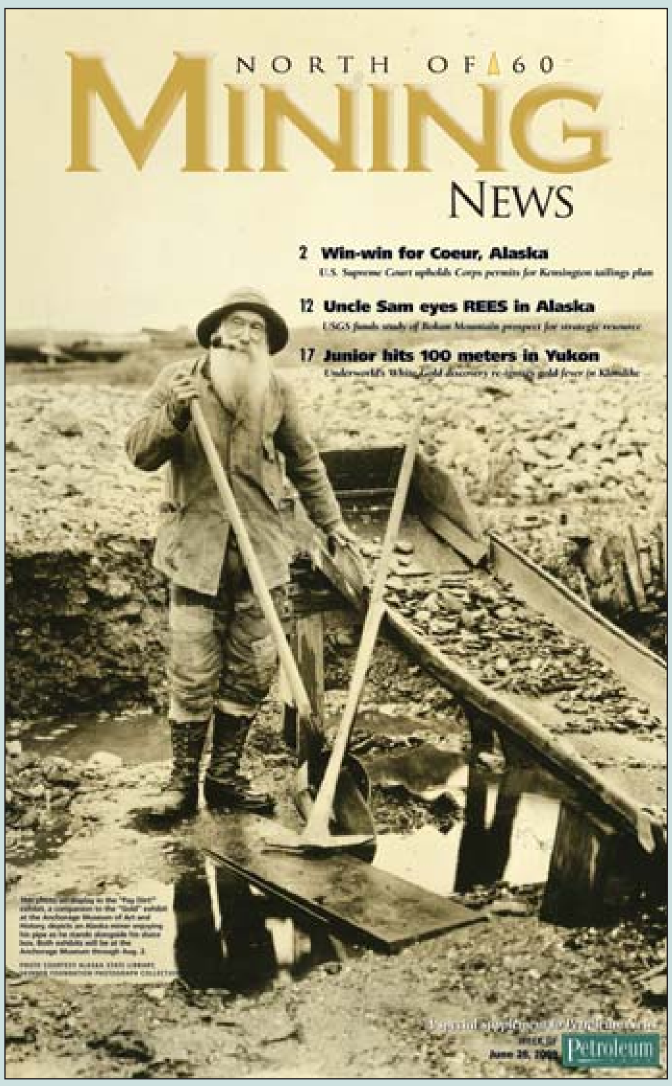
Petroleum news

Vol. 14, No. 26 • www.PetroleumNews.com — *A weekly oil & gas newspaper based in Anchorage, Alaska* — Week of June 28, 2009 • $2

page 11 Fish & Wildlife has new Beaufort, Chukchi-Bering polar bear estimates

June Mining News inside



The June issue of North of 60 Mining News is enclosed

Panel hikes US gas estimate 39% to 1,836 tcf; 1/3 from shale gas

The United States has considerably more natural gas than previously thought, totaling 1,836 trillion cubic feet, says a new assessment from the Colorado-based Potential Gas Committee.

"This is the highest resource evaluation in the Committee's 44-year history," a June 18 press release said.

The assessment is for the year ended 2008 and shows 39 percent more gas than the year-end 2006 report, which put total potential resources at 1,321 tcf.

The committee attributes most of the increase in its latest assessment to a "reevaluation of shale-gas plays in the

The committee attributes most of the increase in its latest assessment to a "reevaluation of shale-gas plays in the Appalachian basin and in the Mid-Continent, Gulf Coast and Rocky Mountain areas."

see **ESTIMATE** *page 18*

BREAKING NEWS

NATURAL GAS

A blast from the past

Exxon tells legislators predictable and durable fiscal terms needed for gas line

By KRISTEN NELSON

Petroleum News

When ExxonMobil aligned with TransCanada on the Alaska gas line project in May it brought North Slope gas and corporate clout to the table — and a couple of specific items TransCanada hadn't previously had access to: the gas study the North Slope producers did in 2001 and right-of-way information for the trans-Alaska oil pipeline, whose route a gas pipeline will parallel for a considerable distance.

It also brought an agenda.

ExxonMobil — along with the other North Slope producers, BP and ConocoPhillips — said during Alaska Gasline Inducement Act hearings in 2007 that fiscal certainty was needed for a project to go forward. ExxonMobil had taken the lead during Stranded Gas Development Act negotiations under the Murkowski administration and the resulting contract between the North Slope producers and that administration, put on the table in early 2006 but never voted on by legislators, gave producers 35

ExxonMobil Production Co.'s U.S. joint interest manager, Marty Massey, said ExxonMobil evaluated the full range of options available to it to progress the project: joining Denali; joining TransCanada; doing its own line; and just showing up at an open season.

see **HEARING** *page 19*

EXPLORATION & PRODUCTION

Oil disperses gas clouds

Imperial, BP, gear up for Canadian Beaufort exploration; despair over Mackenzie

By GARY PARK

For Petroleum News

The Inuvik Petroleum Show wrapped up its ninth annual gathering June 19 with some misgiving about whether there will be a 10th celebration.

The plodding progress — some may even say that "progress" is overstating things — towards approval of the Mackenzie Gas Project causes doubt that the trade show can survive.

But it's not all doom and gloom in Canada's North.

A partnership of Imperial Oil and parent company ExxonMobil is gearing up for a deepwater oil exploration program in the Beaufort Sea, two years after making a work commitment of C$585 million in an exploration lease.

Among the alternatives is the use of tankers, rather than pipelines, to carry oil from the production sites, which the companies regard as a new frontier that requires deepwater drilling that has yet to be conducted in the Arctic environment.

The two companies have indicated they could spud their first well in 2013, within the five-year limit they have to complete exploration work that qualifies for a four-year extension of their permit.

BP, which gambled C$1.2 billion last year to secure a license, is also grooming what it views as a high-quality prospect for an initial exploration well in

see **CLOUDS** *page 17*

EXPLORATION & PRODUCTION

Rig moves to Nenana

Partners Doyon, Usibelli, ASRC, Rampart prepare to drill Interior Alaska wildcat

By KAY CASHMAN

Petroleum News

On June 23 the Arctic Wolf No. 2 rig left Fairbanks, Alaska, in what the local newspaper described as "a slow caravan of tractor-trailers" on its way south to the Nenana basin to drill a natural gas exploration well for Doyon Ltd. and three partners.

Transported by Carlile Transportation Systems, the rig components will be reassembled at the drill site after a journey down the Parks Highway and a barge trip across the Nenana River.

The well site is on Alaska Mental Health Trust land about four miles west of the town of Nenana and

see **WILDCAT** *page 17*

DOYON LIMITED

Transported by Carlile Transportation Systems, the rig components will be reassembled at the drill site after a journey down the Parks Highway and a barge trip across the Nenana River.

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ALTERNATIVE ENERGY

Fairbanks businessman eyes small-scale nuclear power

Plan is second public proposal for small-scale nuclear power in Alaska; would be in Ester

By STEFAN MILKOWSKI

For Petroleum News

Geothermal, hydroelectric and wind power have all been pitched as solutions to Alaska's high energy prices. But what about nuclear?

Fairbanks businessman John Reeves recently took the first step toward developing a small-scale nuclear power plant on land he owns in the town of Ester south of Fairbanks. Reeves is asking the Fairbanks North Star Borough Planning Commission for a conditional use permit allowing a nuclear power plant on the land.

"In my opinion, it's the best energy there is," Reeves said in an interview June 22. "No greenhouse gases, no carbon dioxide."

Reeves said he figures he could produce power for 4 to 8 cents per kilowatt-hour and sell the power to Golden Valley Electric Association at a profit.

Reeves is a special assistant to the commissioner of the Department of Transportation and Public Facilities. This project is not connected to his state work; the proposal is through his company, Fairbanks Gold Co. LLC.

A public hearing on the permit request is scheduled for August.

Reeves is looking specifically at a design proposed by the Santa Fe, N.M.-based company Hyperion Power Generation Inc. The plant, which has not yet been certified by the Nuclear Regulatory Commission or tested, is meant to produce 25 megawatts of electricity and to operate for five to 10 years without refueling. The company hopes to mass produce the units and sell them for $25 million to $30 million each.

Reeves' proposal follows a similar proposal by the City of Galena to install a 10-megawatt reactor being developed by Toshiba Corp. and Westinghouse Electric Co. that is designed to operate for 30 years without refueling.

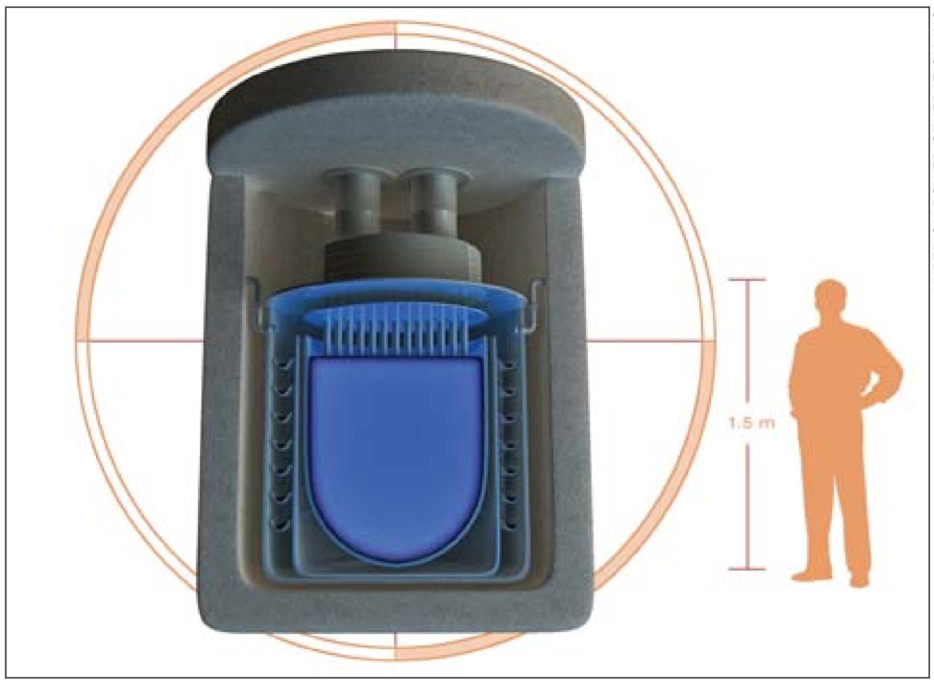
Both projects face significant regulatory challenges likely to last several years. Marvin Yoder, Galena's city manager from 1996 to 2006, said the city started working with Toshiba in 2003 but likely won't see the plant until 2017 at the earliest. In an interview June 24, Yoder said the low-maintenance plant is still an attractive option for the rural community. "It's just whether or not the community can afford to wait till 2017, 2018 to see something happen."

New technology

The Hyperion plant Reeves is hoping to bring to Alaska relies on technology developed as a "side project" by an inventor at the Los Alamos National Laboratory, according to Deborah Blackwell, Hyperion's vice president of public policy. The self-contained unit would be "about the size of two ordinary backyard hot tubs" and would be buried underground, she said.

Blackwell said Hyperion has figured out the basic technology and is working now to create a design that can be easily manufactured. She added that the company's goal is to be able to fill orders from customers within a few months.

Blackwell said the plant was originally designed for the Alberta tar sands but has received significant attention from around the world for all kinds of applications. In addition to Reeves, Blackwell said two "big corporate" entities operating in Alaska have expressed interest in the plant.



HYPERION POWER GENERATION INC.

Fairbanks businessman John Reeves is taking steps to bring a small-scale nuclear power plant to Alaska. The plant's developer, New Mexico based Hyperion Power Generation Inc., hopes to deploy the self-contained units at military bases, oil fields and remote communities. The company has not yet applied for design certification from the Nuclear Regulatory Commission.

Permitting challenges

Hyperion hopes to deliver its first units in 2013, but the regulatory process could push that date back significantly.

"They are essentially at square one," Scott Burnell, a spokesman at the Nuclear Regulatory Commission, said June 23. The first step in the regulatory process involves a company securing a design certification for a given technology. Hyperion has had informal meetings with the NRC, but has yet to exchange any technical information or apply for certification, a process that takes "several years," Burnell said. Once the plant itself is certified, a developer would still need NRC approval to build and operate the plant, which can also take years.

Burnell said Toshiba is "somewhat further along" in the certification process, but added that the unusual nature of both plants will likely lengthen NRC's review process.

While the NRC would permit the plant, the Alaska Department of Environmental Conservation may also have a role, according to Douglas Dasher, an environmental engineer with the department. State statutes drafted in the 1970s identify the department as the lead agency in permitting nuclear power plants, but the statutes were never used and the department has not drafted regulations, he said.

Mixed support

Support for nuclear power among Alaska's political leadership and local residents is mixed.

"Absolutely I can see nuclear playing a role in our energy agenda," Gov. Sarah Palin wrote in an e-mail June 23. "Small-scale nuclear is an exciting prospect and fits

see NUCLEAR POWER page 4

● EXPLORATION & PRODUCTION

Kaloa well dry, Aurora not discouraged

By KAY CASHMAN

Petroleum News

The most recent gas development well drilled by Aurora Gas on the west side of Cook Inlet was a dry hole, company President Scott Pfoff told Petroleum News in mid-June.

The Kaloa No. 3 well was the company's second dry development well in the Kaloa field, he said.

"The geology is starting to get to us," Pfoff said. "But we're not ready to throw in the towel yet."

He said the other dry hole, Kaloa No. 4, was drilled several years ago.

JUDY PATRICK

SCOTT PFOFF

The independent plans to drill one more gas development well this summer, as well as possibly use fracture technology at a well in its Three Mile Creek field and re-complete and clean out Kaloa No. 2 well.

The company's next gas development well will be drilled at the Nicolai Creek field, also on the west side of Cook Inlet, where Aurora operates five gas fields.

Initially, Pfoff hoped to drill another gas development well this summer, at Aurora's Moquawkie field, but the company's owners decided to defer that well, he said June 25, until gas prices improve.

While Aurora is waiting for its permits from the State of Alaska for Nicolai Creek, Pfoff hopes to keep Aurora's AWS No. 1 drilling rig busy with the work at Three Mile Creek and Kaloa.

Hoped to do some coal coring

"With the Moquawkie No. 5 well that's been deferred, we'd wanted to target the high pressure gas we encountered that caused our diverter incident last year at Moquawkie No. 4," he said, explaining that Moquawkie No. 5 was going to be drilled just a few hundred feet from No. 4.

"We were targeting some other sands that are in the Moquawkie No. 4 well that we suspect got hit with some heavy drilling mud. It may have damaged the formation, but our owners would rather we wait, in belief gas prices will increase.

"We were also looking at doing some coalbed analysis — some coal coring at No. 5 — as well as target some of the shallower Beluga sands that were probably damaged during drilling," Pfoff said. "We'd have been better able to produce from those sands with the new well."

But Aurora's owners thought "there is still a chance we can get the gas from those sands from Moquawkie No. 4. They want to wait for gas prices to improve before we go after shallow coal."

Pfoff estimates it will be about 45 days before Aurora has its Nicolai Creek well permits. ●

Editor's note: The diverter incident Scott Pfoff refers to in this article was a blowout in which Aurora hit an unexpected shallow gas pocket while drilling, forcing drilling mud back up and out of the drilling hole. It was controlled in less than 24 hours. For more information see the Dec. 14, 2008, edition of Petroleum News.

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GOVERNMENT

Salazar names Birnbaum director of MMS

Secretary of the Interior Ken Salazar has named attorney Liz Birnbaum director of the Minerals Management Service.

"As a former associate solicitor here at Interior with extensive experience as counsel and staff director for congressional committees, Liz brings a number of strengths to this key position at Interior," Salazar said in a June 25 statement. "Her in-depth knowledge of energy issues, natural resource policy and environmental law as well as her managerial expertise and work in coalition building will be especially important as we advance President Obama's new energy frontier and lay the foundation for a clean energy economy."

As MMS director, Birnbaum will administer programs managing renewable and traditional energy and mineral resources on the nation's outer continental shelf and collection and distribution of revenues for minerals developed on federal and American Indian lands.

Birnbaum has been staff director of the Committee on House Administration since 2007. From 2001-07 she was vice president at American Rivers, the nation's leading river conservation organization.

She was at Interior from 1999-2001 and was counsel to the House Committee on Natural resources from 1991-99; prior to that she was with the National Wildlife Federation.

She received her Juris Doctor degree from Harvard University in 1984 and her A.B. degree, magna cum laude, from Brown University in 1979. She was editor in chief of the Harvard Environmental Law Review, Vo. 8.

—PETROLEUM NEWS

continued from page 3

NUCLEAR POWER

with development of our more conventional sources of non-renewables."

Rep. Craig Johnson, an Anchorage Republican, introduced legislation in March aimed at easing the development of nuclear power in Alaska. The legislation, HB 191, would modify the state permitting process and expand public financing options for nuclear power projects.

"(HB 191) does not advocate nuclear above other energy sources," Johnson wrote in a sponsor statement. "It simply levels the playing field so that a community or region may consider the source of power along with other sources."

The Yukon River Inter-Tribal Watershed Council, a coalition of First Nations and Alaska tribes, passed a resolution in 2005 opposing nuclear development within the Yukon River watershed.

"We know that an accident could jeopardize the health of the entire river," Rob Rosenfeld, the group's Yukon region director, said June 24.

Yoder blamed the opposition to the Galena project on nuclear's stigma in the U.S. and argued that Toshiba's sealed design would ensure that no radiation is released. "It's certainly not going to affect the Yukon," he said.

Deirdre Helfferich, publisher of the Ester Republic, said most people in Ester aren't taking Reeve's proposal seriously, but added that she expects there to be opposition if the project does start moving. ●

● LAND & LEASING

British Columbia fires up gas enthusiasm

Single sale almost doubles Alberta's first-half performance; prompts B.C. optimism that Horn River development could occur in 2010

By GARY PARK
For Petroleum News

British Columbia has jolted Western Canada out of its 2009 land sales slumber, unloading 21 licenses in its scorching-hot Horn River shale gas region for C$179 million, setting the stage for full-scale development in 2010.

In the midst of a North American gas glut and a sluggish drilling year, the industry gave a ringing vote of support to the future of gas as an energy source by notching the biggest sale in any Canadian province this year.

British Columbia Energy Minister Blair Lekstrom said the successful bids were triple the combined sales in the first five months of 2009 and the ninth largest in the province's history.

"It is a clear indication that there is strong investment interest in B.C.'s burgeoning oil and gas industry," he said.

Lekstrom said he now hopes British Columbia, backed by royalty and infrastructure incentives designed to spur development of its unconventional shale and tight gas resources, can now demonstrate that economic recovery of the Horn River gas is economically viable.

He said B.C. now views the shale strongholds in Texas and Louisiana as tougher competition than neighboring Alberta.

"We look at all the jurisdictions involved in this (resource). Our goal is to be the most competitive jurisdiction in North America," he declared.

The 21 parcels sold in the June sale covered 63,611 hectares (157,183 acres) at an average per-hectare price of C$2,804. The strongest competition was focused on eight drilling licenses which accounted for C$173 million at prices ranging from C$2,100 to C$11,765 per hectare, with one parcel claiming C$62.5 million.

Imperial, Exxon big bidders

Not all of the successful bidders disclosed their identities, but a partnership of sister companies Imperial Oil and ExxonMobil Canada, which has already secured a foothold in the region, spent a combined C$111 million for a number of parcels covering almost 46,000 hectares, underscoring the corporate belief that Horn River could yield significant resource additions and production volumes.

In the space of a year, companies have doubled the number of "fracs" in a single hole, allowing EnCana to reduce its planned Horn River wells this year to 24 from 40, with some producers now estimating Horn River could be profitable with gas prices at only US$4 per million British thermal units.

Other leading producers such as EnCana, Nexen, Apache and EOG Resources are all active in the region, reporting flows from wells completed last winter in excess of 6 million cubic feet per day.

British Columbia has reached the midway point in its 2009 land sales year with total revenues at C$246 million from 163,144 hectares at an average C$1,000 per hectare, but no one in the industry or government expects the province will come anywhere close to last year's record haul of C$2.6 billion.

In contrast, Alberta has collected a total of only C$96 million from its first-half auctions of conventional and oil sands rights.

The Canadian Association of Petroleum Producers called the latest British Columbia sale a clear sign that gas is the "fuel of the future" because of its relatively clean-burning properties and its sustainable nature.

That follows reports in the United States that new shale gas fields could meet current U.S. demand for 100 years, although much work is needed to show that the reserves match expectations that shale deposits in North America could reach 1,200 trillion cubic feet.

Time to ramp up

A spokeswoman for Talisman Energy told the Financial Post that her company, although a leading player in British Columbia's Montney gas play and Quebec's lowlands, does not expect an early increase in Canada's gas reserves as a result of the shale activity.

She said it will take the next few years for the plays to ramp up.

Murray King, an analyst with FirstEnergy Capital, said the technological advances needed to develop shale gas on a large scale must resolve issues such as the environmental impact of new drilling methods on water supplies.

He said the economics of shale gas will become more attractive when gas prices regain levels of US$7-$9 per thousand cubic feet over the next three years or so.

A spokesman for EnCana said the abundance of shale gas potential, backed by solid U.S. data, should give governments and the industry reason to shift away from coal-fired electricity plants and gasoline-powered motor vehicles.

He said that once the supply is established, money can be spent on infrastructure to use gas to fuel the North American economy.

Peter Tertzakian, chief energy economist at ARC Financial, said the fact that the fuel does not have to be imported into North America makes the supplies even more secure, makes the gas more affordable than oil, keeps the development spending at home — all features that could see gas build market share in electricity generation.

One of the major technological gains is the use of extended-reach horizontal wells and increased well fractures, allowing producers to extract more gas from the shale rocks.

In the space of a year, companies have doubled the number of "fracs" in a single hole, allowing EnCana to reduce its planned Horn River wells this year to 24 from 40, with some producers now estimating Horn River could be profitable with gas prices at only US$4 per million British thermal units. ●

PIPELINES & DOWNSTREAM

ConocoPhillips exits Keystone pipeline

It took ConocoPhillips less than 18 months to decide it had better places to spend money than by holding a stake in TransCanada's planned $12 billion Keystone pipeline from the Alberta oil sands to Illinois, Oklahoma and possibly the Gulf Coast.

The big U.S. independent entered 2008 by taking a 50 percent stake in the project, which is scheduled for completion of its first phase in 2012, and bailed out of its remaining 20 percent interest on June 16 for $550 million.

The big U.S. independent entered 2008 by taking a 50 percent stake in the project, which is scheduled for completion of its first phase in 2012, and bailed out of its remaining 20 percent interest on June 16 for $550 million.

TransCanada will also assume $200 million of short-term debt and increase its commitment by another $1.7 billion.

A ConocoPhillips spokesman said his company decided it would be a "good time to exit" Keystone, recover its investment and redirect the money elsewhere.

TransCanada Chief Executive Officer Hal Kvisle said in a statement that taking over exclusive ownership of the project represents a "unique opportunity (for his company) to play a vital role in transporting a growing supply of Canadian crude oil to the largest refining markets in the United States for decades to come."

Keystone has shipping commitments of 910,000 barrels per day for the opening segments to Wood River and Patoka, Ill., with the prospect of expanding capacity to 1.1 million-1.5 million bpd. It is one of three pipeline proposals to deliver crude from the Alberta oil sands to the U.S.

When ConocoPhillips joined the Keystone project, Chief Executive Officer Jim Mulva said the system would play a "significant role" in integrating his company's upstream and downstream assets and ensure market access for growing Canadian production, while Kvisle welcomed the benefits of two companies establish a "platform for developing future crude oil pipeline opportunities."

It seems now that ConocoPhillips wants to draw the line at its joint venture with EnCana, by sharing its refinery outlet with EnCana's production.

—GARY PARK

● FINANCE & ECONOMY

State reaches $15.7M royalty oil settlement with Williams

By KRISTEN NELSON
Petroleum News

Alaska has reached a $15.7 million settlement with Williams Alaska Petroleum Inc. over payments for royalty oil purchased by Williams.

"We are required by the constitution and by statute to sell royalty in-kind oil for no less than the value we receive for royalty in-value," Alaska Department of Natural Resources Commissioner Tom Irwin said in a June 23 statement. "DNR oil and gas royalty accountants verify that this agreement achieves this goal for the group of royalty in-kind contracts for the dispute period."

TOM IRWIN

The state can take its royalty oil and natural gas — typically 12.5 percent — as product or as the value of the product. When the state takes royalty in-value it relies on the producer of the oil or gas to sell it; when the state takes its royalty in-kind the state contracts for the sale of the oil or gas.

The state supplied royalty oil to Williams Alaska Petroleum, the former owner of the North Pole Refinery, under several long-term supply contracts from 1978 through March 2004, DNR said. The contracts included a legacy 25-year supply contract dating from 1978 and several shorter-term contracts dating back to 1997.

Price followed Prudhoe payments

DNR said the royalty oil sales price under its contracts with Williams Alaska followed the payments made by the Prudhoe Bay oil producers for royalty in-value, so as the producers' royalty in-value payments were adjusted from time to time because of royalty audits, regulatory changes in their allowed royalty deductions or changes to their royalty formulas, the price for the royalty in-kind oil sold to Williams Alaska also changed in the same direction and amount.

DNR said the State of Alaska and Williams Alaska reached an agreement to resolve the unpaid price adjustments, resolving the pending lawsuit and all of the disputed retroactive price adjustments arising from the royalty oil supply contracts under which Williams purchased state royalty oil.

The state sued Williams Alaska last October to collect unpaid contract price adjustments that had been due for some time.

DNR said the State of Alaska and Williams Alaska reached an agreement to resolve the unpaid price adjustments, resolving the pending lawsuit and all of the disputed retroactive price adjustments arising from the royalty oil supply contracts under which Williams purchased state royalty oil.

The $15.7 million settles all claims by the state and counterclaims by Williams Alaska. DNR said some 25 percent of the amount will be deposited in the Permanent Fund, 0.5 percent in the Education Trust Fund and the remainder in the Constitutional Budget Reserve Fund.

Refinery sold in 2004

Williams completed the sale of its Alaska business interests March 31, 2004, for some $290 million.

Subsidiaries of Wichita, Kan.-based Flint Hills Resources LLC purchased the refinery at North Pole, two petroleum terminals — in Anchorage and Fairbanks — and crude oil and refined products inventories. Flint Hills is a wholly owned subsidiary of Koch Industries Inc.

Koch Alaska Pipeline Co., a subsidiary of Koch Pipeline Co., purchased Williams' 3.0845 percent interest in the trans-Alaska oil pipeline system. ●

FINANCE & ECONOMY

Keep them coming

Industry leaders press Alberta government to extend royalty incentives by another year, note Saskatchewan, B.C. offer better terms

By GARY PARK
For Petroleum News

The Alberta government is under pressure to extend its short-term royalty incentives by another year, thus allowing companies to plan for a stepped-up drilling season in the upcoming peak winter season.

David Collyer, president of the Canadian Association of Petroleum Producers, told an investor symposium in Calgary that "it's very important to have an extension … (for Alberta) to remain competitive."

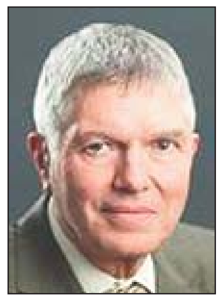
To drive the point home, Andy Wiswell, chairman of CAPP and CEO of NAL Oil and Gas Trust, said companies have "some very attractive opportunities for oil in Saskatchewan and they have a significantly lower royalty program (than Alberta). So to have the Alberta government extend the program in some fashion would be very important to our continuing investment in Alberta."

Collyer told reporters that Alberta must make a decision "sooner rather than later" because of the impact on capital budgets that will soon be developed for the winter and into 2010.

When it announced the incentive program three months ago, in response to low oil and gas prices, the government said it would monitor the results until the end of 2009 and decide then if it was necessary to continue or extend the terms.

One-year royalty credit

The incentives include a one-year drilling royalty credit for new conventional oil and gas wells and a new well incentive program which offers a maximum 5 percent royalty for the first year of production from new wells. The drilling program offers a C$200-per-meter-drilled royalty credit to companies on a sliding scale based on production.



Alberta Energy Minister Mel Knight

Energy Minister Mel Knight told the symposium his government understands that operators need information on Alberta's plans as they embark on capital spending decisions over the next 30 to 60 days.

He said negotiations with the industry are ongoing, while the government gathers information on the impact of the new royalty framework which took effect on Jan. 1.

But he was emphatic that the government will not return to the old regime, telling reporters that what existed before "may have suited people at a certain point in time ... (now) we're going to go forward."

Knight did make a rare concession that uncertainty over Alberta's fiscal regime over the past three years has "absolutely made a difference in the mindset of investors."

He said it was never the government's intention to place itself between investors and the industry, but he suggested there is more to a healthy investment climate than just the fiscal regime, noting Alberta is also working with other governments to reduce red tape.

Decision asked by fall

Wiswell said he is pressing for a decision no later than this fall on what will happen with royalty rates.

Over the longer term, he said the government should change its base royalty model so that more of the upside of oil and gas prices remains with the producer rather than heading for government coffers.

John Dielwart, CEO of ARC Energy Trust, said the government caused confusion by applying the royalty incentives to production in the 12 months from April 2009, rather than the previous year.

As a result, ARC pulled back C$30 million it planned to add to its 2009 capital program, he said, adding the trust now plans to spend 60 percent of its C$350 million budget in British Columbia and only 25 percent in Alberta, even though two-thirds of its production comes from Alberta.

Bill Christensen, vice president of strategic planning for Pengrowth Energy Trust, said confusion over the rules has also disrupted his trust's 2009 exploration plans.

"We're still trying to understand what the rules are," he said.

Steve Laut, president of Canadian Natural Resources, said Alberta has made some good moves with its transitional royalty program, but the industry urgently needs some stability as it focuses on next year and beyond.

Some see benefits

Not all the reaction is negative.

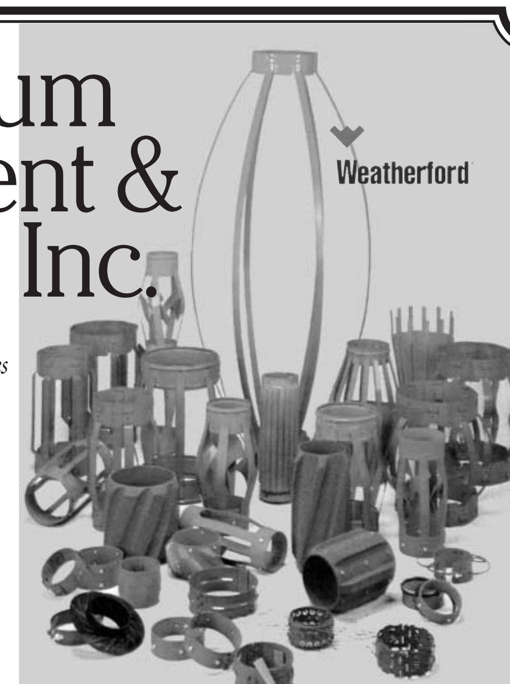
Michael Wuertherick, CEO of Seaview Energy, said that when gas prices were high and the royalty regime was changed Alberta was a "bad place to be. … Nobody wanted to drill wells in Alberta.

"Now, if you are somebody that's positioned with a balance sheet and an inventory of projects, it can be a very significant value-add for a company."

He said 440 barrels of oil equivalent per day of Seaview output qualifies for the 5 percent royalty cap, adding about C$2.5 million to projected 2009-10 cash flow.

Michael Kohut, chief financial officer of Trilogy Energy Trust, said a drilling credit of C$360,000 per well and a 5 percent royalty credit for one year gives his trust a breakeven point of $2 per million British thermal units at a time when it is making money with gas at $4. ●

COURTESY ALASKA PETOGRAPHY



PIPELINES & DOWNSTREAM

Alyeska completes first summer shutdown

By KRISTEN NELSON

Petroleum News

Alyeska Pipeline Service Co. said June 22 that it safely restarted the trans-Alaska oil pipeline after the first scheduled maintenance shutdown of the summer.

The line was restarted at about 4 p.m. June 21, the company said; shutdown was at 6 a.m. June 20.

The company said teams removed three sections of pipe that connected the 48-inch mainline to older equipment no longer in use at Pump Station 3 and replaced a 62,000-pound valve used to redirect the flow of crude oil inside the pump station. Crews also tested new equipment at Pump Station 4 and enhanced leak protection on mainline valves at Pump Station 1.

"There's nothing routine about these shutdown events," Mike Joynor, Alyeska's senior vice president for pipeline oil movements and engineering, said in a statement. He credited teams in the field and at the company's offices for safe execution of the work.

On the Web

See previous Petroleum News coverage:

"June sees first of summer turnarounds," in June 14, 2009, issue at www.petroleumnews.com/pnads/412168992.shtml

Tanker loading not affected

Alyeska said months of planning and lessons learned from previous maintenance shutdowns allowed completion of the work safely and ahead of schedule.

Loading of Alaska North Slope crude oil at the Valdez Marine Terminal was not affected by the shutdown.

The company said annual line-wide shutdowns allow maintenance crews to work on projects along the pipeline and at the terminal simultaneously. Shutdowns coincide with routine maintenance and equipment on the North Slope.

The company said a second summer maintenance shutdown is scheduled for July 18-19.

Alaska Department of Revenue figures for Alaska North Slope production show a drop in daily production from almost 700,000 barrels per day at the beginning of June to less than 300,000 bpd on June 20 and 21.

Conoco work under way

Turnaround work by BP this summer was reported last week.

ConocoPhillips Alaska spokeswoman Natalie Lowman told Petroleum News June 23 that the company is planning turnarounds at both Alpine and Kuparuk.

She said the Alpine work is planned maintenance which will occur in June and July to align with work on the trans-Alaska oil pipeline.

The maintenance work at Kuparuk will include work at Central Processing Facility 2 beginning in June, she said. ●

GOVERNMENT

B.C. leaves Alberta in lurch

By GARY PARK

For Petroleum News

While Alberta stumbles in its attempts to match the competitive edge enjoyed by British Columbia, its fleet-footed neighbor shows every sign of widening the gap.

In fact, without saying it has nothing to learn from its once-unrivalled Canadian neighbor, British Columbia is turning its focus from Alberta to Texas and other United States jurisdictions, where the future lies in shale gas.

Gordon Goodman, an assistant deputy minister in British Columbia's Ministry of Energy, Mines and Petroleum Resources, laid out for a Calgary audience earlier in June what his province is doing to "make sure we put a competitive lens on everything we do."

He conceded there are problems comparing the resource ownership structure in Texas and British Columbia.

"But we believe that on the competitive side we have a good understanding of where we need to be and where we need to go in terms of our shale gas," Goodman said.

Having laid the groundwork over the last couple of years through record sales of government-owned exploration rights, peaking in 2008 at C$2.6 billion, British Columbia's objective now is to almost double its annual gas production to 2 trillion cubic feet by 2020.

Having laid the groundwork over the last couple of years through record sales of government-owned exploration rights, peaking in 2008 at C$2.6 billion, British Columbia's objective now is to almost double its annual gas production to 2 trillion cubic feet by 2020.

Changes for unconventional gas

Goodman said the province initially underestimated the need for a shift in its business practices from conventional to unconventional gas activity, but it has been working closely with explorers, producers and the service sector on multipad wells and the need for large quantities of sand and water to fracture rock.

The province has also been upgrading its consultation process with communities and labor organizations, while creating equity opportunities for First Nations.

He said British Columbia is committed to getting ahead of issues such as the impact on wildlife and water by hosting a workshop with the Fort Nelson First Nation on how much water is needed, where it will come from and how it will be disposed of.

Noting that Texas operators can easily work year round because of their weather conditions, Goodman said the province is weighing what credits it can offer to drill in the winter and complete wells in summer.

In addition, its new net profit royalty program is "one of the keys to making these plays come alive" by sharing the risk with companies until capital costs are paid out, he said.

Four applications approved

So far four applications have been approved under the program and more details should soon be available so that companies can meet their fall cycle for capital budgets.

Goodman said British Columbia may also expand a program that pays 50 percent of approved road and pipeline costs by adding the cost of electrical transmission lines to mitigate operators' costs and lowering carbon dioxide emissions.

Chris Theal, research director at Tristone Capital, suggested the message to Alberta is to take a page out of the British Columbia playbook to promote investment in unconventional resource development.

He said that regardless of whether British Columbia's incentives involve well-depth adjustments or summer drilling they provide a "very transparent and stable fiscal framework."

Theal said the Horn River regime is similar to what Alberta offers oil sands developers by limiting royalties to 2 percent until capital costs are covered, thus promoting "all the upfront investment that's required." ●

Norwegian parliament says yes to Goliat

First Barents Sea oil field, partnership between Eni and StatoilHydro, will use floating facility to reduce CO2 emissions

By SARAH HURST

For Petroleum News

The Norwegian Storting (parliament) has approved the plan for development and operation for the Eni-operated Goliat oil field in the Barents Sea, just more than a month after Norway's government gave the plan the go-ahead. Goliat's reserves are estimated to be approximately 180 million barrels of oil equivalent, and the project's startup is scheduled for the fourth quarter of 2013.

"The approval is a key milestone for the Goliat license and a further step in the realization of the first ever oil field development in the Barents Sea," Eni Norge said in a release June 19. "Goliat is a strategic project for Eni and will be developed with state-of-the-art technology in order to minimize emissions in an environmentally important area."

Norway's StatoilHydro is Eni's partner in Goliat, with Eni holding a 65 percent interest in the project and StatoilHydro the remainder.

"The Goliat field will be developed using subsea wells linked to a circular floating production, storage and offloading facility (FPSO)," Eni said. "Use of the circular FPSO makes it possible to utilize electricity supplied from shore combined with a gas turbine for power and heat on the offshore facility. This will result in significantly lower levels of CO_2 emissions."

Goliat's reserves are estimated to be approximately 180 million barrels of oil equivalent, and the project's startup is scheduled for the fourth quarter of 2013.

Italy's Eni established Eni Norge in 1965, and the Norwegian subsidiary has a daily production of approximately 130,000 barrels of oil equivalent. Eni Norge is the operator of 15 licenses and has ownership interest in 52 licenses on the Norwegian continental shelf. ●

OUR ARCTIC NEIGHBORS

Gazprom postpones Yamal gas production

Russian energy giant Gazprom's management committee has decided in a meeting to postpone development of the Bovanenkovskoe gas field on the Yamal Peninsula, the company said in a release June 18. Completion of the Bovanenkovskoe-Ukhta pipeline and the Obskaya-Bovanenkovo railroad will also be delayed.

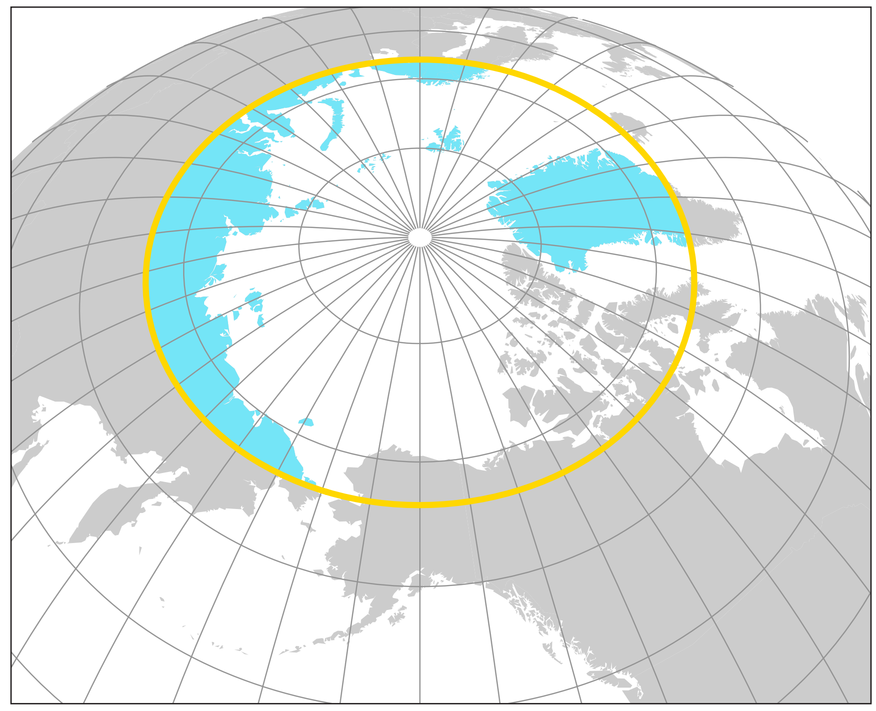
"The meeting noted that the global financial crisis had a negative impact on the domestic and foreign gas demand as well as on the consumption forecast over the next few years," the release said. "Taking into consideration that Gazprom's business is market-oriented, the management committee resolved to postpone the commissioning of the first startup facilities of the Bovanenkovskoe field and the Bovanenkovskoe-Ukhta gas pipeline system from the third quarter of 2011 to the third quarter of 2012."

Gazprom began drilling production wells at the Bovanenkovskoe field and building the pipeline in 2008, the company said. "At present, the top-priority vital industrial and transportation infrastructure facilities and industrial bases are nearing completion, and the gas production and treatment sites are almost ready," the release continued. "Three wells have been constructed and drilling facilities are being installed."

Over 186 miles of the approximately 683-mile pipeline have been built, including 25 miles of one of the most challenging sections, the submerged crossing under Baidarata Bay. In March 2009 the most difficult part was finished — the bridge crossing over the Yuribei River. Currently about 224 miles of the 326-mile railroad are fully operational.

—SARAH HURST

see ARCTIC NEIGHBORS *page 10*



continued from page 9

ARCTIC NEIGHBORS

Lukoil export terminal loads 73 tankers

Russia's Lukoil is celebrating the first year of operations of its Varandey oil export terminal on the Pechora Sea coast in the Nenets Autonomous Oblast. During that time a total of 73 tanker loadings took place, the company said in a release June 9. The terminal's operations are supported by three 70,000-ton icebreaking tankers custom-built by Sovkomflot to operate in the region. Other vessels used to ensure the safe operation of the terminal and tanker loadings in icy conditions include the Toboy icebreaking tug and the Varandey icebreaker.

The Varandey terminal is used to export by sea Lukoil's crude oil that is produced in the Timan Pechora basin. The terminal's overall annual throughput is 12 million tons (240,000 barrels per day).

—SARAH HURST

Rig almost ready for Russian offshore oil field

Russia's Sevmash shipyard in Arkhangelsk Oblast is completing the assembly of the drilling rig for the Prirazlomnaya platform, the company said in a release June 22. The platform is being built for a Gazprom subsidiary for use at its oil field of the same name in the Pechora Sea. Assembly of the drilling rig, which is 238 feet high and weighs 280 metric tons, began May 25 and was due to finish June 28, according to Sevmash.

"The drilling rig consists of five tiers in different sections; then there is a crane block and a crane block shelter," said S. Rezanov, the Sevmash manager who is responsible for work on the platform's upper deck. "The structure is complex, the height is large, but the work is being performed on time and with good quality."

Construction of the platform began in 1998 and is now in its final stages. Sevmash has stepped up the pace, with 1,500 workers on the project, and the company now plans to install 59 equipment units on the auxiliary module in one week. "Labor intensity has increased enormously," Rezanov said. "Primarily this concerns the installation of structures — equipment, electric panels and switchboard circuits. A large portion of the work is related to piping and ventilation."

—SARAH HURST

Norway opens salmon bay for oil reloading

The Norwegian government has approved year-round ship-to-ship reloading of oil in the fjord outside Kirkenes, in the Barents Sea near the Russian border, the Ministry of Environment said in a release June 16. The company Ship Cargo AS appealed a ban on summer oil reloading in Bokfjord last year. The fjord has the status of a national salmon bay and needs to be protected from the oil industry, the ministry concluded when it imposed the ban.

Now that the ban has been reversed, strict environmental considerations should be adhered to, the ministry said. Oil reloading can only take place at the five points in the bay which underwent an environmental impact assessment some years ago. Ship Cargo and a second company, Kirkenes Transit, transferred their reloading of Russian oil and gas condensate to a fjord at North Cape — the point where the Norwegian Sea meets the Barents Sea — when activities at Bokfjord were restricted. Both companies may now return to Kirkenes in the summer.

—SARAH HURST

● SAFETY & ENVIRONMENT

Revised polar bear stocks out for review

US Fish & Wildlife says Southern Beaufort Sea, Chukchi-Bering Sea populations strategic — declining or likely to be declining

By **KRISTEN NELSON**
Petroleum News

The U.S. Fish and Wildlife Service has issued revised population estimates for two stocks of Alaska polar bears, with comments due on the draft revised marine mammal stock assessment reports Sept. 10.

The polar bear, including the Southern Beaufort Sea and Chukchi Sea stocks, was designated as threatened under the Endangered Species Act in May 2008.

The Southern Beaufort Sea polar bear and Chukchi-Bering seas polar bear are strategic stocks — declining or likely to be declining; or currently listed or likely to be listed in the foreseeable future as threatened or endangered under the Endangered Species Act.

Fish and Wildlife regulates taking, possession, transportation, purchasing, selling, offering for sale, exporting and importing of marine mammals under the Marine Mammal Protection Act and it said June 18 that stock assessments are updated periodically to reflect the most current information.

It has been difficult to obtain accurate population estimates for Alaska polar bears "because of low population densities, inaccessibility of the habitat, movement of bears across international boundaries and budget limitations," the department said.

The most recent population estimate, in 2006, was 1,526 bears for the area from Point Barrow east to the Baillie Islands in Canada.

The department said that when Alaska's polar bears were hunted primarily by Natives the population was probably at near carrying capacity. Hunting by non-Natives in the early 1960s reduced stocks substantially, but since passage of the Marine Mammal Protection Act in 1972, stocks have increased. The act banned hunting of polar bears, with an exception for Alaska Natives living in coastal communities who are allowed to hunt bears for subsistence and making of handicrafts, "provided that the hunt was not done in a wasteful manner."

The Southern Beaufort Sea stock experienced little or no growth in the 1990s, the department said, and low growth rates in years of reduced sea ice in 2004 and 2005. An overall declining growth rate of 3 percent from 2001-05 "indicates that the Southern Beaufort Sea population is now declining," the department said.

see **POLAR BEARS** page 12

COURTESY DOYON

continued from page 11

POLAR BEARS

The department's estimate of a minimum population for the stock is 1,397 for the population size of 1,526, for the area from Point Barrow to the Baillie Islands, which results in a calculated potential biological removal of 22 bears per year in order for the stock to remain above its optimum sustainable population, defined as "the number of animals which will result in the maximum productivity of the population or the species, keeping in mind the carrying capacity of the habitat and the health of the ecosystem of which they form a constituent element."

Stock depleted, threatened

The annual harvest from the Southern Beaufort Sea polar bear stock was 39 a year in the 1980s, 33 a year in the 1990s and 32 a year in the 2000s, with an average harvest of 33 in 2003-07. The Canadian harvest for the Southern Beaufort Sea was 21 in the same period, for an average annual Alaska and Canadian harvest during the past five years of 53.6 bears.

The Southern Beaufort Sea polar bear stock is classified as depleted under the Marine Mammal Protection Act and is listed as threatened under the U.S. Endangered Species Act.

"The primary concerns for this population is loss of the sea ice habitat due in part to climate changes in the Arctic, potential overharvest and current and proposed human activities including industrial activities occurring in the near-shore and offshore environment," the department said.

Data suggests this population is declining and because it is classified as a threatened species it is designated as a strategic stock.

Oil and gas concern

Oil and gas exploration is a habitat concern for the Southern Beaufort Sea polar population, the department said, citing a 2004 Minerals Management Service estimate of an 11 percent chance of a marine spill greater than 1,000 barrels in the Beaufort Sea from multiple planned sales.

With a hypothetical 5,912 barrel oil spill from the Northstar offshore oil production facility in the Beaufort Sea, MMS found a low probability that a large number of bears, 25 to 60, might be affected for such a spill and for the purposes of that scenario it was assumed that a polar bear would die if it came into contact with the oil. The range in potential bear deaths was zero to 27 during open water conditions in September and from zero to 74 in mixed ice conditions in October.

At the time of that analysis, based on a stable population size of 1,800 bears, the sustainable average harvest was estimated at 81.1 bears. The department said the actual harvest was 58.2 bears at that time, so an additional 23 bears could have been removed from the population without affecting population levels.

"However, the harvest figure of 81 bears may no longer be sustainable for the Southern Beaufort Sea population so, given the average harvest rate cited above, fewer than 23 oil spill-related mortalities could result in a population decline or increase the time required for recovery," the department said.

No recent O&G lethal takes

During the past five years one Southern Beaufort Sea bear died as a result of research mortality and two bears were euthanized, the department said, but there were no lethal takes of polar bears in oil and gas activities under "incidental take" regulations in the past three years.

1990 is the most recent of three documented lethal takes of polar bears related to oil and gas activities in the Southern Beaufort Sea. The department said one lethal take occurred in 1968 at an offshore drilling site in the Canadian Beaufort Sea; one in 1990 at the Stinson site in the Alaska Beaufort Sea; and one in 1988 when a bear ingested ethylene glycol stored at an offshore island in the Alaska Beaufort.

The department said a polar bear was killed in 1993 at the Oliktok remote radar defense site when it broke into a residence and severely mauled a worked.

Chukchi-Bering seas stock

Fish and Wildlife said the Chukchi-Bering seas polar bear population is widely distributed on the pack ice in the Chukchi Sea and northern Bering Sea and adjacent coastal areas in Alaska and Russia, with the northeastern boundary of this stock near the Colville Delta in the central Beaufort Sea and the western boundary near Chauniskaya Bay in the Eastern Siberian Sea; the southern boundary is determined by the annual extent of pack ice.

While the Chukchi-Bering seas population is estimated at some 2,000 animals, the department said a reliable population estimate has been difficult to obtain because of "the vast and inaccessible nature of the habitat, movement of bears across international boundaries, logistical constraints of conducting studies in Russian territory and budget limitations."

Until 1992 the Chukchi-Bering stock likely "mimicked the growth pattern and later stability of Southern Beaufort Sea stock, since both stocks experienced similar management and harvest histories," the department said, but since 1992 the Chukchi-Bering stock faced increased harvest in Russia and greater loss of summer sea ice habitat and the population is believed to be declining.

Harvest from the Chukchi-Bering stock was 92 a year in the 1980s, 49 a year in the 1990s and 43 a year in the 2000s, with an annual Alaska harvest from 2003-07 of 37.

Illegal harvest in Russia

While Russia prohibited hunting of all polar bears in 1956, problem bears are killed and there has been increased illegal harvest in Russia beginning in 1992, with estimates of annual harvests in Russia as high as 150-250 a year, for a combined Russia-Alaska harvest of some 200 bears in many years.

The department said illegal harvest has not been detected in Alaska and while oil and gas exploration in the Bering-Chukchi region of Alaska began again in 2006, it was primarily in the open water season and has "resulted in minimal interaction with polar bears; there was no evidence of mortality or serious injury."

The ongoing harvest in western Alaska and Chukotka — the autonomous Russian okrug on the Chukchi Peninsula — "is a concern," the department said.

"The primary concerns for this population are habitat loss resulting from climate change, potential over-harvest, human activities including industrial activities occurring within the near-shore environment, and potential effects of contaminants on nutritionally stressed populations."

The department said the stock is designated as a strategic stock because the population is listed as threatened under the Endangered Species Act. ●

● LAND & LEASING

BLM to convey almost half-million acres

Transferring more than 150 million acres from federal to state and private ownership taking longer than originally thought

THE ASSOCIATED PRESS

The federal Bureau of Land Management has filed public notice to convey more than 554,000 acres to a handful of Alaska village and regional Native corporations.

Included are 233,000 acres near Minto, McGrath and Tanacross to Fairbanks-based Doyon Ltd.

The federal government, state and Native corporations are still negotiating millions of acres of land transfers 50 years after statehood and more than 37 years after the Alaska Native Claims Settlement Act was passed by Congress.

The conveyance process turned out to be far more complicated and expensive than expected 30-plus years ago, said Jim Mery, Doyon's vice president for lands.

"Most of us thought most of these lands would be conveyed years ago," he said. "People didn't realize just what it would take for the BLM to do the job ... .There just hasn't been enough funding."

The BLM's Alaska office was assigned to administer the transfer of more than 150 million acres — or 42 percent of the state's land area — from federal to state and private ownership under the Native Allotment Act of 1906, the Alaska Statehood Act, and 1971's ANCSA.

Massive project

The project is massive, said Bob Lloyd, acting deputy state director for conveyance management. About 65 people are on the state's team, with other BLM staffers at field offices pitching in as needed.

Mery attributed recent conveyances to legislation sponsored by Alaska Republican U.S. Sen. Lisa Murkowski and approved by Congress in 2004.

Murkowski introduced the legislation to ensure that federal conveyances to the state and to Native corporations would be complete by Alaska's 50th anniversary of statehood, according to Robert Dillon, Republican communications director for the Senate Energy and Natural Resources Committee, on which Murkowski holds a leadership role.

The BLM isn't likely to meet that goal, although Murkowski's bill drove movement. The state has received about 94 percent of entitled lands, and Native corporations have taken about 90 percent due under the settlement act.

"While there's been progress in accelerating the pace of conveyance since 2004, there's still a ways to go to fulfill the promises the federal government made to Alaska at statehood," Dillon said.

Dillon said Murkowski has requested another $5 million in the BLM's budget to finish the process.

State waiting

The state isn't expecting to collect its full share anytime soon, said Dick Mylius with the state Department of Natural Resources. The state will hold back a few million acres' entitlement in case prime parcels become available. Specifically, the state is eyeing the federal pipeline utility corridor paralleling the Dalton Highway and several military installations.

ANCSA granted about 44 million acres of land to Alaska Natives and provided $962.5 million in compensation.

The legislation drove creation of regional and village corporations to manage the funds and land entitlements.

Conveyances aren't the conclusive action. Sometimes the state intercedes on Native selections, saying the BLM hasn't addressed enough public access easements. Generally, Native corporations counter that the bureau has set aside too much land for easements.

Disputes are appealed before the Interior Board of Land Appeals in Washington, D.C., where Doyon is currently involved in six matters now, according to Mery. ●

NATURAL GAS

Canada makes LNG debut at Canaport

Canada has entered the liquefied natural gas age with the Canaport LNG terminal at Saint John, New Brunswick, receiving its first shipment.

The joint venture by privately held Irving Oil and Spain's Repsol is the first onshore LNG facility to be built in eastern North America in 31 years, beating out several rivals in a contest to supply 1 billion cubic feet per day to the gas-hungry U.S. Northeast market, accounting for one-third of New England's current consumption.

The Canaport partners have decided their C$800 million investment is for the long-term future of gas, not the current over-supplied, under-priced North American market, where gas in storage is approaching record volumes ahead of the winter heating season.

Global LNG supplies are also threatening to undermine the faint hopes of a price rebound and a prolonged decline in drilling.

Fadel Gheit, an analyst with New York-based Oppenheimer & Co., said a glut of LNG entering North America will not only suppress prices, it could deter those poised to invest in the development of shale gas.

However, Canaport has an edge over some of its competition because Repsol, one of the world's largest LNG shippers, has its own gas supply in Trinidad and Peru and has secured contracts to sell much of its expected output to New England customers.

A spokeswoman for Repsol said the New England market is "very lucrative because it has a lot of supply constraints," while gas from Trinidad will allow Canaport to be a relatively low-cost supplier.

—GARY PARK

SAFETY & ENVIRONMENT

Court declines wetlands permafrost case

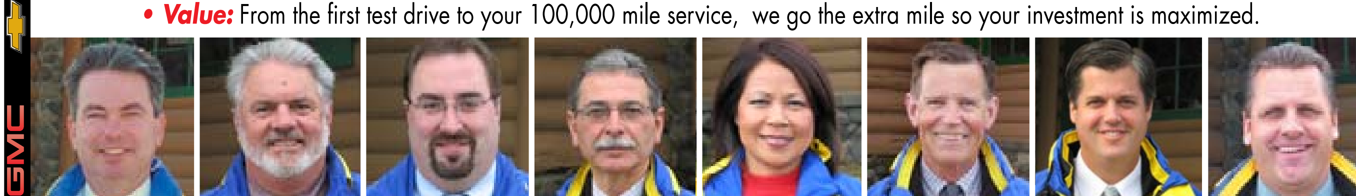
The U.S. Supreme Court has refused to consider a Fairbanks case focused on whether land with permafrost is subject to federal wetlands review.

The Fairbanks North Star Borough in 2006 wanted to build a park on two acres west of Fairbanks. The Army Corps of Engineers said the borough needed a wetlands permit.

Borough officials, with help from a private lands right group, challenged the Corps' jurisdiction.

Attorney Daniel Schiff of the Pacific Legal Foundation says the decision June 22 is a disappointment for property owners who will be precluded from getting a day in court. Corps' spokeswoman Pat Richardson says the agency position is that jurisdictional determinations are not subject to judicial review.

—THE ASSOCIATED PRESS



GOVERNMENT

USCG, DEC sign marine pollution MOU

The Alaska Department of Environmental Conservation and the 17th Coast Guard District are pledging increased cooperation during marine pollution incidents.

DEC Commissioner Larry Hartig and Rear Admiral Gene Brooks, commander of the 17th Coast Guard District, signed a memorandum of agreement June 16 that enhances cooperation in spill response, planning, training, information sharing and inspection of vessels and facilities.

"The purpose of this agreement is to better ensure the strongest protection for waters and resources of Alaska," Hartig said in a statement.

Brooks said, "Cooperation and coordination in government is crucial to the public we serve. Not being content with our current strong relationship, we are moving forward, together, to enhance our planning, capabilities and operations to strengthen the protection of Alaska's marine environment."

—PETROLEUM NEWS

FINANCE & ECONOMY

Shell gives UAF $175,000 for research

Shell has given the University of Alaska Fairbanks a grant of $175,000 for Arctic research.

Pete Slaiby, Shell Alaska general manager, presented a check to UAF Chancellor Brian Rogers at a Fairbanks Chamber of Commerce luncheon June 16.

Shell said the grant is for the continuation of a multiyear study focused on the interpretation of climate change and warming trends in Arctic seas.

"Shell has a history of partnering with universities and we have already achieved a great partnership with UAF in gathering baseline science," Slaiby said in a statement.

The core of the research program is funded by grants from the National Science Foundation and the National Oceanic and Atmospheric Administration, Shell said, but federal funds alone were not sufficient to cover costs of the project.

"This is a natural partnership for Shell," said Slaiby. "It's an opportunity to lend support to the continuation of an internationally recognized research program that can provide new, high-quality oceanographic data not only to industry, but other user groups as well."

—PETROLEUM NEWS

● FINANCE & ECONOMY

Oil rises above $70 on government report

By CHRIS KAHN

Associated Press Writer

Oil prices jumped above $70 a barrel June 25 after the government said that the economy may be faring better than previously thought.

In a revised reading on gross domestic product in the first quarter, the Commerce Department reported a 5.5 percent annualized decline from January to March, rather than the 5.7 percent it reported a month ago.

The slowing economy has slashed demand for energy as factories shut down and fewer people drive to work or take leisure trips by car or plane. But it's thought to be shirking at a slower pace this quarter and refinery closures combined with ongoing political turmoil in oil producers Iran and Nigeria helped boost crude prices throughout the day.

Benchmark crude for August delivery added $1.56 to settle at $70.23 a barrel on the New York Mercantile Exchange. In London, Brent prices increased $1.87 to $70.20 a barrel on the ICE Futures exchange.

Value of dollar a factor

The value of the dollar again is playing a strong role in the price of crude.

Crude prices have fallen off after peaking above $73 a barrel earlier in June as the dollar strengthened. Most experts agree prices on Nymex, and at the local gas station, hit levels that weren't supported by meager demand for energy. They blame investment money that has flowed into the market, using oil as a hedge against inflation.

Retail gasoline prices fell for the first time in nearly two months June 22, and have fallen every day since. The national

see PRICES page 15

SAFETY & ENVIRONMENT

Climate change report devotes chapter to Alaska

Alaska merits a chapter in a new White House report on climate change, which says temperatures in the state have climbed at twice the rate of the rest of the nation over the last half-century.

The report, a compilation of current science, says annual temperatures have risen 3.4 degrees Fahrenheit in 50 years.

Temperatures are projected to rise another 3.5 to 7 degrees by midcentury.

The report says sea ice is melting, meaning shipping and resource extraction can expand. It says arctic ice could be gone during summers by the end of the century.

Marine species moving north

The report says that with marine species moving mostly northward, fishermen will have to travel farther. It might be difficult for Alaska Natives to find the walruses and seals they subsist on.

Coastal erosion is increasingly threatening communities, including the villages of Newtok and Shishmaref.

The Bering Sea and Alaska's coastline are becoming stormier, throwing off autumn barge delivery schedules and making commercial fishing more dangerous.

Melting permafrost is sinking land, adding as much as $6.1 billion to costs for publicly owned infrastructure by 2030.

In past three decades, the number of days annually that oil-and-gas-related truckers may travel on tundra ice roads has halved, from 200 to 100.

The average area burned in North American wildfires each year tripled from the 1960s to the 1990s. In Alaska, the wildfire burn area is projected to at least double by midcentury and triple by 2100.

—THE ASSOCIATED PRESS

● PIPELINES & DOWNSTREAM

Refiners move into alternative fuels

Oil companies shop for discounted ethanol plants forced into bankruptcy by economy, frozen credit, wildly swinging corn prices; of some 200 U.S. plants, about two dozen in bankruptcy

By WILLIAM KATES

Associated Press Writer

When Sunoco closed in mid-June on the acquisition of a bankrupt ethanol plant in Fulton, N.Y., for pennies on the dollar, it became just the latest oil refiner to step into the alternative fuels market.

Traditional refiners under pressure to reduce emissions are finding new avenues to meet evolving environmental standards, and finding big bargains along the way.

Sunoco made its initial bid just weeks after Valero Energy Corp., the nation's largest independent oil refiner, became an ethanol plant owner the same way.

"You are going to see this become a trend ... especially with the government wanting to go green," said Daniel Flynn, who follows the renewable fuels industry for Chicago-based Alaron Trading. "There are a lot of these ethanol plants hanging by a hair. This could be the perfect time for the big companies to step in."

In April, San Antonio-based Valero bought seven large ethanol plants in the Midwest from bankrupt VeraSun Energy Corp., the nation's second-largest producer of ethanol, for $477 million.

Sunoco snapped up the $200 million Northeast Biofuels plant in upstate New York for $8.5 million.

Over the past couple of years, Marathon Oil Corp. has acquired large stakes in ethanol plants in Illinois and Ohio, each with more than a million gallons in annual capacity.

Plant to be refurbished

Philadelphia-based Sunoco will spend as much as $20 million to refurbish the plant and get it to its full 100-million-gallon per year production capacity by early next year.

Sunoco blends about 460 million gallons of ethanol with gasoline each year.

The Fulton, N.Y., plant will supply nearly 25 percent of the ethanol Sunoco needs to meet renewable-fuels standards, said spokesman Thomas Golembeski.

The plant is close to Sunoco's main operations in the Northeast where many of its 4,700 gas stations are concentrated, but the shift in U.S. energy policy was a big motivator.

"We also view this as a first step into an area of possible growth for the company," said spokesman Thomas Golembeski.

The ethanol industry has been shaken by the financial crisis. Credit has frozen over and producers were wholloped by wild swings in the corn futures market, the feedstock for fuel. Ethanol prices have plunged.

At a June biofuels conference in Colorado, there were workshops for distressed businesses.

Some 200 ethanol plants

There are about 200 ethanol plants in the United States, according to the Renewable Fuels Association, a Washington, D.C.-based industry trade group.

Between 170 and 175 of those plants are currently producing about 10.5 billion gallons of ethanol a year, said Matt Hartwig, an RFA spokesman.

About two dozen other plants with an additional combined capacity of 2 billion gallons a year are currently idle, about half of them in bankruptcy, Hartwig said.

That is where big oil refiners, with much bigger revenues, come in.

The entry of traditional oil companies is part of a natural industry evolution, Hartwig said.

"You will continue to see the more familiar, farmer-owned model ... but the industry is big enough, diverse enough for different business models and ownership structures," Hartwig said.

Demand will increase

Despite the ethanol industry's growing problems, demand for the fuel will increase. The U.S. Environmental Protection Agency's proposed renewable-fuels standards call for a jump in ethanol production from 9 billion gallons last year to 36 billion gallons by 2022.

Much will be corn-based, but some will come from other biofuel sources such as willows or sugar cane.

Rick Kment of DTN in Omaha, Neb., said most oil companies were not interested in building their own ethanol production plants because of the financial risk.

But don't be surprised if the top U.S. oil companies — Exxon Mobil Corp., Chevron Corp. and ConocoPhillips — don't make the leap, Kment said.

"For them, a 50 million gallon, or even a 100-million gallon plant would only produce a drop in the bucket of their total needs," Kment said. ●

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PRICES

average lost another 0.9 cents to $2.667 a gallon, according to auto club AAA, Wright Express and Oil Price Information Service. A gallon of gas is 24.2 cents more expensive last month, but it's still cheaper than last year when retail prices topped $4 a gallon.

Stores of natural gas, a key energy source for power plants, also continued to build as manufacturers slowed production and major employers trimmed operations. The government reported June 25 that natural gas supplies rose again the week ending June 19, though less than analysts expected.

In Nigeria, another round of attacks on oil industry infrastructure by local militants prompted analysts to reconsider their output estimates of Africa's biggest crude producer.

"We think that we are currently getting close to 1.3-1.4 million barrels a day," said Olivier Jakob of Petromatrix in Switzerland. "This compares to 1.9 million barrels a day in July 2008 and 1.8 million barrels a day" in the first quarter of this year.

In other Nymex trading, gasoline for July delivery rose 5.58 cents to settle at $1.8983 a gallon and heating oil gained 3.82 cents to settle at $1.7763 a gallon. Natural gas for July delivery advanced 4.1 cents to $3.802 per 1,000 cubic feet. ●

Associated Press writers Pablo Gorondi in Budapest, Hungary and Alex Kennedy in Singapore contributed to this report.

Oil Patch Bits

Crowley receives safety and environmental award

Crowley said June 17 that it is doing its part to keep Alaska's waterways clean. In an informal presentation, Capt. Jack Jensen, marine superintendent for Tesoro in Nikiski, Alaska, presented crewmembers of Crowley's tug Vigilant with an award recognizing their commitment to safety and the environment by concluding 2008 with zero spills and incidents.

"We are pleased to have a strong advocate of environmental stewardship in Tesoro," said Bruce Harland, vice president of contract services in Alaska. "Our crewmembers work tirelessly to ensure not only the safety of customers' assets but also the environment. Tesoro's proactive attitude in stationing a Crowley tug in Cook Inlet year-round shows a commitment on their part to protect Alaska's pristine waterways."

The Vigilant is on long-term charter to Tesoro and is stationed in Cook Inlet where it provides ship assist and escort services for Tesoro operated tankers moving in and out of the Tesoro Refinery dock at Nikiski. The Vigilant also provides assist for ships and barges carrying Tesoro product and for other third-party entities needing an extra measure of safety in the heavy ice conditions that plague Southcentral Alaska's Cook Inlet during the winter.

For more information visit www.crowley.com.

Alaska Railroad receives $26M grant

The Alaska Railroad said June 19 that it is receiving a grant for $25.8 million under the American Recovery and Reinvestment Act. The Federal Transit Administration, under the U.S. Department of Transportation, said the grant is for the track rehabilitation and other railroad-related improvements in Seward, Talkeetna, Fairbanks, Nenana and Anchorage.

"This is a significant investment in the railroad which is an integral part of the Alaska economy moving goods and people throughout the state," said U.S. Sen. Mark Begich, D-Alaska. "We're providing jobs, improving the transportation network and boosting the economy all at the same time."

According to the project summary, money for this project will be used for the collision avoidance system; power upgrades at the Seward depot; construction of the restroom facilities in Seward and Talkeetna; purchase and installation of automated passenger equipment safety devices; construction of a second set of tracks at the Fairbanks intermodal facility; Nenana rail alignment; track rehabilitation; and engineering, construction and safety fencing at the Ship Creek intermodal facility.

Editor's note: Both of these news items — some in expanded form — will appear in the next Arctic Oil & Gas Directory, a full color magazine that serves as a marketing tool for Petroleum News' contracted advertisers. The next edition will be released in September.

Companies involved in Alaska and northern Canada's oil and gas industry

All of the companies listed above advertise on a regular basis with Petroleum News

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WILDCAT

about 50 highway miles southwest of Fairbanks, Jim Mery, senior vice president of lands and natural resources for Doyon, told Petroleum News in November.

According to a June 24 Fairbanks Daily News-Miner article, Doyon and its partners — Denver-based Rampart Energy and Alaska-based Usibelli Energy and Arctic Slope Regional Corp. — plan to spend $15 million drilling a 10,500- to 11,000-foot well over a period of about 40 days, starting in about two weeks. (Of the four partners in the venture, Doyon has the largest equity ownership.)

"We hope to have a commercial discovery, but the lack of a commercial discovery doesn't mean we will be discouraged," Mery told the News-Miner. Most of all, the partners hope to find "an active petroleum system" on their acreage in the undeveloped Interior Alaska basin.

"Our major focus continues to be bringing pipeline gas to Fairbanks," but depending on the size of the gas resource, "there clearly are some opportunities for electric generation," he said.

The Nenana basin holds an estimated 1 trillion to 4 trillion cubic feet of gas and from 250 million to 750 million barrels of oil, Mery told the newspaper. According to the News-Miner, Mery also thinks the prospects for propane "solid."

Similar to Cook Inlet

The basin exhibits somewhat similar geology to Southcentral Alaska's prolific Cook Inlet basin and is generally considered prospective for natural gas.

Doyon told Petroleum News that the proposed well will be the first deep test in the basin.

Two wells have previously been drilled in the area, both shallow and both towards the basin edge rather than the basin center: the Nenana No. 1 drilled by Union Oil Company of California in 1962 west-northwest of Nenana, and the Totek Hills No. 1 drilled by ARCO Alaska Inc. in 1984 on the southern side of the basin.

The Nenana well was drilled to 3,062 feet, found no pay intervals and was plugged and abandoned. The Totek Hills well was drilled to a total depth at 3,590 feet and encountered coal seams at various depths.

In 2002 Denver-based Andex Resources purchased a state exploration license for the Nenana Basin with a work commitment of $2.5 million. The license included about 500,000 acres of state land. Andex also negotiated oil and gas leases on about 41,000 acres of Native subsurface land owned by Doyon and on about 9,500 acres owned by the Alaska Mental Health Lands Trust in the basin.

Toghotthele Corp., a Native village corporation, owned the surface land over the Doyon subsurface holdings.

In 2004 Doyon, the Native regional corporation for Interior Alaska; ASRC, the regional corporation for northern Alaska; and Healy, Alaska-based Usibelli Energy formed a partnership with Andex to fund the Nenana exploration.

2005 seismic survey

In the spring of 2005 Andex contracted PGS Onshore to carry out a 2-D seismic survey in the basin, as part of the exploration license commitment. Following seismic acquisition Andex proceeded with the analysis of the new seismic data, to determine a site for a wildcat well — Andex had estimated the possibility of between 3 trillion and 10 trillion cubic feet of recoverable gas in the Nenana Basin.

But, in 2006 uncertainty regarding changes in Alaska gas production taxes, as new production tax legislation moved through the state Legislature, put the dampers on planned drilling on the Nenana acreage. Andex eventually pulled out of the project, with the remaining Nenana partners taking over operatorship of the exploration license.

ACES tax break

It wasn't until November 2007, when a new state production tax — Alaska's Clear and Equitable Share tax, or ACES — provided a tax break for gas produced and used within the state, that the Nenana project began to move forward.

That tax break proved crucial, Mery told Petroleum News, as did the November 2008 addition of a fourth partner to replace Andex.

The Alaska Department of Natural Resources October 2008 decision to approve a three-year extension of the Nenana exploration license, scheduled to expire in September 2009, was also vital to continuing the project, Mery said.

"We're drilling within a mile of state lands," he noted in an interview with Petroleum News at the time.

The Arctic Fox rig, operated by Anchorage-based Doyon Drilling, a subsidiary of Fairbanks-based Doyon Ltd., was subcontracted to the four partners from FEX, Talisman Energy's Alaska subsidiary, and brought down from the North Slope in May. ●

Editor's note: Rampart Energy was known as Babcock & Brown Energy until earlier this year when the company changed its name.

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CLOUDS

2014.

Mike Peacock, Imperial's exploration and development manager, told the Financial Post that his company would sooner find oil than gas in the Beaufort because oil would be easier to develop.

Liz Jolley, exploration vice president at BP, said a lot of seismic data must first be gathered before the company moves to the drilling phase.

Tanker alternative

Among the alternatives is the use of tankers, rather than pipelines, to carry oil from the production sites, which the companies regard as a new frontier that requires deepwater drilling that has yet to be conducted in the Arctic environment.

Northwest Territories Industry Minister Bob McLeod said the prospect of offshore oil exploration, even though it would not generate the economic benefits of onshore activity, would generate excitement and stimulate interest in the North.

Inuvik Mayor Derek Lindsay told the Canadian Broadcasting Corp. that with all companies paring back their spending, there was a struggle obtaining sponsorships for the C$135,000 show and attendance was down 10 percent from last year at about 450.

He blamed the decline in support on the Joint Review Panel's delays in completing its environmental and socioeconomic impact assessment of the proposed Mackenzie Valley pipeline.

But he suggested a favorable report from the panel before the end of 2009 could revive hopes for a 2010 show.

O.D. Hansen, a spokesman for the Aboriginal Pipeline Group, which has rights to secure a one-third equity stake in the pipeline, told delegates as they prepared to leave that "We hope next time we see you, we will have bigger and better news."

Randy Ottenbreit, Imperial's senior officer in charge of the MGP, said a lot of work is taking place to keep the project moving ahead, including discussions between the proponents and the Canadian government on a fiscal framework.

Richard Nerysoo, head of the Gwich'in Tribal Council in Inuvik, delivered an upbeat message, saying his council refused to let "pessimism overtake the opportunities that we have" for resource development.

Nellie Cournoyea, head of the Inuvialuit Regional Corp. and a former premier of the Northwest Territories, echoed that sentiment, saying "It's not that nothing is happening … but it's up to us to grab those opportunities for the Inuvialuit as best we can."

No more blind faith

However, Russell Newmark, chief executive officer of E. Gruben Transport, told the show that companies are no longer prepared to operate on blind faith that the MGP will proceed.

"No one is going to do anything because there's no degree of confidence," he said.

Gruben built a C$14 million hotel in Inuvik in hopes that construction workers, geologists and energy executives would ensure "no vacancy" signs, but the hotel has lost money since it was opened.

Newmark said the implications extend beyond the pipeline itself to the whole spectrum of northern development, noting that the delays in the MGP regulatory phase deter companies from paying for training or offering prospective employees any kind of secure future.

He said that to be held hostage by "the seven or eight members" of the JRP is "frustrating." ●

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ESTIMATE

Appalachian basin and in the Mid-Continent, Gulf Coast and Rocky Mountain areas."

The Potential Gas Committee is a non-profit organization of volunteer members working in the natural gas exploration, production and transportation industries, as well as field and technical services and consulting.

The independent committee receives technical assistance and other support from the Potential Gas Agency at the Colorado School of Mines at Golden, Colo.

"The PGC's year-end 2008 assessment reaffirms the Committee's conviction that abundant, recoverable natural resources exist within our borders, both onshore and offshore, in all types of reservoirs," said John Curtis, a geology professor and director of the Potential Gas Agency.

Alaska implications

The increased estimate of U.S. gas resources is of great interest to all gas-producing provinces, none more so than Alaska.

Two industry alliances are now pursuing a multibillion-dollar pipeline to feed the state's 35 tcf of known North Slope gas reserves into the North American marketplace.

Competing supplies of gas, whether from conventional gas fields or from emerging unconventional sources such as shale gas, could have some bearing on whether or when expensive new ventures such as the Alaska gas pipeline will proceed.

The two gas pipeline alliances — ExxonMobil and TransCanada, and a BP-ConocoPhillips partnership called Denali — each plan open seasons next year to try to recruit sufficient gas to their projects.

That's when all the factors, including potential supplies of non-Alaska gas, will come into play, said Dave MacDowell, a spokesman for the Denali project.

"We have a long-term view. The long-term view is that the North American market will have a place for Alaska gas," MacDowell said.

But pipeline companies aren't the ultimate decision makers, he said.

"Of course, the shippers are the ones who will need to evaluate future market prospects during the open season, when they will decide whether to make the long-term, multibillion-dollar financial commitments needed to underpin project financing," MacDowell said.

Report details

The PGC assessment of 1,836 tcf is a "statistically aggregated mean value" consisting of 1,673 tcf of gas from traditional reservoirs and 163 tcf in coalbed gas.

Compared to the year-end 2006 report, traditional resources increased by almost 519 tcf while coalbed gas dipped by 3 tcf. That results in a net increase of 515 tcf or 39 percent for the year-end 2008 assessment.

These results combined with the U.S. Department of Energy's latest determination of 238 tcf of proved gas reserves as of year-end 2007 yields a total available "future supply" of 2,074 tcf, the PGC report says.

The PGC generates its gas resource assessments every two years in three categories of decreasing certainty: "probable" or current fields, "possible" or new fields, and "speculative" or frontier areas. For each category, a "minimum," "most likely" and "maximum" volume is assessed for each of 89 geological provinces grouped into seven geographic areas in the Lower 48 and Alaska. Mean values are calculated by statistical aggregation of the minimum, most likely and maximum traditional values for each resource category.

Technically recoverable gas

Curtis cautioned that the current assessment doesn't assume a timeline or market price for discovery and production of future gas.

"Estimates of the Potential Gas Committee are 'base-line estimates' in that they attempt to provide a reasonable appraisal of what we consider to be the 'technically recoverable' gas resource potential of the United States," he said.

Curtis continued: "Our knowledge of the geological endowment of technically recoverable gas continues to improve with each assessment. Furthermore, new and advanced exploration, well drilling and completion technologies are allowing us increasingly better access to domestic gas resources — especially 'unconventional' gas — which, not all that long ago, were considered impractical or uneconomic to pursue."

Overall, the Gulf of Mexico shelf, slope and deepwater remains the nation's top gas region, followed by the Rocky Mountain, Atlantic and Mid-Continent regions. Together these account for 87 percent of the 2008 assessed traditional resource, the PGC report says.

The biggest mover was the Atlantic area, jumping 285 percent from 91.7 tcf to 353.5 tcf in the latest assessment. The Atlantic region takes in the Marcellus shale, which has huge gas potential.

The newest report shows no change from year-end 2006 in Alaska's assessment of 193.8 tcf.

Shale gas

The largest "volumetric and percentage" increases from the year-end 2006 report resulted from reassessments of active and newly developing shale-gas plays in the Appalachian basin of the Atlantic region, the Arkoma and Fort Worth basins of the Mid-Continent area, several Gulf Coast basins, and the Uinta basin in the Rocky Mountain area, the PGC report says.

The rising importance of shale gas is reflected in the fact that it accounts for 33 percent or 616 tcf of the 1,836 tcf of total potential resources.

Geologists and other experts, however, continue to debate how big a contributor shale gas ultimately will prove to be, or whether it poses a threat to the Alaska gas pipeline.

Shale gas today accounts for about 5 percent of total U.S. production.

Producing shale gas means horizontal drilling, sinking many wells to maintain production rates and hydraulic reservoir fracturing. This generally means higher cost than producing from conventional gas fields.

Mark Myers, a former U.S. Geological Survey chief now working on the State of Alaska's gas pipeline effort, told Petroleum News in March that North Slope gas produced at high sustained rates from conventional fields can compete with shale gas on a cost basis.

Even if much shale gas is produced, it could actually help chances for an Alaska gas pipeline by driving industrial development that will need North Slope gas by the time a gas line is in place, Myers said.

—WESLEY LOY

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HEARING

years of fiscal certainty.

AGIA provides a certain amount of fiscal certainty for the first 10 years of gas sales into a line for companies committing gas to the project in an initial open season.

The Palin administration argues that what AGIA provides is sufficient, while saying it is open to hearing what producers believe they need to make the project work as more information on costs becomes available.

Legislators express concerns

Legislators had a chance to question all parties — ExxonMobil, TransCanada, Denali (the BP-ConocoPhillips pipeline project), gas producers and the administration — at back-to-back Anchorage hearings June 23, one held by the House Resources and Energy committees and one by the Senate Resources and Energy committees.

Tony Palmer, TransCanada vice president for Alaska development, told legislators that discussions began between TransCanada and ExxonMobil last August after the Legislature approved the administration's award of the AGIA license to TransCanada. Those discussions turned into negotiations in the fall.

TransCanada advised the administration that it was in discussions and then in negotiations with ExxonMobil, but did not reveal the subject of those talks until agreement was reached in early May and the companies were ready to go to their boards. At that point, TransCanada was obligated under AGIA to share the terms of the alignment with the administration, Palmer said.

ExxonMobil Production Co.'s U.S. joint interest manager, Marty Massey, said ExxonMobil evaluated the full range of options available to it to progress the project: joining Denali; joining TransCanada; doing its own line; and just showing up at an open season. He said the company's decision came down to what it believed would move the project forward and had the best chance of bringing all the parties together.

ExxonMobil believes that partnering with TransCanada through AGIA provides the best chance for success, Massey told legislators.

What Exxon brings

The 2001 study and right-of-way data for the oil line that ExxonMobil brought to the alignment with TransCanada are not reimbursable under AGIA, Palmer said, because state matching funds under AGIA only cover work done after the license was issued in December.

Any assets jointly developed by TransCanada-ExxonMobil will remain in TransCanada's hands in the event the TransCanada-ExxonMobil deal breaks apart, he said.

Massey said the value of those items would be calculated for inclusion in the tariff, and reviewed by the Federal Energy Regulatory Commission.

House Resources co-Chair Craig Johnson, R-Anchorage, said he was taking notes for a letter to FERC: We've paid for the oil line, he said, and now those right-of-way costs are going into a gas tariff?

Rep. Charisse Millett, R-Anchorage, asked when ExxonMobil would become a partner in the AGIA license rather than just a partner with TransCanada.

Palmer said ExxonMobil would have to commit its gas to the pipeline and resolve its issues with the state. Then the financial interest ExxonMobil has in the project would be converted to a voting interest.

Asked what those issues are, Massey said predictable and durable fiscal terms are needed, and said ExxonMobil has come to understand that working through AGIA is the way to address those fiscal terms.

Rep. Jay Ramras, R-Fairbanks, asked Massey if the 10 years in AGIA wasn't durable.

Massey said AGIA only contains a moral obligation for the state to abide for 10 years by fiscal terms that are in place when companies commit gas in an initial open season. It is not a contractual obligation and it is very clear, Massey said, that if the Legislature decided to change those terms within 10 years there is nothing in AGIA to stop them.

No commitments from state

Asked by Johnson whether there were any discussions with the administration about Point Thomson related to the TransCanada-ExxonMobil alignment, Massey said there were no commitments from the state on Point Thomson related to the alignment agreement.

The Department of Natural Resources terminated the Point Thomson unit for lack of an adequate development plan and initially took back all of the leases. It subsequently allowed Exxon access to two leases to drill two wells for a gas cycling project at the field. That work is ongoing.

DNR and Exxon are in court — and in discussions — over the company's plan of development for the field.

Massey said the state continues to have questions on the Point Thomson plan of development and ExxonMobil is hopeful the state will come to the conclusion the company's Point Thomson plan of development is correct, and that the state and the Point Thomson interests can then move forward to settlement discussions.

Johnson asked whether Point Thomson is necessary for the gas pipeline.

Massey said yes. Point Thomson represents 25 percent of discovered North Slope gas and the project would be much different without Point Thomson, he said. Gas production could start from Prudhoe Bay, Massey said, but having two fields reduces the risk of financial commitment.

Producer in the line

Rep. Bryce Edgmon, D-Dillingham, told Palmer he was concerned about ExxonMobil joining the project.

He said when he voted on the AGIA license it was apparently awarded to an independent third-party pipeline. If TransCanada is partnering with the largest company on the planet, the $500 million in state matching funds might not need to be part of the overall arrangement, he said.

The AGIA terms established some two years ago provided for any party to bid, and had terms like those an independent pipeline would provide, Palmer said, whether AGIA applicants were independent pipelines or producers. TransCanada committed to the AGIA terms, he said, and the state provided $500 million in matching funds in exchange for a commitment from AGIA applicants to go beyond a failed open season to a FERC certificate.

If there is a resolution of fiscal terms and a successful open season, Palmer said there would be no question that the value of the $500 million to the pipeline goes down.

But that is not the case today, he said, and the $500 million is risk

Administration's role

Commissioner of Revenue Pat Galvin told legislators the administration's role was to look at the agreement between TransCanada and ExxonMobil and determine if it required any approval by the state.

Members of the state's gas team and outside contractors gave the agreement a thorough review, he said, and determined it did not modify or diminish the state's rights.

The administration is excited about the development, which is what AGIA was intended to produce, he said.

Rep. Scott Kawasaki, D-Fairbanks, asked if ExxonMobil had approached the administration about changing any parts of AGIA; he also asked if the administration had decided to open up AGIA for changes.

Galvin said no to both. The administration is aware of Exxon's views on AGIA, but continues to hold to its position that AGIA provides 10 years of tax certainty.

He told Millett the administration believes there is significant distance between what the producers want and what they will ultimately need to commit gas. Those discussions, he said, can take place moving forward.

Galvin called the open season a "false deadline" and said a post-open season discussion of a durable fiscal system won't change the timeline for having a gas pipeline in place because AGIA provides for moving forward.

He also said the state's fiscal system is only one component, with project costs and the market for natural gas being significant factors.

Galvin told Johnson that changes in tax durability would be statutory, requiring enactment by the Legislature.

AGIA issue

Sen. Bert Stedman, R-Sitka, asked if ExxonMobil has signed on to the AGIA must haves and Massey said all of the AGIA obligations remain with TransCanada under the alignment agreement between the companies. Stedman was concerned that, with no commitment to AGIA requirements, ExxonMobil would still receive state matching funds.

TransCanada retains all of the AGIA commitments, Palmer told Stedman, and reimbursements will come to TransCanada which will dispense them to ExxonMobil.

Stedman said he had issues with reimbursements to any entity that hasn't signed on to AGIA.

Sen. Hollis French, D-Anchorage, asked whether ExxonMobil retains rights to information it develops in the partnership and Palmer said ExxonMobil and TransCanada will jointly have access to information, but not to assets. Right of ways would remain with the AGIA licensee as well as permits, he said.

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HEARING

Open season issue

Sen. Lesil McGuire, R-Anchorage, co-chair of Senate Resources and chair of Senate Energy, asked Massey if ExxonMobil would need the state to make changes before it could make firm transportation commitments.

Massey said it's always good to settle these issues early, but said the company can go forward after open season without resolution.

He said resolution would be needed before the company committed to build the line.

As to fiscal terms, Massey said the AGIA 10-year commitment is only a moral obligation and the Legislature could change it; it's not a contractual obligation.

He said ExxonMobil isn't just talking about a single commitment, but needs to see the whole package so it can determine whether the project is economic.

Sen. Lyman Hoffman, D-Bethel, told Massey that AGIA, now the law of the land, still seems to be an issue for ExxonMobil, and asked how he saw that being resolved with the administration and the Legislature.

AGIA is the law, Massey said, and TransCanada is going to execute that project under AGIA. AGIA is the framework under which the state wants to progress the project, he said, and told Hoffman Exxon hopes it can have discussions with the administration; we need to prove to them the things we need to have, he said.

Question of a link

When the state looked at the TransCanada-ExxonMobil deal, was there any discussion of a link with Point Thomson, Sen. Gene Therriault, R-North Pole, asked Massey?

Massey said no, no discussion of a link to Point Thomson and no discussion of a link with fiscal certainty.

On the issue of state review of the deal, Galvin said the state looked in detail and because no control was passed it didn't rise to the level of requiring state review.

He said if it reached the point where ExxonMobil moved into a voting interest, it would require public notice and determination by the commissioners under AGIA.

Sen. Bill Wielechowski, D-Anchorage, asked Galvin what happens next year with gas commitments in an open season contingent on fiscal certainty.

Galvin said it is the administration's view that the state has an adequate fiscal system and if the producers believe something else is needed it is up to them to present it to the state. The purpose of AGIA, he said, is to move forward past an unsuccessful open season. The state has no obligation to put itself in the position of being desperate for a deal, Galvin said.

Therriault asked Ken Minesinger, an attorney with Greenburg Traurig, which works with the administration gas line team, if the firm found any red flags in the agreement between TransCanada and ExxonMobil.

Minesinger said the short answer was no. Greenberg Traurig thoroughly reviewed the agreement

He said AGIA did contemplate bringing producers onboard, and it wasn't something the administration or legislators didn't expect.

AGIA was open for anyone to apply, Minesinger said, and the "must haves" — the requirements in AGIA — ensured that those who came in would in effect act as an independent pipeline. ●

NORTH OF 60
MINING NEWS

This photo on display in the "Pay Dirt!" exhibit, a companion to the "Gold" exhibit at the Anchorage Museum of Art and History, depicts an Alaska miner enjoying his pipe as he stands alongside his sluice box. Both exhibits will be at the Anchorage Museum through Aug. 2.

PHOTO COURTESY ALASKA STATE LIBRARY, SKINNER FOUNDATION PHOTOGRAPH COLLECTION

A special supplement to Petroleum News
WEEK OF
June 28, 2009
Petroleum news

● ALASKA

Supreme Court upholds Kensington permits

High court rejects challenge to Coeur tailings disposal plan; Southeast Alaska gold mine expected to start production in late 2010

By SHANE LASLEY

Mining News

The U.S. Supreme Court has ruled in a 6-3 vote to uphold Coeur d'Alene Mines Corp.'s tailings disposal permits at the Kensington gold mine located about 45 miles northwest of Juneau.

The June 22 decision came in response to a challenge to a permit issued by the U.S. Army Corps of Engineers that allows the proposed mine to dispose in a nearby lake waste rock created during mining.

The Southeast Alaska Conservation Council and other environmental groups fought the miner's plan for wet disposal of the tailings and sued the Corps, arguing that the permits were illegal.

The State of Alaska, Coeur Alaska and federal regulators countered that the tailings, properly classified as fill, met requirements of the 404 permit issued by the Corps.

Hailed as a landmark ruling, the High Court decision ends four years of litigation and paves the way for the Idaho-based miner to complete tailings facilities at Kensington and begin producing gold.

"We are also very grateful for the support during this process from the State of Alaska, the Alaska Congressional delegation, Southeast Alaska Native groups, the Army Corps of Engineers, U.S. Forest Service and the Environmental Protection Agency who all supported the permits in the Court, and the U.S. Solicitor General, who argued the case before the Supreme Court," Coeur President and CEO Dennis Wheeler said in reaction to the ruling.

Two questions

After more than five months of deliberating the tenets of the Clean Water Act, and the jurisdictions of the two agencies charged with enforcing it, the High Court boiled the Kensington case down to two basic questions.

"The first is whether the Act gives authority to the United States Army Corps of Engineers, or instead to the Environmental Protection Agency, to issue a permit for the discharge of mining waste, called slurry. The Corps of Engineers has issued a permit to petitioner Coeur Alaska, Inc. for a discharge of slurry into a lake in Southeast Alaska. The second question is whether, when the Corps issued that permit, the agency acted in accordance with law. We conclude that the Corps was the appropriate agency to issue the permit and that the permit is lawful," Justice Anthony M. Kennedy said, writing for the majority.

> *"The Corps determined that placing slurry in the lake will improve that body of water making it wider shallower, and so more capable of sustaining aquatic life. The Corps determined furthermore, that the alternative – a heap of tailings larger than the Pentagon placed upon wetlands – would cause more harm to the environment."*
>
> **—Justice Anthony M. Kennedy, U.S. Supreme Court**

The Court concluded a discharger of mine waste must ask the question: "Is the substance discharged fill material or not?" to determine whether to seek a 404 permit from the Corps or a 402 permit from the EPA.

The Court found that Coeur Alaska's plan to raise the bottom of Lower Slate Lake by 50 feet – transforming the 23-acre alpine lake into around a 60-acre lake – clearly meets the simple criteria for fill, and the Corps is the proper authority for issuing the permits.

In a dissenting opinion, Justice Ruth Bader Ginsberg expressed concern that the simple criteria would give potential polluters a loophole in meeting the standards of the Clean Water Act by adding a sufficient amount of solid matter to classify the pollutant as fill.

Concurring with the majority, Justice Stephen G. Breyer said, among other safeguards, EPA has the right to veto any 404 permit that it finds has an "unacceptable adverse effect on municipal water supplies, shellfish beds and fishery areas . . . , wildlife, or recreational areas."

"By declining to exercise its veto, the EPA in effect deferred to the judgment of the Corps' on this point," Kennedy wrote.

Court defers to agencies

The Supreme Court also found that the Corps acted under the guidelines of the CWA when it issued the permits, and deferred to the Corps expert analysis that Lower Slate Lake was the "least environmentally damaging practicable" way to dispose of tailings from the Kensington Gold Mine.

"The Corps determined that placing slurry in the lake will improve that body of water making it wider shallower, and so more capable of sustaining aquatic life. The Corps determined furthermore, that the alternative – a heap of tailings larger than the Pentagon placed upon wetlands – would cause more harm to the environment," Kennedy wrote.

While the Corps is in charge of the permits for the material being dumped into Lower Slate Lake, EPA requires Coeur Alaska to comply with the strict standards of a 402 permit for the water being discharged from the lake.

The Court determined this compromise is reasonable and fits within regulatory framework.

"We accord deference to the agencies' reasonable decision to continue their prior practice," Kennedy concluded.

"I cannot say whether the EPA's compromise represents the best overall environmental result; but I do believe it amounts to the kind of detailed decision that the statutes delegate authority to the EPA, not the courts, to make (subject to the bounds of reasonableness)," Breyer concurred.

Wheeler said his company now looks forward to bringing Kensington into production, "which we are now targeting for the second half of 2010."

Once in production, the Kensington Mine is expected to create about 370 jobs, and produce about 125,000 ounces of gold per year. ●

● ALASKA

Estimate: Lik among world's largest

Zazu Metals Corp. shifts focus to obtaining environmental, engineering, other data for preliminary assessment (scoping) study

By ROSE RAGSDALE

For Mining News

Zazu Metals Corp. May 28 reported completion of a current NI 43-101 resource estimate for the Lik zinc-lead-silver project in Northwest Alaska that confirms it as being one of the largest undeveloped zinc deposits in the Western Hemisphere.

The deposit is located 22 kilometers, or about 14 miles, from the Red Dog mine, the world's largest zinc producer. Teck Resources Ltd. owns and operates Red Dog and is a 50 percent joint venture partner in the Lik Project. Zazu owns the remaining 50 percent and has the exclusive right to obtain another 30 percent interest in the property (for a total of 80 percent) by meeting certain spending commitments by 2018.

Scott Wilson Roscoe Postle Associates Inc. calculated the mineral resource estimate for Lik by constructing a wireframe block model at various cutoff grades for the Lik South deposit, and its offset extension Lik North.

The resource estimate includes more than 3.3 billion pounds of zinc, more than 1 billion pounds of lead and more than 31 million troy ounces of silver in the indicated category for Lik South. It also tallied nearly 1.3 billion pounds of zinc, almost 500 million pounds of lead and nearly 10 million troy ounces of silver in the inferred resource category for Lik North and Lik South.

Lik South is a shallow dipping, near-surface, stratiform deposit that Zazu believes is amenable to open pit mining methods and associated low operating costs. Lik North, however, is deeper, and Zazu plans to mine it underground with access from the bottom of the Lik South pit.

The size, continuity, and near-surface location of the Lik South deposit make it especially attractive for development. As a result, Zazu immediately initiated a preliminary assessment (scoping) study and retained Scott Wilson RPA to perform this work.

The resource estimate was based on results of 204 diamond drill holes, totaling 34,460 meters. The drilling covered 200-foot sections in the Lik South area, with holes mainly spaced 100 feet apart along section lines. The block model was estimated using 50-foot-by-50-foot-by-10-foot blocks, with grade interpolation through ordinary kriging.

Kriging is a geo-statistical method of evaluating mine reserves based on a mathematical function known as a semi-variogram.)

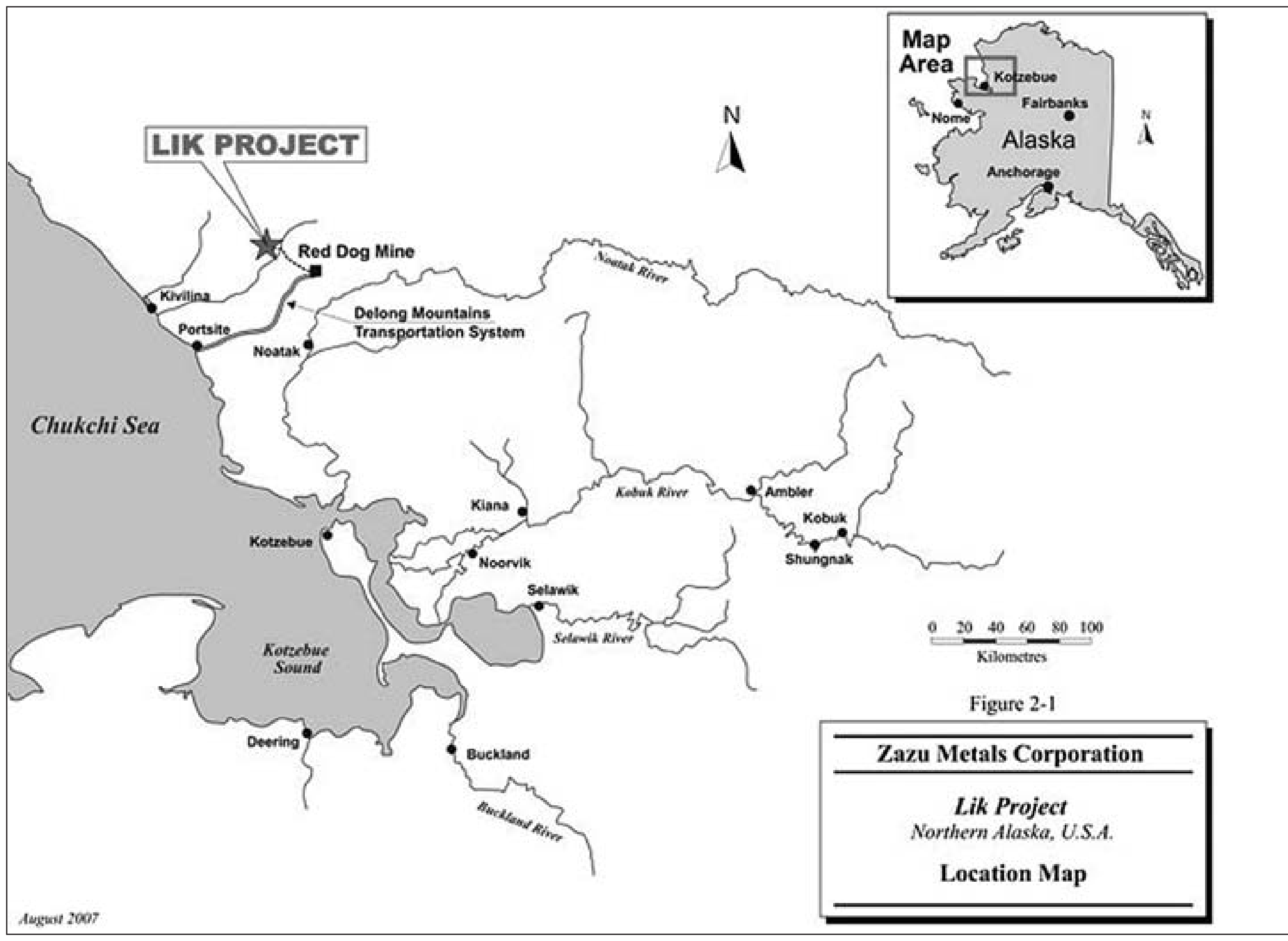
Though Zazu said it has a limited number of shares outstanding, no debt, and a strong treasury, the company does not plan exploration drilling this summer.

"The camp will be open, but it's unlikely we will do any exploration drilling this summer," said Matt Ford, Zazu's vice president of corporate development.

Instead, the company will focus on development by continuing ongoing environmental studies as part of future mine permitting through Travis Peterson Environmental; obtaining an analysis by PND Engineers Inc. of the DeLong Mountains port facility to determine modifications required to ship ore from the Lik deposit; and getting an analysis from Lounsbury Engineers of the approximate costs and requirements of corridor routes.

Zazu will then have Scott Wilson RPA incorporate the data into the scoping study.

The junior also plans to convert the contiguous group of 296 unpatented federal mining claims that comprise the Lik property to state claims. The property covers 2,225 hectares, or about 5,362 acres. ●



ZAZU METALS CORP.

● GUEST COLUMN

Miners miss out on ample opportunities

Corporate philosophy favoring projects with near-term production prospects drives ongoing decline in worldwide gold output

By CURT FREEMAN
For Mining News

I have been reading the tea leaves and think there is an extremely important sequence of events unfolding that represents a golden opportunity for Alaska. Please bear with me as I try to wade through the logic of this and you can tell me what you think.

About two months ago, Brent Cook, a well-known mining analyst and owner of Exploration Insights, published a rather illuminating article entitled “Where Have All the Gold Mines Gone?” The upshot of his article was that most mineral exploration companies currently are being driven by a belief that they need to acquire projects with near-term production characteristics as opposed to generating new projects internally.

This corporate philosophy has infected the mining industry to a degree not previously seen, and, with few exceptions, this corporate goal has been manifestly unsuccessful. Brent says it much more eloquently than I will, but the underlying premise of this prevailing philosophy is that the company espousing it is somehow endowed with intelligence and insight that the competition just flat does not have. Put another way, one has to feel that one is smarter than the competition and will recognize gems in the rough when one’s competitors do not.

This thinking causes companies to make one of the cardinal mistakes of business: They underestimate the intelligence of their competition. Take gold for example: In spite of a nearly US$600 rise in the gold price, new gold discoveries are becoming rarer every year, while worldwide gold production has dropped steadily since 2001. This in the face of the record US$18 billion pumped into the exploration business in the last 5 years!

Even more alarming is the more rapid decline in production from the mature areas of the globe (Canada, Australia, Western U.S. and South Africa), suggesting that new discoveries will have to come from under-prospected areas of the globe, many of which offer significant geographic, political, social and economic risks that more mature areas simply do not have.

The author

CURT FREEMAN

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With demand for gold increasing and new discoveries and production declining, there simply are not enough near-term production possibilities out there, meaning new ounces will have to be discovered.

So how does this affect Alaska? Like some parts of the globe, Alaska is highly under-prospected elephant country, everyone agrees on that. However, unlike most other under-prospected parts of the globe, Alaska is located in a politically stable, economically sound jurisdiction with lots of stable state, federal and native land with a long history of mining.

So, if you are Joe Exploration Company looking for a new discovery, Alaska represents one of the most promising geological venues on earth for new discoveries, while also offering significantly reduced risk. Not many places like that. Go forth and discover!

So, if you are Joe Exploration Company looking for a new discovery, Alaska represents one of the most promising geological venues on earth for new discoveries, while also offering significantly reduced risk. Not many places like that. Go forth and discover!

Western Alaska

ZAZU METALS CORP. announced revised mineral resource estimates on its Lik zinc-lead-silver deposit in the western Brooks Range. At a 3 percent combined lead plus zinc cutoff grade, indicated resources at Lik South deposit came in at 22.13 million tons grading 7.98 percent zinc, 2.58 percent lead and 1.53 ounces of silver per ton with an additional inferred resource of 1.39 million tons grading 6.73 percent zinc, 2.09 percent lead and 1.02 ounces of silver per ton. At a 7 percent combined lead plus zinc cutoff grade, inferred resources at Lik North deposit came in at 5.71 million tons grading 9.65 percent zinc, 3.25 percent lead and 1.48 ounces of silver per ton. The resource estimate was based on the results of 204 diamond drill holes, totaling 34,460 meters. The company continues with baseline environmental, engineering, transportation and shipping studies designed to be incorporated into a preliminary assessment study to be released in the future.

PLACER GOLD CORP. said it has acquired the Bear Creek placer gold prospect in the Cripple Creek Mountains. The Bear Creek mine has a 400-cubic-yard-per-hour dredge on site that can be brought into production within 30 days of receiving funding to recommence mining. Estimated cash production cost are less than $200 per ounce. Historic reports indicate resources at Bear Creek exceed 1 million cubic yards of gravel containing 0.0291 ounces, or 0.825 grams, of gold per bank cubic yard of gravel.

MANTRA MINING announced completion of its acquisition from Cougar Gold LLC of five claim blocks located in southwestern Alaska and collectively known as the Golden Lynx properties. These properties include the Kisa, Gold Lake, Little Swift, Gold Creek and Gossan Valley prospects, formerly explored by **GOLDCREST MINES.** In order to maintain a 55 percent interest in Golden Lynx, Mantra must make capital contributions to Golden Lynx of $321,000 by April 18, 2010, and a further US$1,500,000 by April 18, 2013, which amounts will be used to fund exploration expenditures on the properties. Mantra can earn an additional 25 percent interest in Golden Lynx by making an additional capital contribution of $2,500,000 by April 18, 2015.

Mantra Mining also said it has awarded a drilling contract for 2,500 meters of drilling at its Colorado Creek prospect. The drill program, which will begin in mid-June, will initially target about 10 holes within the more than 4.5-kilometer-long mineralized corridor defined by a coincident gold soil anomaly and magnetic low located adjacent to a large intrusive center and associated with a series of rhyodacite porphyry sills and dikes. Mantra also plans additional surface sampling on trend with the northeast striking mineralized corridor. Historic exploration data, which include 1372.5 meters of core drilled by Placer Dome in 1997, airborne geophysics, and results from over 1,900 soil samples and 600 rock samples, have been compiled and integrated into a comprehensive project database. The data define a northeast trending mineralized zone that is at least 4.5 kilometers, or 2.8 miles, long and associated with a magnetic low on the margin of a multiphase intrusive complex. Gold mineralization appears associated with the porphyry dikes and sills that intrude Cretaceous-age sedimentary and volcanic rocks.

RIMFIRE MINERALS CORP. and **GEOINFORMATICS EXPLORATION INC.** announced a merger between the two companies which will see Geoinformatics acquire all of the issued and outstanding shares of Rimfire at an agreed exchange ratio of 2.6 Geoinformatics shares per Rimfire share. Rimfire’s management team will remain intact in the new organization and Geoinformatics will bring its flagship Whistler copper-gold project to the new company. The Whistler Zone is the most advanced prospect within the Whistler project area with resources of 1.31 million and 4.44 million ounces of gold equivalent in the Indicated and inferred resource categories, respectively.

MILLROCK RESOURCES said **KINROSS GOLD CORP.** has made a private placement in the company in the amount of $350,000, giving Kinross a 6.46 percent interest in the company. Millrock indicated that it would use these funds to carry out reconnaissance surveys and property acquisitions in an undisclosed area of mutual interest in Alaska.

see FREEMAN page 6

GUEST COLUMN

What is so rare as the U.S. Senate?

Government body tempers will of the few to protect interests of the many in modern times, just as it did during the Roman Republic

By J. P. TANGEN
For Mining News

"What is so rare as a day in June?
Then, if ever, come perfect days."
—James R. Lowell

The United States has many unique governmental features which distinguish it from other constitutional democracies, one of which is the role of our Senate. The United States Senate was inspired by the institution that governed the Roman Republic from its founding in 509 BC until its overthrow in 27 BC. That ancient body's impressive durability gives testament to the richness of its concept. Essentially, a group of elders, working together for the good of the Republic, and significantly protected from the vicissitudes of trends and tribulations, was able to reap the best the known world had to offer.

So too, our Senate is hugely responsible for the stability and success of our nation for the past 220 years. In our case, the so-called system of checks and balances has served to protect the nation from the whims of autocrats, whether an Obama or a Bush. Unlike other modern nations where the head of parliament is the head of government (imagine our future in the hands of Representative Pelosi), the power of the representative body is completely restrained by the 100 men and women who owe their standing not to the mob, but to the community, without regard to whether it is urban or rural, large or small, strong or weak.

It is the United States Senate, more than any other body that over the past 30 years has successfully diluted the urge of "the people" to "reform" our domestic mining industry out of existence. And the Senate remains our best hope for the near future. Despite the pressure on Congress to vitiate the general mining law, the deliberate way that the Senate goes about its business necessarily means that legislative implications will be long contemplated before the White House gets to apply its pen. Any change that may occur will be neither perfect nor pleasing, but it will be the best that we can do as a nation under the circumstances.

Mining & the law


J.P. TANGEN

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.

Where mining law revision affects Main Street is not so tied to abandoned mine lands as it is to economic evolution. The emerging Chinese Titan not only holds much of our public debt but also has been aggressive in siphoning off our production capabilities and simultaneously has encouraged development of mineral resources which we use and need. Rare earth metals are a clear example. Wind power turbines will require neodymium magnets. Compact fluorescent light bulbs require cerium, lanthanum, europium, terbium and yttrium. Modern automobiles require all of these metals and praseodymium, dysprosium and zirconium, as well. Although the second-largest, most concentrated, known rare earth deposit on Earth is located in the United States, 97 percent of the global mining of these metals is taking place in the People's Republic of China.

Initially, it may be of small consequence to realize that China dominates the world in producing rare earth oxides; however, what should be of concern is the emergence of China as a consumer of this production. It is projected that the Chinese may be consuming the entire global production within the next five years. In the first quarter of 2009, the Chinese export quota for rare earth materials was 25 percent lower than in the first quarter of 2008.

The United States Senate was inspired by the institution that governed the Roman Republic from its founding in 509 BC until its overthrow in 27 BC.

The technology that led to the invention of neodymium iron boron magnets, for instance, was developed in the United States and sold to China. NIB magnets are used in modern wind turbines. Five hundred sixty pounds of neodymium may be required in a single turbine. America has forfeited that production capability, and may, by extension, forfeit complete access to that technology if we succeed in driving our mineral industry off shore.

Obviously, extrapolating from the general to the specific depends on fragile logic; however, it can be seen that in this tiny corner of the world where things like the availability of computer hard drives are at risk – neodymium magnets are required for them, too – the implications are enormous. This same scenario is being replicated with other metals constantly. It puts our lifestyle and our security at substantial risk. Revision of the General Mining Law implies a cascade of similar unintended consequences. At this point our hopes are staked on the deliberations of the U.S. Senate. Perhaps they will save the Republic yet, once again. ●

continued from page 5

FREEMAN

MILLROCK RESOURCES also said it has entered into a strategic exploration alliance with Alaska newcomer **ALTIUS MINERALS CORP**. This private placement will raise gross proceeds of $930,000 and give Altius approximately 11 percent interest in Millrock. The total gross proceeds from this private placement will increase to approximately $994,243 if **KINROSS GOLD** fully exercises its anti-dilution rights (see previous news story). The funds will be used to fund a strategic alliance in five specific areas in Alaska. Millrock will use alliance funds to research each area and propose an exploration plan for acceptance by Altius. Millrock will be operator of the alliance and will undertake reconnaissance exploration to generate new prospects. Following project identification, the alliance will use standard joint venture agreements for advancement of the properties. Welcome to Alaska Altius Minerals!

Eastern Interior

TERYL RESOURCES CORP. and partner **KINROSS GOLD** said drilling had begun on the Gil project east of the Fort Knox mine. The reverse circulation drilling program is planned for 10,000 feet and the core drilling program planned for 6,000. To date, seven drill holes have been completed.

Alaska newcomer **GOLDEN PREDATOR ROYALTY & DEVELOPMENT CORP.** announced that it has signed an agreement with Copper Ridge Explorations Inc. to acquire Copper Ridge's interest in the Ogopogo gold project in the Goodpaster District, Alaska. Ogopogo is a gold exploration project adjacent to **SUMITOMO'S** Pogo gold mine. At Ogopogo three soil geochemical anomalies have been defined in gold as well as the key pathfinder elements, arsenic, bismuth and antimony. Welcome to Alaska Golden Predator!

INTERNATIONAL TOWER HILL MINES LTD. announced commencement of its summer 2009 exploration program at its Livengood gold project. The summer drilling program is scheduled to complete at least 35,000 meters of reverse circulation and diamond drilling over 5 months, utilizing 3 reverse circulation drill rigs and one deep hole core rig. The initial focus of the program will be the higher grade plus-1-gram-of-gold-per-tonne zone within the system. The program will also include a series of deep holes testing for deposit extension at depths of 300 – 600 meters below known mineralized gold deposit. Other planned milestones for the project include completion of updated resource estimate in June followed by an independent Preliminary Economic Assessment in July. The company also plans to release results from New Discovery target testing in September. A total of four new discovery targets are planned to be drill tested, all of which are within the main 12.5-kilometer-long Livengood gold anomaly. In addition, first pass surface exploration will be conducted on other district-scale targets along trend to the northeast. By October the company expects to release an updated resource estimate, incorporating the results of the bulk of the summer 2009 drill program and the results of the ongoing metallurgical testing and the deep drilling. By January or February of 2010 the company expects to release the final 2009 year end resource update and commence the winter 2010 drilling program.

TRI-VALLEY CORP. announced that it has doubled the size of its land block at its Shorty Creek project near Livengood. The total land position now covers approximately 39 square miles. The company indicated that geochemical and geological data indicate an anomalous gold trend extending farther south than previously thought from **INTERNATIONAL TOWER HILL'S** Livengood deposit property. This trend passes onto the Shorty Creek project and extends into the newly staked property.

Northern Alaska

GOLDRICH MINING COMPANY announced plans to initiate alluvial gold production at its Chandalar property in July. The company indicated that all permits have been obtained for extraction and processing of about 20,000 cubic yards of mineralized material as part of a test mining operation on Little Squaw Creek. The 200-cubic-yard-per-hour gold recovery plant has been constructed in Fairbanks and will soon be mobilized to the mining site. The mining camp has been re-opened and overburden removal has begun. Previous mineral estimates indicate that the Little Squaw Creek alluvial deposit contains an estimated 10.5 million bank cubic yards of "in place" material having an average grade of 0.0246 fine ounces of gold per bank cubic yard. The total amount of unmineralized material that would need to be removed to access the mineralized material is about 9.3 million bank cubic yards of gravel, making for an overburden-to-mineralized material strip ratio of 0.89-to-1.00.

SILVERADO GOLD MINES LTD. announced that an amended preliminary feasibility study has been submitted on its Workman's Bench gold and antimony deposit at its Nolan Creek property in the Brooks Range. The amended report was required in order to clarify metal price forecasts, summarize an analysis of depreciation and sunk costs, review the affect of variable interest rates on the economic model, and to present multiple scenarios for the Base Cash Flow case study. The report also revised the inferred antimony and gold resources estimates on the Pringle Bench prospect. As a result, inferred resources changed from 27,697 tons grading 12.26 percent antimony and 0.230 ounces, or 6.52 grams, per ton of gold, to 24,077 tons grading 12.45 percent antimony and 0.245 ounces per ton of gold. This results in reductions of 12 percent and 8 percent of in-place inferred resources of antimony and gold respectively. The measured reserve estimates on Workman's Bench, on which the pre-feasibility study was based, did not change.

Southeast Alaska

CBR GOLD CORP. said it has entered an agreement with the **HUNTER DICKINSON** group to form a joint venture on the Niblack polymetallic project near Ketchikan. Under the terms of agreement, **HEATHERDALE RESOURCES LTD.**, a private company affiliated with Hunter Dickinson, will retain a 51 percent interest in an Alaska company formed to hold the joint venture by funding exploration and development expenditures totaling at least $15 million within three years. Upon completion of this initial contribution, Hunter Dickinson shall have additional earn-in options to increase its ownership interest to 60 percent by funding additional expenditures of $10 million and to 70 percent by funding completion of a positive bankable feasibility study within an additional three year period. This period may be extended to complete technical work programs for the bankable feasibility study if necessary, but will not exceed six years in any event. All spending requirements are subject to minimum annual expenditure of $5 million. **CBR GOLD CORP.** also announced detailed metallurgical test work which has demonstrated improved metal recoveries and concentrate grades over previously completed studies. The two bulk samples tested included a life-of-mine grade and a higher grade sample similar to mineralization seen in some parts of the deposit. Copper recoveries were 94.3 percent and 94.9 percent in life-of-mine grade and high-grade samples, respectively, with excellent copper concentrate grades of 30.0 percent copper and 29.3 percent copper. Gold and silver recoveries in the copper concentrate were 62.2 percent for gold and 61.2 percent silver in the life-of-mine sample. Zinc recoveries were 90.2 percent and 93.3 percent in life-of-mine grade and high-grade samples, respectively, with excellent zinc concentrate grades of 60.5 percent zinc and 65.6 percent zinc, respectively. Gold and silver recoveries in the zinc concentrate were 9.7 percent gold and 15.8 percent silver in the life-of-mine sample. The company also reported that it had staked an additional 1,250 acres of land in the deposit area covering the potential down- and up-plunge extensions to the known resource as well as potential fold repetition of the host Lookout Rhyolite.

BRAVO VENTURE GROUP INC. reported that a diamond drill rig and field crews have been mobilized on its Woewodski Island precious-metal-rich volcanogenic massive sulfide project near Petersburg. The company is planning to drill two to three core holes for about 1,000 meters at an estimated cost of US$400,000. The program is designed to test the central, east-west trending axis of the East Lake paleograben, where surface mapping, 3D induced polarization geophysics and recent drilling have successfully delineated the dimensions of the graben and semi-massive to massive sulfide horizons along its perimeter. To date, only shallow targets within the host stratigraphy have been drill tested. ●

● BRITISH COLUMBIA

Yellowjacket gears up for production

JV partners Prize Mining Corp. and Eagle Plains Resources Ltd. move closer to startup with upgrades to mill at gold mining project

By ROSE RAGSDALE

For Mining News

Now that Prize Mining Corp. and Eagle Plains Resources Ltd. have completed modifications on a 350-metric-ton-per-day mill at the Yellowjacket Gold Project near Atlin in northwestern British Columbia, the processing of stockpiled mineralized bulk sample material is under way.

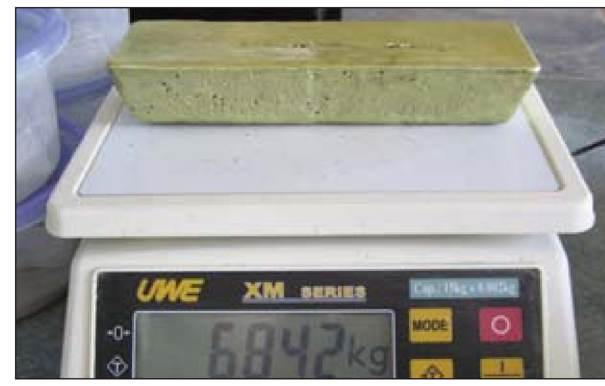
The joint venture partners June 4 reported completion of the small mill and milling will proceed under an existing bulk sampling exploration permit, while they await approval of a new permit under British Columbia's Small Mines Act.

Jamie Mathers, a spokesman for the project, said June 18 that Prize Mining and Eagle Plains are hopeful that they will receive the Small Mines Permit within the next month. Once in place, it will allow for up to 75,000 metric tons of annual production.

The Yellowjacket Project anticipates 35,000 metric tons of production during 2009 and commercial production activity is expected to begin by the third quarter.

Once the remaining 5,000 metric tons of the bulk sample is processed and the new permit is obtained, the partners intend to begin full-scale bedrock mining and milling operations.

see YELLOWJACKET *page 8*



A gold bar is weighed at the Yellowjacket Gold Project near Atlin, B.C., where JV partners Prize Mining Corp. and Eagle Plains Resources Ltd. are gearing up for commercial production.

PRIZE MINING CORP. & EAGLE PLAINS RESOURCES LTD.

● GUEST COLUMN

Mining industry invests in communities

Companies advance in emerging field of sustainable development by tackling tough issues such as public health, environment

By RONALD W. THIESSEN

For Mining News

Few can argue that the business of mining and mineral development has evolved dramatically in recent years. Engineering standards. Environmental safeguards. Regulatory oversight. Operational efficiencies. Health and safety performance. Even community development. Each of these critically important dimensions of planning and operating a modern, socially responsible mine has advanced light years since the term 'sustainable development' entered the public lexicon in the early 1990s.

But for all that, mining is still viewed by many as a dark and dirty industry. Perhaps it's understandable. The core business of mining – extracting large volumes of rock from far beneath the earth's surface to process the metal commodities that feed global manufacturing – is an inherently 'industrial' activity.

But there's another reality about modern mining that's available to anyone with a laptop, an internet connection and an open mind. When it comes to Corporate Social Responsibility and the emerging field of Sustainable Development, the global mining industry today is in the vanguard – regularly partnering with governments, communities and NGOs to tackle difficult issues like public health, community development and the environment.

RONALD W. THIESSEN

There's certainly no shortage of international CSR-SD awards to demonstrate our industry's leadership in this realm (see Google). But to truly understand the scope and impact of the sustainability initiatives mining companies are pioneering around the world, you really have to get on the ground.

By way of example:

In South Africa, where HIV-AIDS • affects 44 percent of the population, Rio Tinto is funding a program that provides care to 150,000 people suffering from this and other communicable diseases. BHP Billiton and 12 other mining companies are underwriting trials of advanced HIV therapeutic vaccines. And Northern Dynasty partner Anglo American manages one of the world's largest workplace HIV-AIDS programs.

In Brazil's Atlantic rainforest region, Anglo American has committed $92 million to conserve and restore native vegetation ravaged by logging, agriculture, human settlement and other land uses, and to support local community development.

And in Ghana, Newmont Mining invested some $36 million last year alone in public infrastructure and community development initiatives.

Northern Dynasty is doing its part too, through the Alaska-based Pebble Partnership. Last year, the Pebble Partnership initiated the Pebble Fund – a five-year, $5 million commitment to invest in sustainable development initiatives in southwest Alaska.

Just this spring, the Pebble Fund awarded its first $1 million in grants to 33 non-profit organizations advancing programs related to fisheries, energy, education and community development.

We are very proud to be involved in an initiative that may be the most significant pre-development community investment in the history of mining.

It's true, of course, that mining companies support community development and other sustainability initiatives because such investments are required to build local partnerships and earn the social license we need to operate. It's not entirely altruistic, but that doesn't diminish the very significant benefits that accrue to local people through responsible mineral development.

The programs referenced above, and hundreds more like them, will improve quality of life and environment and opportunity for local and indigenous people forever. Those still struggling with the modern usage of 'sustainable development' and how developing a finite resource can be considered 'sustainable' should take note. ●

Ronald W. Thiessen is president and CEO of Northern Dynasty Minerals Ltd., one of the two companies working to develop the Pebble copper-gold deposit in Southwest Alaska.

PRIZE MINING CORP. & EAGLE PLAINS RESOURCES LTD.

Workers align a SAG mill in May at the Yellowjacket Gold Project. JV partners Prize Mining Corp. and Eagle Plains Resources Ltd. reported completion of modifications to the project's 350-metric-ton-per-day mill facility. The partners expect to process 35,000 metric tons of gold ore at Yellowjacket in 2009.

PRIZE MINING CORP.

continued from page 7

YELLOWJACKET

'Nugget' effect in deposit

Prize Mining and Eagle Plains, meanwhile, are working without a current mineral resource estimate for the property.

Located about 97 kilometers, or 60 miles, due east of Skagway, Alaska and 15 kilometers, or 8 miles, east of Atlin, the Yellowjacket Project is situated in the Pine Creek Valley, an area subjected to extensive placer mining for more than 110 years.

Homestake Mineral Development drill tested the property and calculated a (pre-NI 43-101) preliminary resource estimate of 453,500 metric tons grading 10.26 grams per metric ton gold in the late 1980s.

Gold mineralization at Yellowjacket consists of coarse gold hosted in quartz stockworks and silicified zones in brittle volcanic and altered ultramafic rocks. Gold mineralization occurs along a prominent fault structure, which is interpreted to control the distribution of placer gold reported in the area.

In 2003, Calgary, Alberta-based Prize Mining Corp. (formerly Muskox Minerals Corp.) optioned the property and exploration continued. Drilling during the next three years yielded exceedingly high-grade gold but the results were sporadic.

The coarse gold mineralization at Yellowjacket has a pronounced "nugget effect," where adjacent samples within the same mineralized zone can have widely varying gold values. Consider hole TW05-2, for example. It encountered wide swings in gold grades over about 30 meters, ranging from a 21.45-meter intersection grading 11.49 g/t gold to a 2.62-meter-wide intersection grading 853 g/t gold, including 0.91 meters grading a spectacular 2,397.59 g/t.

Prize Mining also took channel samples of the bedrock surface and found similar wide variations in gold grades.

Mathers said a well-known mining consultant advised Prize Mining to extract bulk samples to assess the resource rather than continue spending money on drilling core samples.

As a result, the company in 2006 began a bulk-sampling program to evaluate the deposit in an economic framework.

Positive metallurgical tests

Prize Mining hired engineering, metallurgical and environmental consultants to carry out permitting, pit design, mill design and fabrication work.

Excavation activity began in 2007 under a 10,000-metric-ton bulk sample permit. A modern milling facility was constructed, and includes a 1,000-kilowatt generator, ball mill, SAG mill, feeders, pumps, conveyors, three Knelson concentrators, magnetic separator, Diester and Gemini tables and an on-site assay laboratory.

Metallurgical tests indicated preliminary recoveries of 81 percent and that the high-grade gold zones at Yellowjacket can be processed using gravity-only extraction methods. Head grades averaging 9 grams per metric ton were back-calculated from gold production values obtained from the weighted mineralized blocks processed.

Test work done on the rock units excavated from the pit have found them to be non-acid generating. During the bulk sample test, no chemicals or additives were used in the processing or extraction of the gold.

Low-cost advantages

Consultants retained by Prize Mining recommended the recent modifications to the mill circuit that boosted capacity to 350 metric tons per day and are expected to increase gold recovery to 90 percent.

Samples for head and tail grades from a 10,000-metric-ton bulk sample taken in 2008 are currently being analyzed by ACME Laboratory Ltd. in Vancouver and results are expected soon.

In April, Cranbrook, B.C.-based Eagle Plains purchased 40 percent interest in the Yellowjacket Project by providing C$2 million in working capital. These funds were used to clear existing liens and obligations on the property, in addition to completing the mill upgrades and covering costs related to engineering, permitting and environmental compliance.

Eagle Plains will, in turn, receive 60 percent of all proceeds of production up to $2 million, at which time it will revert to a 40/60 working interest. Eagle Plains also will have the option of increasing its working interest to 60 percent by making another $2 million in payments to Prize Mining by the sixth anniversary of the agreement.

The joint venture's overall operating costs are low. Capital costs are already paid, milling costs average less than 1.5 g/t gold and mining costs, so far, have been offset by placer production.

The project also boasts a good relationship with local First Nations, low reclamation costs, good infrastructure including power, and access to skilled local workers, contractors and vendors.

Mathers said the JV partners also have been making bars from gold mined so far at Yellowjacket and "selling them as they go" to help finance the operation.

Prize Mining and Eagle Plains are also considering enclosing the newly completed mill, Mathers said. "If they can do that at a reasonable cost, it would enable them to run the mill year-round and thereby, boost output considerably," he added. ●

● YUKON TERRITORY

New junior targets Tintina Gold Trend

Miner acquires former Brewery Creek Mine, other properties in Yukon, British Columbia and Alaska in search of major discovery

By ROSE RAGSDALE

For Mining News

GOLDEN PREDATOR ROYALTY & DEVELOPMENT CORP.

The Brewery Creek Mine in central Yukon Territory closed in 2002 due to low prices after producing nearly 300,000 ounces of near-surface gold. Newcomer Golden Predator Royalty & Development Corp. intends to return the mine to production and hopefully discover a larger resource at depth.

A gold mining group looking north from Nevada where it has been focused in recent years is seeing what many other explorers have noticed before them – the Tintina Gold Belt that stretches across Interior Alaska and Yukon Territory offers the handsome prospect of a major gold discovery.

But the difference for Golden Predator Royalty & Development Corp. is that it is prepared to back up its conclusions with the hard work and financial capital necessary to not only find the gold but bring it into production in short order.

That's the word from the Vancouver-based junior, which over the past year put together at least two deals – redevelopment of the Brewery Creek Mine near Dawson City and acquisition of several early-stage gold projects in Yukon, Alaska and British Columbia.

The company said the transactions are part of an aggressive property acquisition program in the Yukon and surrounding area that is focused on development of large, intrusive-related gold deposits within the prolific Tintina Trend, which hosts such mega-discoveries as Fort Knox and Donlin Creek.

"Elephant country doesn't adequately describe the Tintina Gold Trend. The discoveries coming out of it have been world class," said Golden Predator Chairman and CEO William M. Sheriff.

Golden Predator signed a letter of intent June 8 with Alexco Resource Corp., owner of the Brewery Creek Project, to acquire up to a 75 percent interest in the former gold mine. The move came one business day after the junior entered a similar agreement with Copper Ridge Explorations Inc. to purchase that company's interest in the Gold Dome (formerly Scheelite Dome) gold project, in central Yukon's Dawson Range, the Willoughby gold project in northern British Columbia and the Ogopogo gold project in eastern Alaska.

Consolation prize and potential jackpot

Brewery Creek, closed in 2002 by former owner Viceroy Resource Corp. because of low gold prices, is located 55 kilometers, or 34 miles, due east of Dawson City in northern Yukon. The mine produced about 278,484 ounces from seven near-surface oxide deposits along the Reserve Trend in an open-pit heap-leach operation.

The acquisition of the Brewery Creek Project presents Golden Predator with two immediate targets for potential resource development. Un-mined, near-surface oxide gold mineralization remains at the site, and a 2005 National Instrument 43-101 estimated resource calculated at 3.98 million metric tons grading 1.135 grams per metric ton gold (145,000 contained ounces) in the indicated category and 2.2 million metric tons grading 2.01 g/t gold (142,000 contained ounces) in the inferred category, using a cutoff grade of 0.5 g/t gold.

The 2005 report also noted that while the regional structural model for Brewery Creek offers potential for the discovery of higher grade sulphide deposits, the depth of drilling to date has been inadequate in testing this model.

"There's 300,000 ounces of gold left at Brewery Creek, which is more than was produced, and the entire effort was centered on near-surface oxide," Sheriff said.

The Brewery Creek Project covers claims initially staked in 1987. More than 175,000 meters of trenching and drilling was completed on the property with much of the exploration drilling completed to depths of only 50 meters or less and focused on defining the near-surface oxide potential.

About 85 percent of the mined-out mineralization was hosted by Cretaceous-aged quartz monzonite sills with stock-like bodies of biotite monzonite and syenite belonging to the Tombstone plutonic suite occurring in the south-central part of the project. This suite of coeval granitic rocks is known to be associated with gold mineralization at Dublin Gulch, Clear Creek, Gold Dome (Scheelite Dome) and the Marn skarn as well as at Brewery Creek.

A subsidiary of NovaGold Resources targeted a deeper sulphide mineralization at Brewery Creek in earlier exploration and did an analogy to that company's 31million-ounce Donlin Creek Project in southwestern Alaska before its attention was diverted elsewhere. Sheriff said his company is acquiring an enormous exploration database on Brewery Creek from Alexco and previous explorers.

"I view (Brewery Creek) as having a consolation prize in a half-million-ounce near-surface oxide resource and having the potential for a multimillion-ounce feeder zone at depth," Sheriff said. "And I view it as the third best project in the Yukon behind Underworld Resources and Northern Freegold Ltd."

The company plans to start drilling at Brewery Creek in late August or early September, he said.

Presence in Yukon

Through its newly created Yukon subsidiary, True North Mining Corp., Golden Predator intends to initiate phase 1 of a drilling program this field season once it receives all necessary permits to begin testing for these deeper and higher grade targets.

Sheriff, a geologist by training with more than 30 years experience in the mineral exploration and development business, was the driving force behind the founding of Golden Predator and another miner, EMC Metals Corp.

He will serve as chairman of True North Mining, while Art Ettlinger, a veteran geologist and mining engineer at Golden Predator with extensive international experience, including in Canada, has been appointed president. Ettlinger is moving to Whitehorse to run True North Mining's new office.

Sheriff said the company will focus on its Yukon properties and other prospects in the Tintina Trend and needs a presence in Whitehorse, where Yukon government offices are located.

"No other jurisdiction is as pro-mining as the Yukon," he observed.

Mike Burke, senior geologist with the Yukon Geological Survey, said it was nice to see Golden Predator pick up not only Brewery Creek but also Scheelite Dome. "These are properties that need somebody with some staying power," he said.

Complex deal with Alexco

Under terms of the letter of agreement with Alexco, Golden Predator can earn up to a 75 percent interest in 793 contiguous quartz mining claims and leases and certain related assets in three stages at Brewery Creek as well as a 50 percent interest in certain barite deposits on the property. To earn various levels of equity in the project, starting at 51 percent, Golden Predator must incur exploration spending on an annual schedule that could total C$6 million by 2014.

The junior made a firm commitment to spend at least C$1 million initially on exploration. The agreement calls for another C$3 million in spending over the next few years, and an option to acquire an additional 14 percent interest by spending C$1

see BREWERY CREEK *page 10*

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BREWERY CREEK

million more (for a total minimum of C$5 million in expenditures) and completing a preliminary economic assessment by Dec. 31, 2013. Another C$1 million minimum in spending can earn Golden Predator an additional 10 percent equity (for a total of 75 percent interest in the project).

Alexco, which completed award-winning multiyear reclamation of the previous mining operation at Brewery Creek, will have a one-time right to buy back 10 percent interest in the project by paying 2.5 times all exploration and development spending incurred by Golden Predator that exceeds C$4 million.

The Brewery Creek Project also is subject to two underlying royalty agreements with third parties: a "sliding scale" royalty on the next 21,516 ounces of gold production.

Another opportunity in barite

Golden Predator also can earn 50 percent interest in known and future discoveries of deposits of barite at Brewery Creek with exploration and development spending specifically related to barite of at least C$1 million by Dec. 31, 2012, and with not less than C$3.5 million in exploration and development spending on the gold potential at Brewery Creek.

Barite, a yellow, white or colorless crystalline mineral, is the chief source of barium chemicals used in paint.

Other Tintina prospects

Golden Predator also plans to explore and develop other large intrusive-related gold deposits in the Tintina Gold Trend, starting with two of the properties it purchased from Copper Ridge.

True North Mining was formed to identify and develop gold deposits similar to those that have already been developed in the Tintina Gold Trend.

The wide geologic provenances of these large deposits attest to the prospectivity of this gold belt, further enhanced by a $900 gold price, the company said. Golden Predator said the acquisition of Gold Dome, Willoughby and Ogopogo supports its goal of developing projects with sound geologic foundations, which will provide significant opportunities for expansion within the Tintina Trend.

Sheriff said the company is evaluating more opportunities in the region, and, subject to permitting, "we plan to have two active drilling projects in the Yukon this season."

"It's certainly a lot easier to develop a bigger resource out of an existing deposit than to go out and find a new deposit," he said.

At Gold Dome (formerly Scheelite Dome), gold mineralization occurs in veins, stockworks, replacement zones and skarn. Highlights of drilling conducted during the period 1998 to 2003 include 6.4 meters averaging 7.09 g/t gold, 1.7 meters averaging 24.4 g/t gold, 7.7 meters averaging 3.67 g/t gold; 4.6 meters averaging 3.66 g/t gold; and 5.9 meters averaging 2.46 g/t gold. Mineralization occurs within a 10-kilometer-, or 6-mile-long geochemical soil anomaly with a classic gold-arsenic-bismuth-antimony geochemical signature.

"Scheelite Dome has the largest (geochemical) anomaly in the Tintina Trend. We're trying to assemble a geological picture this year and will probably do our main drilling program next year," Sheriff said.

GOLDEN PREDATOR ROYALTY & DEVELOPMENT CORP.

Alexco Resource Corp. completed extensive reclamation programs at the former Brewery Creek Mine in central Yukon Territory before optioning interest in the property to Golden Predator Royalty & Development Corp. recently.

Ogopogo lies adjacent to and within similar geology to the Pogo gold mine in eastern Interior Alaska. Owned by Sumitomo Corp., Pogo is a flat-lying vein system that contains 3.6 million ounces in proven and probable reserves grading 0.47 ounces, or 13.3 grams, per standard ton gold. At Ogopogo three soil geochemical anomalies have been defined in gold as well as the key pathfinder elements – arsenic, bismuth and antimony.

Sheriff said his company is also considering building mills at Brewery Creek and Gold Dome.

B.C. property has promise

The Willoughby project is located within a well-mineralized trend in the Stewart-Iskut-Eskay Creek gold district in British Columbia. Highlights of historical drilling on the project include 11.7 meters grading 39.8 g/t gold in hole 94-15, 12.2 meters grading 10.8 g/t gold, including 3.0 meters grading 32.9 g/t gold in hole 94-27, 2.9 meters grading 398 g/t gold in hole 95-36, 5.9 meters grading 16.2 g/t gold in hole 95-51 and 13.0 meters grading 13.3 g/t gold, including 3.0 meters grading 31.1 g/t gold in hole 95-53.

The Willoughby project also is subject to two existing option agreements.

Deal provides for feasibility study

The letter of agreement also calls for Golden Predator to pick up interest in another gold project in Mexico from Copper Ridge under terms still being negotiated. As consideration for the assignment of the four projects, Golden Predator will pay Copper Ridge $750,000 in units at C50 cents per unit. The $750,000 will be allocated among the four projects. Each unit will consist of one share and one warrant, and each warrant will be exercisable for a period of two years at a price of C75 cents for the first six months and C90 cents for the remaining 18 months. The number of units is adjustable under certain circumstances.

In addition, should any of the properties become the subject of a positive bankable feasibility study before Dec. 31, 2011, then up to 500,000 shares will be payable to Copper Ridge, capped at C$1 million in value (Provisions are included for raising the cap as high as C$2.5 million under certain other conditions).

Copper Ridge also retained a 1 percent NSR on the Willoughby project and if secured, the Mexico project, and a 2 percent NSR on Ogopogo, which will be reduced to 1 percent in the event of a U.S. federal production royalty. The agreement, when finalized, also will be subject to a number of other conditions, including regulatory approval, due diligence, the completion of a private placement by Copper Ridge.

Nevada work will continue

Golden Predator, meanwhile, is forging ahead in Nevada where it has been focused in recent years on becoming a mid-tier precious metals producer through the strategic use of its Taylor milling facility near Ely, Nev. and through a facilities-use agreement at the Springer Facility with its sister company, EMC Metals Corp. Golden Predator is moving forward on several of its gold and silver projects in 2009 with the mandate to identify one or more properties for near-term production of small-tonnage, high-grade ores.

Sheriff said the company aims to drill 80,000 feet, or about 24,600 meters, on targets in Nevada this year.

Golden Predator is partially self-financed through a passive royalty stream from a portfolio of properties that it anticipates will yield about US $1.2 million at current gold prices for 2009. ●

● ALASKA

‘Pay Dirt!’ discovered in ‘Gold’ exhibit

Companion exhibits at Anchorage Museum explore man’s captivation with gold, and the gold rushes that opened the Alaska frontier

By **SHANE LASLEY**
Mining News

A stroll through the “Gold” exhibit at the Anchorage Museum of Art and History can transport visitors through six millennia of man’s captivation with the brilliant metal. The journey explores the unique characteristics of this precious and rare element that made it the prize of ancient civilizations, a standard of wealth and an invaluable metal to modern technology.

The more than 300 golden objects on display include examples of the first gold coins minted in ancient Lydia and Ionia (now Turkey), gleaming pre-Columbian jewelry, a Tiffany brooch designed by Paloma Picasso, a Fabergé Easter egg and Walter Cronkite’s Emmy.

As visitors explore “Gold,” they discover “Pay Dirt! Alaska’s Golden Landscapes” – a companion exhibit that features the Alaska gold rushes that transformed “Seward’s folly” into a territory of golden opportunity. (That’s right. There was more than one gold rush to Alaska.)

The “Pay Dirt!” exhibit was created by the Anchorage Museum as a companion exhibit within the American Museum of Natural History’s “Gold” exhibit, also on view May 30 through Aug. 2.

Golden properties

Historians believe that gold, because it is very easy to shape and is found in nature in its pure form, was the first metal used by humans. Objects made from the lustrous metal date back at least 6,000 years.

Two of the oldest artifacts on display – a crown and an image of a sheep recovered from Treasure Hill in Tepe Hissar, Iran – have remained untarnished for 4,500 years. These treasures, made from gold flattened into sheets, are not only examples of man’s longstanding attraction to gold but depict the mineral’s malleability and capacity to resist corrosion.

The same properties that allowed ancient artisans to shape gold and gives the brilliant metal the ability to retain its luster over the millennia make gold an important element to modern technology.

A symbol of lordly wealth

While its characteristics make it invaluable to certain practical applications, gold is best known as a symbol of wealth.

In 476 B.C. Greek poet Pindar scribed, “Water is best, but gold shines like fire blazing in the night, supreme of lordly wealth.”

The jewelry, coins, bars, statues and many other items embellished with gold on display at the museum reflect the yellow metal’s status as a symbol of wealth and monetary value.

One of the key exhibits is a stater, a gold coin produced in Lydia about 2,600 years ago. King Croesus, ruler of Lydia, began issuing gold coins with a standardized purity for general circulation in about 550 B.C.

Gold remained a primary form of currency until early in the 20th century. Most governments stopped producing gold currency by 1933 due to hoarding of the precious metal during the great depression.

CRAIG CHESEK/AMNH

Byzantine and Islamic gold coins. For nearly 2,600 years gold was a standard currency. Most governments stopped producing gold currency by 1933 due to hoarding of the precious metal during the great depression.

Pay Dirt!

The “Pay Dirt” exhibit – which is inspired partly by writer Jack London, who introduced American readers to Alaska’s untamed landscape – provides a window into the treasures and travails of the Alaska gold rushes that began at the end of the 19th century.

The stampede of “gold fever”-stricken fortune seekers into Alaska began in earnest in 1897 when word spread of rich gold discoveries just across the border in the Canadian Klondike. The United States economy had been hit hard by a series of bank collapses resulting in a recession and widespread unemployment, motivating tens of thousands of Americans to adventure north in search of their fortune and a fresh start.

The golden riches of Alaska’s streams did not come without a cost. The terrain was rugged and the weather brutal, but the lure of gold drew prospectors west from the Klondike across the 700-mile breadth of Alaska to the golden beaches of Nome.

The “Pay Dirt!” exhibit quoted Klondike prospector Fred Dewey as writing in 1898, “My feet are sore, my heels are blistered, my legs sore and lame, my

see **EXHIBIT** *page 23*

D. FINN/AMNH

This replica of an Apollo 11 space helmet, on display in the “Gold” exhibit at the Anchorage Museum of Art and History, demonstrates some of gold’s special properties. The visors of astronauts’ space helmets receive a coating of gold so thin that it’s partially transparent. The astronauts can see through it, but, even at that thinness, the gold film reduces glare and heat from sunlight.

● ALASKA

Bokan Mountain may be strategic deposit

Investors take note as demand for unfamiliar rare earth elements raises profile of resource in Southeast as global supply shrinks

By ROSE RAGSDALE
For Mining News

Advances in high technology, especially the recent drive to produce increasingly efficient hybrid automobiles, is spurring demand for rare earth elements and energizing a little-known mining sector with at least one known Alaska mineral deposit.

Thanks to analysts touting the virtues of investing in rare earth mining, two companies, Commerce Resources Corp. and Rare Element Resources Ltd. listed on the Toronto Stock Exchange have seen gains in their stock price of 32 percent and 37 percent, respectively, this spring, according to Dow Jones.

The analysts point to recent moves by Chinese investors to acquire a sizable slice of the global supply of REEs and the U.S. Defense Logistics Agency to stop selling into the REE market in 2008 as indications that prices for the unfamiliar metals are on the rise.

Worldwide HREE production originates principally from deposits in China. In 2008, China announced progressive restrictions on the export of REEs to non-China-based production facilities. The resulting constraints on supply have generated increasing global demand for the securing of predictable and scalable sources of these critical high technology metals.

This, in turn, suggests that companies developing rare earth deposits, especially in North America, can expect to see their values continue to increase, analysts say.

Promising deposit in Southeast Alaska

In Alaska, Ucore Uranium Inc., a Canadian junior based in Halifax, Nova Scotia, recently has focused on exploring for rare earth elements and uranium within the Bokan Mountain Granite complex on the southern end of Prince of Wales Island in Southeast Alaska, about 60 kilometers, or 37 miles, southwest of Ketchikan and 130 kilometers, or 81 miles, northwest of Prince Rupert, B.C.

Ucore's Bokan Mountain Project covers 30 square kilometers, or 19 square miles, within the Tongass National Forest and includes the former high-grade Ross Adams Mine, Alaska's only prior producing uranium mine.

Ucore June 11 said it changed the name of its U.S. subsidiary, Bokan LLC, to Rare Earth One LLC to reflect its evolving focus at Bokan Mountain. The rebranded unit will hold Ucore's 512 federal lode mining claims at Bokan Mountain and its other rare earth assets, while the company will retain Ucore Uranium as the operating name of its Canadian holding company.

COURTESY OF UCORE URANIUM INC.

Consulting Geologist Mike Power, Bokan Project Manager Cliff Hanson and Ucore Uranium Inc. Vice President of Exploration Harmen Keyser pore over maps of the rare earth and uranium-rich deposit.

COURTESY OF UCORE URANIUM INC.

A mineralized sample at Bokan Mountain.

"The property goes well beyond its superficial prospects as a prior high-grade uranium producer, and is a multi-metal deposit in every sense," said Ucore President and CEO Jim McKenzie in announcing the name change. "The Rare Earth One trade name is a strong mineral group specific brand. Its use will delineate Bokan's potential as a significant rare earth element deposit and a prospective source of these increasingly valuable technology metals."

Wide spectrum of REEs

But what are "rare earth" elements? The narrowest definition restricts them to the lanthanides, which are lanthanum, cerium, praseodymium, neodymium, promethium, samarium, europium, gadolinium, terbium, dysprosium, holmium, erbium, thulium, ytterbium, and lutetium. Sometimes the radioactive actinides are included, so that all elements in the f-block are considered "rare earth metals" in a manner similar to how d-block elements are called "transition metals." The actinides are actinium, thorium, protactinium, uranium, neptunium, plutonium, americium, curium, berkelium, californium, einsteinium, fermium, mendelevium, nobelium, and lawrencium. All are radioactive, and only thorium and uranium are found in large amounts in nature because of their very slow decay rate; one might argue that the elements from neptunium on cannot be properly called "rare earths" because they are all artificial. Lastly, some include scandium and yttrium as rare earth metals because of their chemical similarity to the lanthanides.

The cheapest rare earth metals are yttrium, lanthanum, cerium, praseodymium, neodymium, samarium, and gadolinium, along with thorium and uranium; while the most expensive are scandium, europium, thulium, and lutetium.

However, the moniker "rare earth" can be misleading, since some REEs, such as cerium, are actually more abundant than lead.

REEs such as thulium and lanthanum are used in numerous electronic applications as well as superconductors, supermagnets, refining catalysts and hybrid-car components.

The two other rare metals one needs to know about are tantalum and niobium. Tantalum is widely used in the electronics industry. Niobium is used in steels and super-alloys.

Though the actual amount of REEs that go into manufacturing products such as hybrid cars is small, it has become increasingly vital, especially in strategic and national defense applications.

REEs in Alaska

Ucore has been exploring Bokan Mountain since 2007 and in 2008, reported drill results from the I&L zone with indications of potentially significant concentrations of highly valuable heavy REEs, many of which are uncommon at most other North American deposits and have valuations ranging from hundreds to over US$1,000 per pound. Further, Ucore said it identified several zones with surface sampling that contain even higher REE values outside of the I&L zone and the other main uranium-bearing zones at Bokan Mountain.

The junior said Bokan Mountain is exceptional among North American rare earth deposits for its pronounced enrichment in the heavy rare earth elements.

"Rare earth deposits in North America and around the world almost invariably skew towards the comparatively less valuable light rare earth elements, with the notable exception of select geological areas in China," Ucore said.

Currently, there is only one REE mining operation in the United States, at Mountain Pass in the Mojave Desert in California near the Nevada border, said Steve Borell, exec-

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Drill technician Chris Brown checks equipment at I&L Zone at Bokan Mountain in Southeast Alaska.

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BOKAN

utive director of the Alaska Miners Association. Thus, the potential strategic importance of the Bokan Mountain cannot be overestimated, he said.

"We consider ourselves very fortunate to be exploring a prospective deposit in the State of Alaska," McKenzie told Mining News June 20. "The area has a long history of producing successful mining facilities, and the ongoing support from both the Forest Service and the Ketchikan area has been more than encouraging. Our efforts to establish a prospective rare earth resource are also exciting, since these valuable technology minerals are rapidly increasing in demand in the U.S. and beyond."

Dependence on imports

Analysts for the U.S Geological Survey, an agency of the U.S. Department of the Interior, anticipate increased long-term growth in demand for heavy REEs, both domestically and worldwide. The agency has issued an opinion on the impact of anticipated shortages of REEs on U.S. domestic high technology production capabilities. The USGS noted that the United States was once self-sufficient in the production of REEs but in recent years, has become more than 90 percent dependent on China for its REE supply.

"The United States is in danger of losing its longstanding leadership in many areas of REE technology. Transfer of expertise in REE processing technology and REE applications from the United States and Europe to Asia has allowed China to develop a major REE industry, eclipsing all other countries in production of both ore and refined products," the USGS said.

Deposit may be strategic asset

In 1989, the U.S. Geological Survey first indicated Bokan's potential as a heavy rare earth prospect in a (pre NI 43-101 and non 43-101 compliant) study of the resource. The scientific agency estimated that the area hosts more than 11 million pounds of uranium as well as tantalum, niobium, and rare earth elements, which ranked Bokan as housing the single largest combined heavy and light rare earth deposit in North America.

The study also identified significant in situ yttrium mineralization at Bokan, estimating one of the largest concentrations of yttrium in North America (non 43-101 compliant). Yttrium is considered to be a proxy for the presence of the entire "Yttrium Group of Lanthanides," otherwise known as the HREEs, and has a strong statistical correlation to the presence of HREEs, according to Ucore. In turn, the high relative concentrations of yttrium at Bokan correlate well to the area's strong prospectivity for the entire suite of HREEs, the junior said.

Since acquiring the Bokan Mountain property in 2007, Ucore has been working to confirm the USGS estimates and is investigating the possibility of an even larger resource, to be explored with modern exploration techniques.

Drill core results from 2008 show REE mineralization, including yttrium, zirconium, beryllium, and niobium, at Bokan Mountain.

USGS funds more research

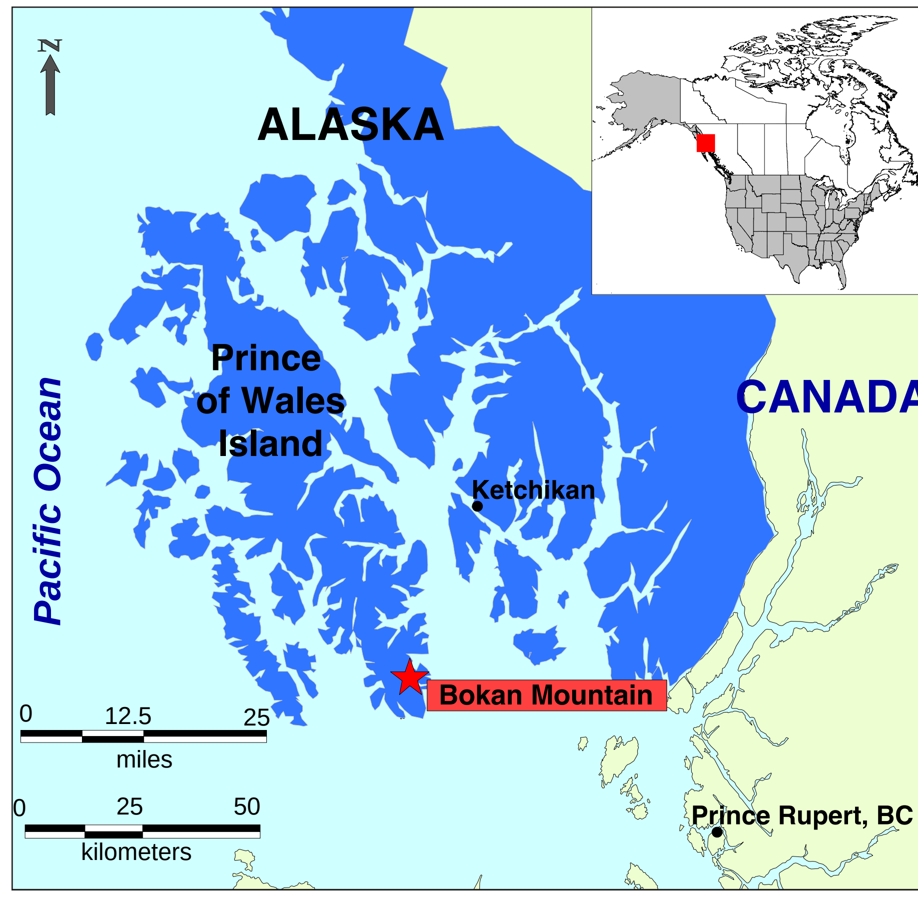
In April, the USGS awarded one of four 2009 Mineral Research Grants for the investigation of mineralization at Bokan Mountain. The focus of the studies will be the uranium and rare earth deposits within the Bokan Mountain Granite complex, and will be conducted by a group of geologists from four Canadian universities, lead by Dr. Jaroslav Dostal of Department of Geology, Saint Mary's University, Halifax, Nova Scotia.

The U.S. Department of the Interior scientific agency said its Mineral Resources External Research Program awards the grants to support research projects that assist in securing sustainable supplies of minerals for the future, while delivering mineral information of critical importance to national security.

The research at Bokan Mountain is expected to provide further insight into the geological processes which led to deposit formation, while characterizing the granite complex which hosts the deposit at Bokan. In particular, the project will aim to define the various types of mineralization, decipher the nature and origin of the uranium and REE mineralization, document the description, classification and chemical nature of the host peralkaline rocks, and supplement data as to their origin and tectonic settings. The study may also establish geochemical parameters to help distinguish ore-bearing from barren peralkaline granitic complexes.

The project is expected to provide a better understanding of the geologic processes that led to deposit formation and to characterize the granite complex that contains the deposits. From this study, analogies to similar deposits around the world will be made and the potential for similar deposits in Alaska and western North America can be assessed, according to the USGS .

"This research project represents a substantial financial commitment on the part of the USGS to the greater understanding the Bokan Mountain complex," said Ucore President and CEO Jim McKenzie. "It will undoubtedly raise international academic awareness of the site, and add greatly to our own understanding of what we have. Ucore will be providing extensive logistic support as the project moves ahead."●

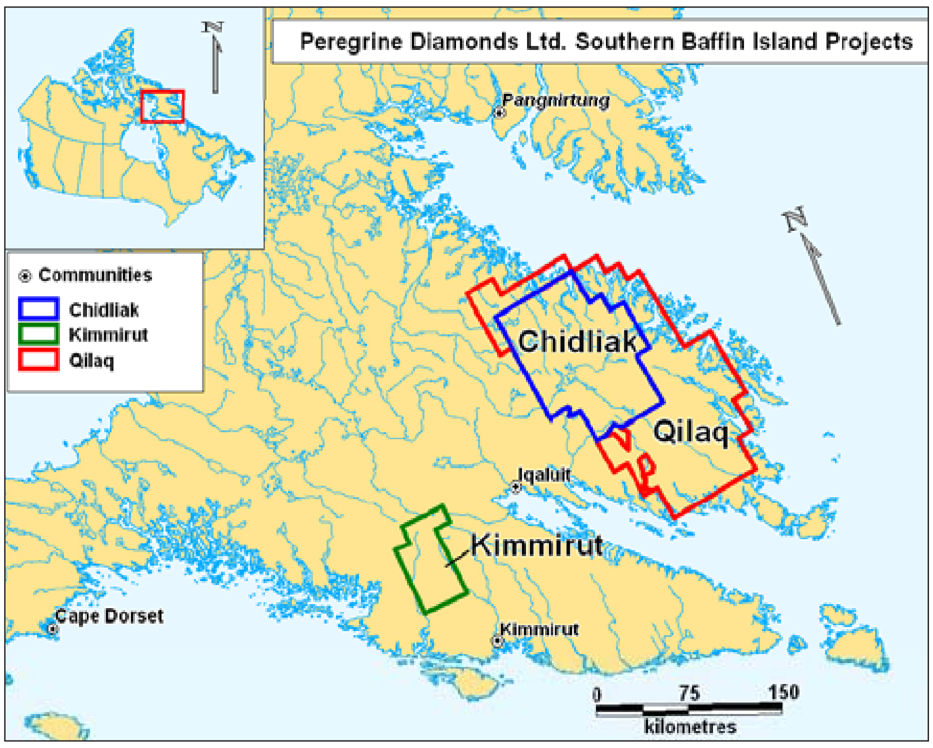


The crew barge for the Bokan Mountain Project is moored at Kendrick Bay.

NUNAVUT

Peregrine attacks major diamond prospect

Mining giant BHP Billiton steps up with critical funds for 2009 exploration of Arctic property despite tight capital markets



By ROSE RAGSDALE

For Mining News

A good bit of the excitement in Nunavut's mining sector this summer is being generated by Peregrine Diamonds Ltd. at the Chidliak Project on Baffin Island. The junior's 2009 exploration program of the 9,800-square-kilometer, or 3,784-square-mile property got underway in May. It is drawing significant industry attention, not only because of the hefty $9.2 million that partner BHP Billiton forked over to fund the gambit, but also because it offers the possibility of a major diamond discovery.

BHP, which owns most of the huge Ekati Mine in Northwest Territories, knows what a good diamond prospect looks like and the major likes what it sees at Chidliak. It committed to spend $22.3 million to earn 51 percent interest in the project, and it can gain another 7 percent stake by funding a feasibility study.

For Peregrine, the backing is a godsend in the current recession that enabled the Canadian junior to forge ahead at Chidliak with plans for core drilling, bulk sampling, mineral sampling, magnetic and geophysical surveys, and construction of a second 24-person camp as well as initiation of environmental baseline studies.

Promising diamond indicators

The earliest kimberlites were discovered on Baffin Island in the 1970s, but Chidliak is located 800 kilometers (497 miles) away from them in an unrelated area, according to Jennifer Pell, Peregrine's chief geoscientist.

"It's only 700 kilometers (435 miles) from kimberlites discovered in Greenland," Pell told a Toronto audience in March.

Peregrine began exploring the area in 2005 and has conducted sampling programs every year since. Last year, it enlarged the prospect and discovered three diamond-bearing kimberlites, CH-1, CH-2, and CH-3, at Chidliak.

Pell said the diamond-bearing kimberlites appear to be younger than 475 million years and younger than other kimberlites found in the Arctic.

She said the sampling density is still low at Chidliak, but samples taken so far have more than 10 percent G10 garnets and a significant number are above the graphite diamond stability line. A key goal for the junior this summer will be to increase the sample density

"It's really exciting, the variety and amount of materials these kimberlites have brought to the surface," she said.

A 2.28-metric-ton sample collected from CH-1 returned a diamond content of 1.56 carats per metric ton for diamonds caught on a 0.85-mm screen. It also yielded a 2.01-carat, gem quality, octahedral diamond. Based on its geophysical signature, the estimated surface expression of CH-1 is six hectares.

"CH-1 has the potential for more than 1 carat per metric ton, much larger than Ekati and as big as Lac de Gras," Pell said. "Chidliak has the potential to host a significant diamond discovery."

Much more to learn

About 170 kimberlite-type geophysical anomalies were identified from an airborne geophysical survey done in 2008 over less than 15 percent of the property. Many of the anomalies are associated with kimberlite indicator mineral trains.

The 2009 Chidliak exploration program will further evaluate the known kimberlites, drill-test high priority kimberlite-type targets and to prepare for a substantial 2010 exploration program by expanding the till sample coverage and by prospecting and geochemical sampling of at least 100 of the known geophysical anomalies.

High priority, kimberlite-type geophysical targets will be drilled and about 500 meters of core drilling is planned for each new kimberlite discovery. The CH-1 kimberlite will be evaluated by core drilling and consideration will be given to drilling the CH-2 and CH-3 kimberlites this season.

Exploration this year will involve up to 50 people, two helicopters, one core

see PEREGRINE page 16

ALASKA

Explorer focuses on timing at 40 Mile

Polymetallic discovery in 2008 did little to boost junior's profile in capital markets, despite especially favorable drill results

By ROSE RAGSDALE
Mining News

Despite stellar drill results from an aggressive 2008 program at the 40 Mile Project in eastern Alaska, Full Metals Minerals Corp. is slowing the pace of exploration on the 242,000-acre property this year.

40 Mile encompasses numerous lead-zinc-silver targets as well as prospective gold and copper showings.

Full Metal's exploration of the West Little Whiteman, Little Whiteman, and Fish prospects resulted in the discovery of a previously unknown mineral district containing multiple occurrences of massive to semi-massive to disseminated sphalerite and galena mineralization distributed over a 14-kilometer trend.

Due to lack of outcrop and remoteness, the district is under-explored and ripe for potential future discoveries. At Little Whiteman, called "LWM," Full Metal discovered a large area of lead, zinc, silver mineralization that has the potential to become an economic deposit.

Also, multiple other prospective carbonate replacement-style targets have been identified on the property.

Proving the economics

"We probably have an economic ore body at 40 Mile," said Full Metal President Mike Williams in a June 17 interview. "It's getting to the point that we think we need to do what's necessary to show that we have an economic ore body."

Williams said Full Metal gained little traction in the capital markets in 2008 despite news of the significant discovery late in the year.

"We were drilling last year, spending a lot of money and putting out spectacular drill results, but we were not in the market. It was not impacting our stock price," he said.

Full Metal has completed three years of systematic exploration evaluating 40 Mile's mineral potential. The junior also spent more than US$10 million in exploration work on the project, including geologic mapping, surface rock and soil geochemical surveys, geophysical surveys, and diamond core drilling.

Last year, 40 Mile drilled 39 holes at LWM, and intersected massive to semi-massive sphalerite-galena-chalcopyrite mineralization in most of them. Step-out and infill holes were completed on 50-meter centers along strike and down-dip. Infill hole LWM08-57 encountered

see 40 MILE page 20

FULL METALS MINERALS CORP.

Full Metals Minerals Corp. mounted an aggressive drilling program in 2008 at the 40 Mile Project in eastern Alaska near the Yukon Territory border. Here, a rig drills hole 26 at the LWM Prospect.

● ALASKA

Finding rekindles Ballot Measure 4 fires

APOC identifies more than 20 campaign violations by 'Gillam Group;' member accuses initiative opponents of similar improprieties

By SHANE LASLEY
Mining News

The opposing sides of Ballot Measure 4, the failed ballot initiative that opponents said targeted development of a mine at the huge Pebble copper-gold-molybdenum deposit in Southwest Alaska, have moved their ongoing battle from the court of public opinion into a court of law.

A June 4 report, based on an investigation conducted by staff of the Alaska Public Offices Commission, recommended the anti-Pebble syndicate be levied the maximum civil penalties for multiple violations of Alaska campaign law. The APOC staff also recommended that the case be turned over to the Alaska Attorney General for a criminal investigation.

APOC's investigation followed a complaint filed by the Pebble Partnership and Resource Development Council for Alaska in March that charged the Renewable Resources Coalition, Alaskans for Clean Water, Americans for Job Security and McKinley Capital Management CEO Bob Gillam with conspiring to hide about $2 million in contributions by Gillam to support the anti-mining citizens' initiative that appeared on Alaska's 2008 primary ballot.

Art Hackney, one of the key individuals investigated by APOC, has countered with allegations that the mining interests hid $3.5 million in expenditures and over $1.3 million in contributions during the campaign directed at convincing Alaskans to vote down the initiative.

APOC probe affirms violations

In the course of its investigation into the group promoting Ballot Measure 4, APOC confirmed 17 of the 18 campaign law violations alleged in the Pebble complaint and turned up several additional campaign law violations by the anti-Pebble faction.

"APOC staff has conducted as thorough an investigation as time allowed, and concludes that the majority of alleged violations are supported by a preponderance of the evidence. Additionally, in the course of the investigation, APOC staff found several other violations," the commission wrote.

APOC has turned the Pebble case over to the Alaska Department of Administration, which will assign an administrative law judge to assist the commission in handling hearings.

Gillam Group

The charges brought to light by the APOC investigation center on four key players of the "Vote Yes on 4" campaign – Richard Jameson, Michael Dubke, Bob Gillam and Hackney – which the APOC staff dubbed "the Gillam Group."

Hackney, an Anchorage-based political consultant, was one of the sponsors of Ballot Measure 4. His firm, Hackney & Hackney Inc., reportedly earned between 10 percent and 15 percent of money spent on the "Alaskans for Clean Water" campaign for handling most of the advertising aimed at convincing Alaska voters to approve the measure.

Hackney is also a former board member of "Americans for Job Security," a Virginia-based group that, according to the APOC Web site, contributed $1.6 million to the "Vote yes on 4" campaign. The APOC report says Dubke was president of the organization from 1998 through March 2008.

Jameson is president of Renewable Resources Coalition,

ALASKA DEPARTMENT OF NATURAL RESOURCES

The photo, above, which shows drill water overflow and recycle sump at drill rig 8407, was taken by Alaska Department of Natural Resources regulators during a field inspection in June 2008. It is being used in an anti-Pebble Project television advertisement sponsored by Alaska Wild Salmon Protection, a "Gillam Group" company. A recent Alaska Public Offices Commission staff report criticized the AWSP for having been "set up to allow (Bob) Gillam to spend money on lobbying without disclosing he was employing lobbyists."
The photo, below, taken in November, is the same site five months later. The sump has been backfilled, and the site reclaimed and reseeded. Once native vegetation returns, the only distinguishing feature will be the post marking the capped drill hole. Truth About Pebble, an Anchorage-based citizens organization, has called for broadcasters to pull the misleading television advertisements off the airwaves.

PEBBLE LIMITED PARTNERSHIP

an anti-Pebble group that Hackney helped to organize.

Gillam, who owns a wilderness home about 15 miles away from the proposed Pebble mine site, has spent several million dollars to prevent the development of Pebble, including US$2.6 million, or 89 percent, of the US$2.9 million raised to promote Ballot Measure 4.

"Gillam … was the main proponent of the effort and was by far its largest financial backer. Day-to-day execution of the effort was left to Hackney, who directed the expenditure of millions of dollars in print and broadcast advertisements in favor of Ballot Measure 4.

Dubke was a media and political consultant who worked on advertising, messaging, and the get-out-the-vote effort for the ballot initiative. Dubke also was instrumental in attempting to veil the fact that the entire effort was being funded by Gillam.

"Jameson, as president of the (Renewable Resources) coalition, placed his organization largely at the service of the ballot campaign working in conjunction with the others. Together, these four individuals operated as a de facto "group" organized to influence the outcome of an election," APOC staffers wrote.

Hackney said the APOC report's claim that Gillam recruited the other members of the group is absurd.

"The fact of the matter is I set up Renewable Resources Coalition," he told Mining News. "I didn't even know who Bob Gillam was."

Following the money

The largest financial impropriety alleged in the Pebble complaint is that the Gillam Group attempted to hide $1.6 million of Gillam's contributions to the pro-Ballot Measure 4 campaign by channeling the money through Americans for Job Security.

The Ballot Measure 4 proponents replied that Gillam simply paid membership dues to the soft money group, and the money manager "had no legal right to direct where these funds ultimately went."

The APOC report characterized Americans for Job Security as "nothing more than a sham entity created for the sole purpose of allowing people like Gillam to evade campaign disclosure laws."

The majority of Gillam's contributions to the campaign were channeled through the group and into Alaskans for Clean Water, the organization registered with APOC to promote passage of Ballot Measure 4.

According to the APOC report, the funneled contributions "were either illegal anonymous contributions, illegal contributions in the name of another, or both."

Hackney said the report "has no foundation."

APOC's staff said there was no limit to the amount of money Gillam was allowed to throw into the campaign, but the voters had the right to know where the money came from.

APOC Executive Director Holly Hill said the commission has turned the Pebble case over to the Alaska Department of Administration.

Chief Administrative Law Judge Terry Thurbon told Mining News that hearings originally scheduled for June 15 – 17 have been postponed due to "the addition of some new complaints that are being consolidated in this matter."

Hackney fires back

Hackney countered the accusations made in the Pebble complaint and the APOC staff report by alleging campaign improprieties by Ballot Measure 4's opposition.

A complaint filed June 15 by the initiative's sponsor claims that Alaskans Against the Mining Shutdown, the Council of Alaska Producers, and NANA Regional Corp. conspired to hide $3.5 million in expenditures and more than $1.3 million in contributions spent in opposition to the anti-mining measure.

The charges made by Hackney include:

Alaskans Against the Mining Shutdown, the organization that ran the opposition campaign, concealed more than $1.3 million in contributions and more than $2.2 million in spending until after the election.

The Producers' Council, an organization representing mining companies working in Alaska, failed to properly report more than $6.3 million in contributions to Alaskans Against the Mining Shutdown.

The council also failed to properly report nearly $500,000 in expenditures.

NANA Regional Native Corp. failed to properly report more than $400,000 in spending.

Hackney claimed these organizations hid the contributions and expenditures until after the election was decided. ●

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PEREGRINE

drill and some excavation equipment. A 50-metric-ton mini-bulk sample will be collected by trenching from CH-1and processed in the lab to recover commercial-sized diamonds.

BHP Billiton has the right to modify the approved budget.

Exploration at other prospects

In February, Peregrine received approval for 86 prospecting permits bordering Chidliak. The new permits, totaling 13,000 square kilometers, or 5,019 square miles, comprise a new property named Qilaq. This summer, Peregrine plans to evaluate Qilaq's diamond potential by collecting about 600 till samples and analyzing them for kimberlite indicator minerals.

Peregrine said it also will spend $1.5 million exploring the 3,140-square-kilometer, or 1,212-square-mile, Nanuq property, about 275 kilometers, or 171 miles, north of Rankin Inlet in Nunavut. The junior holds a 100 percent interest in Nanuq subject to a 2 percent gross overriding royalty payable to BHP Billiton.

Peregrine discovered three diamondiferous kimberlites at Nanuq in 2007 but a number of geophysical anomalies, some of them larger than five hectares, have yet to be tested. The 2009 exploration program is set to begin in early July.

The 2009 program will increase the kimberlite indicator mineral sample density on Nanuq and field-check priority geophysical targets.

Nanuq is immediately south of the Nanuq North property, which is currently funded on a 50-50 basis by Peregrine and Indicator Minerals. The Hunter Exploration Group owns 20 percent interest in the project, and a gross overriding royalty of 2 percent on any revenues generated from 16 claims covering 139 square kilometers, or 54 square miles, while Peregrine and Indicator each hold 40 percent interest in the 16 claims. Hunter's 20 percent interest is carried through completion of a scoping study.

Peregrine and Indicator each have an undivided 50 percent interest in Nanuq North's remaining 192 square kilometers, or 74 square miles, and Indicator is the project operator. ●

● YUKON TERRITORY

Discovery sparks rush to White Gold area

Miners scramble to stake thousands of claims within weeks as Underworld Resources' drilling results capture industry's imagination

By ROSE RAGSDALE
For Mining News

The recent discovery of significant gold mineralization near the headwaters of the White River in western Yukon Territory has sparked a staking rush fired by the imagination of miners with a long memory.

More than 12 junior exploration companies have flocked to the region in recent weeks, grabbing claims in the proximity of the increasingly promising White Gold Project held by Underworld Resources Ltd.

WHITE GOLD

Underworld May 26 reported discovery of 103 meters grading 3.4 grams per metric ton gold.

The companies are also latching onto property a good distance away but ostensibly bearing geological similarities to the mineralization that Underworld uncovered at White Gold's Golden Saddle Prospect.

"They are calling it the biggest staking rush since Voisey's Bay," Underworld Chairman Michael Williams told Mining News.

Voisey's Bay was a big nickel discovery in Labrador in the 1990s.

> *"I use the analogy of Sasquatch. We've been seeing tracks for 100 years, but now we have our first sighting. We're getting a picture of what this beast looks like, and that is what is capturing the imagination of explorers across the planet."*
> **–Shawn Ryan, co-owner, Ryanwood Explorations Inc.**

Re-staking the Klondike

About 4,529 quartz claims were staked since January this year, in the northwestern quarter of Yukon Territory, many of them in the vicinity of the White Gold discovery, said Kathryn Perry, Yukon Mining Recorder in the Dawson office.

That compared with 820 comparable claims staked during the first six months of 2008.

"We've recorded about 2,500 claims in the past week, and we're not done yet," Perry told Mining News June 22.

Mike Burke, a senior geologist with the Yukon Geological Survey, said any company currently rushing to the Klondike to look for gold is "smart."

Though the White Gold discovery is not in the Klondike, it is the first hardrock discovery close to the fabled region, Burke said.

"It opens up a new deposit type to explore for in the Dawson Range and Klondike that might have contributed to the vast amount of gold that came out of the Klondike," he said.

Another reason miners are flocking to the area is that White Gold, unlike Northern Freegold Ltd.'s impressive gold discovery last year, is surrounded by a lot of unclaimed land.

"Northern Freegold's discovery attracted a lot of attention, but a lot of that area was already staked," Burke said. "White Gold is brand new in an area that has never been explored before (in modern times). It also recently was mapped by the Yukon Geological Survey, so people have solid data to look for similar geology, airborne signatures and such.

"It's also the herd mentality – 'Here's a bright light in a down year,' " he added.

As for numbers, Burke said that for every explorer announcing the acquisition of property or the staking of claims in the area, there are others who are keeping quiet.

"It's a moving target. We'll know in a few months. Right now, there are lots of people coming and going," he said. "I've heard stories about folks telling people riding on the elevator in Vancouver about their new claims, only to learn their audience had picked up claims, too."

ROSE RAGSDALE

Yukon prospector Shawn Ryan optioned the White Gold claims to Underworld Resources Ltd. in 2007. Ryan used this ditch digger to conduct trenching tests as he explored the White and Black Fox properties.

A modern gold rush?

Shawn Ryan, a Yukon prospector who optioned the original White Gold claims to Underworld in 2007, said he believes the recent influx of miners is only the beginning of an industry rush to the area. "You can let your imagination run wild," he said.

"Basically, Underworld found 25 meters of gold, and then it was 50 meters and then it was 100 meters," Ryan said. "I think it caught everybody off guard. Over the last 100 years, we haven't seen anything like this.

"I use the analogy of Sasquatch. We've been seeing tracks for 100 years, but now we have our first sighting. We're getting a picture of what this beast looks like, and that is what is capturing the imagination of explorers across the planet," he said.

Discovery revives legendary quest

During the late 1890s and early 1900s, miners took millions of ounces of gold out of the placer creeks of western Yukon Territory, but no one ever found the source of all that gold.

"The registered amount of placer gold found in the Klondike was 12 million to 13 million ounces, but I figure it was really more like 20 million ounces," Ryan said. "(White Gold) is the type of deposit that could have produced that much gold. The last hole they drilled was 300 meters thick. I'm just waiting to see what their next set of drill results will be."

The prospector said the Underworld discovery has brought the entire Klondike region back into vogue.

"The Gold Rush mentality is back up

see **RUSH** *page 20*

● YUKON TERRITORY

Underworld finds deeper gold-silver zone

Explorer adds new dimension to evolving discovery at White Gold with the latest drill results, raises another C$16.55 million

By ROSE RAGSDALE
For Mining News

Underworld Resources Inc. began what promises to be a long, exciting summer by reporting results Memorial Day from the first three holes of its 2009 drilling program, currently under way at the White Gold Property in west-central Yukon Territory.

Two weeks later, the aggressive junior churned out additional drill results for one of the three holes, this time identifying deeper gold mineralization that is also rich in silver.

A week later, Underworld closed several private placements that generated C$16.55 million in gross proceeds and gave Kinross Gold Corp. an 11 percent stake in the junior.

Underworld also released more encouraging drill results June 23 for another nine drill holes in phase 1 of its 2009 drilling program, seven holes in the Golden Saddle zone and two in the Arc zone.

Underworld is exploring sediment and vein-hosted gold targets on 845 claims covering 169 square kilometers, or 65.3 square miles, on the White Gold and Black Fox gold Properties in the west-central Yukon Territory, 95 kilometers, or about 60 miles, south of Dawson City. After two years, the junior has nearly doubled its claims in the area and identified significant gold mineralization. News of Underworld's drilling results also has touched off a staking rush in the region.

UNDERWORLD RESOURCES INC.

Underworld Resources Ltd. geologists examine visible gold in rocks from the Golden Saddle zone on the White Gold Property in west-central Yukon Territory.

100 meters of 3.4 grams per metric ton gold

Drillers encountered significant thicknesses of gold mineralization at White Gold within an interpreted shallow-dipping zone in all three of the first holes drilled in the 14,000-meter program. The results are:

WD09-28: 1.84 g/t Au over 102.5 meters from 105 to 207.5 meters

WD09-29: 3.89 g/t Au over 60.5 meters from 145.5 to 206.0 meters

WD09-31: 3.39 g/t Au over 104.0 meters from 100.0 to 204.0 meters

These holes were completed in a fence of four, drilled at the Golden Saddle zone, west of hole WD08-21, which returned 3.1 g/t gold over 50.7 meters.

The objective of the initial drilling was to test for the continuity of mineralization and to test the mineralization to depth, below hole WD08-21, which bottomed in alteration and in mineralization.

The four holes on the section span about 120 meters of down-dip extent, with assays pending for WD09-30 and additional assays pending from above and below the zone identified in WD09-31.

Underworld said its geologists believe the mineralization at Golden Saddle is shallow-dipping; however further assay results and additional drilling are required before they can reliably estimated true thickness.

More gold down below

Underworld June 12 reported discovery of a new, deep gold-silver-rich zone down hole from the earlier drill results. The junior said hole WD09-31 returned 10.5 meters averaging 4.8 g/t Au and 38.2 g/t Ag starting at 401.5 meters within a breccia zone underlying the Golden Saddle Zone.

The deep breccia zone within hole WD09-31 occurs from 401.5 to 412.0 meters and includes 9.40 g/t gold and 73.3 g/t silver over 3.4 meters, underlying the upper zone in this hole.

The mineralization is hosted in a milled hydrothermal breccia with interstitial pyrite and specular hematite.

Underworld said its drillers lost hole WD09-31 at 414.8 meters due to depth limits of the diamond drills currently in use at Golden Saddle. The company will bring a more powerful drill rig to the site to test the new zone to greater depth.

This zone suggests the potential for stacked mineralized structures within Golden Saddle. Further, the silver/gold ratios within the "upper" Golden Saddle zone are typically greater than 1:3, while silver/gold ratios in the "lower breccia" Golden Saddle zone are 8:1, the junior said.

"This type of mineral zonation is often associated with intrusion-related gold deposits is suggestive and suggests that there may be an intrusive source to mineralization at depth," Underworld Chairman Michael Williams told Mining News.

"We could have tapped into a sizable ore body, rather than a narrow vein. The new structure is brecciated, which is another indication of the system's potential," Williams said June 17.

"In political terms, the deposit has legs," he added.

Underworld said its drillers lost hole WD09-31 at 414.8 meters due to depth limits of the diamond drills currently in use at Golden Saddle. The company will bring a more powerful drill rig to the site to test the new zone to greater depth.

Two diamond drills are currently turning on the White Gold Property, and had completed nine holes at Golden Saddle and five holes at the Arc zone (located two kilometers, or 1.24 miles, southeast of Golden Saddle) as of June 12.

Latest results extend mineralization

Results of drilling at Golden Saddle reported June 23 returned 3.16 g/t gold over 44.5 meters from 179.5 meters and extends Golden Saddle's "upper zone" further down dip in hole WD09-32. WD09-32 is located 60 meters down dip from WD08-21, which returned 3.2 g/t Au over 50.7 meters.

Underworld said hole WD09-34, which returned 1.4 g/t gold over 29.50 meters, demonstrates extension of the mineralized zone further to the north east. Hole WD09-38, however, intersected 0.95 g/t gold over 153.0 meters, including higher grade upper and lower intervals, including more than 3.1 g/t gold over 17.2 meters and 4.1 g/t gold over 16.0 meters. WD09-38 intersected the Golden Saddle Zone 60 meters up-dip from WD09-34. Hole WD09-30 was drilled up-dip from the same collar location as WD09-31, which intersected 3.4 g/t gold over 104.0 meters. WD09-30 returned 0.6 g/t gold over 70.9 meters, including 2.1 g/t gold over 7.0 meters, but the zone was truncated by an altered and sheared ultramafic unit or dyke, which is interpreted to be a poor host rock to the gold mineralization within the Golden Saddle Zone, the company said.

Underworld also reported significant gold mineralization intercepted in two holes drilled at the Arc Zone, which is located two kilometers southeast of Golden Saddle.

The junior said two drills turning at White Gold are now working on a 6,000-meter phase 2 program for 2009. Assays are still pending for four more holes at Golden Saddle which tested for further extensions to the northeast, spanning an additional 120 meters of strike length.

Offerings raise C$16.5 million

Underworld June 19 said it closed private placements of more than 12.8 million units in several offerings, including one with a syndicate of agents led by Canaccord Capital Corp. and including Axemen Resource Capital and Dundee Securities Corp. The junior said 10 million units sold at a price of C$1.25 each, while 2.415 million flow-through units sold at a price of C$1.45 each for total gross proceeds of more than C$16.5 million. Each unit consists of one common share and one-half of one transferable common share purchase warrant.

Underworld said one of its directors purchased 15,000 units in the offering and, as a result, security holdings of company insiders have increased.

Fort Knox Mine owner, Kinross Gold Corp., also purchased 1.2 million units of the offering. After giving effect to the offering and the exercise of the warrants, Kinross would hold 1.8 million common shares of Underworld, which, together with the 2.72 million common shares already held by Kinross, constitutes 11.1 percent of Underworld's outstanding common stock.

In addition to the brokered financing, Underworld also completed a non-brokered financing, issuing 400,000 units at a price of C$1.25 each and 34,500 flow-through units for C$1.45 each for total gross proceeds of C$550,025. Underworld said it will use funds raised from offering the flow-through units for general exploration spending in Yukon, and the remaining net proceeds for general working capital. ●

● YUKON TERRITORY

Explorers grab claims near White Gold

Companies line up to gain partners, capital for Yukon exploration along with opportunities to cash in on future gold discoveries

By ROSE RAGSDALE
For Mining News

At least 11 companies have either staked claims in the vicinity of the recent White Gold discovery by Underworld Resources Ltd. in western Yukon Territory, or been inspired by Underworld's exploration success to become involved in exploration programs in the region this year.

Underworld May 26 reported the discovery of 103 meters averaging 3.4 grams per metric ton gold at the White Gold Property.

Among the companies flocking to the area:

MPH VENTURES CORP. June 19 said it has entered into an agreement to acquire the Quartz Claims property, 22 unit blocks covering about 950 hectares, or about 2,290 acres, adjacent to and northeast of Underworld's White Gold property. The Vancouver-based junior cited Underworld's discovery hole of 103 meters of 3.4 grams per metric ton gold at White Gold, and the land to the east, west, and south of the Quartz Claims Property has now been completely staked and a staking rush appears to be under way. MPH also said it planned to mobilize a field crew to perform detailed mapping and sampling within a few weeks. The junior said it agreed to pay the unnamed seller C$75,000 in cash and 800,000 shares of its stock plus a 3 percent net smelter royalty with an option to buy back 1 percent for $1 million. The company also agreed to spend C$250,000 over the next 12 months as a work commitment and to pay a finder's fee of 75,000 common shares in connection with the property acquisition.

ASHBURTON VENTURES INC. June 18 said it also acquired lode quartz mineral claims adjacent to the White Gold property. The Ashburton Claims are tagged directly to the northeast, about 10 kilometers, or 6 miles, from Underworld's discovery hole. Ashburton said its claims appear to host meta-sedimentary stratigraphy as sililar to White Gold, as outlined in GSC mapping by Gordey and Ryan. Of note, the Yukon Minfile pinpoints an adit that was driven for 4.6 meters in 1902 on Ashburton's claims. Ashburton said it will pay the vendor, Blair Naughty, C$75,000 in cash, 650,000 shares of Ashburton stock plus another 350,000 shares on the first-year anniversary of the transaction. A 3 percent net smelter royalty also will be granted to the vendor, but Ashburton retained an option to buy back 1 percent for C$1 million. Ashburton also agreed to spend C$250,000 during the next 12 months as a work commitment.

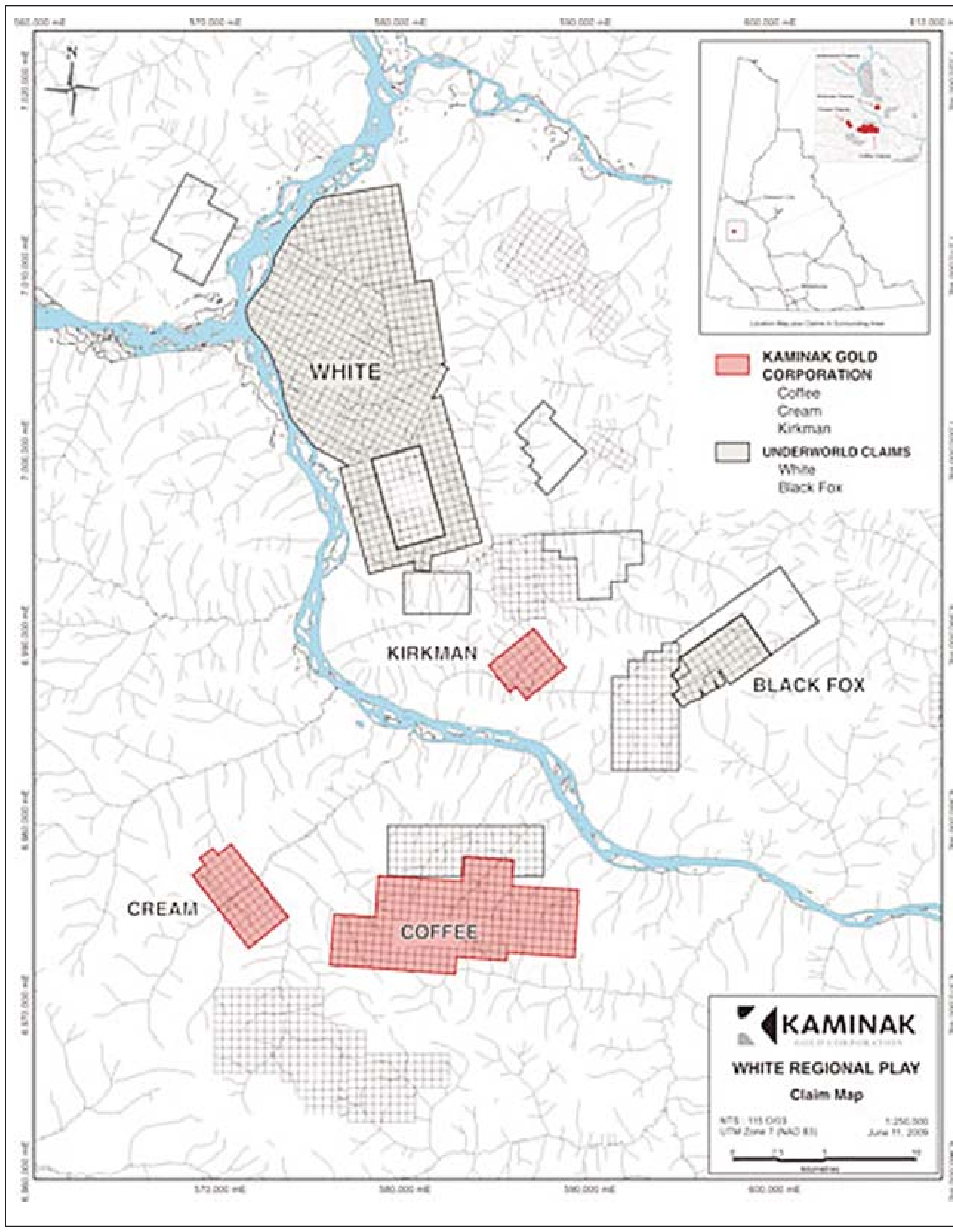
CLOUDBREAK RESOURCES June 15 said it acquired lode quartz mineral claims adjacent to the White Gold Property directly to the east of the Underworld Resources Inc. Cathy 146 and Cathy 144 quartz mineral claims and about 4 kilometers, or 2.5 miles, from Underworld's recent discovery. Cloudbreak said its 500 hectares, or 1,205 acres, is attached to claims held by Alix Resources, and both claims packages are completely surrounded by Underworld's stakings. GSC mapping by Gordey and Ryan indicates that the Cloudbreak claims appear to be underlain by similar meta-sedimentary stratigraphy as the Underworld White Gold property, the junior said. Cloudbreak also said it will pay the vendor Blair Naughty $75,000 in cash, 1.25 million shares of its stock and a 3 percent NSR with an option to buy back 1 percent of the NSR for C$1 million. The company also agreed to spend C$250,000 over the next 12 months as a work commitment.

ALIX RESOURCES CORP. June 11 said it purchased lode quartz mineral claims adjacent to the White Gold Property directly to the east and 4 kilometers, or 2.5 miles, from Underworld's recent discovery. Alix's 500-plus hectares, or about 1,205 acres is completely ring-staked by Underworld, and from GSC mapping by Gordey and Ryan, the Alix claims appear to host similar meta-sedimentary stratigraphy as the White Gold property. Alix also said it will continue to seek additional claims in the area, and is also considering its options with regards to a private placement announced May 26. Alix said it will pay vendor Blair Naughty $75,000 in cash, 700,000 shares of Alix stock and a 3 percent NSR with an option to buy back 1 percent for C$1 million. The junior also committed to spend C$250,000 during the next year on exploration of the property. The transaction is subject to TSX Venture approval. Alix also said it would mobilize a field crew to the property within a couple of weeks to begin a systematic geological and geochemical survey of the claim block. This work would include detailed silt sampling of streams draining the property, along with rock sampling and geologic mapping. Alix Resources geologists are very familiar with working in the Tintina Gold Belt, the company added.

ALDER RESOURCES LTD. June 12 said it signed a letter of intent option agreement with Cariboo Rose Resources Ltd. that gives Alder the option to earn 60 percent interest in Cariboo Rose's Canadian Creek mineral property 160 kilometers, or 99 miles, south of Dawson City. The property is also 50 kilometers southeast of Underworld Resources' White Gold project. The Canadian Creek claims cover an area of about 4,800 hectares, or 11,568 acres. To earn 60 percent interest in the property, Alder must complete certain cash payments (totaling C$250,000), issue a total of 250,000 shares in its capital, and fulfill designated exploration expenditures on the property totaling C$2.5 million, within the times specified, all to be completed by June 18, 2013. Alder has given a firm commitment to complete the first C$250,000 of the work by June 18, 2010. The Toronto-based junior also said it has committed to fund and complete an NI 43-101 compliant report on the property by Jan. 31, 2010. Once Alder earns a 60 percent stake in the Canadian Creek property, the owners will pursue the work as a joint venture.

CARIBOO ROSE June 8 said it acquired the core claims at Canadian Creek in 1993 and expanded the property with the acquisition of a number of claims from Pacific Sentinel Gold in 2000. Since 1993 about C$2 mllion has been spent developing 15 kilometers of road access, completing 24 diamond drill holes covering 3,796 meters, conducting extensive magnetometer and induced polarization surveys and collecting and analyzing 1,647 soil samples. There are three exploration target types on the property: (1) bulk tonnage (intrusion related) gold deposit; (2) an untested gold arsenic soil anomaly which has a similar signature and setting to Underworld's White Gold discovery and; (3) a classic "Arizona-style" copper-gold-molybdenum porphyry deposit related to the adjacent Casino deposit owned by Western Copper Corp. Bulk tonnage style gold mineralization was first identified at Canadian Creek in 1993 when an excavator trench exposed 40 meters of mineralized rock grading 0.57 g/t gold, including 10 meters grading 1.69 g/t. A diamond drill hole completed in 1993 intersected 150 meters grading 0.49 g/t gold, including 44 meters grading 0.71 g/t. A large area to the south, east and west of the drilled area remains untested. An untested open-ended soil gold-arsenic (antimony) anomaly extending over two kilometers by one kilometer occurs northeast of the Koffee porphyry occurrence (now renamed the Coffee Can anomaly) in an area underlain by sediment and volcanic schists. Cariboo Rose said the recent discovery by Underworld Resources of bulk tonnage gold mineralization hosted by quartz sericite and biotite schist at its White Gold Project (Golden Saddle) suggests a similar setting. As is the case at the White Gold Project, the Coffee Can anomaly is associated with a strong soil arsenic response with a number of soil samples exceeding 1,000 parts-per-million arsenic. A float

see EXPLORERS page 20



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40 MILE

1.2 meters true width, averaging 24.8 percent zinc, 10.0 percent lead, 0.68 percent copper and 192.4 grams per metric ton silver.

"We got an average of 22 percent lead-zinc mineralization. The grade is exceedingly high and the metallurgy looks good," Williams said.

The mineralization occurs within dolomitized marble host rock, with the primary zone located adjacent to a fault zone. In the southwestern area of drilling, surface oxidation is locally variable in the upper zone. In some areas, the oxidation extends to over 200 meters below surface; the lower zone is typically less oxidized, with primary sulphide commonly located at surface. In the northeast, surface oxidation is much shallower. The thickness of mineralization can vary dramatically in CRD systems, with this variability common at LWM.

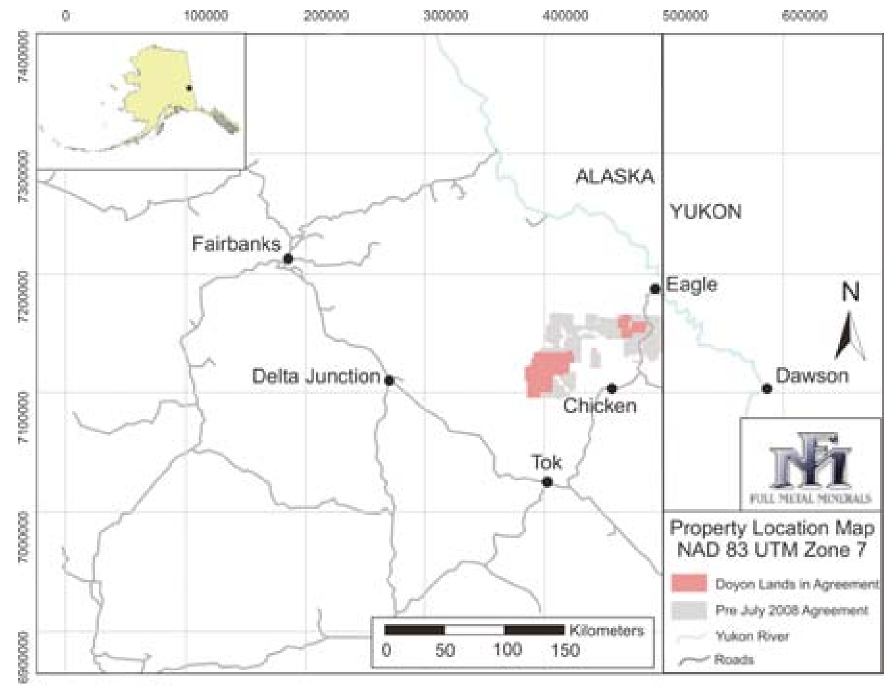
For 2009, Full Metal is focusing initially on further defining drill targets on the 40 Mile property, and will spend $300,000 on phase 1 of its exploration program.

"We're doing sampling and geological mapping right now, and we're contemplating doing some geophysical work later this year and maybe some drilling later this year," Williams said. "We think we will be in great shape to drill next year."

Market conditions are changing, and Full Metal hopes to capitalize on an anticipated shift in supply-demand dynamics.

"We think we're heading into a zinc market," Williams said. "We need some of these zinc mines out there to close, which will tighten up the supply. Full Metal has a good leg up because our zinc assets in Alaska are as good at it gets.

"Mining is a funny business. It's all about timing," he added. ●



The 40 Mile Project is located in eastern Alaska about 260 kilometers, or 161 miles, east of Fairbanks, near the community of Chicken. In 2006, Full Metal Minerals Corp. signed a lease agreement with Doyon, Ltd. The lease grants Full Metal exploration and development rights to more than 242,000 acres, or 100,415 hectares, of Doyon land containing numerous lead-zinc-silver targets as well as prospective gold and copper showings.

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RUSH

here," he said. "The companies are coming in. We're also getting the riffraff, like we did in the original Gold Rush."

Ryan's company, Ryanwood Exploration Inc., staked the area currently being explored and optioned the initial claims package for the White Gold Project to Underworld.

He said he currently is working with four other companies.

"We just recorded over 2,200 claims," he said and added that more work is planned.

"We've got four helicopters going and over 30 guys are in the bush – ground staking rather than paper staking. That's what is fun about it."

Ryan said miners are beginning to re-evaluate all of the creeks in the area.

"We're getting ready to launch a big program this summer. While we had eight to 10 guys last summer, we will have 22-24 people on staff this year, doing soil sampling, lightweight trenching and magnetic surveys," he added. "It's just getting going."

Leading the parade

Explorers seeking to mimic Underworld's exploration success range from newcomers to longtime explorers in the territory, and some of them have already benefitted from the rush.

"Companies are staking all around the Underworld discovery and doubling their market cap in the process," said Underworld's Williams.

While the discovery was centrally located on the White Gold claims, Underworld added to the claims package last fall and in January as its geologists began to comprehend the geological signature of the deposit," Williams said.

"Our guys did a pretty good job. On a scale of 1-10, I'd say were at an 8 or 9 in getting the claims we wanted," he said. "That's not to say some of the other guys don't have discoveries on their properties. But it's good to be in the lead. You don't want to be a spectator on this one." ●

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EXPLORERS

sample of quartz-sulphide veining discovered in 1993, along strike from the geochemical anomaly but off-grid, returned 6.6 g/t gold and 51.0 g/t silver associated with sulphides including arsenopyrite. Cariboo Rose also said it is planning a summer exploration program on the Canadian Creek property.

ATAC RESOURCES LTD. June 10 said it entered into an option agreement that will allow Arcus Development Group Inc. to earn a 50 percent interest in the Green Gulch, Touleary, Dan Man and Shamrock gold properties, which collectively comprise the Dawson Gold Project. Properties that make up the Dawson Gold Project either directly adjoin or are in close proximity to claims hosting Underworld Resources' recent White Gold discovery in central Yukon (See Underworld's news release dated May 26, 2009 for additional information).

"ATAC continues to implement its project generating business model of identifying early- to mid-stage precious metal opportunities and finding strong partners to advance them." stated Graham Downs, Chief Executive Officer of ATAC. "The optioning of the Dawson Gold Project to Arcus falls directly in line with our corporate objectives and we look forward to working with them in an emerging gold district."

Under terms of the agreement, Arcus can earn a 50 percent interest in the Dawson Gold Project by making cash payments totaling C$185,000, issuing a total of 1 million of its shares to ATAC and completing a total of C$3.5 million in work expenditures, all over a three-year period. Arcus will be the operator until it earns a 50 percent interest in the project. Following earn-in, a joint venture will be formed to explore the project, ATAC said.

Though the Dawson Gold Project agreement is conditional upon Arcus completing a financing of not less than C$1 million, exploration is starting immediately, subject to a clause concerning reimbursement.

STRATEGIC METALS LTD. June 9 outlined its exploration plans for summer and fall 2009. Work will focus on projects with significant precious metal potential. Initially, surface work will follow-up encouraging results from previous programs to identify the best targets for trenching or drilling later in summer or fall. Key prospects that will be evaluated include Eureka, a road accessible project located in the South Klondike gold district about 50 kilometers north of the White Gold discovery. Strategic said gold at Eureka is hosted in a series of gently to moderately dipping breccia zones developed within schists and gneisses. Strong gold-in-soil geochemical values obtained from widely spaced sampling have outlined a 6-kilometer-long by up to 2-kilometer-wide anomaly. Excavator trenching and shallow reverse circulation drilling in a 700-meter by 150-meter area within the soil anomaly intersected several subparallel zones that are each 2 meters to 20 meters wide and typically graded between 0.3 and 2 g/t gold. Creeks draining the property are prolific placer gold producers, Strategic added.

PACIFIC RIDGE EXPLORATION LTD. June 9 said the company has staked 212 mineral claims comprising three properties containing gold exploration targets in proximity to Underworld Resources' gold discovery at the White Gold property south of Dawson City. Pacific Ridge said its gold target selections have been based on review of historic exploration data in the company's files as well as management's prior experience in the region that dates back to 1969. The junior said it also will report further after additional property acquisitions may be completed and details of the company's 2009 Klondike exploration program are finalized. Pacific Ridge also said it had C$939,400 in working capital as of March 31.

KAMINAK GOLD CORP. June 8 said it increased its summer work program on the Coffee and Kirkman properties located in the newly recognized "White" gold district in the west-central Yukon. An initial phase-1 trenching program, budgeted at C$500,000, is expected to begin in early July. The Phase One program will target high-priority gold geochemical anomalies that are analogous to Underworld Resources Inc.'s newly discovered White Project where a new mineralized gold system has been revealed. Contingent upon trenching results, Kaminak has funding in place to complete a second-phase diamond drilling program this season. "Given the recent developments in the White District, we feel it is important and advantageous to step-up our efforts as quickly as possible," said Kaminak President and CEO Rob Carpenter. "We will aggressively evaluate our priority targets in 2009." The primary target on all three properties is a near-surface, bulk-tonnage gold deposit analogous to Underworld Resources Inc.'s White Project, which is located only 8 kilometers, or 5 miles, from Kaminak's Kirkman property and 27 kilometers, or 17 miles, from Kaminak's Coffee and Cream properties. On Kaminak's Coffee property, more than 1,250 soil samples have been collected and results have outlined a core anomaly measuring 1.5 kilometers by 2 kilometers, which is characterized by a strong geochemical signature defined by gold (highest threshold from 80 to 839 parts per billion), Arsenic (100 to 1,758 ppm) and antimony (8 to 117 ppm). Two smaller grids also were established along the regional strike situated 2.5 kilometers east and 4.5 kilometers west of the core grid. Both grids outlined anomalous gold values with the highest threshold values on the western grid ranging from 50 to 643 ppb gold, and values on the eastern grid ranging from 50 to 148 ppb gold. The three separate grids are demonstrating anomalous gold values over a linear length of 10 kilometers. Kaminak said the results indicate that the size and intensity of the new Coffee soil anomaly is the largest new gold-in-soil anomaly in the White gold district. Compelling soil geochemical anomalies also occur on the Cream and Kirkman properties, the junior added.

RIMFIRE MINERALS CORP. and **NORTHGATE MINERALS CORP**. also reminded investors recently that they discovered gold mineralization at the Boulevard Property in west-central Yukon Territory last summer. The discovery was made during a trenching program to investigate a 1.2-kilometer-by-0.4-kilometer gold-arsenic-antimony soil geochemical anomaly. Gold mineralization was discovered in two trenches (TRBV08-01: 7.04 g/t gold over 6.0 meters). Mineralization does not outcrop and no prior gold showings exist on the Boulevard Property. The Boulevard was staked in partnership with Northgate Minerals under the terms of a strategic alliance (signed in December 2005) to explore for gold deposits in west-central Yukon. Each party agreed to half of a C$330,000 reconnaissance exploration program to identify and acquire gold targets, of which the Boulevard was one. Detailed soil geochemical sampling in 2007 led to the identification of the soil anomaly targeted in the 2008 trenching. Additional soil geochemical sampling in 2008 has expanded the anomaly and it remains open for expansion. ●

NORTH OF 60 MINING NEWS

Companies involved in Alaska and northwestern Canada's mining industry

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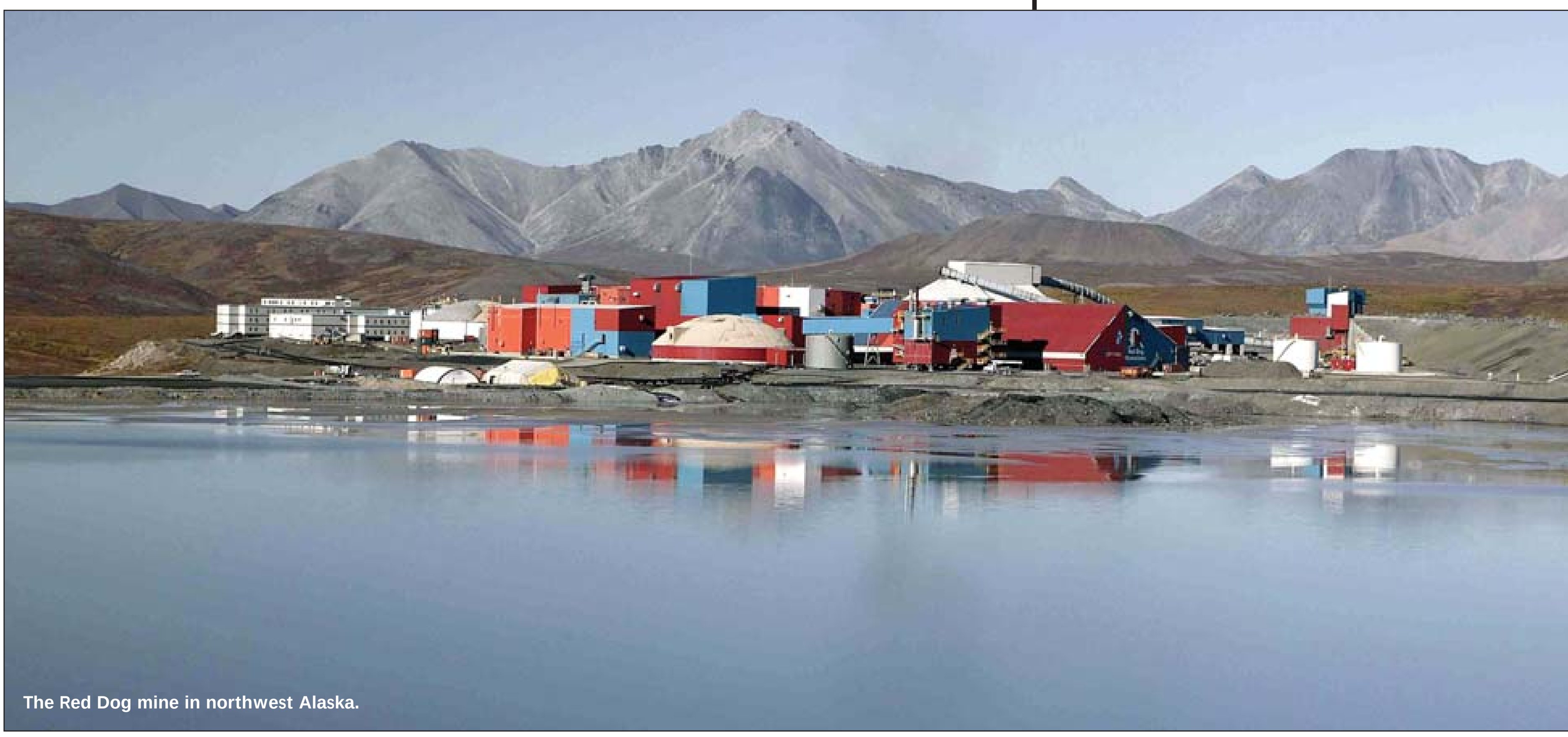

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This delicate, crystallized gold specimen found in Colorado was formed from superheated gold-bearing water. Crystallized gold specimens like this are extremely rare in nature.

continued from page 11

EXHIBIT

hands, neck, shoulders sore and chafed from rope. But boys, don't think I'm discouraged … there is a glimmer of gold in the distance!"

Modern explorers

Modern explorers continue to discover rich deposits of the glimmering metal as they retrace the steps of the pioneer prospectors. These new caches are rarely placer deposits of gold dust and nuggets found in streams or beaches, but instead are deposits of rock-bound microscopic gold that over time fed the placer deposits across Alaska.

A quartz-pebble boulder containing disseminated gold is on display at the "Gold" exhibit, providing visitors with insight into what the 21st century gold miner is seeking.

The Fort Knox Mine near Fairbanks is currently anticipated to extract about 3 million ounces of microscopic gold from such rock. A nearby stream is the site of the 1902 gold discovery that led to the establishment of Fairbanks, Alaska's "Golden Heart City."

Golden dawn

Aurum, which means golden dawn, is the Latin word for gold. Financial uncertainty and gold prices nearing US$1,000 per ounce are creating a new aurum for exploration companies looking for gold rich deposits in Alaska.

Though gold has lost its status as a currency in the modern monetary systems, its position as a secure symbol of wealth has not left the human psyche. Investors, large and small, turn to gold as a safe haven for their fortunes today, just as they did during past recessions and economic downturns.

In the current recession which has taken down banks and automobile manufacturers once considered pillars of the U.S. economy, many investors are once again looking to amass gold as a way to secure wealth. And like Alaska's historic gold rush, investments are being channeled to prospectors seeking to unlock the golden treasures of Alaska's mineral-rich landscape.

The "Gold" and "Pay Dirt" exhibits are reminders of the important role gold has played throughout history, and how a remote frontier territory was swept into the 20th century as cities and supporting infrastructure sprung up seemingly overnight as adventurers drawn by the lure of gold rushed to Alaska to unlock the treasures of this vast and rugged land.

The exhibits are open for exploration at the newly expanded Anchorage Museum 9 a.m. to 6 p.m. daily, closing on Thursdays at 9 p.m. Museum admission is $8 for adults and $7 for seniors, military and students. The "Gold" exhibit, curated by the American Museum of Natural History, is an additional $12 for adults and $5 for children 3–17. ●

PHOTO TAKEN BY O.D. GOETZE, COURTESY OF THE ANCHORAGE MUSEUM

These gold bars, sacks of gold coins and buckets of ore from the Miners and Merchants Bank in Nome were worth US$1.2 million when this picture was taken in 1906. Today the pictured gold would be worth nearly US$60 million.

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The Anchorage Museum of Art and History has a London Good Delivery bar, also called a "400-ounce" bar, on display in its "Gold" exhibit. About 2.4 million LGD bars, or 960 million ounces of gold, are held by central banks, many of whom loan or sell LGD bars to international bullion banks.