketing this and I expect to have a direction with who we are going to work with relatively soon," he said.

Juneau hinted that a deal could be put together before the start of the 2014 exploration season in Alaska.

"If we are going to have a new owner or partner or both, we would certainly want to take their view into account," he explained, when asked about planning for the upcoming program.

If a deal does not materialize in time, Contango ORE entered into 2014 with more than US\$4.4 million in the bank, and there are plenty of drills available to exploration companies with cash.

"The good news about this downturn is you do not need to make decisions far in advance, so we feel the timing is appropriate to go out and see if we are going to do a transaction; and if we don't, we have time to go out and do our own drilling," he said. ●



SHANE LASLEY

These newly built core shacks were constructed in anticipation of the more than 47,000 feet (14,000 meters) of drilling completed at the Tetlin gold-copper-silver project during 2013.



Delta P Pump & Equipment LLC
All pumps and related equipment

WE KNOW MINING

Toyo, Tsurumi, & Grindex submersible pumps	American made Schurco slurry pumps
Pinch Valves Hose	Schurco parts to fit Weir pumps and applications.

Phone (907) 694-7583 Fax (907) 694-7584 deltappump@alaska.com
PO Box 771452, Eagle River, AK 99577



Business Travel

Your First Choice in Fairbanks

- Government Lodging - Free Internet Access
- Corporate Rates - Free Airport Shuttle Service
- Meetings & Groups - Catered Presentations

Sophie Station Suites

1717 University Ave Fairbanks | 800.528.4916

Hotels@fdifairbanks.com | FountainheadHotels.com



C O L U M N

Capital markets take grim toll on miners

Metals prices start to climb as juniors strive to weather prolonged downturn; cash-rich producers to seek growth opportunities

By **CURT FREEMAN**
For Mining News

The over-all mood at the recent Cordilleran Roundup mining convention in Vancouver, B.C. was more restrained than in previous years, but also more realistic due in large part to the prolonged downturn in risk capital mining markets. It seems the industry has transitioned from the denial stage accompanying the declines of 2013 to an acceptance and determination stage that always precedes a return to market vitality.

In a recent public release by financial giant Ernst and Young, the magnitude of the 2013 downturn was summarized: The market capitalization of Canadian-domiciled mining companies decreased by 45 percent over the course of the year. Lack of investor confidence, sliding commodity prices and asset write-downs all contributed to the grim tally for 2013. In addition, companies were reluctant to raise equity through stock sales because of their low stock prices and the extreme dilution that they would suffer by selling shares at what, for many, were five- and 10-year lows. As a consequence, proceeds raised during 2013 totaled roughly \$6.9 billion, down 49 percent from sums raised during the same period in 2012. However, Ernst and Young felt that growth opportunities existed. They expect mid-tiers and producers with cash flexibility to take advantage of inorganic growth opportunities and felt that junior mining companies with good quality, de-risked projects will attract buyer interest. In a possible sign that the bottom has been reached, as I write this summary, gold and silver prices have reached their highest levels since early November 2013, while copper, zinc and lead prices have shown modest increases in 2014. Light at the portal of the adit?

Western Alaska

TECK RESOURCES LTD. and partner **NANA REGIONAL CORP.** announced fourth quarter and year-end 2013 results from its Red Dog mine. In the 4th quarter the mine produced 141,900 metric tons of zinc in concentrate and for the year the mine produced 504,100 metric tons of zinc in concentrate. Zinc ore grade for the year was down unchanged at 17.0 percent and mill recoveries were up slightly to 84 percent. The mine also produced 25,400 metric tons of lead in concentrate during the fourth quarter and 96,700 metric tons of lead in concentrate for the year, levels that were slightly lower compared to the year-previous quarter but up over full year 2012 production. Lead ore grade for the year decreased to 3.96 percent, while mill recoveries increased slightly to 64.9 percent compared to 2012. Operating profit after depreciation, amortization and price adjustments for the fourth quarter was US\$94 million, compared with US\$153 million in 2012. Operating profit after depreciation, amortization and price adjustments for the year was US\$364 million, compared with US\$384 million in 2012. In the fourth quarter of 2013, certain customers drew zinc from consignment inventories, deferring delivery of zinc from the fourth quarter of 2013 to the first quarter of 2014. Mill throughput for 2012 was a record 3.85 million metric tons due in part to softer ore, which also contributed to the better recoveries for zinc and lead. During 2012 the mine paid partner NANA Development Inc. and the State of Alaska royalties of US \$120 million versus royalties of US\$137 million in the year-previous period.

NOVAGOLD RESOURCES INC. provided a year-end 2013 progress report on its Donlin gold project, a 50:50 joint venture with **BARRICK GOLD**. The company indicated that the permitting process on its Preliminary Draft Environmental Impact Statement continues on-time and within budget. During 2013 the company held 14 public scoping meetings in various Yukon-Kuskokwim villages and in Anchorage. The company

also continued its workforce initiatives, community outreach and social engagement efforts throughout the region. The company's efforts were recently recognized as it was awarded the Employer of the Year Award from the **NATIONAL ASSOCIATION OF STATE WORKFORCE AGENCIES**. In 2013, project expenditures were US\$29.2 million compared to US\$33.9 million in 2012. During 2014 project expenditures of US\$24 million are expected, with the primary focus being advancement of the project permitting process through the completion of the Preliminary Draft Environmental Impact Statement in late 2014 for agency review. This event will be followed in 2015 by issuance of the draft Environmental Impact Statement for public review.

MILLROCK RESOURCES INC. announced that it has entered into a Binding Letter Agreement with Alaska newcomer **FIRST QUANTUM MINERALS LTD.** whereby the company has granted First Quantum an exclusive right to enter into an Option to Joint Venture Agreement on Millrock's Alaska Peninsula project, located in southwest Alaska. First Quantum will fund an initial exploration program estimated to cost US\$600,000. The program will include regional geochemical sampling, geological mapping, prospecting and airborne magnetic surveys, which are to be carried out in summer of 2014 by Millrock. First Quantum may also elect to increase the expenditure to fund drilling of several holes. Subject to exercise of the exclusive right by November 30, 2014, First Quantum will have an option to earn up to an 80 percent joint venture interest in the property through a two-stage option agreement. The Alaska Peninsula project is comprised of mineral lands owned by Bristol Bay Native Corporation and includes several known porphyry copper prospects, including Kawisgag, Mallard Duck Bay and Bee Creek prospects. Welcome to Alaska First Quantum Minerals Ltd!

Interior Alaska

KINROSS GOLD CORP. announced year end 2013 results from its Fort Knox mine. Total 2013 production was up significantly over 2012 totals. The mine produced 421,641 ounces of gold at a cost of US\$561 per ounce versus 359,948 ounces of gold produced at a cost of US\$663 per ounce in 2012. During 2013 the mill processed 21,634,000 metric tons of ore grading 0.82 grams per metric ton gold. Mill recoveries were 83.7 percent for the year. During 2013 the mine placed 29,751,000 metric tons of ore grading 0.29 g/t gold on the valley leach facility. The 17 percent increase in total production was due primarily to higher mill head-grades and an increase in ounces recovered from the leach pad as a result of the commissioning and ramp-up of the second carbon-in-column plant, partially offset by a decrease in metric tons of ore processed. Capital expenditures at the mine increased to US\$135.3 million in 2013, primarily due to the purchase of new haulage equipment.

CONTANGO ORE INC. announced its first resource estimate at the Peak zone on its Tetlin gold project near Tok. At a 0.5 g/t gold cutoff, initial indicated resources came in at 5,970,000 metric tons grading 3.46 g/t gold, 11.0 grams per metric ton silver and 0.25 percent copper. Using the same cutoff, initial inferred resources came in at 3,850,000 metric tons grading 2.07 g/t gold, 14.28 g/t silver and 0.235 percent copper. This initial third-party resource estimate includes data from 130 drill holes totaling 27,767 meters and 1,444 down-hole survey measurements. Geochemical data from these holes include gold and multi-element results from 17,572 samples. A total of 78 of the 130 drill holes totaling 16,010 meters passed through the Peak Zone mineralized solids. Statistical analyses suggested capping of maximum values was justified, resulting in 7 gold values being capped at 75.0 g/t gold, 13 silver values capped at 252.0 g/t silver and 7 copper values

capped at 5.40 percent. A block model with blocks 10 meters by 10 meters by 5 meters in dimension was created to cover the mineralized solids. Specific gravity estimates were obtained on-site from direct measurements of mineralized and unmineralized drill core. Specific gravities averaged 2.81 for unmineralized waste rock and 3.15 for mineralized rock. No economic parameters were utilized in determining the cut offs. No attempt was made to calculate separate resource estimates for oxide zone, transitional zone or sulfide zone mineralization. The Peak Zone sits within, but covers less than 1 percent of, a 6.5-kilometer by 5.5-kilometer multi-element soil anomaly known as the Chief Danny Zone, where the company is hoping to outline additional resources in future. The company also announced that it had hired Denver-based Petrie Partners Securities LLC to advise the company on its options going forward, including a merger with an existing mining concern, sale for cash, stock, or a combination thereof or continued funding of the project by the company.

Northern Alaska

NOVACOPPER INC. announced a fourth quarter and year end 2013 summary of work conducted at its Bornite and Arctic deposits on its Upper Kobuk Mineral project, a partnership with **NANA INC.** At Bornite, the US\$14.4 million program included 4,684 meters of drilling at the Ruby Creek zone (a potential open pit target) and 3,458 meters of drilling on depth extensions of the South Reef zone and Lower Reef mineralization (a potential underground target). In addition a significant drill core re-sampling and re-assaying program at the Bornite Project included 33 historical drill holes comprising 11,067 meters of drill core, which were originally drilled by Kennecott between 1957 and 1975. The company plans to release an updated resource estimate on the Bornite project in the first half of 2014, incorporating the new 2013 drill results as well as the results from the re-assaying program. The company will continue to focus efforts on supporting the **ALASKA INDUSTRIAL DEVELOPMENT EXPORT AUTHORITY** in permitting the Ambler Mining District Industrial Access Road which is expected to provide access to Arctic and Bornite projects. The company also anticipates signing a memorandum of understanding with Alaska Industrial Development Export Authority in the first half of 2014 to explore the feasibility of utilizing liquid natural gas trucked from the North Slope to replace diesel as the main source of fuel to operate the Arctic processing facility.

Southeast Alaska

HECLA MINING CO. announced year end 2013 production results from the Greens Creek mine on Admiralty Island. The total cash cost per ounce of silver produced for the year was US\$4.42 per ounce versus US\$2.70 per ounce in 2013. The average grade of ore mined during the year was 13.04 ounces of silver per ton, up significantly from the average grade of 11.13 ounces per ton in the year previous. For the year the mine produced 7,448,347 ounces of silver, 57,457 ounces of gold, 20,114 tons of lead and 57,614 tons of zinc. The mill operated at an average of 2,206 tons per day in 2013, which is the highest daily average since the mine began operations in 1989. This higher mill throughput combined with higher grades for silver and gold accounted for the +1.1 million ounce increase in silver production in 2013 versus the year previous period. The mine is forecasting 2014 production of 6.5 to 7 million ounces of silver and 55,000 ounces of gold at a cash cost of \$6.00 per ounce of silver equivalent.

CONSTANTINE METAL RESOURCES LTD. announced that joint venture partner **DOWA METALS & MINING CO., LTD.** of Japan has approved a US\$6.2 million exploration budget for the company's Palmer volcanogenic massive sulfide deposit near Haines. Palmer is an early resource expansion stage project that is host to a 4.75 million metric ton inferred resource estimate grading 1.84 percent copper, 4.57 percent zinc, 0.28 g/t gold and 29 g/t silver. The three-rig 2014 program will be focused on expanding the South Wall and RW massive sulfide zones, which are open laterally and

The author

The author Curt Freeman, CPG #6901, is a well-known geologist who lives in Fairbanks. He prepared this column Feb. 17. Freeman can be reached by mail at P.O. Box 80268, Fairbanks, AK 99708. His work phone number at Avalon Development is (907) 457-5159 and his fax is (907) 455-8069. His email is avalon@alaska.net and his website is www.avalonalaska.com.



CURT FREEMAN

• COLUMN

Comparing mine, fishing jobs tells tale

Setting aside for a moment the politics of the Pebble Project, does the organized opposition benefit the Bristol Bay fisherfolk?

By J. P. TANGEN
Special to Mining News

Although in my judgment it is premature for little green people to write the obituary of the Pebble Project, undoubtedly it is high-centered for the nonce, (however long a nonce may be); but that shouldn't prevent us from reflecting on some of the silly arguments that have been made against the project.

Undoubtedly, the greatest success in that regard was the implication that somehow the project, if it evolved into a mine, would somehow make fish in Bristol Bay die. The outspoken proponents of that point of view, generally speaking, were people who kill fish for a living. Nothing kills a fish like hauling it out of the water, cutting off its head and tail and filleting it.

Nonetheless, the argument was made and got some traction, perhaps because Robert Redford helped spread the word. It is not known whether Mr. Redford has ever killed a fish, but that seems to make no difference.

Looking behind the argument, it seems reasonable to ask a question or two about just exactly how a mine in Southwest Alaska might kill one or more salmon, and the argument seems to break down into two viral vectors: some sort of renegade escapement of one or more substances leaking from such a mine site or a catastrophic impoundment failure liberating a large volume of devastating chemical fluids into the streams and tributaries that support the fishery.

Responsible objective observers were indubitably stunned at such solipsism. No one could quite explain how it was that a mine, which had not even been planned yet could intoxicate fish when the entire might of the greatest nation on Earth was committed to thwarting even the tiniest spill of even the most innocuous pollutant. The U.S. Environmental Protection Agency, in

continued from page 8

FREEMAN

to depth. Drilling also will target other massive sulfide prospects on the property. There are at least 25 separate base metal and/or barite occurrences and prospects on the property, indicating the potential for discovery of additional mineralization.

ARROWSTAR RESOURCES LTD. reported that it plans to conduct exploration drilling at its Port Snettisham magnetite iron project south of Juneau. The purpose of the drill program is to determine the extent of the mineralization at depth, its mineralogy and petrology, the nature of the contact zone and the magnitude of the mineralization. With these data, an industry-compliant indicated and inferred resource estimate will be prepared. The 2014 drilling program is budgeted at US\$1.2 million. The Snettisham deposit was historically explored by the Bureau of Mines in 1955 and by Marcona Corp. in 1969. Marcona conducted sufficient drilling to complete a feasibility study on the deposit and announced plans to put the property into production in partnership with Marubeni of Japan. The decline of iron ore prices in the early 1970s caused the project to be delayed and eventually abandoned. ●

Mining & the law

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



J.P. TANGEN

its inimitable wisdom prepared an area assessment, apparently in total ignorance of the Clean Water Act which it administers, to ensure that no putridity finds its way into the waters of the United States. The assessment can only be construed as a testament to the ineptitude of the authoring agency.

In another vein, the argument ran, the Southwest is seismically active, and who knows when the next gazillion point nine on the Richter Scale seismic event might come along and burst the humungous dam that was going to be built to hold back the reservoirs of pregnant tailing water, sending torrents downstream with malicious intent? It seemed lost on the concerned that an event of that magnitude might ruin the whole weekend for a lot of other folks and their piscine friends, even if there were no mines around.

But, even assuming for the sake of light-hearted repartee that some tragic

event or another might put a temporary dent in the anadromous population, the question remains: what is the true significance? By which I mean, to be perfectly clear, that there was never any particular quantitative projection concerning the extent of the hypothetical fishkill. Would it be one fish, or 100, or 100,000 or 100 million? It is hard to know when you are building arguments on suppositions.

Arguably, the impact would be maxed out at about 20 percent of any given run, because the Pebble Project, by any projection I have seen, would impact only two of the 10 major tributaries that drain into Bristol Bay.

So let's say that one fifth of the fishermen and women dependent on catching those unfortunate critters were deprived of their livelihood for a season or two, what would be the economic impact to this, the poorest region of the state? According to the Alaska Department of Labor, in 2012 there were 2,260 workers engaged in the seafood processing industry in Bristol Bay,

making a grand total of US\$17 million.

If one fifth of them were laid off due to a shortage of fish slime, that would mean 452 warm bodies, more or less, would have to go to work at the hypothetical mine to clean up the mess, and they would have to exchange their average annual salary of US\$7,500 for a mine worker's average annual salary of about US\$95,000.

It goes without saying that the foregoing comparison is unfair, after all fishing does tend to be seasonal; however, the point remains the same – the argument that a world-class mine in southwest Alaska could somehow impair a world-class fishery in Bristol Bay is simply silly.

Proponents of public policy who embrace such a position say far more about themselves than about the substance of the situation. Alaska's mines are safe and environmentally sound. The published numbers are irrefutable. Ultimately, the deposits of southwest Alaska will be developed, Luddites to the contrary notwithstanding. ●



Interior
GRAPHICS &
PRINTING

Fort Knox

Our People Our Community

Amazing things happen when people give back.

Employees to vendors, Fort Knox always teams with skilled, dedicated, community-minded people. Michelle Maynor, mother of two, local roller derby star, owner of Interior Graphics & Printing, and one of Fort Knox's vendors, is pure gold.

More than 30 years ago, Michelle moved to Alaska. She takes pride in creating collateral, signage, and engineering prints for our operation, and being a behind-the-scenes member of the Fort Knox family. She says, "Fort Knox cares about the success of Fairbanks, as well as their employees. That kind of attitude has a ripple effect throughout the community, and it's the kind of thing that makes Fairbanks such an amazing place."

Michelle believes in the philosophy of giving back. It could be volunteering at the Food Bank, the Arctic Winter Games, coaching, or fueling the Fairbanks Roller Girls' fire. If it has to do with Fairbanks, Michelle is there. She says, "I like that I get to help people every day."

We like how she rolls.

KINROSS Fort Knox

kinross.com

• ALASKA

Graphite Creek deposit grows less remote

As Graphite One expands world-class deposit, huge cache of high-quality mineral finds itself on threshold of global shipping lanes

By SHANE LASLEY
Mining News

Due to its isolation in the far reaches of Western Alaska, Graphite Creek has long been regarded as an enormous deposit of an industrial mineral with little value. Today, however, graphite has been elevated to the status of a technology mineral and the once-secluded deposit sits on the threshold of the burgeoning Arctic shipping lanes that promise to dramatically reduce the transport time between Europe and Pacific ports.

With demand on the rise and access to Graphite Creek drifting closer to world markets, Graphite One Resources Inc. has spent the past two years confirming the project as the largest deposit of graphite in North America, and among the largest in the world.

This work has culminated in an

inferred resource of 186.9 million metric tons averaging 5.5 percent graphitic carbon, for a total of 10.35 million metric tons of graphite, using a cut-off grade of 3 percent. Increasing the cut-off to 7.0 percent graphitic carbon, an inferred resource of 37.68 million metric tons averaging 9.2 percent (3.47 million metric tons) graphite has been outlined at the project.

“The continuity of the mineralization and simple geological structures at Graphite Creek has allowed us to grow our resource to an impressive size with very little drilling (28 drill holes to date),” said Graphite Creek Vice President of Exploration Dean Besserer.

Expanding Graphite Creek

Situated roughly 40 miles (65 kilometers) north of Nome, Graphite Creek has long been suspected to host between 6

million and 20 million tons of crystalline-flake graphite. This assumption was based on a 100-meter-thick graphite-rich layer that outcrops to the surface for some five kilometers (three miles) along the northern slopes of the 42-mile (68 kilometers) Kigluaik Mountains on Alaska’s Seward Peninsula.

A 4,248-meter drill program carried out by Graphite One in 2012 confirmed the historical assumption along about half of the surface exposure. This drilling established a maiden NI 43-101-compliant inferred resource of 107.2 million metric tons averaging 5.78 percent graphitic carbon, or some 6.2 million metric tons of graphite.

The final hole of the 2012 program, drilled about 2,200 meters southwest of the resource, cut 177 meters averaging 3 percent graphitic carbon, including 52 meters averaging 6.09 percent graphite.

This step-out hole, taken alongside the results of surface mapping and geophysical surveys, indicate that the graphite deposit extends well beyond the bounds of the resources established with 17 holes drilled in 2012.

Graphite One’s goal for 2013 was to extend the resource to the step-out hole. With equity markets tight, the company held out until September to close a C\$2.2 million financing.

Once the funds were raised, it did not take Graphite One long to complete a 10-hole drill program that extended the deposit both to the southwest and northeast, confirming 4.8 kilometers (3.0 miles) of continuous near-surface high-grade graphite mineralization.

The first two holes of the 2013 program were drilled to the northeast, extending the Graphite Creek deposit some 400 meter in that direction.

Hole 13GCH009 cut 90.3 meters averaging 3.6 percent graphite from a depth of 15 meters; and

Hole 13GCH010 cut 102.1 meters averaging 3.3 percent graphite from a depth of 11.9 meters.

The balance of the program focused on filling in the 2,200-meter gap between the deposit and the southwestern step-out hole.

Hole 13GCH011 cut 83.8 meters averaging 3.81 percent graphite, including 30.5 meters averaging 6.26 percent graphite from a depth of 11.9 meters;

Hole 13GCH012 cut 86.4 meters averaging 5.06 percent graphite from a depth of 15.4 meters, including 10 meters averaging 13.07 percent graphite;

Hole 13GCH013 cut 46.1 meters averaging 3.81 percent graphite from a depth of 22.9 meters, including 14.2 meters averaging 7.16 percent graphite;

Hole 13GCH015 cut 106.2 meters averaging 2.1 percent graphite from a depth of 7.9 meters, including 5.24 meters averaging 5.83 percent graphite;

Hole 13GCH016 cut 75.9 meters averaging 2.4 percent graphite from a depth of 6.1 meters, including 10.5 meters averaging 6.2 percent graphite; and

Hole 13 GCH017 cut 126. 8 meters averaging 2.5 percent graphite from a depth of 20.5 meters, including 14 meters averaging 7.2 percent graphite.

Over the course of three weeks, Graphite One succeeded in more than doubling the strike of the Graphite Creek deposit and expanding the resource by around 68 percent.

“Our small drill program from 2013 allowed us to prove that the mineralization is continuous and extends for nearly 5 (kilometers), further demonstrating the size of this deposit,” said Graphite One President and CEO Anthony Huston.

Aggressive timeline

As expansive as the deposit at Graphite Creek has become, all indications are that the resource could be expanded to several times its current size.

The current deposit represents drilling along less than 30 percent of an 18-kilometer- (11.2 miles) long conductor zone revealed by an extensive airborne magnetic-electromagnetic survey flown in 2012 and the drilling completed to date has demonstrated a close correlation between the conductor and graphite in the ground.



29
Cu
63.55

World-class project. World-class science.

Pebble is a world-class copper deposit and one of North America’s most significant copper discoveries. Since 2001, more than 100 independent scientists and technicians have conducted one of the most extensive environmental studies program in Alaska.

The Pebble Partnership is committed to responsible resource development in Southwest Alaska — recognizing that a world-class project requires world-class science.

www.pebblepartnership.com

THE
pebble
PARTNERSHIP

see GRAPHITE CREEK page 11

continued from page 10

GRAPHITE CREEK

With a 10.35-million-metric-ton inferred graphite resource, Graphite One has little need to expand the deposit. Instead, the company will focus its planned 2014 drill program on upgrading the confidence of the world-class deposit it has outlined with an eye on putting that into production.

“An infill drill program during 2014 will significantly de-risk this deposit by bringing the resource into the measured indicated and/or indicated measured category, and will help us develop our preliminary economic assessment,” explains Besserer.

With an eye on jumping into the graphite market as early as possible, Graphite One has entered into a memorandum of understanding with the Alaska Department of Natural Resources, for engagement with the state’s large mine permitting team.

“As we move towards our PEA (preliminary economic assessment) and BFS (bankable feasibility study) this is an integral part of the process as we strive to keep our aggressive timeline towards development,” Huston explained.

JDS Energy and Mining Inc. is working on high-level engineering and logistics studies for the Graphite Creek project. Results of the studies will be part of a PEA for Graphite Creek due to be published by the first quarter of 2015.

Closer to markets

As Graphite Creek marches towards developing a mine at Graphite Creek, the world-class deposit is steadily moving closer to global markets.

As Arctic sea ice becomes less prevalent, an increasing number of cargo ships are passing a few miles west of Graphite Creek as they make the top-of-the-world traverse between Europe and Asia. While it may be years or even decades before the Arctic shipping lanes north of Russia and Canada become reliable and widely used, the increasing likelihood that the Bering Straits will become a busy thoroughway has Alaska and U.S. officials scrambling to establish infrastructure for such an eventuality.

After studying more than a dozen locations, the U.S. Army Corps of Engineers and Alaska Department of Transportation identified Port Clarence and Nome as the two best locations for a deep-sea port to serve as a base to protect national interests, support ship traffic and serve economic development in the Arctic.

While either location would put Graphite Creek within 50 miles (80 kilometers) of a deep-sea port, Port Clarence, located about 24 miles (39 kilometers) west of the project, would be the most advantageous.

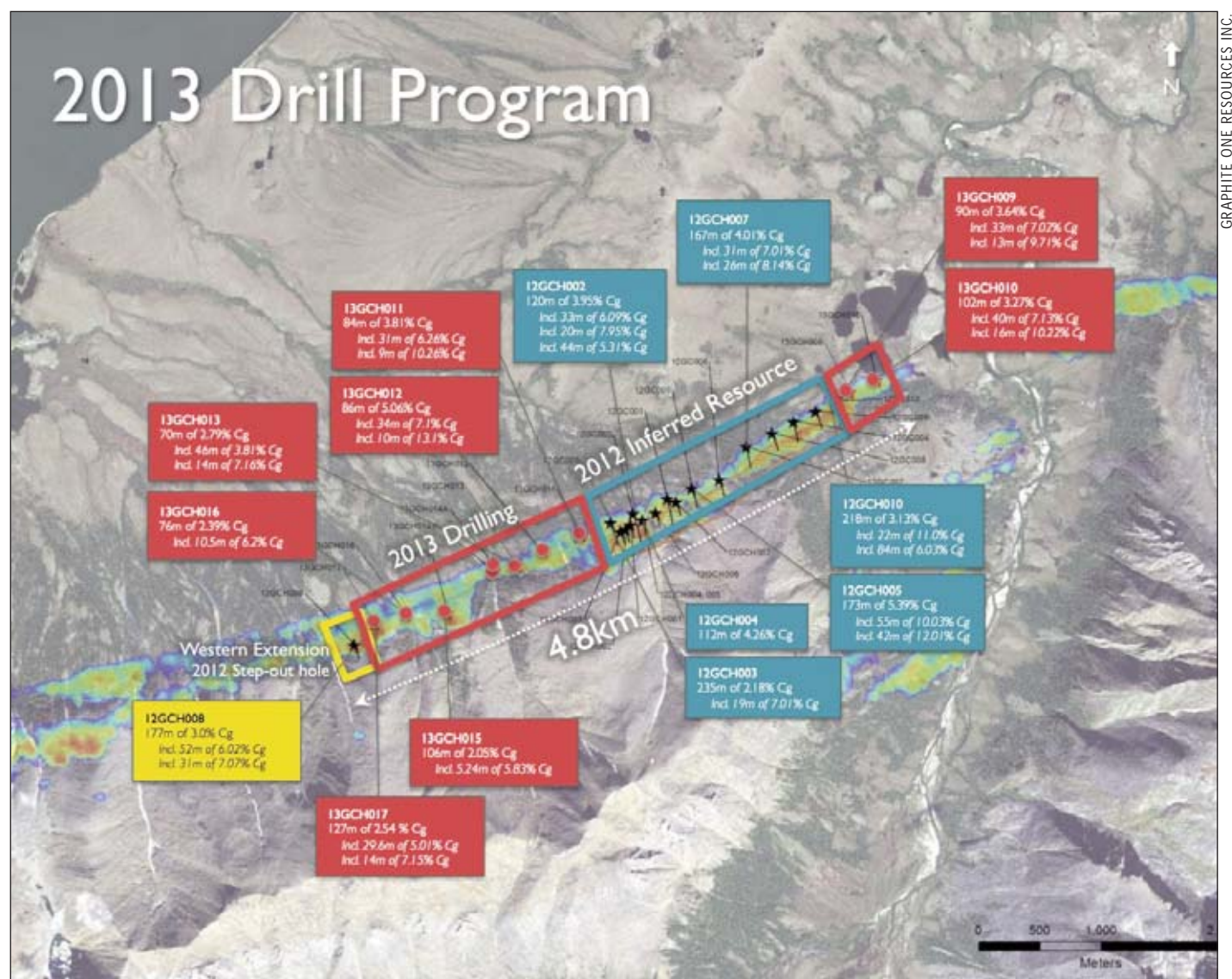
The Graphite Creek property lies along the shores of Grantley Harbor, providing a potential water route to barge graphite from the project to Port Clarence.

DOT and the Corps cited proximity to mining projects, Bering Straits shipping lanes and natural deep water as reasons Nome and Port Clarence topped the list. The agencies are currently completing feasibility studies for these sites with an eye on attracting investments and public-private partnerships needed to fund development.

Marketable graphite

Being on the threshold of global shipping lanes is only as important as the product you have to ship.

The Graphite Creek deposit is shaping



up to be a rich source of the quality of graphite prized for high-technology applications.

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

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

Large flake graphite containing 94-97 percent carbon, the grade needed in electric vehicle batteries, is currently selling for around US\$1,400 per metric ton, down about half from the peak of around US\$3,000 per metric ton in 2011 but substantially higher than the US\$1,000-per-metric-ton levels of 2008.

Laboratory analysis of three 15-kilo-

gram samples collected by Graphite One in 2011 identified the potential for large flake graphite at the project.

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

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

Additionally, some 65 percent of the large flake graphite is greater than 40 mesh, a premium form known as jumbo flake.

In addition to testing the physical characteristics, Graphite One had one of the 2011 samples tested for recoverability. Using a combination of gravity separation and flotation resulted in recoveries from

86.8 percent to 92 percent graphitic carbon.

A larger 10.5-metric-ton sample tested at Activation Laboratories Ltd. early in 2013 demonstrated a leaching process capable of producing 98.8-99.2 percent graphitic carbon from a rough concentrate obtained from Graphite Creek.

Graphite One is continuing bench-scale metallurgical work with the goal of developing a simple concentration and leaching process that will produce an ultra-high purity graphite product, potentially positioning Graphite Creek to compete in the C\$13-billion, or 1.5 million-metric-ton-per-year, synthetic market.

Huston said, “The Graphite Creek property is the largest known flake graphite deposit in North America, and we look forward to continuing to develop marketable graphite products to meet the global graphite demand, which is growing rapidly.” ●

TECHNOLOGY SOLUTIONS FOR THE ENERGY SECTOR

Oil | Gas | Mining
Full Life Cycle Communications

GCI Industrial Telecom has proven experience designing for and working in demanding environments. As experts in the field, our aim is to provide innovative full life cycle communications solutions to increase your productivity.



877.411.1484
gci-industrialtelecom.com



Your business technology partner.

MAP 2 Landscape Management Units & Land Use Categories

PEEL WATERSHED PLANNING REGION, YUKON



LEGEND

Landscape Management Units & Land Use Categories

- Protected Area (PA)
 - Restricted Use Wilderness Area (RUWA)
 - Integrated Management Area Zone II
 - Integrated Management Area Zone III
 - Integrated Management Area Zone IV
- Overlay Zones**
- Dempster Hwy Corridor
 - Major river corridor

First Nation Settlement and Tetlit Gwich'in Yukon Lands

- R-blocks
 - Site selection
- Adjacent Land Use Planning Zones**
- North Yukon Regional Land Use Plan
 - Gwich'in Land Use Plan Zones (NWT)

- Parks/SMA**
- Yukon territorial park
- Transportation**
- Major road/highway
 - Winter Road
 - Yukon territorial campground
 - Territorial boundary

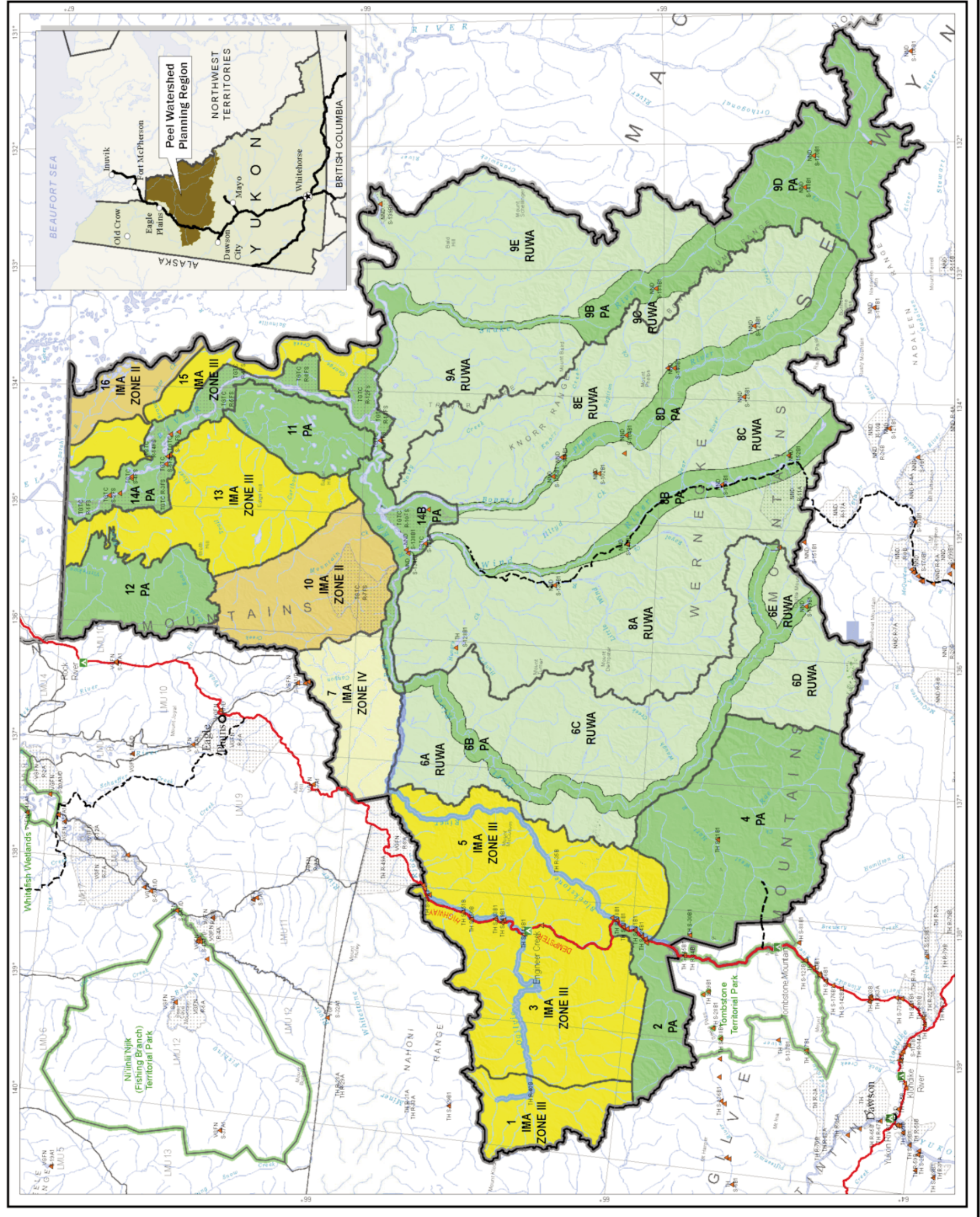
Base data: 1:1M hydrology (Digital Chart of the World), 1:250,000 National Topographic Database (NRCAN), 1:1M topography, 90m and 300m shaded relief, 1:250,000 territorial boundaries, 1:1M Yukon First Nation Traditional Territory Boundary, Gwich'in Primary & Secondary Use Areas, 1:250,000 territorial parks and campgrounds (Yukon Environment), 1:250,000 Dempster Hwy (Yukon Highways), 1:250,000 Yukon First Nation R-Block and TG Yukon Lands, 1:250,000 S-Sites (adapted from Geomatics Yukon).

Thematic data: 1:1M Gwich'in land use planning zones (Gwich'in Land Use Planning Board), 1:250,000 land management units (NYPC, PMPC), 1:250,000 planning regions (YLUPC).

DATA DISCLAIMER

This map is a graphical representation, which depicts the approximate size, configuration and spatial relationship of known geographic features. While great care has been taken to ensure the best possible quality, this document is not intended for legal descriptions and/or to calculate precise areas, dimensions or distances. We do not accept any responsibility for errors, omissions or inaccuracies in this data.

Digital copies of this map may be obtained from the Peel Watershed Planning Commission website at: www.peelplan.yukon.ca



January 2014

• YUKON TERRITORY

Government crafts plan for Peel region

Taking “balanced” approach in land-use scheme enables officials to offer mining opportunities in 71 percent of the watershed area

By ROSE RAGSDALE

For Mining News

The Government of Yukon released a final land use plan for the Peel River Watershed region Jan. 21, sparking sharp criticism in recent weeks from the major stakeholders in the agreement and at least one appeal.

In unveiling the plan, Yukon Premier Darrell Pasloski touted the “balanced approach” the government took to protect the natural environment while respecting all sectors of the territory’s economy.

Roughly the size of Ireland, the Peel River Watershed sprawls over 77,000 square kilometers (30,000 square miles) of mountainous terrain situated at the northern end of the Rocky and Mackenzie Mountains chain. Though about 10 percent of the watershed lies across the border in Northwest Territories, some 68,000 square kilometers (26,248 square miles) is situated in Yukon, directly north and west of more populous central areas of the territory near Whitehorse, Dawson and other smaller communities.

Hailed by conservationists as one of the largest intact natural ecosystems left in North America, the Peel Watershed drains about 14 percent of Yukon’s land mass.

The regional land use plan for the area applies to non-settlement lands, which cover more than 97 percent of the region. It attempts to balance protection for the most sensitive areas of the Peel Watershed with providing opportunities for economic activities.

The plan separates the Peel’s public lands into three types of areas – Protected, Restricted Use Wilderness Areas and Integrated Management Areas – with designations that allow for active management of lands and resources, while ensuring sound environmental stewardship, according to Yukon officials.

Among the plan’s protections:

Some 19,800 square kilometers of the region is permanently protected, bringing to nearly 17 percent the total protected area of Yukon, more than anywhere else in Canada.

Five rivers – the Wind, Bonnet Plume, Snake, Hart and Peel – are within protected areas of the watershed and will be designated as new “Wild River Parks.”

Only 0.2 percent of land can be disturbed in Restricted Use Wilderness Areas, which cover 44 percent of the watershed. This leaves 99.8 percent of the land surface in the RUWAs undisturbed at any one time.

First Nation subsistence harvesting activities and treaty rights are recognized and respected.

Among the plan’s economic opportunities:

About 70 percent of the region is open to exploration and commercial opportunities.

- Protection of viewscapes along river corridors provides benefits for tourism ventures.

- Restricted Use Wilderness Areas (RUWAs) will have regulated surface access, air access coordination, notification for low-level (Class 1) mineral exploration and regulated off-road vehicle access.

- Integrated Management Areas allow access to natural resources, with sustainable resource development.

Protected Areas make up 29 percent of the Peel region, while the remaining public land in the region is divided, with 44 percent designated as RUWAs, which allow for low levels of carefully managed land-use activity, and 27 percent designated as Integrated Management Areas, where most land-use activities may occur. In the latter two types of areas, mineral staking and proposed commercial activities will be subject to enhanced regulatory and permit processes.

The Yukon government also replaced the temporary mineral claim-staking withdrawal with a permanent staking withdrawal in the Protected Areas, as outlined in the land use plan. Staking is now permitted in 71 percent of the Peel Watershed region.

Departure from recommendations

Critics of the Peel land-use plan say the Yukon government largely rejected recommendations from the Peel Watershed Planning Commission, which asked that 80 percent of the watershed region be protected as conservation areas.

The planning commission spent more than five years

talking to First Nations and the public before releasing its recommendations. It called for as much as 80 percent of the region to be withdrawn from any industrial development, including mineral staking.

Commission members included First Nation groups and Yukon Government nominees. The commission handed its recommendations to the Yukon government in March 2013.

The Nacho Nyak Dun, the Tr’ondek Hwech’in, the Canadian Parks and Wilderness Society Yukon and the Yukon Conservation Society filed a lawsuit Jan. 27 in Yukon Supreme Court, charging the Yukon government with violating land claims signed with First Nations in its land use plan for the Peel River watershed.

Leaders of the First Nations said the suit does not reflect hostility between aboriginal people and miners in Yukon. Rather, it shows the reverence the groups feel for the Peel region.

“We do not want to see mining in the Peel watershed,” said Tr’ondek Hwech’in Chief Eddie Taylor. “To us that land is sacred and should be preserved for future generations. As our elders say, the Peel is our church, our university and our breadbasket.”

The Government of Yukon Feb 18 filed a statement of defense before the court, denying all allegations and seeking dismissal of the lawsuit.

Miners dismayed by new restrictions

Yukon’s mining community also has expressed significant concerns about provisions of the new plan for land use in the Peel Watershed region.

Samson Hartland, executive director of the Yukon Chamber of Mines, said mining companies in Yukon were pleased to see the government made some modifications to the plan recommended by the commission a year ago.

However, the industry is very concerned about some provisions of the final version, he told Mining News Feb. 17.

“At same time, you have to realize that ‘the devil is in the details,’” he said. “The restrictions imposed by the government render many projects uneconomic, though they are not technically off-limits. With 29 percent of the region in a fully conservation area, and another 44 percent placed in Restricted Use Wilderness Areas, it makes it very difficult for a company to carry out a project.”

Hartland said the host of new restrictions means miners must cope with extra layers of requirements on top of the territory’s already stringent regulations.

“Anybody in the industry understands how rigorous the requirements for access is. Now to have additional requirements in another layer added on top of that is not a positive development,” he said. “Extra provisions such as winter-only access and not being allowed to go in to work during whitewater rafting season – you can get pretty bogged down in details,” he said.

The government’s plan also has exacerbated the industry’s concern about diminishing access to remote areas for mineral exploration.

“The plan increased total protected areas in Yukon to 17 percent, which by the government’s own admission is the highest percentage in Canada,” Hartland observed.

“It’s important to get people to start putting things in perspective, to try to get people to agree on what level of protection is reasonable,” he explained. “The trajectory we’re on is to have 40-50 percent of our land in protected areas, and I’m not sure people are aware of that. I think it’s important to have that discussion. It’s a concern.”

On the heels of finalizing the Peel region plan, the Yukon government released a notice seeking comment on a proposal for the Dawson Land Use Region, the third of five regions in the territory where land use is being planned.

“Going from the announcement of the Peel plan right into seeking comment on another plan” is difficult for stakeholders who are still trying to understand the implications of the Peel decisions.

One miner’s frustration

Mining companies already pursuing projects in the Peel region, meanwhile, had their existing claims grand-

fathered-in and permitted for development by the government.

Tarsis Resources Ltd., for example, holds 90 claims along Goz Creek in the southeast part of the region about 180 kilometers north of Mayo.

Under the new land use plan, the claims now lie in a protected area of the Peel Watershed.

While Tarsis can still work the claims, company officials say the “protected” designation is confusing and could make raising funds in the market for further exploration and development at the least, difficult, and potentially impossible.

Tarsis President and CEO Marc Blythe, P. Eng., said his company is asking the Yukon government to create a buffer zone around the claims that would make room for any potential development.

“We’re not exactly happy with how (the plan) turned out; to have a protected area all around us certainly restricts our ability to work on those claims going forward,” Blythe told Mining News.

“Trying to put some sort of access through a restricted area is going to be very, very difficult to permit; there’ll certainly be a lot of opposition I would imagine from environmental groups,” he said.

Blythe said he is particularly worried about the popular perception of the label, “protected,” for the area where the Goz Creek claims are located. He believes the perception could make it impossible for the effectively operate in the area.

Blythe said he gets frustrated when he hears people talk about the Peel Watershed being a pristine area, when more than C\$100 million of minerals exploration have been completed in the region.

“If the region is still pristine after C\$100 million of mining exploration, then I think that demonstrates how responsible the mining industry has been when operating in these areas,” he said.

Goz Creek is a high-grade zinc-silver deposit with a historic resource estimate dating from exploration in the 1970s.

Tarsis has spent more than C\$1 million on exploration on the project since 2008 and the previous operator spent a couple million.

“So that’s at least C\$3 million to C\$4 million that has been invested in that project. We’re invested in those claims, and if they want us out of there, they need to give us compensation,” Blythe said. “Those claims have been mined since 1973, and I think it’s unreasonable to put such restrictions on the area. It’s not as if we are looking for something. We already have a resource there.”

Moreover, the Yukon has “really stringent mining regulations, and I see no reason that industry and the government can’t continue to work together,” he said.

Industry also enjoys a strong working relationship with 11 of the Yukon’s 14 First Nations, including those with traditional territories in the Peel Watershed.

Back in 2008 when Tarsis first began an exploration program at Goz Creek, company officials consulted the Nacho Nyak Dun First Nation, which considers the area where the 90 Goz Creek claims are located its traditional territory, Blythe said.

“We made a presentation to the chief and the community about our plans, and they were on board with them. We met with Chief Simon Mervyn on several occasions since, and they were fine with the work that we were doing,” Blythe said.

Despite the land-use permit it holds for Goz Creek, Tarsis would be unlikely to invest more money in the project going forward “when it looks as if we won’t be allowed to operate there,” Blythe said. “We would hope we could reach some agreement with the government.”

Yukon officials say the government has no intention of adjusting the Peel land use plan.

They note that other projects in Canada that have been developed in protected areas, including the Myra Falls zinc mine located in the Strathcona-Westmin Provincial Park in B.C.

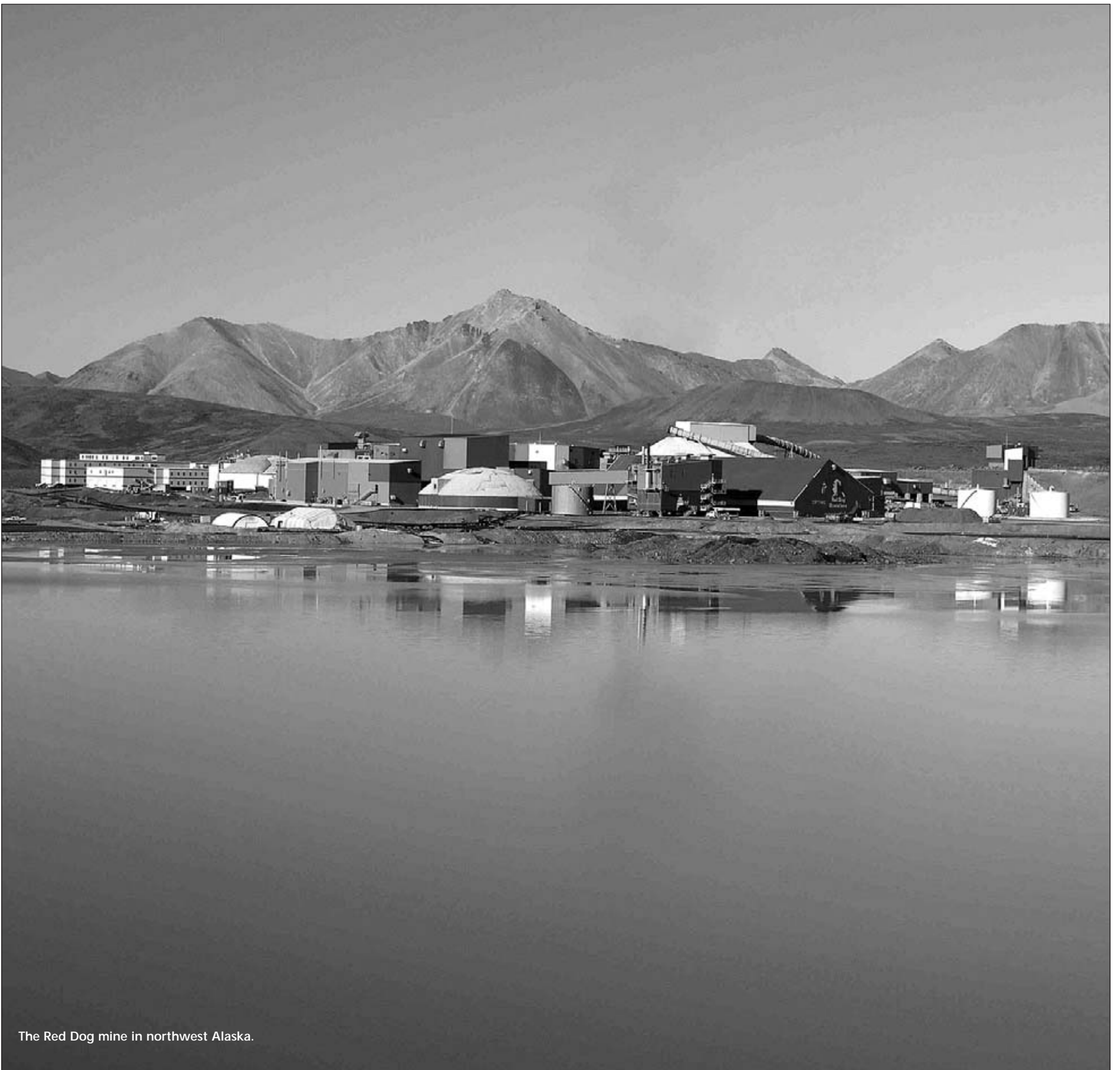
Though the plan allows Tarsis to carry out exploration plans and ultimately to develop a mine, Yukon officials acknowledge that the Goz Creek project would certainly be held to a high environmental standard and would likely be more in the public eye than a project located outside a protected area. ●

NORTH OF 60 MINING

Companies involved in Alaska and
northwestern Canada's mining industry

NEWS

DIRECTORY



The Red Dog mine in northwest Alaska.

Mining Companies

Kinross Fort Knox/Fairbanks Gold Mining Inc.

Fairbanks, AK 99707
Contact: Anna Atchison, Manager,
Community and Government Relations
Phone: (907) 490-2218 Fax: (907) 490-2290
E-mail: anna.atchison@kinross.com
Website: www.kinross.com

Located 25 miles northeast of Fairbanks, Fort Knox is Alaska's largest producing gold mine; during 2011, Fort Knox achieved 5 million ounces of gold produced, a modern record in Alaska mining.

Usibelli Coal Mine

Fairbanks, AK 99701
Contact: Bill Brophy, VP Customer Relations
Phone: (907) 452-2625 • Fax: (907) 451-6543
Email: info@usibelli.com
Website: www.usibelli.com
Other Office

PO Box 1000
Healy, AK 99743
Phone: (907) 683-2226

Usibelli Coal Mine is headquartered in Healy, Alaska and has 700 million tons of coal reserves. UCM produces an average of 2 million tons of sub-bituminous coal each year.

Service, Supply & Equipment

Alaska Air Cargo • Horizon Air Cargo

P.O. Box 68900 SEAFZ
Seattle, WA 98168
Contact: Joe Sprague, Vice President of Cargo
Phone: (206) 392-2705 or 800-2ALASKA
Fax: (206) 392-2641
E-mail: joe.sprague@alaskaair.com
Website: www.alaskacargo.com
Award winning cargo services to more places, more often, with more lift to, from, and within the state of Alaska.

Alaska Analytical Laboratory

1956 Richardson Highway
North Pole, AK 99705
Phone: (907) 488-1266 • Fax: (907) 488-077
E-mail: jlovejoy@mappatestlab.com
Environmental analytical soil testing for GRO, DRO, RRO, and UTEX. Field screening and phase 1 and 2 site assessments also available.

Alaska Steel Co.

6180 Electron Drive
Anchorage, AK 99518
Contact: Joe Pavlas, outside sales manager
Phone: (907) 561-1188
Toll free: (800) 770-0969 (AK only)
Fax: (907) 561-2935
E-mail: j.pavlas@alaskasteel.com
Full-line steel and aluminum distributor. Complete processing capabilities, statewide service. Specializing in low temperature steel and wear plate.

Austin Powder Company

P.O. Box 8236
Ketchikan, AK 99901
Contact: Tony Barajas, Alaska manager
Phone: (907) 225-8236 • Fax: (907) 225-8237
E-mail: tony.barajas@austinpowder.com
Web site: www.austinpowder.com
In business since 1833, Austin Powder provides statewide prepackaged and onsite manufactured explosives and drilling supplies with a commitment to safety and unmatched customer service.

Calista Corp.

301 Calista Court, Suite A
Anchorage, AK 99518
Phone: (907) 279-5516 • Fax: (907) 272-5060
Web site: www.calistacorp.com

Construction Machinery Industrial, LLC

5400 Homer Drive
Anchorage, AK 99518
Contact: Robert Fairbanks, Sales Manager
Phone: (907) 563-3822
Fax: (907) 563-1381
Email: r.fairbanks@cmiak.com
Website: www.cmiak.com

GCI Industrial Telecom

Anchorage:
11260 Old Seward Highway Ste. 105
Anchorage, AK 99515
Phone: (907) 868-0400
Fax: (907) 868-9528
Toll free: (877) 411-1484
Web site: www.GCI-IndustrialTelecom.com
Rick Hansen, Director
Richard.Hansen@gci.com
Mark Johnson, Business Development Manager
Mark.Johnson@gci.com

Deadhorse:

Aurora Hotel #205
Deadhorse, Alaska 99734
Phone: (907) 771-1090
Mike Stanford, Senior Manager North Slope
Mike.Stanford@gci.com

Houston, Texas:

8588 Katy Freeway, Suite 226
Houston, Texas 77024
Phone: (713) 589-4456
Hillary McIntosh, Account Representative
Hillary.McIntosh@gci.com
GCI Industrial Telecom provides innovative solutions to the most complex communication issues facing industrial clientele. We deliver competitive services, reputable expertise and safely operate under the most severe working conditions for the oil, gas and natural resource industries. GCI-your best choice for full life cycle, expert, proven, industrial communications.

HDR Alaska Inc.

2525 C St., Ste 305
Anchorage, AK 99503
Contact: Jaci Mellott, Marketing Coordinator
Phone: (907) 644-2091
Fax: (907) 644-2022
Email: Jaci.Mellott@hdrinc.com
Website: www.hdrinc.com
HDR Alaska provides engineering, environmental, planning, and consultation services for mining and mineral exploration clients. Services include: biological studies; cultural resources; project permitting; NEPA; stakeholder outreach; agency consultation; and environmental, civil, transportation, energy, and heavy structural engineering.

Jackovich Industrial & Construction Supply

Fairbanks, AK 99707
Contact: Buz Jackovich
Phone: (907) 456-4414 • Fax: (907) 452-4846
Anchorage office
Phone: (907) 277-1406 • Fax: (907) 258-1700
24-hour emergency service. With 30 years of experience, we're experts on arctic conditions and extreme weather.

Judy Patrick Photography

511 W. 41st Ave, Suite 101
Anchorage, AK 99503
Contact: Judy Patrick
Phone: (907) 258-4704
Fax: (907) 258-4706
E-mail: jpp@mtonline.net
Website: www.judypatrickphotography.com
Creative images for the resource development industry.

Advertiser Index

Alaska Airlines Cargo
Alaska Analytical Laboratory
Alaska Dreams
Alaska Steel Co.
Austin Powder Co.
Calista Corp. 5
Constantine Metal Resources
Construction Machinery 20
Fairbanks Gold Mining/Fort Knox Gold Mine 9
GCI Industrial Telecom 11
Greer Tank Inc. 16
IFR Workwear Inc.
Judy Patrick Photography 18
Keller Williams Commercial
Last Frontier Air Ventures. 6
Lynden. 2
Nature Conservancy, The 4
Northern Air Cargo
Pacific Rim Geological Consulting. 5
Pebble Partnership 10
PND Engineers Inc.
Salt+Light Creative
Sourdough Express Inc.
Taiga Ventures/PacWest Drilling Supply 19
Total Safety
URS Corp.
Usibelli Coal Mine

Keller Williams Commercial

101 West Benson, Ste. 503
Contact: Stewart Smith, Associate Broker
Anchorage, AK 99503
Phone: (907) 865-6505
Cell: (907) 727-8686
Email: stewart@stusell.com
Contact: Mollie Smith, Commercial Associate
Cell: (907) 229-1384
Email: mollie@stusell.com
Web site: www.stusell.com;
www.AKMiningClaims.com
Mining Claims to buy, sell, or lease, or lease, call the Alaska professionals. We provide real estate brokerage service to the mining industry, with over 35 years of commercial experience. Call for a list of our featured properties.

Last Frontier Air Ventures

39901 N. Glenn Hwy.
Sutton, AK 99674
Contact: Dave King, owner
Phone: (907) 745-5701
Fax: (907) 745-5711
E-mail: helicopter@LFAV.com
Anchorage Base (907) 272-8300
Web site: www.LFAV.com
Helicopter support statewide for mineral exploration, survey research and development, slung cargo, video/film projects, telecom support, tours, crew transport, heli skiing. Short and long term contracts.

Lynden

Alaska Marine Lines • Alaska Railbelt Marine
Alaska West Express • Lynden Air Cargo
Lynden Air Freight • Lynden International
Lynden Logistics • Lynden Transport
Anchorage, AK 99502
Contact: Jeanine St. John
Phone: (907) 245-1544 • Fax: (907) 245-1744
Email: custsvc@lynden.com
The combined scope of the Lynden companies includes truckload and less-than-truckload highway connections, scheduled barges, intermodal bulk chemical hauls, scheduled and chartered air freighters, domestic and international air forwarding and international sea forwarding services.

Northern Air Cargo

3900 W. International Airport Rd.
Anchorage, AK 99502
Contact: Mark Liland, acct. mgr. Anch./Prudhoe Bay
Phone: (907) 249-5149 • Fax: (907) 249-5194
Email: mliland@nac.aero • Website: www.nac.aero
Serving the aviation needs of rural Alaska for almost 50

years, NAC is the states largest all cargo carrier moving nearly 100 million pounds of cargo on scheduled flights to 17 of Alaska's busiest airports. NAC's fleet of DC-6, B-727, and ATR-42 aircraft are available for charters to remote sites and flag stops to 44 additional communities.

Pacific Rim Geological Consulting

Fairbanks, AK 99708
Contact: Thomas Bundtzen, president
Phone: (907) 458-8951
Fax: (907) 458-8511
Email: bundtzen@mosquitonet.com
Geologic mapping, metallic minerals exploration and industrial minerals analysis or assessment.

Pebble Partnership

3201 C St., Suite 604
Anchorage, AK 99503
Phone: 907-339-2600
www.pebblepartnership.com

PND Engineers Inc.

1506 W. 36th Ave.
Anchorage, AK 99503
Phone: (907) 561-1011
Fax: (907) 563-4220
Website: www.pndengineers.com
Full-service engineering firm providing civil, structural, and geotechnical engineering, including mining support, resource development, permitting, marine and coastal engineering, transportation engineering, hydrology, site remediation, and project management.

TTT Environmental LLC

4201 "B" St.
Anchorage, AK 99503
Contact: Tom Tompkins, general manager
Phone: 907-770-9041 • Fax: 907-770-9046
Email: info@tttenviro.com
Website: www.tttenviro.com
Alaska's preferred source for instrument rentals, sales, service and supplies. We supply equipment for air monitoring, water sampling, field screening, PPE and more.

Taiga Ventures

2700 S. Cushman
Fairbanks, AK 99701
Mike Tolbert - president
Phone: 907-452-6631 • Fax: 907-451-8632
Other offices:
Airport Business Park
2000 W. International Airport Rd, #D-2
Anchorage, AK 99502
Phone: 907-245-3123
Email: mike@taigaventures.com
Web site: www.taigaventures.com
Remote site logistics firm specializing in turnkey portable shelter camps – all seasons.

Total Safety U.S. Inc.

209 E. 51st Ave.
Anchorage, AK 99503
Contact: Tyler Zollinger, District Manager.
Phone: (907) 743-9871
Fax: (907) 743-9872
E-mail: tyler.zollinger@totalsafety.com
Website: www.totalsafety.com
A full service safety company specializing in Remote Medical Services, H2S Services, Industrial Hygiene, and Safety Consultants. Total Safety provides Service, Rental, or Sales of Safe Breathing Air, Gas Detection, and Technical Safety Equipment.

URS Corp.

700 G Street, Suite 500
Anchorage, AK 99501
Contact: Joe Hegna, Alaska Vice President/Alaska Operations Manager
Phone: (907) 562-3366 • Fax: (907) 562-1297
E-mail: joe_heгна@urscorp.com
Website: www.urscorp.com
Provide engineering, construction and technical services with capabilities to support all stages of project life cycle. We offer a full range of program management; planning, design and engineering; construction and construction management; operations and maintenance; and decommissioning and closure services.

• BRITISH COLUMBIA

Premier orders review of BC EA process

Province generally ranks favorably in comparison with similar regulatory regimes among Canada, U.S. jurisdictions in Far North

By ROSE RAGSDALE
For Mining News

British Columbia Premier Christy Clark ordered a review of the Canadian province's environmental assessment process in January, saying the current system has become too cumbersome.

Clark provided few details when she announced the initiative at the Mineral Exploration Roundup in Vancouver Jan. 27. She said environmental reviews of major projects are crucial, and while the current process is rigorous and transparent, the B.C. environmental assessment office can "do better."

"In my view, it is better to do the hard and rigorous work at the front end and get it right, than to endure decades of questions and debate and acrimony about why and how it was done," Clark said.

Due to recent streamlining and regulatory initiatives, Clark said the government has exceeded its BC Jobs Plan goal for permitting turnaround times. Notices of Work permit applications are now processed in 55 days on average, a considerable reduction from an average of 110 days in 2011, demonstrating government's commitment to an efficient and barrier-free permitting process.

However, Clark told reporters that she believes the existing system for environmental assessments has gotten less predictable and more inefficient.

"My view is if a project is environmentally unsustainable and the wrong project, we should say no. If it's a project that is environmentally sound, we should say yes," she said.

"But I think over the years, the environmental assessment process has gotten so long, so difficult and so complex, that communities, proponents can't get a yes, can't get a no."

Clark also said she believes getting an efficient approval or rejection would be best for economic development in B.C.

A key aim of the mandate from Clark is to cut the timeline for environmental assessments in the province, according to

B.C. Environment Minister Mary Polak.

"We have been told by industry that permitting is taking too long," a ministry spokesman told Mining News Feb. 12.

But surveys of the environmental assessment processes of the other jurisdictions situated north of the 60th parallel in Canada and the United States suggest that B.C.'s EA process may be no worse and in some instances, arguably, better than others.

While mines typically require many years to get from ore discovery to production, mine projects in British Columbia that have initiated production in recent years benefitted from relatively expeditious permitting. These include the New Afton gold mine and the Mount Milligan copper-gold-silver mine.

For New Afton, located 10 kilometers west of Kamloops, B.C., no environmental assessment was required by the B.C. government for the underground operation, and it took about 9.5 months for operator New Gold Inc. to obtain a Mines Act Permit, from Jan. 18, 2007 when the company's application was received, to Oct. 30, 2007 when the permit was issued. Operations began at New Afton in 2012, with first concentrate shipped in July 2012.

For Mt. Milligan, located 155 kilometers (96 miles) northwest of Prince George, B.C., former operator Terrane Metals Corp. entered the pre-application EA process on Oct. 13, 2006 and B.C. regulators received the application from Terrane Sept. 3, 2008. Approval of the project was granted on March 16, 2009, and a Mines Act permit was issued in September 2009.

The following year in July, Terrane was acquired, along with the C\$917 million, 15-year mine life Mt. Milligan project, by Toronto-based Thompson Creek Metals Co. Inc., formerly Blue Pearl Mining Co.,



CHRISTY CLARK

SHANE LASLEY

"My view is if a project is environmentally unsustainable and the wrong project, we should say no. If it's a project that is environmentally sound, we should say yes. But I think over the years, the environmental assessment process has gotten so long, so difficult and so complex, that communities, proponents can't get a yes, can't get a no."

—Premier Christy Clark, Government of British Columbia

for about C\$700 million.

Operations began at Mt Milligan in August 2013, with first concentrate shipped from the mine on Sept. 24, 2013.

British Columbia currently has more than 20 major mines and expansions moving through the environmental assessment and permitting process.

Improvement needed in B.C. regime

Still, many in British Columbia's mining industry say the province's current regulatory regime, especially its EA processes, could be much better.

"... for BC to reach its true potential, it is clear that further improvements in permitting and a consistent, fair and science-based approach to environmental assessments are required," Association of Mining Exploration British Columbia President and CEO Gavin Dirom, M.Sc., P. Ag., said in a recent letter to the association's membership. "This message was reflected in December as part of AME BC's participation in a business coalition that urged the federal government to undertake a balanced review of the New Prosperity copper-gold project. The B.C. Supreme Court also reinforced this message on Dec. 10 when it ruled that the B.C. government's rejection of the proposed Morrison copper-gold-molybdenum mine 'failed to comport with the requirements of procedural fairness.'"

"It was no surprise then that the importance of having robust and timely permitting and environmental assessment processes were also key findings from two member surveys AME BC conducted this fall: one on the state of human resources in the mineral exploration and development sector and another focused on ranking AME BC's top policy recom-

mendations to government for 2014," he added.

Dirom also said having the right policies and implementing them successfully over time will create an even more attractive business and investment climate in the province.

The AME BC view echoed comments of individual company executives reported in the 2012-2013 Fraser Institute Annual Survey of Mining Companies. The annual Fraser Institute survey is sent to about 4,100 exploration, development, and other mining-related companies worldwide.

Among comments from last year's survey respondents about British Columbia's policies:

"I think that Canada and B.C. in general have a lot more potential for being the highest-rated jurisdictions for mineral exploration, but politics (for the purpose of getting elected or re-elected) gets in the way of making the right policies in exchange for votes," said a vice president of an exploration company.

"Dealing with the Ministry of Mines in B.C. via a phone call. Always polite. Always willing to go the extra mile to answer the question," said a senior manager of another exploration company.

"Both exploration and development permit wait times are unacceptable as they can range from three months to two years in some cases. Recently, a permit application that had been sitting without release for referral to First Nations for three months was resolved, but only with the intervention of the government minister. There is no consistency between how local offices deal with referrals and no consistency with how they are issued. There is a general lack of communication and commitment from B.C. government employees to service the public, although there are notable exceptions," an exploration company manager said.

Of the 96 countries and jurisdictions ranked in the survey, British Columbia placed No. 30 in the survey's Policy Potential Index and No. 34 on the Mineral Potential Index, assuming current regulations and land restrictions.

However, when considering mineral potential assuming no land restrictions in place and industry employing best practice, the province climbed to No. 19.

British Columbia placed even lower, near the middle of the pack at No. 49, when respondents considered "uncertainty concerning the administration, interpretation, and enforcement of existing regulations."

Mixed reviews from industry

Canada's average policy potential index score improved slightly in

2012/2013, but for the first time since 2006/2007, a Canadian jurisdiction did not rank first in the survey. The highest ranked Canadian jurisdiction was Alberta, which remained in third place.

GREER

Tank INC.

FAIRBANKS 1(800) 770.1711
ANCHORAGE 1(800) 770.8265
WASHINGTON 1(800) 725.8108

**Your local welding specialist
for over 58 years, meeting &
exceeding your needs!**

Structural Steel | Plate & Sheet Steel
Diamond Plate | Grating | Aluminum | Pipe

Commercial Septic & Water Tanks
(Metal & Plastic)

Tanks, Skids & Stands

Fuel Tank Accessories

Custom Fabrications

Above & Below Ground Industrial Tanks

WWW.GREERTANK.COM

see PROCESS REVIEW page 17

continued from page 16

PROCESS REVIEW

In general, the mining industry has mixed views of Canadian mining policies.

“Canadian mining regulations and legislation are generally easy to operate under,” said the president of a producer company with more than US\$50 million.

However, the manager of a consulting company said, “Canadian projects [are] taking years to wind through regulatory processes in which every opinion has the same validity regardless of how poorly informed. I am not sure that any province is immune from this nonsense.”

“Constant back and forth in Canada [with] First Nations trying to prove negative impacts of mining in order to get contractual financial and other commitments from mining companies. We need to find our way to a regulatory and cultural regime where First Nations can focus on holding companies to responsible behavior and opportunities for mutually beneficial business relationships – not percentages of projects (this includes a transparent and reliable approach to determining whether a First Nation should share in the royalty paid on minerals, not negotiating an additional financial payment),” according to a vice president of a producer company with more than US\$50 million.

Another manager of a producer company with more than US\$50 million said, “Canada’s federal/provincial regulatory duplicity, primarily EAs [Environmental Assessments], lends itself to detracting investment opportunities.

A company president of an exploration company said, “Re-affirm that the province has real ownership and control of its land and mineral resources. Mining companies are not sure who really owns the resources, therefore, mineral claims or titles are becoming meaningless.”

Said an exploration company president: “I believe the federal courts have put provincial governments in Canada in a near impossible situation by imposing the ‘duty to consult’ requirements on the provinces without ensuring that the additional rights given or up held (depending on the perspective) for First Nations people are balanced by giving the provinces an adequate mechanism to deal with how this affects their mining community (which is a provincial jurisdiction). It is an off-loading and imposition of a responsibility without the authority to balance exploration’s basic requirements of land access.”

A cut above

By comparison, other North of 60 jurisdictions have varying track records when it comes to environmental assessments and permitting for mine projects.

Yukon Territory, situated directly to the north of British Columbia, is considered one of the most mining-friendly jurisdictions in Canada’s North.

The territory earned high marks in the 2012-2013 Fraser Institute mining survey. Yukon placed No. 8 in the survey’s PPI ranking and No. 7 when ranked according to current mineral potential, assuming current regulations and land use restrictions.

In recent years, Yukon regulators have approved the startup of three mines and are close to permitting a fourth operation.

The first of these modern mining operations, Minto Mine, commenced commercial production Oct. 1, 2007, after a 4-month commissioning period. However, the environmental assessment process for the copper-gold project pre-dates devolution in Yukon Territory, which occurred in 2003.

The Minto claims had been actively explored since 1970 by various operators, before Minto Exploration Ltd., guided the project the federal regulatory process in the late 1990s. Minto was assessed under Environmental Assessment and Review Process Guidelines Order (EARPGO the predecessor of CEAA). MintoEx submitted its application on Aug. 18, 1993, and the water license was issued in April 1998.

Sherwood Copper, now Capstone Mining Corp., acquired the fully permitted Minto project in 2005 and began production about two years later.

The Bellekeno silver mine, by contrast, traveled a much shorter path to production. Operator Alexco Resource Corp. submitted its application to the Yukon Enviro-Socioeconomic Assessment Board in February 2009, and was issued a quartz mining license in November 2009, and a Water License in August 2010.

The territory’s EA and permitting process, today, is lauded as one of the best in the Far North by industry.

“Yukon: The bands (are) working with the miners to

“In the NWT, Bill C15, The NWT Devolution Act is currently in report phase. It’s an omnibus bill and contains a major regulatory improvement initiative to amend the Mackenzie Valley Resource Management Act. As currently proposed, it would legislate about two years for an environmental assessment and two years for an environmental impact review. So (it would be) somewhat consistent with the rest of the north and Canada, if passed into law.” —Tom Hoefer, executive director, NWT & Nunavut Chamber of Mines

help grow the economy,” an investor relations manager for an exploration company told the Fraser Institute.

Observed an industry consultant: “Yukon has “good mineral endowment and government just seems to work like one would hope it would.”

Changes in the wind

Next door to the east in Northwest Territories and farther east in Nunavut Territory, the environmental assessment and permitting processes – still managed by federal and federal-territorial joint regulatory boards and departments – have been criticized for being uncertain and expensive as well as too lengthy.

Commenting on the regulatory climate in Northwest Territories, one exploration company manager told the Fraser Institute: “(It’s) too hard to get exploration permits on a predictable schedule and without excessive and overly expensive early-stage community consultation.

About Nunavut, a vice president of an exploration company said this: “Nunavut is a territory that is in many ways in conflict. It wants investment and then creates a bureaucracy and commercial environment that is strongly negative towards any investment.

Changes, however, are underway, especially in Northwest Territories where devolution – scheduled to be implemented in April – will see management and decision-making functions of the regulatory process transferred to the territorial government.

The Mackenzie Valley Environmental Impact Review Board released an external report in October 2011 that found typical environmental assessments in Northwest Territories, on average, were becoming longer and more detailed and may have surpassed the original expectations of the comprehensive land claims agreements and the legislation for the middle stage between preliminary screening and environmental impact review.

The report, commissioned by the Review Board and prepared by Stantec Consulting Ltd. of Yellowknife, NWT, compared to environmental assessment processes in Canada. The consultant concluded that EIA processes across Canada are not directly comparable and the assessments reviewed during the study each have unique attributes. However, it noted that the environmental assessment process in the Mackenzie Valley is one of the lengthier processes in Canada.

Stantec examined the timeliness of each phase of the administrative tribunal’s assessment process and compared its recent reviews of DeBeers Canada Inc.’s Snap Lake Diamond Mine and Tamerlane Ventures Inc.’s Pine Point Pilot Project with comparable EAs for recent mine development projects in Nunavut, Yukon Territory, British Columbia, Saskatchewan and Newfoundland.

“With the exception of the Galore Creek project in British Columbia, which had significant proponent-caused delay during the scoping phase, the ‘EA start-up to issuance of TOR’ and the ‘EIS conformity to EA determination’ phases’ were longest for those projects assessed in the Mackenzie Valley,” Stantec wrote in the report.

“We have been asking for reform to the Mackenzie Valley Resource Management Act for at least the past seven years, and timelines were ever present in our ask,” said Tom Hoefer, executive director of the NWT & Nunavut Chamber of Mines.

“In the NWT, Bill C15, The NWT Devolution Act is currently in report phase. It’s an omnibus bill and contains a major regulatory improvement initiative to amend the Mackenzie Valley Resource Management Act. As currently proposed, it would legislate about two years for an environmental assessment and two years for an environmental impact review. So (it would be) somewhat consistent with the rest of the north and Canada, if passed into law,” Hoefer told Mining News.

“There have been no timelines legislated in NWT or NU, until the Nunavut Project Planning and Assessment

Act (NUPPAA) was passed into law this past year, and provides for about two years. I’m not certain that it is law yet, but close,” Hoefer said. “We also worked closely with the government to create the Nunavut Planning and Project Assessment Act. ... It’s not law yet, so no projects currently in play are affected. However, in all fairness, the boards themselves have started to become more efficient, and I believe if asked, they would say that they are now ready to meet those timelines.”

Federal intrusion hurts

To the west lies Alaska, the only U.S. jurisdiction situated “North of 60” and thus offering mining challenges comparable to those faced by mining companies operating in northern British Columbia.

In recent years, the state has had about a half-dozen operating mines and a dozen others teetering on the brink of development, including two giant advanced-stage ventures, the Pebble copper-gold-molybdenum project in southwestern Alaska and the Donlin gold project in western Alaska.

The two mines that succeeded in gaining operating permits in Alaska are Pogo gold mine in Interior Alaska and the Kensington gold mine near Juneau.

An underground cut-and-fill operation using gravity, flotation, and cyanide leaching processes to recover gold, the Pogo mine is operated by Sumitomo Metal Mining Pogo LLC. An environmental impact statement process for Pogo was triggered by an application for an NPDES water discharge permit. The U.S. Environmental Protection Agency started the EIS process with public notice in August 2000 and published the final EIS in September 2003. EPA then issued the NPDES (National Pollutant Discharge

Elimination System) water discharge permit in March 2004. Pogo’s permits from state regulators were issued in December 2003, and mine production began in 2006.

Pogo took about three years for the EIS and another six months to get the NPDES permit issued, but there was an NPDES permit appeal filed (which was later withdrawn after negotiation) during this six-month period, said Jack DiMarchi, CPG, Large Mine Project Manager for the Alaska Department of Natural Resources.

The Kensington Gold Mine is an underground long-hole stoping and drift-and-fill operation using flotation processes to recover gold. Operated by Coeur Alaska Inc., a subsidiary of Coeur d’Alene Mines Corp, Kensington was originally permitted in 2005.

“I have always said that it takes about three years to permit a “normal sized” large mine in Alaska,” said Ed Fogels, deputy commissioner of the Alaska Department of Natural Resources. “This doesn’t include appeals and litigation—the Kensington project took about three years for the EIS and permitting, but another year or so for the court challenge (to the U.S. Supreme Court). Also, Kensington had a number of false starts (they changed their plans several times) on permitting, dating back probably almost 20 years before finally getting their permits.

“Really big mine projects like Pebble will likely take longer than three years for the EIS and permitting process. The schedule for all these projects is primarily driven by the federal EIS process,” Fogels added.

Alaska regulators are generally praised by the industry for its EA process and permitting regime.

The state was ranked 19th out of 96 jurisdictions worldwide on the 2012-2013 Fraser survey’s Policy Potential Index. Yukon placed No. 8 in the survey’s PPI ranking and No. 6 when ranked according to current mineral potential, assuming current regulations and land use restrictions.

Among the few individual comments about Alaska that the survey reported from respondents:

“Supportive government, particularly in the central district where areas are specifically designated for mineral resource development. Permit process is a known quantity. Despite opposition in Southwest

Alaska toward one project, the central district is the best place to have a project for certainty, exploration potential and geo-political risk,” observed the president of an exploration company.

Another exploration company president said the Alaska Land Claims Act unequivocally identifies Native interest.

And lastly: “There needs to be a classification just for the ‘United States.’ While Alaska has great potential and the state government is welcoming, the federal government exerts incredible control over Alaska and thus it’s difficult to rate it high, given the federal intrusion,” said a vice president of a producer company with more than US\$50 million. ●

• N U N A V U T

Mining plays key role in economic future

In 2013 report, public-private coalition identifies main drivers and significant challenges to prosperity in Far North territory

By ROSE RAGSDALE
For Mining News

Despite a surge in economic activity in recent years, Nunavut still has considerable work to do for its residents to achieve prosperity.

That's the conclusion of the 2013 Nunavut Economic Outlook, a report based on research conducted by Impact Economics on behalf of the Nunavut Economic Forum last summer and fall.

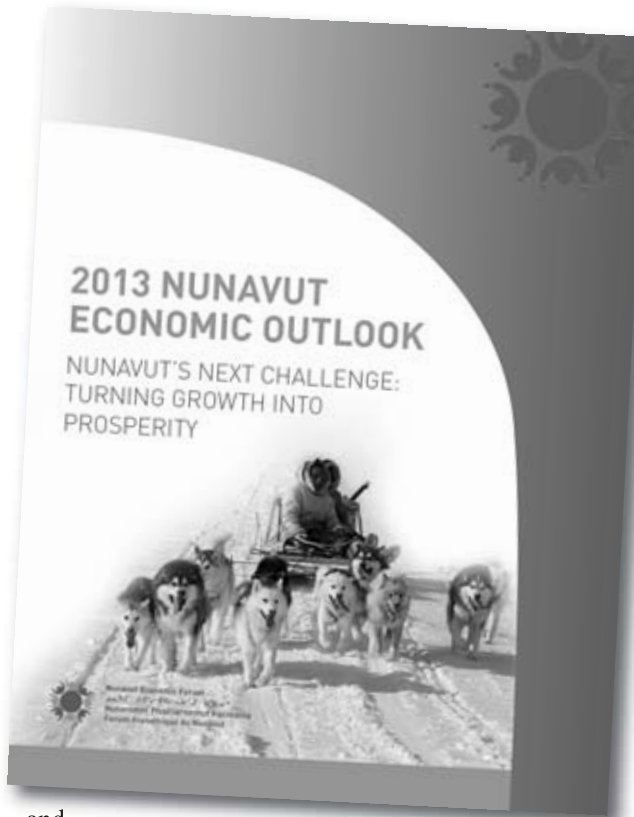
The forum released the 98-page report at the North Lights Trade Show in Ottawa in January. Subtitled "Nunavut's Next Challenge: Turning Growth into Prosperity," it details recent socioeconomic developments in the territory and offers insights into where Nunavut appears to be headed.

The forum, a coalition of public and private entities, works to identify and share information about economic activity in Nunavut. The 2013 Outlook marks the sixth report by the group since 2001.

"For the first time since its creation and after a decade of persistent investments in its foundation, Nunavut's economy is expanding in several areas. Turning this growth into prosperity for people and for communities is Nunavut's next great challenge," the Forum wrote in introducing the 2013 report.

"While there has been an increase in employment levels and average personal income is now in line with the Canadian average, there are still many Nunavummiut who are not participating in the economy (for a number of reasons) which has given rise to an increase in inequality. This division between rich and poor can be observed in numerous economic and social datasets and it is clear that the gap is widening," wrote the Forum.

Closing this gap presents overwhelming challenges that will require Nunavut to innovate, experiment, test,



and

adapt repeatedly at the community, regional, and territorial levels. Progress will be measured by hundreds of small victories achieved in a slow march towards a high and sustainable quality of life, the Forum observed.

"Growth over the next five years will likely be higher (in Nunavut) than in any other jurisdiction in Canada when measured by GDP, but this statement hides important considerations. Not all regions within Nunavut will grow equally, and more work is needed to bring economic opportunities to more communities," the group predicted

Some 35,591 people who resided in Nunavut as of July 1, but they will not share equally in the benefits of the anticipated economic growth even though the territory has enough jobs available to employ most, if not all, of its labor force. Nunavut's employment rate currently averages 13.5 percent, reflecting that about 2,000 Nunavummiut are unemployed even though there are two jobs for each unemployed residents.

Yet 93 percent of university graduates from Nunavut find jobs, giving the territory the best graduation-to-employment ratio in Canada, according to the outlook.

"Understanding why so many remain unemployed and end up in a poverty situation means understanding the complexity within Nunavut's challenge of bringing prosperity to all Nunavummiut," the report said.

Though the outlook for growth in most sectors of the economy is good, mining offers the most promise for capital investment, job creation and business opportunities. The Mary River iron ore project is now under construction and prospects for development of the Meliadine gold project remain high.

The Meadowbank Gold Mine, which had just entered production when the last (2010) Nunavut Economic Outlook was written, is the only operating mine in the territory. Owned and operated by Agnico-Eagle Mines Ltd., the mine is scheduled to continue operating until 2018 and produce about 358,000 ounces of gold annually during the next few years. Meadowbank currently employs about 800 workers, of which 31 percent are Inuit, primarily from the Kivalliq Region of Nunavut.

Nunavut has at least eight advanced mine projects, of which Mary River appears to be closest to startup of operations. Co-owned by the steelmaker Arcelor-Mittal from Luxemburg and Iron Ore Holdings Ltd., the operator at Mary River made the decision to proceed with

see NUNAVUT OUTLOOK page 19

WHATEVER



WHENEVER



WHEREVER

Creative photography for the oil & gas industry.
judypatrickphotography.com
907.258.4704

JUDY PATRICK
PHOTOGRAPHY



continued from page 18

NUNAVUT OUTLOOK

development of a mine in 2013 and began shipping construction materials to the mine site in the latter half of 2013.

Predicting the future of mining in Nunavut with any degree of precision has been challenging during the past decade. The territory is strewn with numerous examples of projects that have risen to prominence bringing hope to communities only to fade away due to a variety of factors. Hope Bay Gold Project and Jericho Diamond Mine are good examples. Many of these mineral-rich deposits have changed hands several times or stalled in the exploration phase for prolonged periods and continued to exhibit uncertainty regarding their future development. Low commodity prices, challenging capital markets and high cost of development are major contributors to this uncertainty.

“For the first time since its creation and after a decade of persistent investments in its foundation, Nunavut’s economy is expanding in several areas. Turning this growth into prosperity for people and for communities is Nunavut’s next great challenge.”

—2013 Nunavut Economic Outlook, Nunavut Economic Forum

In the economic outlook, the Forum predicted that Nunavut’s GDP will be shaped by the course of large mineral resource development projects over the next several years.

“On average, GDP could grow between 4 percent and 5 percent during that time frame. There are several important construction projects that will make important contributions to Nunavut’s economy in the next five years, but will barely register when set beside the Mary River or Meliadine projects,” the outlook said.

“Similarly, important advances in fishing, tourism, and the arts sector, while dwarfed by mining activity, cannot be fully appreciated through an analysis of their contributions to GDP,” it concluded.

The Nunavut Economic Forum was started as a coalition of about 30 federal, territorial and municipal government agencies, Inuit organizations, business associations and non-government groups in the territory. The coalition set up the forum as an independent organization in 2004, first to monitor an earlier economic development strategy for the territory, covering 2003 to 2013. The forum also organizes “Sivummut” economic development conferences in Nunavut.

Beginning with the 2005 edition, the Nunavut Economic Outlook has provided feedback on the implementation of Nunavut’s Economic Development Strategy. This year’s Outlook will help to inform the next Economic Development Strategy. ●

JUDY PATRICK

All Seasons



2700 S. Cushman, Fairbanks, Alaska 99701 | (907) 452-6631 | Fax: (907) 451-8632
351 East 92nd Ave., Anchorage, AK 99515 | 907-245-3123
operations@taigaventures.com | www.taigaventures.com



Fuel Systems
Portable Tent Camps
Expediting Services
Camp Catering & Services



Baroid
Johnson Screens
Pacto Waterless Toilets
Well Monitoring Supplies

NORTH OF 60 MINING NEWS



We do the digging, you get the gold.

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

The North of 60 Mining News online subscription package — which includes 52 issues of the weekly newsletter, 12 issues of the monthly edition of Mining News and full access to all of the Mining News web site features—is available for only \$69 per year.

To subscribe to this lode of information, go to www.miningnewsnorth.com or call 907-522-9469.

Atlas Copco and Construction Machinery Industrial— Your total equipment solutions team



▲ Atlas Copco PowerROC T35 Drill, Skagway, AK

Construction Machinery Industrial is proud to be your source for Atlas Copco rigs and Atlas Copco Secoroc drill bits and drill steel.

IN THE WORLD —

Atlas Copco, developing and manufacturing the best drilling technology.

IN ALASKA —

CMI, providing the best sales and support lineup.

IN YOUR CORNER —

CMI and Atlas Copco— your winning team.



John Cole
Equipment Sales Rep.
Fairbanks, Alaska



Kirk Currey
Equipment Sales Rep.
Anchorage, AK



Anchorage, Alaska (907) 563-3822 • (800) 478-3822
 Fairbanks, Alaska (907) 455-9600
 Ketchikan, Alaska (907) 247-2228
 Juneau, Alaska (907) 780-4030

Sustainable Productivity

