Petroleum news

page 3 Point Thomson owners say terminate if milestones not met

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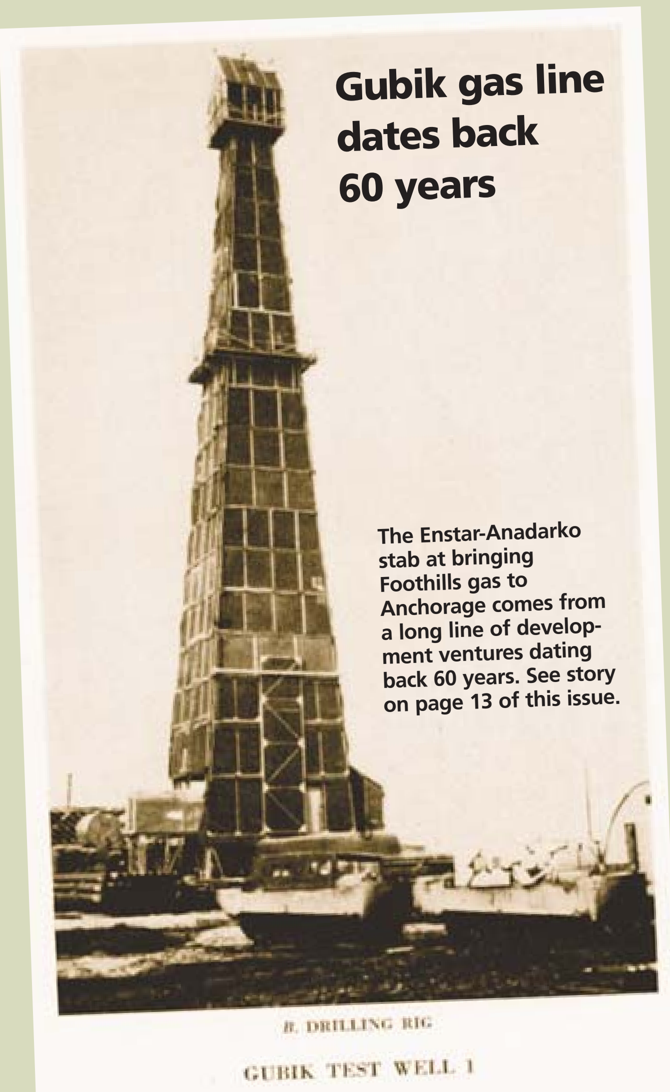

Gubik gas line dates back 60 years

The Enstar-Anadarko stab at bringing Foothills gas to Anchorage comes from a long line of development ventures dating back 60 years. See story on page 13 of this issue.

U.S. claims two-thirds of Canada's oil and gas output

Canada posted record crude oil and equivalent output in 2007 and logged a marginal decline in natural gas production, with almost two-thirds of the total volumes ending up in the United States.

Crude rose 4.2 percent from 2006 to a record 1.01 billion barrels, or 2.77 million barrels per day and gas declined 2.1 percent to 5.92 trillion cubic feet or 16.2 billion cubic feet per day.

see **OUTPUT** page 18

Legislators ask Palin to prepare lawsuit against producers for holding North Slope gas hostage

Nine Democratic members of the Alaska House have asked Gov. Sarah Palin and Attorney General Talis Colberg to begin preparation to force North Slope leaseholders to sell natural gas into an economic pipeline project.

"For the last three years the major oil companies have done more to block a gas line than anyone," said Anchorage

see **LAWSUIT** page 18

BREAKING NEWS

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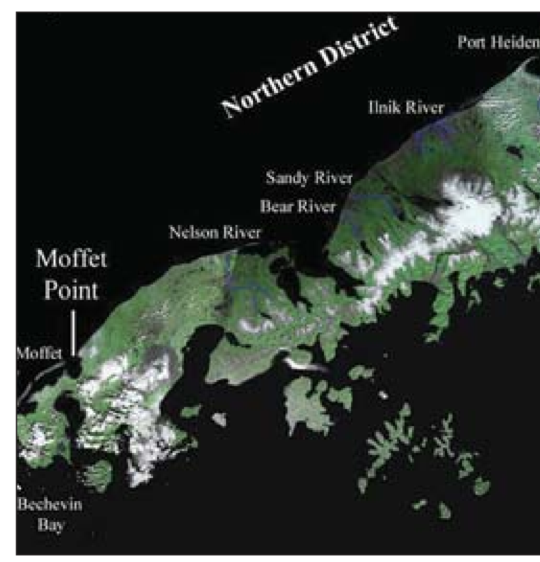
EXPLORATION & PRODUCTION

Benefits and risks

Oil and gas development could reinvigorate Alaska's Bristol Bay region

By ALAN BAILEY

Petroleum News



It's been 20 years since the last oil and gas lease sale in the U.S. Minerals Management Service North Aleutian planning area in the southeastern Bering Sea on the north side of the Alaska Peninsula. And the prospect of another MMS lease sale in the area, following the January 2007 lifting of a federal moratorium on oil and gas leasing in the Bristol Bay region, has triggered a contentious debate on the merits and pitfalls of oil and gas development in the area.

The North Aleutian Basin Energy-Fisheries Workshop held in Anchorage March 18 to19 provided an opportunity for a wide variety of people to

see **BRISTOL BAY** page 8

EXPLORATION & PRODUCTION

Newfoundland gets fresh lift

White Rose, Terra Nova may expand; optimism for discovery off west coast

By GARY PARK

For Petroleum News

Every bit as turbulent as the Atlantic Ocean that pounds its shoreline, Newfoundland finds itself in a rare condition these days as hope builds on a number of fronts — possible expansion of its White Rose and Terra Nova projects, renewed optimism in its unending quest for a commercial discovery off its west coast, the next phase of exploration in the highly prospective Orphan basin and a chance that throughput at its sole refinery could be increased by one-third.

But it's not all plain sailing, with ConocoPhillips Canada President Kevin Meyers suggesting the province's new regime that man-

Topping the list of developments lately has been a three-way deal by Husky Energy, Petro-Canada and StatoilHydro to secure the semisubmersible Henry Goodrich to Newfoundland for 24 to 30 months.

dates a minimum 10 percent stake in future projects for the government without sharing the exploration costs could cut into drilling plans.

Whatever unfolds, the region represents a small, yet significant element of energy security for the U.S. Northeast, with production capacity at

see **NEWFOUNDLAND** page 19

PIPELINES & DOWNSTREAM

Court upholds TAPS rate

Upholds RCA's tariff decision for 1986-96, says shippers' protest was untimely

By KRISTEN NELSON

Petroleum News

In 2003, following a successful protest of 1997 intrastate rates for shipping crude oil on the trans-Alaska oil pipeline, two shippers, Tesoro Alaska and Williams Alaska Petroleum, protested the 1986-96 rates.

While the Regulatory Commission of Alaska heard the 1996 protest on proposed 1997 rates — and ultimately agreed with the shippers that the rates were too high — it found the 2003 protest of the 1986-96 rates untimely.

Tesoro and Williams appealed the decision to the Alaska Superior Court, which remanded the case to RCA for further proceedings.

see **TAPS** page 18

JUDY PATRICK

The 800 mile trans-Alaska oil pipeline runs from Prudhoe Bay to the Port of Valdez.

contents

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● LAND & LEASING

Point Thomson settlement offered

Eastern North Slope unit's working interest owners offer milestones for work in 23rd plan of development; agree to termination if not met, but with conditions

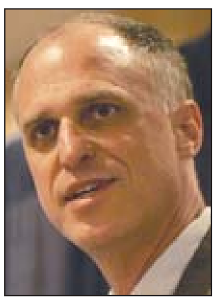
By KRISTEN NELSON

Petroleum News

The major Point Thomson unit owners — ExxonMobil, BP, Chevron and ConocoPhillips — have proposed a settlement in their dispute with the State of Alaska over the development of the unit.

The basis of the March 21 settlement proposal is the 23rd plan of development for the eastern North Slope unit that the owners put on the table in February.

The Alaska Superior Court and the Department of Natural Resources would have enforcement authority, based on proposed milestones; the penalty would be termination of the unit.



JUDY PATRICK

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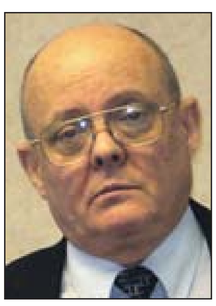

SHANE LASLEY

TOM IRWIN, DNR

DNR did terminate the unit in late 2006, based on an earlier rejection by the Division of Oil and Gas of a proposed 22nd plan of development. The owners appealed to the Alaska Superior Court which in late 2007 upheld DNR's rejection of the plan of development but returned the matter to the department for a hearing on appropriate remedies.

In February, the Point Thomson unit owners submitted a 23rd plan of development.

DNR held a hearing on remedies in early March and at that hearing the major Point Thomson owners discussed the 23rd POD and how it would be different than previous plans, emphasizing that, unlike earlier PODs, there are no alternatives — the 23rd POD says there will be production and lays out the proposed development plan and a timetable for the work.

Questions on commitment

At the hearing DNR Commissioner Tom Irwin and hearing officer Nan Thompson questioned the companies on their commitment to the development of Point Thomson and to the 23rd POD.

The companies testified that they are committed to the development plan and to putting the field on production.

In their post-hearing brief the companies said non-compliance with approved plans of development or unit expansion agreements by the working interest owners cited by Thompson during the hearing "were not situations where the WIOs failed to perform a promise" but situations where a POD or a unit expansion agreement gave the working interest owners a choice and they chose to pay rather than drill.

The companies said in their brief that such choices "are analogous to the 'drill or pay' leases that were once common in the oil and gas industry" which did not involve a promise to drill but rather a promise to drill or pay "and choosing one of the alternatives does not put the operator in breach of its obligations."

The 23rd POD, however, contains no such drill or pay option but is a plan going through to production.

On the Web

See previous Petroleum News coverage:

"A matter of trust: Companies testify on why DNR should accept a new Point Thomson plan," in March 16, 2008, issue at www.petroleumnews.com/pnads/220771379.shtml

"No off ramps: Exxon insists it will take Point Thomson to small-scale production by 2014," in March 9, 2008, issue at www.petroleumnews.com/pnads/320939019.shtml

"Exxon submits PTU plan: New development plan calls for condensate, oil to be produced before natural gas," in Feb. 24, 2008, issue at www.petroleumnews.com/pnads/369341493.shtml

"DNR calls for briefing on Point Thomson plan of development," in Jan. 13, 2008, issue at www.petroleumnews.com/pnads/534884139.shtml

"State wins lawsuit: Judge agrees with Alaska on 22nd Point Thomson plan; requires hearing on remedy," in Jan. 6, 2008, issue at www.petroleumnews.com/pnads/485989934.shtml

Milestones to production

The companies selected seven milestones:

• Award the contract for conceptual engineering on the initial production system within 30 days of approval of the 23rd POD;

• Begin drilling in the winter of 2008-09 and "thereafter diligently prosecute" the five-well drilling program described in the 23rd POD;

• Award the contract for front-end engineering design for the initial production system by June 30, 2009;

• Start procurement of materials by issuing purchase orders for equipment with long lead times by Sept. 30, 2010;

• Begin gravel installation for the initial production system in the winter of 2011-12;

• Award the contract for module fabrication for the initial production system by March 30, 2012; and

• Begin onsite installation of initial production equipment in the winter of 2012-13 "and thereafter diligently complete construction of the IPS facilities."

Subject to adjustment

The companies said in the proposed order that the timing of the milestones "is based on early engineering and may require adjustment which is subject to mutual agreement with DNR."

They also cited Article 25 of the Point Thomson unit agreement and said the time to achieve any milestone "shall be extended for any period of time" they are prevented from achieving the milestone by circumstances contemplated in Article 25, basically circumstances outside their "reasonable control … specifically including permitting and regulatory delays."

Article 25 lists a number of examples that could cause unavoidable delay: strikes; acts of God; federal, state or municipal law or agencies; unavoidable accidents; uncontrollable delays in transportation; inability to obtain necessary materials on the open market; "or other matters beyond the reasonable control of the Unit Operator whether similar to matters herein enumerated or not."

In the proposed settlement the companies said: "If Appellants fail to achieve any of the Milestones, and that failure is not excused by Article 25 of the Point Thomson Unit Agreement, the Court shall order termination of the Point Thomson Unit." The settlement does say that any party may appeal an order related to the failure to achieve a milestone or whether the milestone was excused by Article 25.

Tangled with fiscal contract

The Point Thomson unit was a part of the fiscal contract negotiated by the administration of Gov. Frank Murkowski under the Stranded Gas Development Act.

see SETTLEMENT page 20

FINANCE & ECONOMY

Abu Dhabi subsidiary TAQA North makes mark in Canada

TAQA North, the wholly owned unit of Abu Dhabi National Energy Co., has posted the first modest marker on the road to its 2012 goal of joining Canada's top 10 oil and gas producers. Following a US$7.5 billion shopping spree in 2007, TAQA Chief Executive Officer Peter Barker-Homek described the year as one of transformation from a domestic power utility in the Middle East to a "global energy franchise."

Total production last year was 7.25 million barrels of oil equivalent, at an average 19,867 boe per day, of which 5.13 million boe at an average 14,055 boe per day came from Canada, 65 percent of that natural gas and 35 percent oil.

The balance was contributed by Netherland's assets acquired from BP and the Brae assets in the British North Sea purchased from Talisman Energy, with 80 percent of that production coming from gas.

The parent company, 75 percent owned by the Abu Dhabi government, now operates in nine countries. In Canada, it notched a successful drilling year, completing 13 successful wells with a 92.9 percent success rate.

Having established a Canadian foothold, it is set to enjoy a full year of production from last year's takeovers of Northrock Resources, Pioneer Canada and PrimeWest Energy Trust — representing combined output of about 100,000 boe per day from deals worth C$7.5 billion, well on the way to the C$20 billion worth of assets it aims to control by 2012.

Its global objective is a US$60 billion oil and gas business by 2012.

—GARY PARK

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● FINANCE & ECONOMY

Upping the stakes through stocks

Environmental investing firm pushing shareholder proposal at ConocoPhillips meeting, hoping to prevent Teshekpuk Lake drilling

By ERIC LIDJI

Petroleum News

An environmental advocacy group is asking ConocoPhillips shareholders to weigh the potential environmental damage of oil and gas drilling around Teshekpuk Lake.

The Boston-based investment firm Green Century Capital Management Inc. submitted the proposal for the upcoming ConocoPhillips shareholder meeting in May.

Green Century Capital maintains a mutual fund portfolio of companies it considers environmentally responsible, but also uses its position as a shareholder in major companies like ConocoPhillips to push specific issues related to the environment, including "wilderness preservation and biodiversity."

"We have a dual aim, to make a profit and make a difference," said Erin Gray, head of marketing for Green Century Capital.

The proposal, if adopted, would have ConocoPhillips prepare a report on the possible environmental impacts of drilling in those parts of the National Petroleum Reserve-Alaska set aside in 1998.

The area covers around 600,000 acres of the Northeast Planning Area of the reserve around Teshekpuk Lake, and over the past decade has been a point of contention between environmental groups and the federal government.

Following the Energy Policy Act of 2005, which pushed for more domestic sources of oil production including Alaska, the Bureau of Land Management amended the 1998 decision to include the area around Teshekpuk Lake for future oil and gas drilling, pending environmental studies of the area.

Many consider the area to be a critical habitat for wildlife and subsistence resources in the Arctic and a coalition of environmental groups took the federal government to court over the decision, forcing BLM to conduct more research and cancel planned lease sales.

In August of last year, BLM released a draft of a supplemental environmental impact statement for the Northeast Planning Area, keeping Teshekpuk Lake on the table, but not recommending it as the preferred path for developing the area.

ConocoPhillips against the proposal

The ConocoPhillips board of directors is asking shareholders to vote against the Green Century Capital proposal, saying the report would not be "a beneficial use of Company resources."

That's partially because the future of Teshekpuk Lake is still uncertain. The final version of the new supplemental EIS and the subsequent record of decision aren't expected until later in the year.

That means any lease sale for Teshekpuk Lake would probably come under a new presidential administration, and none of the major candidates remaining in either party share the Bush administration's interest in drilling for oil and gas in Alaska.

ConocoPhillips also believes it has a "history of operating in sensitive areas around the world in a responsible manner."

Proposal symbolic in many ways

The Green Century Capital proposal is symbolic in many ways.

ConocoPhillips could agree to commission the report and still decide to drill around Teshekpuk Lake. Or, ConocoPhillips could decide to leave the Teshekpuk Lake area, only to have another company come in and drill.

Also, shareholder proposals only serve to advise or pressure the decisions of senior management; even if every shareholder at the annual meeting votes for a proposal, ConocoPhillips would not be required to implement it.

Gray agreed that the proposal is a good-faith effort in many ways, but said Green Century Capital's goal is to promote transparency and reporting, giving environmentally minded investors more information about companies.

Green Century Capital made a similar proposal last year and almost 27 percent of the shareholders present at the annual meeting voted in favor of it, which the company saw as a surprising victory and proof that shareholders outside the environmental community supported the idea.

"We see this as a real sea change in the oil industry," Gray said. "In the past it would have been unheard of for an oil investor to put an area off limits, in some people's mind."

Green Century not new to Alaska

Several years ago, Green Century Capital and other environmental groups pushed for the major oil companies to withdraw from Arctic Power, a lobbying group related to drilling in the Arctic National Wildlife Refuge. At least two companies dropped their membership in the organization, although it is unclear if the decision was prompted by the work of Green Century Capital.

"We have had a very longstanding interest in Alaska and the issue of wilderness preservation, and it's probably our longest on-going campaign and probably our most successful," Gray said. ●

● GOVERNMENT

Saskatchewan goes to the Wall

New government gives priority to competitive royalties, taxes; plans incentives to promote development, offset slide in output

By GARY PARK

For Petroleum News

The Alberta petroleum industry is starting to look across the fence into Saskatchewan with a mixture of curiosity and envy. And why not?

Governed for 16 years by the left-leaning New Democratic Party, Saskatchewan has been steadily displacing Alberta's conservative bastion as a model of how to run an oil and natural gas regime.

These days there's not much question about where E&P companies would prefer to do business.

Even before the NDP was turfed in a November election, the industry had credited a government steeped in socialist traditions with creating a pro-business climate.

In the run-up to the election, Derek Evans, chief executive officer of Focus Energy Trust, echoed an increasingly common refrain, describing Saskatchewan as having the best cost and royalty structures in the Western Canada Sedimentary basin, which embraces much of British Columbia, Alberta, Saskatchewan, Manitoba and a corner of the Northwest Territories.

That view has only gathered strength since the Saskatchewan Party under the leadership of 41-year-old Brad Wall romped home in the election and wasted no time putting word out to the industry that it had nothing to fear.

Governed for 16 years by the left-leaning New Democratic Party, Saskatchewan has been steadily displacing Alberta's conservative bastion as a model of how to run an oil and natural gas regime.

Wall: Looking to 'become more competitive'

In a January visit to Calgary, the headquarters of Canadian oil and gas companies, Wall walked into the middle of a fierce debate over the Alberta government's royalty overhaul at a time when companies were slashing their capital budgets by hundreds of millions of dollars.

He told one packed meeting that the only review his government would be likely to conduct would be one to ensure its regime was even more competitive on a national and global scale.

Wall's message is clear: He is determined to ensure that his province's economic recovery, which has relied heavily on the oil and gas industry, "translates into lasting prosperity."

"We're comfortable with our royalty structure the way it is now," he said. "What we're looking to do is become more competitive."

Concerned that Saskatchewan is "behind a little in developing our hydrocarbon assets," Wall said his strategy could include faster turnaround on permit applications and drafting a regulatory structure that is as conducive to nonconventional assets such as the oil sands, shale gas and shale oil as to more conventional assets.

Industry got reassurance

Gary Leach, executive director of the Small Explorers and Producers Association of Canada, whose member companies have been at the forefront of record land sales and activity in Saskatchewan, had a meeting with newly appointed Energy and Resources Minister Bill Boyd and his senior staff.

BRAD WALL

"The big elephant in the room was reassurance that we were seeking that Saskatchewan had no intention of visiting on the industry the calamity of the new royalty framework in Alberta," Leach said. "They provided the reassurance we were looking for."

Not only that, but the government delegation indicated it might be willing to introduce incentives for targeted activity, especially natural gas.

In addition, Wall said Saskatchewan will be looking for research and development partnerships with industry in enhanced oil recovery, where the province is already setting the pace in Canada with its funding for carbon capture and storage.

The first real test of Wall's pledges came March 19 when the 2008-09 budget contained some potentially disturbing numbers.

Dependent on the oil and gas sector for 20 percent of its revenues, Saskatchewan pointed to a sharp downturn in industry revenues for the upcoming year to C$1.36 billion, off C$326 million from its 2007-08 projections.

Oil revenue from 429,000 barrels per day is budgeted at C$1.05 billion, off C$98.1 million from last fiscal year; natural gas returns from 658 million cubic feet per day are almost unchanged at C$118 million; but government land sales are expected to slump to C$192.5 million from last year's record C$418.9 million, as land prices return to more moderate levels after a rush to corner Bakken and Lower Shaunavon rights.

Trends all downhill

The trends over the next four years are all downhill, with conventional oil production dropping 3 percent to 415,800 bpd, natural gas sliding 20 percent to 554 million cubic feet per day and land sales nosediving 48 percent to C$101 million.

Instead of trying to recoup those losses by hiking its royalties and taxes, Saskatchewan headed in the opposite direction.

It earmarked C$829 million for resource-related capital and infrastructure spending to encourage continued oil and gas growth.

Finance Minister Rod Gantefoer, without specifically fingering Alberta, said Saskatchewan has "seen the problems and pressures that can arise when an aging infrastructure falls behind the pace of growth. Those same pressures are now emerging in Saskatchewan … (and) we must be ready for growth."

For Wall, that means leaving existing royalties untouched while positioning his province to encourage sustainable development of its oil sands resources.

"There's a lot of room for new investment (in an area covering about 7,000 square miles) and the energy science and technology associated with it," he said.

"Our oil sands could offer tremendous opportunities for economic growth if they are properly developed."

Paul Michael Wihbey, a Washington-based energy strategist, bolstered that view, saying Saskatchewan's "research into oil extraction, combined with its stable government and untapped resources, are its top selling points."

"It will be a driving force in how this new world market in oil will be defined," he said.

Wall insists he "wants others outside our borders to know about this very secure, politically stable supply of energy."

Oilsands Quest exploring aggressively

To that end, hopes are pinned on Calgary-based startup Oilsands Quest, which has been on an aggressive exploration and delineation program since 2004, with preliminary estimates pointing to as much as 1.5 billion barrels of bitumen in place.

While conceding there is a question mark hanging over how much is economically recoverable, Wall is already gearing up to enhance low royalty rates with "updated and competitive" regulations for its oil sands and oil shales.

In addition, he is ready to build on Saskatchewan's record of investing in carbon capture and storage to improve prospects for oil sands development as well as supporting research and new technologies to unlock a whole range of light, medium and heavy crudes that are part of the province's estimated 39 billion barrels of initial oil in place, of which more than 30 billion barrels is considered beyond commercial reach for now and only 5.2 billion barrels is rated as economically recoverable using conventional means and proven technology.

How the tale of two neighboring provinces unfolds will be closely followed by an industry that feels the time it has invested in explaining the nature of its business and what it can contribute in jobs and revenues is paying off in Saskatchewan.

The same applies to natural gas, where the potential has been estimated at 9 trillion cubic feet, of which 3.5 tcf is deemed recoverable.

Wall said that if technological advances can increase recovery rates by just 5 percent, Saskatchewan's remaining recoverable reserves would more than double.

How the tale of two neighboring provinces unfolds will be closely followed by an industry that feels the time it has invested in explaining the nature of its business and what it can contribute in jobs and revenues is paying off in Saskatchewan.

It hopes there is a message for Alberta, which still has time to adjust its royalty framework before the final regulations are released this spring. ●

INTERNATIONAL

Venezuela looks to impose new tax on oil

Venezuela will soon impose a new tax on oil companies aimed at recouping a larger share of their rising profits, President Hugo Chavez said March 24.

The new levy will be a tax on "unexpected earnings" generated by the steep rise in world oil prices, Chavez said. His administration has readied a bill outlining the new tax — although he said it has not yet determined what the tax rate will be.

"They're earning money that they haven't accounted for," Chavez said in a televised speech. "Those large additional earnings aren't a product of any extraordinary effort. ... It isn't that they've invested more."

The move by Venezuela comes after the U.S. House of Representatives in February approved $18 billion in new taxes on the largest oil companies, with Democrats citing record oil prices and rising gasoline costs in a time of economic troubles.

The White House, however, said the bill unfairly takes aim at the oil industry. President Bush is expected to veto the legislation if it passes Congress.

Venezuela's socialist president, who has mentioned plans for the tax before, could approve the country's new tax by decree under fast-track powers that the National Assembly granted him last year. Those powers expire in July.

Chavez has moved to increase state control over the oil industry in recent years, while letting foreign companies stay on as minority partners in oil fields they once managed under contract.

Royalties raised in 2005

In 2005, Chavez raised royalty rates to 30 percent from 16.6 percent on foreign firms operating heavy oil projects in the crude-rich Orinoco River region, and last year the government assumed majority control of those projects.

Companies operating in Venezuela include U.S.-based Chevron Corp., France's Total, Britain's BP PLC and others.

Chavez said the idea for a new tax arose from a conversation with Joseph Stiglitz, the 2001 Nobel Prize winner for economics.

"Those who are going to criticize me, well criticize me, but they'll be criticizing the Nobel laureate in economics Joseph Stiglitz," Chavez said.

Soaring oil prices have been linked to the falling value of the dollar, Chavez noted, blaming the U.S. slowdown on the "imperialist ambition of the president of the United States, among other things."

Chavez has called the U.S. war in Iraq an attempt to seize control of that country's oil.

—THE ASSOCIATED PRESS

● PIPELINES & DOWNSTREAM

Upgrade work starting on pump station 4

Alyeska now beginning the third of four pump stations slated for improvements, hopes to have vibration issues under control

By ERIC LIDJI
Petroleum News

The Alyeska Pipeline Service Co. is getting ready to tackle the third pump station slated for revamping.

Construction crews plan to start work in May on a temporary housing camp at Pump Station 4 on the trans-Alaska oil pipeline near Atigun Pass around milepost 250 of the Dalton Highway.

The temporary camp will sit on the spot of the original Atigun Construction Camp, deconstructed and re-vegetated 30 years ago after construction finished on the trans-Alaska oil pipeline.

Delta Leasing, LLC will build and operate the camp.

Around 50 people are currently at the site, and the camp is expected to swell to around 100 or 150 during peak construction, according to Alyeska spokesman Mike Heatwole.

Heatwole said the work is expected to be complete by the first quarter of 2009.

Currently, the plan is awaiting a "fast track" air quality control minor permit from the Alaska Department of Environmental Conservation, which is taking comments through April 3.

Part of Strategic Reconfiguration

The camp will support upgrades related to Strategic Reconfiguration, a multimillion-dollar project to improve the efficiency of the pipeline at a time when daily throughput is about one-third of the peak hit 20 years ago.

A large part of the work involves changing out the diesel generators with electric generators better able to power up and down with the amount of oil moving through the line.

Alyeska has already completed 45 percent of the work on Pump Station 4.

Although the Strategic Reconfiguration program is behind schedule and overbudget, Alyeska has made progress in recent years, completing work on Pump Station 9 near Delta Junction and Pump Station 3, north of Atigun Pass.

After completing work on Pump Station 4, Alyeska will move on to Pump Station 1, the last of the four stations slated for upgrades.

When the Strategic Reconfiguration program began, Alyeska originally tried working on all four stations at once, but decided to halt work and continue sequentially. At the time, the company had completed 45 percent of the work on Pump Station 4, Heatwole said.

Part of the reason behind tackling the four pump stations one after another, rather than all at the same time, was to keep from repeating mistakes.

Both Pump Station 9 and Pump Station 3 experienced technical problems following the changeover, including vibrations along the pipeline.

Heatwole said Alyeska has those technical issues in mind at Pump Station 4.

"We're reviewing designs right now at Pump 4 and as applicable we'll be making modification there," Heatwole said.

Heatwole said the pipeline experienced similar vibrations during the original startup back in the 1970s. ●

FINANCE & ECONOMY

Citigroup predicts rising steel prices

Despite talks of a looming or growing recession, steel prices continue to climb to record levels, prompting analysts with Citigroup to predict "a period of higher prices, margins, and earnings, with shares damped by pessimistic multiples compression until the U.S. economy stops deteriorating."

As of March 24, the price of hot rolled coil, or HRC, was $800 per ton, up from a 2007 peak of $580 per ton, and the price of cold rolled coil, or CRC, was $880 per ton, up from a 2007 peak of $680 per ton. The price of rebar was also above 2007 peak prices.

The Citigroup analysts expect those price hikes to "stick," but added "optimism should be tempered by the recognition that little volume is likely being transacted at record-high prices, that most of the gains are cost-driven, and that it will take time for these prices to flow through the broader customer base to lift company-average realizations."

Calling previous forecasts "conservative," the analysts now predict HRC prices for 2008 at $743 per ton, up from $550 per ton, and CRC at $840 per ton, up from $650 per ton. For 2009, they predict prices in the $700 to $800 per ton range and for 2010, those estimates drop again to the $650 per ton to $750 per ton range.

—ERIC LIDJI

● FINANCE & ECONOMY

Crude tops $107 on Iraq bombing, supply concerns

By JOHN WILEN

Associated Press Writer

Oil futures shot back above $107 a barrel Thursday, March 27, after the bombing of an Iraqi oil pipeline diverted investors' attention away from a stabilizing U.S. dollar.

Retail gas prices, meanwhile, inched up overnight while diesel prices slipped.

The bombing of a key Iraqi oil pipeline Thursday morning appeared to cut oil exports from the southern oil city of Basra, despite oil officials' statements to the contrary. Dow Jones Newswires reported that exports from southern Iraqi terminals have been reduced to about 1.2 million barrels a day from a normal rate of 1.56 million barrels a day.

"We're going to be getting less oil because of the explosion," said James Cordier, founder of OptionSellers.com, a Tampa, Fla., trading firm. For traders, the big factor is that Iraqi oil supplies were cut by a deliberate act of terrorism, Cordier said. That raises the prospect of more attacks, and less oil.

Light, sweet crude for May delivery rose $1.68 to settle at $107.58 a barrel on the New York Mercantile Exchange after earlier rising as high as $108.22. Crude futures, also aided earlier in the week of March 23 by a flagging U.S. dollar, are up 6.6 percent since Monday, March 24.

The news from Iraq added to supply concerns stoked Wednesday, March 26, when the government reported that domestic crude oil inventories were mostly unchanged the previous week, while fuel supplies fell more than expected.

The supply issues temporarily drew investors' attention from the dollar, which rose slightly against the euro, reversing a trend that sent oil futures surging nearly $5 on Wednesday. A stronger dollar makes hard assets such as energy commodities less attractive as a hedge against inflation than when the greenback is falling. Exacerbating the impact of foreign exchange moves, oil futures are priced in dollars, making them more expensive to investors overseas when the greenback rises.

Despite Thursday's strength, analysts expect the dollar to soon resume its decline against foreign currencies. The Federal Reserve is expected to cut interest rates several more times this year, and lower rates tend to weaken the dollar.

"I think crude oil is easily going to be testing $120 (in coming weeks)," Cordier said.

At the pump, meanwhile, gas prices rose 0.6 cent Thursday to a national average of $3.267 a gallon, according to AAA and the Oil Price Information Service.

The Energy Department expects gas prices to peak near $3.50 this spring, but many analysts think prices will rise even higher than that. ●

● INTERNATIONAL

Russia arrests two dual US-Russian citizens

By JIM HEINTZ

Associated Press Writer

Russia has charged two brothers with dual Russian-U.S. citizenship on charges of gathering secret information aimed at giving foreign oil companies a competitive advantage, according to the Federal Security Service.

The service said March 20 that one of the men was an employee of TNK-BP, a major Russian oil company half-owned by British Petroleum and that the other, his brother, was an employee of the British Council, the overseas cultural arm of the British government.

A British Embassy spokeswoman, however, said the latter man, Alexander Zaslavsky, was not a council employee, but a member of the "Alumni Club," a group set up by the council for Russians who have studied in Britain.

Russian relations with Britain have been especially troubled since the 2006 murder of renegade FSB agent and Kremlin critic Alexander Litvinenko, who was poisoned with a rare radioactive substance in London.

The U.S. Embassy declined to comment.

Police searched the Moscow offices of BP and TNK-BP March 19.

"We do not condone illegal activities nor do we rely on unfair competitive practices," TNK-BP said in a statement. "We continue to cooperate with the Russian authorities to resolve any current issues, using the established Russian processes."

The searches turned up "business cards of representatives of foreign defense departments and the (U.S.) Central Intelligence Agency," according to a statement from the Federal Security Service, or FSB.

It was not clear whether either of the arrested brothers was believed to have foreign intelligence connections.

They were arrested "in an attempt to receive confidential information, commercial secrets, from a Russian citizen" who was an employee of a leading Russian oil company, the FSB said.

The information was intended "for the use of foreign oil and gas companies with the goal of obtaining a concrete advantage over Russian competitors," the FSB said.

The arrests are likely to raise tensions between the Kremlin and Britain and the U.S.

Russian-British relations troubled

Russian relations with Britain have been especially troubled since the 2006 murder of renegade FSB agent and Kremlin critic Alexander Litvinenko, who was poisoned with a rare radioactive substance in London.

Russia has refused to extradite the man identified by Britain as the main suspect in the case, and each country has expelled some of the other's diplomats in connection with the dispute.

Russia ordered the closure of British Council branch offices in St. Petersburg and Yekaterinburg this year. The council acts as the British government's cultural arm overseas, but Russia contends it is a commercial operation.

Litvinenko was a close associate of Boris Berezovsky, the Russian tycoon who fled to Britain and received asylum after becoming a Kremlin critic. Russia has repeatedly sought his extradition.

On March 20, Russia charged Berezovsky in absentia with lying in his claims last year that Russian agents had tried to kill him.

Pressure to produce

TNK-BP came under massive official pressure last year, when government regulators said it was not meeting production targets at a giant Siberian gas field and threatened to withdraw its license.

The Kremlin has increased pressure on foreign energy companies in recent years as part of its effort to consolidate control over the country's largest and most important hydrocarbon deposits.

BP agreed in June to sell its stake at the Kovykta gas field to state gas monopoly OAO Gazprom, but talks on the price have continued.

Some observers suggested that the March 19 searches could be part of Gazprom's efforts to pressure the British oil company into lowering the price. It added that another state energy company, OAO Rosneft, could also be interested in buying some of TNK-BP assets.

Searches and the confiscation of documents accompanied a massive government crackdown on the Yukos oil company, which ended with an eight-year prison sentence for its founder, Mikhail Khodorkovsky, and the transfer of its assets into state hands. ●

EXPLORATION & PRODUCTION

'Structural anomalies' delay Neptune in Gulf

Australia's BHP Billiton, during a routine inspection just prior to the startup of the Neptune tension leg platform in the deepwater Gulf of Mexico, said it found "structural anomalies" in the hull, causing a delay in first oil and gas production that was initially scheduled to come on-stream by the end of March.

Neptune is the third high-profile deepwater U.S. Gulf project in the last two years to miss a scheduled startup due to unexpected subsea problems. BP announced a delay at its Thunder Horse development in August 2006, citing issues with leaks on manifold welds. Thunder Horse represents the largest-ever oil discovery in the Gulf, with reserves of around 1 billion barrels. Additionally, Chevron sidelined its Tahiti project last June, citing concerns about the shackles on mooring lines.

Further inspection under way

BHP announced March 24 that further inspection and assessment of Neptune's hull was under way "to determine the appropriate course of action to mitigate the anomaly."

"The company is currently assessing all the options in order to re-commence startup activities," the company added. However, BHP did not provide a new timeline for field startup.

As a safety precaution, BHP initially removed all personnel from the facility until it could assess the problem. Since performing "a rigorous analysis," BHP said it "confirmed the facility was safe for crews to return to work and crews began boarding the platform March 24."

Neptune is about 120 miles off the Louisiana coastline. It is a single-column tension leg platform and was installed in 4,250 feet of water on Green Canyon block 613. The Neptune field actually comprises five blocks: Atwater Valley 573, 574, 575, 617 and 618 where water depths range from 4,200 to 6,500 feet.

The Neptune tension leg platform is designed to handle 50,000 barrels of oil per day and 50 million cubic feet of natural gas per day. BHP is the designated operator of the field with a 35 percent interest. Partners include Marathon Oil Co. (30 percent), Woodside Energy (USA) Inc. (20 percent), and a subsidiary of Woodside Petroleum Ltd., Maxus (U.S.) Exploration Co. (15 percent).

—RAY TYSON

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BRISTOL BAY

hear about and discuss many of the issues relating to oil and gas development in the region. Organized under the auspices of the University of Alaska Fairbanks Alaska Sea Grant College Program, the workshop sought to identify future impacts of oil and gas industry activities on commercial and subsistence fishing, and the associated research needed in advance of the proposed lease sale.

Several organizations including Shell Oil, the University of Alaska and MMS funded the workshop.

MMS has estimated that there may be 8.6 trillion cubic feet of technically recoverable natural gas and 753 million barrels of technically recoverable oil and condensate in the North Aleutian Basin.

Early stage

But John Goll, director of the MMS Alaska region, told workshop participants that the process for determining whether a North Aleutian Basin lease sale would take place was at an early stage and that there is no guarantee that a sale will occur.

"What we are starting here is really a long process … looking at all of the issues, and decisions on whether the sale will be held or not will not be made for about two years or more," Goll said.

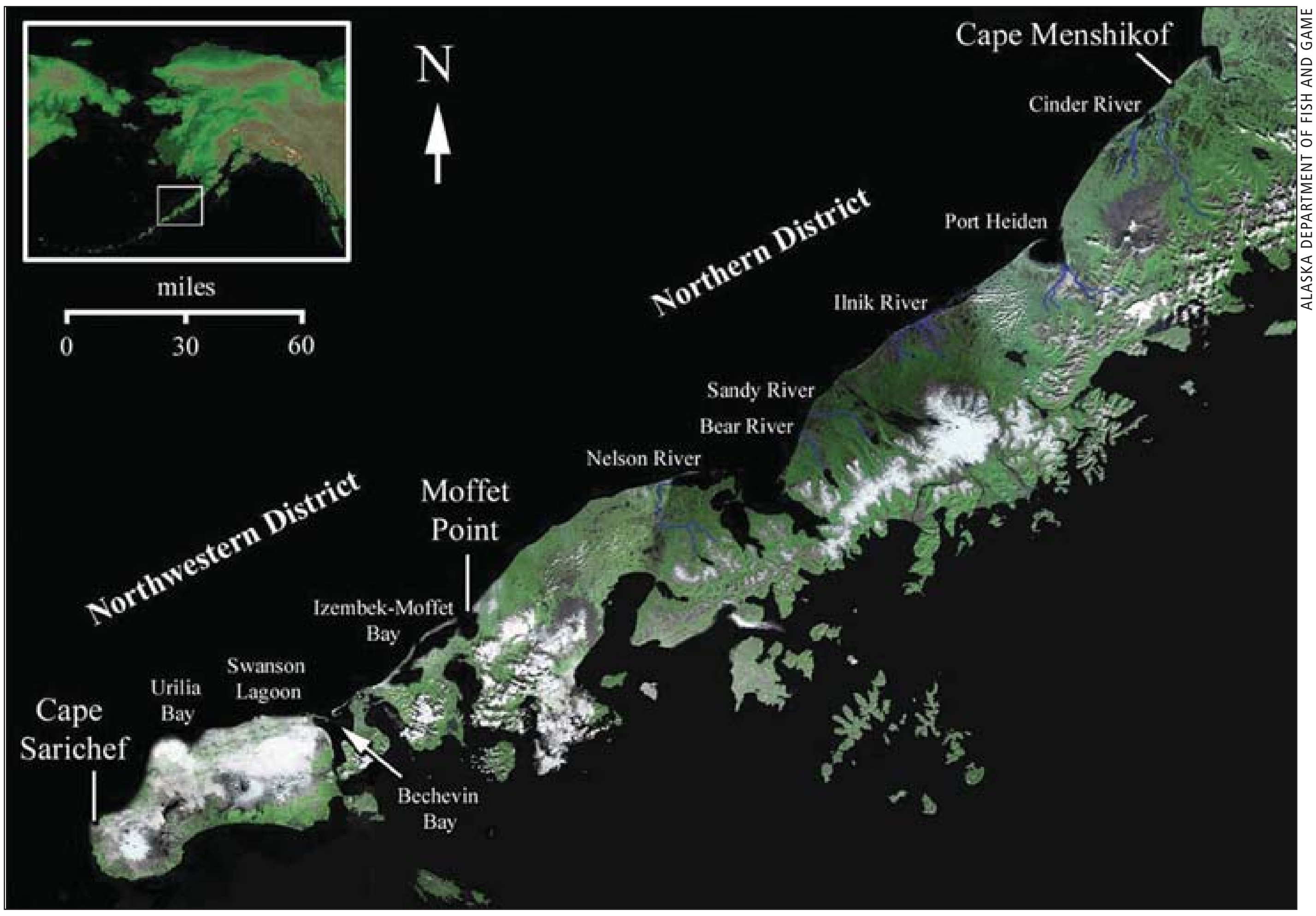
Goll said that the preparation of an environmental impact statement would be part of the process leading to the sale decision. He also said that the state governor would have to agree to the sale taking place.

"The Outer Continental Shelf Lands Act really gives a lot of deference to the governor of the state. … Basically we have to do what the governor tells us to do, unless there is a real reason for national security or other interests not to," Goll said.

And if there is a lease sale, subsequent plans of exploration or development by leaseholders would be subject to environmental assessments and state coastal management plan consistency determinations, he said.

"Activity will not automatically happen," he said. "… There are repeats of reviewing activity before any oil (or gas) comes out of the ground."

MMS hopes to come out with a call for information and notice of intent for the lease sale EIS within the next two or three



ALASKA DEPARTMENT OF FISH AND GAME

The North Aleutian salmon fishery centers on communities and rivers along the north side of the Alaska Peninsula, close to the proposed lease sale area.

weeks, Goll said. Public scoping could occur in the spring and summer.

"The draft EIS we would expect to come out in early 2010 … with a final EIS … in early 2011, with an expectation of a sale in the fall of 2011," Goll said.

Potential scenarios

Gregg Nady, Shell's Alaska exploration team leader, talked about potential development scenarios in the North Aleutian basin, based on an engineering study that Shell had conducted in the 1980s. Nady emphasized that he was presenting the results of the Shell study in the interests of sharing information about what could happen — any decision on oil and gas development in the basin remains a long way off.

"I do certainly believe that understanding something about what a development might look like … helps to inform the decision," Nady said. "The more people know about what this might look like, the better prepared people are."

If Shell acquired any offshore leases in the basin, the company could potentially drill exploration wells between 2012 and 2014, Nady said.

"It's a fairly short window of activity to find out if there's any oil and gas there," he said.

Shell used Cook Inlet and the North Sea as analogues for development ideas in the southeastern Bering Sea, Nady said. And, with the North Aleutian basin thought to be gas prone, Nady described a scenario in which perhaps three to six offshore steel or concrete platforms a few miles offshore in the Bering Sea would connect by pipeline to a liquefied natural gas plant on the south side of the Alaska Peninsula near Port Moller.

Well bores would pass through platform legs to protect the wells from any sea ice. The use of modern seismic data analysis, measurement-while-drilling techniques, state-of-the-art well planning and modern blowout preventers would all serve to ensure that there isn't a well blowout, Nady said.

"There has not been a significant well blowout for an exploration well in the history of the federal OCS in the United States," he said.

In response to a question about some onshore oil and gas leases that Shell purchased in the State of Alaska's 2005 Alaska Peninsula areawide lease sale, Nady said that those leases lie in a shallower section of the North Aleutian basin.

"We felt like if there was going to be an OCS lease sale it would be good to get a position early," Nady said. " … If we got something significant to work we could add on smaller opportunities later."

Fishing industry

If oil and gas activities do start in the southeastern Bering Sea those activities will share the outer continental shelf with a very large fishing industry that has been operating in the region for many years.

"The single largest fishery in the world exists in the eastern Bering Sea, and that is the eastern Bering Sea pollock fishery. There isn't a fishery larger in volume and in value," said Brent Paine, director of United Catcher Boats, an organization that represents trawl boat owners in the Bering Sea, the Gulf of Alaska and on the U.S. West Coast. That fishery is sustainable and renewable, and it's growing, he said.

"The price for ground fish products in the next decade is probably going to double or more than double," Paine said "The eastern Bering Sea fishery alone to the fishermen is (currently) worth about $200 million."

Adding in the wholesale price results in upwards of $700 million to $800 million coming out of the Bering Sea annually, he said.

"Domestic crab fisheries in the Bering Sea and Bristol Bay areas began in the 1950s," Bob Murphy, fisheries management biologist for the Alaska Department of Fish and Game, told the workshop. "Harvest and effort have fluctuated annually but have been relatively stable in recent years. … Bering Sea crab fisheries provide important revenues for the cities of Unalaska, St. Paul, King Cove, Akutan, St. George and Kodiak."

Both Bristol Bay and the northern Alaska Peninsula are the sites of major salmon fisheries. In the northern Aleutian area by itself the sockeye salmon catch came in at about 3.4 million fish in 2007, Murphy said. However, the number of salmon fishing permits in the region has declined in the past decade because of falling salmon prices, he said.

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BRISTOL BAY

There is also a longline cod fishery in the Bering Sea.

And, in addition to the fishing grounds, the southeast Bering Sea includes critical habitat for the northern right whale, a sea mammal that has been included on the endangered species list.

Overlapping areas

Several of the Bering Sea fisheries overlap with the section of the North Aleutian basin that is most prospective for oil and gas. Those overlaps include major components of both the pollock and crab fisheries. Salmon fisheries occur along the coastline neighboring the oil and gas basin.

The pollock trawl fishery, the cod fishery and the flatfish trawl fishery all have "hot spots" close to the area where there is the highest potential for a natural gas find, said Jane DiCosimo, senior fisheries analyst for the North Pacific Fishery Management Council.

And those overlaps raise concerns about potential impacts of oil industry activities on fishing activities or fish habitats — drilling rigs and subsea pipelines could impede fishing activities, for example.

"I think the effect of oil and gas development on the essential fish habitat within the North Aleutian basin is one of the key issues for us," Paine said.

There are also major concerns about the potential for an oil spill.

"What is the biological effect on pollock stocks, the crab stocks, the cod stocks, the flatfish stock if a tanker does have a disaster in the area?" Paine asked. "Would Shell Oil be willing to put a contingency fund … to guarantee the fishing fleet the value that it's foregone because of an ecological disaster?"

Several people talked about the potential for seismic survey activities to disturb fish stock. Jerry Payne, a research scientist with the Newfoundland Department of Fisheries and Oceans, reviewed research that has been done in this topic. There is some evidence that seismic sound may affect the nervous systems of crustaceans and fish, but no indication of increased mortality, he said.

It would be premature at the current state of knowledge to set reference acceptable sound levels for shellfish and fish — more research is needed, he said.

Can co-exist

Arnie Thomson, executive director of the Alaska Crab Coalition, said that thanks to modern technology the oil industry can co-exist with the fishing industry.

"Times change and technology advances," Thomson said. "… The Alaska Crab Coalition is aware of the 40-year history of co-existence between fisheries and gas and oil production in the Gulf of Mexico, Cook Inlet, eastern Canada and Norway."

However, environmental protections have to be a major priority.

"We're aware that this is a pretty high-risk business in terms of our industry," Thomson said.

The Alaska Crab Coalition would like to see industry and federal government commitment to a scientific monitoring program for impacts to the marine environment, commitments to environmental protections and commitments to compensation for impacts, he said.

Dale Schwartzmiller, vice president of Alaska production for Peter Pan Seafoods, also expressed guarded support for oil and gas development.

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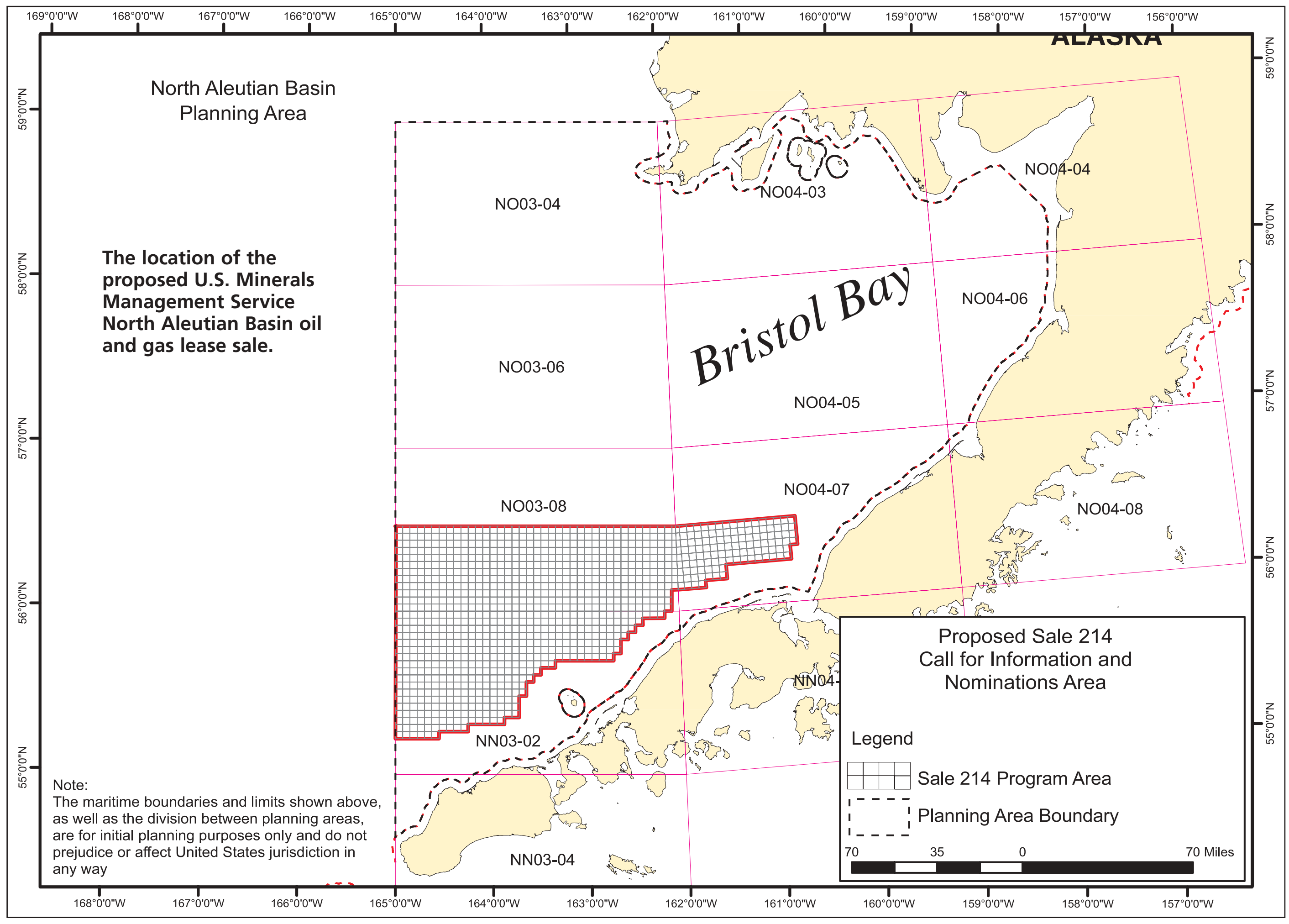

The location of the proposed U.S. Minerals Management Service North Aleutian Basin oil and gas lease sale.

U.S. MINERALS MANAGEMENT SERVICE

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BRISTOL BAY

"Recent history in Alaska and other regions of the world has shown that energy development and fisheries can co-exist," Schwartzmiller said. "While we are optimistic that outer continental shelf development can be a positive step to reduce dependence on foreign oil and gas resources and be a benefit to the local economy, we share the concerns of many that such development can only be done if mitigation measures are in place after a transparent review and approval process."

Eric Olson, a commercial salmon fisherman from Dillingham and chairman of the North Pacific Fisheries Management Council, expressed concern. Salmon from many fisheries on the west coast of Alaska pass through the North Aleutian area, he said.

"The renewable fisheries resource that occurs north of this proposed development is of significant value not only to Bristol Bay but to the State of Alaska as a whole," Olson said. "The potential impact on all of these fisheries throughout the western Alaska system needs to be fully analyzed."

Olson questioned how to put a value on a fishery that could be affected by a large-scale oil spill in the region.

"I think if you ask the people who live in the region and participate in the fisheries, the answer you will get will be similar to that Mastercard commercial — 'priceless,'" Olson said. "… Do we want to risk an effect on long-term renewable resources for what may be in the big scheme of things a short term development? … I don't have the answer."

Bubba Cook, senior fisheries officer with the World Wildlife Fund, expressed outright opposition to any oil and gas development in the Bering Sea.

Oil and gas developers often claim that risks can be managed and mitigated, Cook said.

"We've heard these arguments before every spill and toxic cleanup that's occurred," Cook said. "… Sufficient data gaps (for concern) exist with regard to fisheries and their relationship to oil development."

Kelly Harrell, Alaska coordinator for the Alaska Marine Conservation Council, expressed similar sentiments.

"Our organization's position is that environmental challenge of offshore drilling in this tremendously important area cannot be met," Harrell said. "… The risks are simply too great to accept."

Subsistence fishing

The north Aleutian and Bristol Bay region supports a vibrant subsistence economy and culture that substantially depends on fishing.

"Subsistence is a viable sector of local economies," James Fall of the Alaska Department of Fish and Game, Division of Subsistence, told the workshop. "… Subsistence activities are highly valued and people in these communities intend to maintain their subsistence uses as long as they live and as long as their dependents live."

Norman Anderson, a commercial fisherman from Naknek, talked about the importance of the subsistence culture in his community.

"It's not just the activity. It is the means of sharing that is very valuable," Anderson said. "I don't see how we can put a price on that — that's nothing that can be replaced."

Anderson described how his parents and village elders had instilled in him a respect for the land and for keeping resources safe.

"We must all do everything we can to save this big village we call Earth," Anderson said.

Oil and gas development would bring increased noise and the spilling of contaminants into the sea, Anderson said. And the region is subject to storms similar in intensity to the Gulf of Mexico, he said.

"The only difference is that they name their weather … and we just wonder whether PenAir is going to make it in with the mail," he quipped.

Thomas Tilden, tribal chief of the Curyung Tribal Council in Dillingham, also stressed the critical importance of subsistence to his community. Tilden said that his grandmother had once taught him that to be rich is to be able to eat and to feed yourself.

"Corporations are driven by profits and dividends and re-elections," Tilden said.

Municipal governments are driven by taxing corporations and business, while subsistence users are driven by food, he said.

"Who is at greater risk? Who is going to suffer the most? Who can recover? These are some of the questions that need to be asked," Tilden said. "… It's about culture. It is our lifestyle. It is about who we are."

Economic benefits

But oil and gas development could bring substantial economic benefits to the Alaska Peninsula and Bristol Bay areas, where a multiyear decline in salmon fishing combined with soaring fuel costs have caused hardship and a drop in the population.

Justine Gundersen, a resident of the village of Nelson Lagoon on the north side of the Alaska Peninsula and a member of the Aleutians East Borough Assembly, spoke about the opportunities that the oil industry presents, as well as the community concerns. Nelson Lagoon lies close to the area of the proposed lease sale.

"We all are concerned about an oil spill," Gundersen said. "Not only would that devastate the commercial fishery, it would devastate our subsistence lifestyle."

But local people are no longer able to live on salmon fishing at current fish prices and with heating fuel that costs more than $4 per gallon. On the other hand people want to remain in their communities and want to see a future for their children, she said. The oil and gas industry could bring the means to sustain the communities.

"In the '80s we were against oil development," Gundersen said. "… Things change."

The communities have held discussions about oil and gas, and the regional boroughs have set stipulations for the oil industry, she said.

"People don't want to leave. People want to develop," Gundersen said. "… We do support this development. … There's always a risk, but you can't stand still."

The regional boroughs have moved to support oil and gas development, albeit with the stipulations that Gundersen referred to.

Stanley Mack, mayor of the Aleutians East Borough, said that his borough had gleaned lessons learned from many people from various communities and organizations that have experienced oil and gas development.

"The last trip I made to Norway was the greatest eye-opener I ever had in my life, to find out how these folks can still exist with oil development in their area," Mack said. The Norwegian communities had told the oil companies what the locals need if oil development were to proceed, he said. The companies wanted the oil and the communities got what they wanted.

"That's where I'm coming from today," Mack said. "… We're trying to train our youngsters … so that they can take part in what happens. … We're pro-development but we're always protective of our culture, our lifestyle. … We'll protect them at all costs."

Other regions

Gordon Slade, executive director of One Ocean, Canada, talked about experience of oil and gas development offshore Newfoundland. One Ocean was formed in 2002 to promote communication between the Newfoundland fishing and oil industries.

"Newfoundland's heart and soul is in the fishing industry," Slade said.

But there was a major collapse in the cod fishery in 1992, he said. The first oil from the offshore oil industry came from the Hibernia field in 1997.

"In Newfoundland and Labrador the fishing industry is not opposed to development of oil and gas," he said. "… We can live together providing the oil and gas industry acts in a responsible manner and takes all the necessary precautions to protect the marine environment."

In a videoconference with Norway, where a thriving offshore oil and gas industry has co-existed with the fishing industry for many years, Per Eidsvik, an advisor with Nordland County in central Norway, told the workshop about current offshore exploration interest in the Nordland VII area, in the environmentally sensitive Lofoten region.

Although oil and gas development could bring economic benefit to the region, it will be many years before those benefits could be realized, Eidsvik said. And a decision has yet to be made on whether to allow oil and gas development to proceed.

In answer to a question about discharges from oil and gas platforms, Eidsvik said that after "quite a number of years" Norway has reached a point of no discharge to sea, especially of produced water.

"That's very important for us," Eidsvik said. "The next goal is to get the emissions of carbon to zero."

Dr. James Parker, an environmental advisor with Shell International Exploration and Production, spoke about interactions between the fishing and oil industries in the North Sea.

Each oil company operating in the North Sea has to appoint a fisheries liaison officer to liaise with the government and the fishing organizations, Parker said. There is also an offshore fisheries-oil consultative group that brings together representatives of the oil and fishing industries.

Oil and gas licenses can include special conditions for areas with sensitive fishing zones and operators are required to consult

see **BRISTOL BAY** *page 11*

EIS likely needed for North Aleutian seismic

If oil companies want to carry out seismic surveys in the area of the U.S. Minerals Management Service's proposed north Aleutian basin lease sale, MMS would likely have to prepare an environmental impact statement, John Goll, director of the MMS Alaska region, told the North Aleutian Basin Energy-Fisheries Workshop on March 19.

"We've told companies that if anybody does want to come in and shoot seismic, it's very likely that we will have to do an EIS," Goll said.

Much 2-D seismic was shot in the sale area during north Aleutian oil and gas exploration in the 1980s, and in earlier phases of exploration in the region. Goll expects that if a lease sale were to take place companies would use that existing seismic to determine what tracts to bid on. He said he has heard that seismic companies are reprocessing the old data, so that it is unlikely that there will be a push to shoot new data before a lease sale.

"The sense that we've had from a number of companies that we've been talking to is, for the purposes of a lease sale, they probably would not need it," Goll said.

On the other hand, once companies own leases they tend to want to shoot 3-D seismic, to identify where to drill wells. A benefit of 3-D seismic is that it can reduce the number of exploration wells needed, Goll said.

—ALAN BAILEY

● EXPLORATION & PRODUCTION

Blackbeard's back with beefed-up rig

McMoRan re-enters 'ultra-deep' wildcat in U.S. Gulf abandoned in '06 at 30,067 feet; company acquired rights to prospect last year

By RAY TYSON

For Petroleum News

E&P independent McMoRan Oil & Gas Corp. has contracted Rowan's Gorilla IV jack-up rig to re-enter and deepen the ultra-deep Blackbeard No. 1 wildcat, perhaps the most closely watched exploration well on the globe until ExxonMobil and its partners gave up on the troublesome Gulf of Mexico well in August 2006.

The rig is now on location at South Timbalier block 168 in 70 feet of water, and drilling operations were expected to commence, according to McMoRan.

The rights to the prospect, previously drilled to 30,067 feet but temporarily abandoned prior to reaching the primary targets, were acquired by McMoRan from Newfield Exploration in August 2007, as part of a $1.1 billion property acquisition package on the U.S. Gulf's outer continental shelf. McMoRan, now the operator, holds a 26.8 percent working interest in the Blackbeard prospect, which is part of the larger Treasure Island ultra-deep play. In total, McMoRan holds interests in about 450,000 gross acres associated with the play acquired from Newfield.

ExxonMobil was a partner and operator in the original Blackbeard well, which took a year and a half to drill and is said to have cost up to a staggering $200 million, certainly ranking it among the most expensive wells drilled anywhere in the U.S. Gulf. In fact, the Blackbeard well cost more than McMoRan's entire 2008 capital expenditure budget.

While exploration at Blackbeard thus far has turned up only a thin layer of gas, a major discovery farther down could dramatically alter the production dynamics of the shelf, which has been in decline for years.

Last October McMoRan said it intended to use a beefed up drilling rig to re-enter Blackbeard, explaining then that the original rig, Rowan's Tarzan-class Scooter Yeargain, was capable of going deeper than 30,000 feet but lacked a suitable tree and blowout preventer, one of the reasons why the well was abandoned. The company said it intended to strengthen the surface blowout preventer stacks before re-drilling.

The Gorilla IV, a member of Rowan's premium jack-up fleet, is a LeTourneau Class 200-C Gorilla design. It can operate at water depths up to 450 feet and presumably can drill in excess of 30,000 feet.

Rowan said it entered into a multi-well contract with McMoRan that included re-entering the Blackbeard prospect. The Gorilla IV was committed for a minimum of 90 days, and work on Blackbeard was priced at a day rate of more than $190,000.

Bob Palmer to drill at Eldorado

Meanwhile, Rowan's Super Gorilla class jack-up Bob Palmer is undergoing final preparations for its initial assignment on BP's Eldorado prospect, also located in the Gulf of Mexico. The rig will be drilling one or more wells targeting a depth of at least 28,000 feet, Rowan said.

"These commitments both reaffirm the demand for ultra-deep gas drilling in the Gulf of Mexico and help to dispel a common misconception outside this industry that a rig is just a rig," said Danny McNease, Rowan's chief executive officer. "Rowan has throughout its history prided itself on the quality of its assets, and we will continue to invest in equipment of the highest capability, maximizing both marketability and opportunities for meaningful shareholder returns."

ExxonMobil was a partner and operator in the original Blackbeard well, which took a year and a half to drill and is said to have cost up to a staggering $200 million, certainly ranking it among the most expensive wells drilled anywhere in the U.S. Gulf.

The original Blackbeard exploration well attracted worldwide interest, no doubt because of its targets ranging downhole to 38,000 feet, just shy of the world record of around 40,000 feet, established years ago by Russian scientists studying the world's geological depths.

While exploration at Blackbeard thus far has turned up only a thin layer of gas, a major discovery farther down could dramatically alter the production dynamics of the shelf, which has been in decline for years. ●

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with fishermen about proposed offshore construction.

"We've got some pretty good information now on fishery sensitivities around the coast and there are requirements to notify the government before certain survey operations, for instance seismic surveys, are undertaken," Parker said.

The United Kingdom has a formal fund, administered by the fishing organizations, to compensate fishermen if they pick up any oil industry debris in their nets, he said.

New subsea wellheads incorporate features to prevent damage to fishing gear, Parker said. A GPS based system also alerts fishermen to the proximity of any subsea oil and gas equipment. And there is a 500-meter exclusion zone around each oil and gas installation.

Many discharges into the sea are regulated under international agreements and all discharges have to be permitted, Parker said. Continuous monitoring of fish around oil and gas installations tests for contamination.

Industry is also investigating issues relating to noise.

"We have a large, joint-industry project at the moment looking at the effects of operational noise from our industry on marine organisms," Parker said.

And on the United Kingdom continental shelf all operators have to contribute to a fund that ensures that the industry can cover any liabilities that arise from pollution from the offshore oil industry, he said.

Cook Inlet

John Williams, mayor of the Kenai Peninsula Borough, talked about interactions between the oil and fishing industries in Cook Inlet and on the Kenai Peninsula.

"On the Kenai Peninsula we've got subsistence fishing. We've got personal use fishing. We've got sport fishing. We've got commercial fishing both onshore and offshore," Williams said. "… I don't believe that oil has ever had a lasting detrimental effect … on the fishing industry."

On the other hand, the oil industry has brought economic prosperity to the region — the resident community on the peninsula has increased from 10,000 to about 53,000 people since 1968, Williams said. And that population enjoys facilities such as schools and major hospitals.

"Really when you look at the Kenai Peninsula, as it is today, without the oil industry and the tax base it's very, very doubtful that the population base would be there, the educational base for our 43 schools and Kenai River campus of the University of Alaska — none of that would probably exist," Williams said.

Bob Shavelson, executive director of Cook Inlet Keeper, agreed that the oil and gas industry can bring economic benefits but cautioned against government agencies giving way to oil industry pressure. Cook Inlet Keeper has joined with fishermen and tribal groups to sue the U.S. Environmental Protection Agency over the permitting of oil industry waste disposal in the Cook Inlet, he said.

Any perception that "smudges the fish brand" is bad for the fishing industry, Shavelson said.

Gary Fandrei, executive director of the Cook Inlet Aquaculture Association, said that issues relating to the interactions of the energy and commercial fishing industries in Cook Inlet mainly revolved around communication lapses — unanswered questions about new oil industry activities, for example. On the other hand, there have been opportunities for inter-industry cooperation, in the construction of a temporary fish ladder near Mount Redoubt, for example.

"I think that a lot of these things can be taken care of by direct communications," Fandrei said.

The need for communications between all of the North Aleutian stakeholders seemed to be a theme that emerged from the workshop. John Devens, executive director of the Prince William Sound Regional Citizens' Advisory Council, urged the early formation of some form of organization to represent local community interests.

"You need a citizen's group to oversee what's going on," Devens said.

People in Newfoundland and Labrador did not have an early opportunity for a dialogue like this, said Slade in a general discussion session at the end of the workshop.

"We've had oil and gas in Newfoundland and Labrador for 10 years," Slade said. "The fishing industry and oil and gas industry are working well together … through One Ocean. They have good dialogue with the regulators … but every day you have to be on top of things … and the fisheries and the communities have to be aware of what's happening. And so this information exchange is critical." ●

● EXPLORATION & PRODUCTION

Shell, UA discuss Arctic research work

Conversations included students, professors from International Arctic Research Center, School of Fisheries and Ocean Science

By JEANNETTE J. LEE

Associated Press Business Writer

Officials with Royal Dutch Shell met Monday, March 24 with academics at the University of Alaska to learn more about research the university is conducting.

The international oil company is expanding its presence in Alaska as it pursues offshore drilling projects, placing a growing number of personnel in its Anchorage offices and strengthening ties with the public university system.

During the meet-and-greet in Fairbanks, Shell shared some of its Arctic research with department heads to see whether any projects might overlap with work being done at the university, said company spokesman Curtis Smith.

The sessions gave Shell a "great introduction" to the capabilities of the university in the areas of engineering, research and development, Smith said in an e-mail.

After a 10-year absence from Alaska's lucrative oil scene, Shell is pursuing exploratory drilling projects in the Chukchi and Beaufort seas and is considering another in the Bering Sea. Environmentalists and some fishing and Alaska Native groups oppose the drilling, saying it could harm commercial and subsistence fisheries, as well as marine mammals and other wildlife.

At the meetings with university officials March 24 were Susan Moore, Alaska operations manager of Shell Exploration and Production, Victoria Broje, a spill response specialist and environmental scientist, and three other researchers and engineers, according to the university.

Talks included students, professors

The talks included students and professors at the college of Engineering and Mines, Alaska Native engineering programs, the International Arctic Research Center and the School of Fisheries and Ocean Sciences.

"We had a full day of very exciting dialogue," said Emily Drygas, a senior development officer at the University of Alaska Fairbanks. "The discussion was really open and really positive."

But the meetings produced some dissent. Longtime oil industry critic and University of Alaska professor Rick Steiner was excluded because of what he said was his history of criticizing Shell's plans in Alaska.

"Alaskans know well the corrupting influence of oil money behind closed doors," Steiner said. "It is very troubling that the state's public university system is now being drawn into such non-transparent dealings with the oil industry."

Drygas said Steiner's request to be included simply came too late.

"He called late on Friday afternoon and asked if he could be part of the agenda and I let him know we were already set," said Drygas.

The daylong informational tour did not include any discussions of possible funding for research, scholarships or other financial involvement by Shell, said university spokeswoman Carla Browning.

"My understanding is that they are really just sharing information," she said. "If the discussions lead to financial support that is aligned with the university's mission, it may be considered."

The university and the Dutch-owned oil giant have already collaborated on at least one project.

Earlier in March they co-sponsored a forum on oil and fishing interests in the Bering Sea. The public meeting at the Anchorage Marriott Hotel was funded by $25,000 from Shell and $20,000 from the university. ●

INTERNATIONAL

Arctic offshore meeting set

The High North Center of Business at Norway's Bodø University is hosting the third annual "dialogue and tour" meeting May 3 to 10 in the city of Bodø. Directed at fishermen, community leaders, Norwegian and Alaska Natives, scientists, energy companies, government officials, students from the United States, Norway and Russia, and environmental groups, these meetings provide an opportunity to discuss stakeholder viewpoints and foster dialogue on issues related to the Arctic development.

This year's meeting will focus on socioeconomic issues and the benefits of the development of the Arctic region.

"The offshore oil and gas and fishing industries are two diverse, but closely tied, industries that provide significant resources … for the communities and economies of both Alaska and Norway," the organizers say. "The Arctic region, including the Barents and Chukchi seas, is poised to be an essential and secure hydrocarbon producing area in a time of ever-increasing global energy demand. … Developing a dialogue between these two industries and other stakeholders will provide further economic opportunities for citizens of the Arctic high north."

The event includes a Norwegian coast cruise, culminating in a visit to StatoilHydro's new liquefied natural gas production facilities for the Barents Sea Snøhvit field.

"In addition to the energy-fisheries dialogue, there will be opportunities for meetings and discussions between participants as well as lectures to Norwegian and Russian students of the Energy Management Program," said Andrew Browning, adjunct professor of energy management at Bodø University. "The lectures will focus on issues related to the high north development such as creation of regulatory frameworks, fostering community relations and global initiatives on sustainable development."

—ALAN BAILEY

NATURAL GAS

The long unrealized Gubik gas line

Enstar-Anadarko stab at bringing foothills gas to Anchorage comes from long line of development ventures dating back 60 years

By ERIC LIDJI

Petroleum News

If Enstar Natural Gas Co. and Anadarko Petroleum Corp. successfully build a bullet line from the foothills of the Brooks Range to Anchorage, it would prove up an old oil patch theory.

On and off again for more than 50 years, business leaders in Alaska have wondered whether markets along the Railbelt could justify developing the Gubik gas field.

"The most attractive and most promising opportunity from the view point of proven resources, risk involved, and foreseeable returns on investment would entail the production of natural gas from the Gubik structure and its transmission to the Alaskan Railbelt area by means of a pipe line approximately 465 miles in length from the Gubik gas field to the northern terminus of the Alaska Railroad," engineer James W. Dalton wrote in a 1954 report for the Alaska Development Board.

Now Enstar has proposed building a $3.3 billion small-diameter pipeline from the Gubik field situated about 20 miles due east of the village of Umiat, through Fairbanks and down into Anchorage, most likely along the Parks Highway, around 660 miles altogether.

For Enstar, the bullet line would alleviate some of the worry surrounding declining gas supplies in the Cook Inlet. For Anadarko, which began an exploration program at Gubik this winter, the bullet line would guarantee a market for Gubik gas even if a larger natural gas pipeline to the Lower 48 never gets built.

An early exploration adventure

There's a reason Anadarko named its first exploration well of the season Gubik No. 3.

The U.S Navy and the U.S. Geological Survey drilled Gubik No. 1 and Gubik No. 2 in 1951 as part of a post-World War II exploration effort to find oil and gas across the Naval Petroleum Reserve No. 4, now known as the National Petroleum Reserve-Alaska.

Between 1945 and 1947, USGS scouting trips through the hills along the Anaktuvuk and Colville rivers and an aerial magnetic survey of the region provided the outline of the Gubik anticline, a thin structure about eight miles long and two miles wide.

The crews shot two lines during a seismic survey in 1950 and further delineated the structure during another seismic survey the following year, prompting the decision to drill two test wells about one mile apart.

Early in the year, a train of tractor-trailers brought about 2,000 tons of equipment to Gubik. The crew set up a camp for more than 25 people at Gubik and built an airstrip.

A drilling team found the National 50 rig stationed at the Fish Creek No. 1 well site, an older Navy well located about 75 miles to the north of the Gubik wells, along the northern border of what is now the Greater Mooses Tooth Unit.

On May 20, 1951, the USGS team commissioned by the Navy spud the Gubik No. 1 well along the western bank of the Chandler River at the top of the Gubik anticline. The well reached a total depth of 6,000 feet through "tight" rocks, and found "commercial quantities" of gas at a depth between 890 feet and 1,750 feet, according to a USGS report on the program.

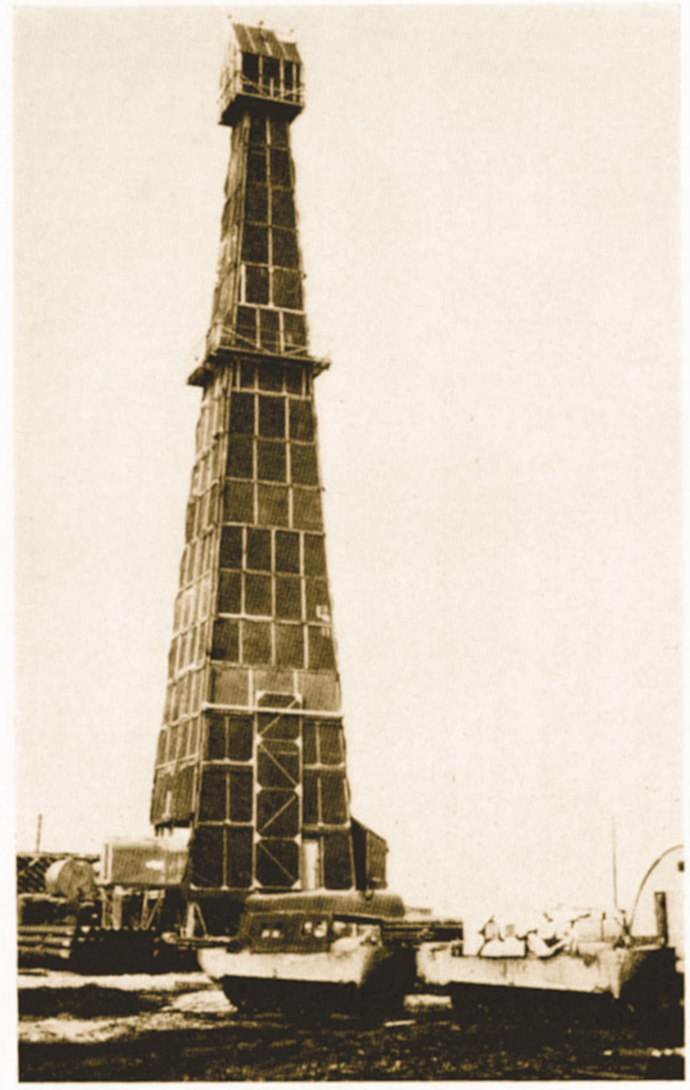
The crew plugged and abandoned the Gubik No. 1 on Aug. 11.

During a stretch of late summer deemed "bad for moving," the crew hauled the rig, the camp and the 2,000 tons of equipment more than a mile to the southeast, setting up the second well site in less than a month.

On Sept. 10, 1951, the crew spud Gubik No. 2 from a slightly lower spot on the anticline, finding both oil and gas. At a depth of 4,620 feet, the crew plugged the well in two places and prepared to re-enter with a smaller drill bit.

Just before the crew finished pulling the drill pipe from the well, mud and gas began flowing from the hole for about five minutes before igniting, sending flames more than four feet into the air.

see GUBIK page 14



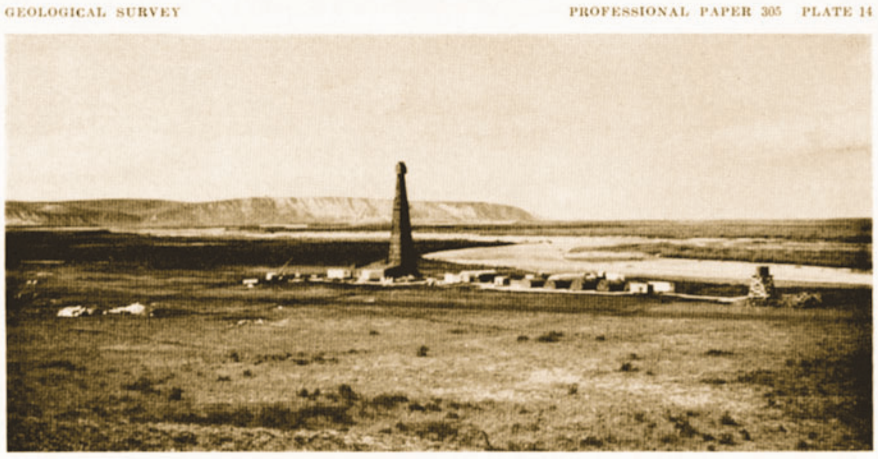
B. DRILLING RIG

GUBIK TEST WELL 1

U.S. DEPARTMENT OF THE INTERIOR

The original rig used for the Gubik test wells drilled in 1951. A blowout destroyed the rig that fall.

GEOLOGICAL SURVEY PROFESSIONAL PAPER 305 PLATE 14



A. WELL AND CAMP BESIDE CHANDLER RIVER

U.S. DEPARTMENT OF THE INTERIOR

Work at 1951 Gubik gas wells.

● EXPLORATION & PRODUCTION

BP planning summer Z Pad expansion

Expansion will promote heavy and light oil recovery of Orion and Polaris pools through the Western Region Development Program

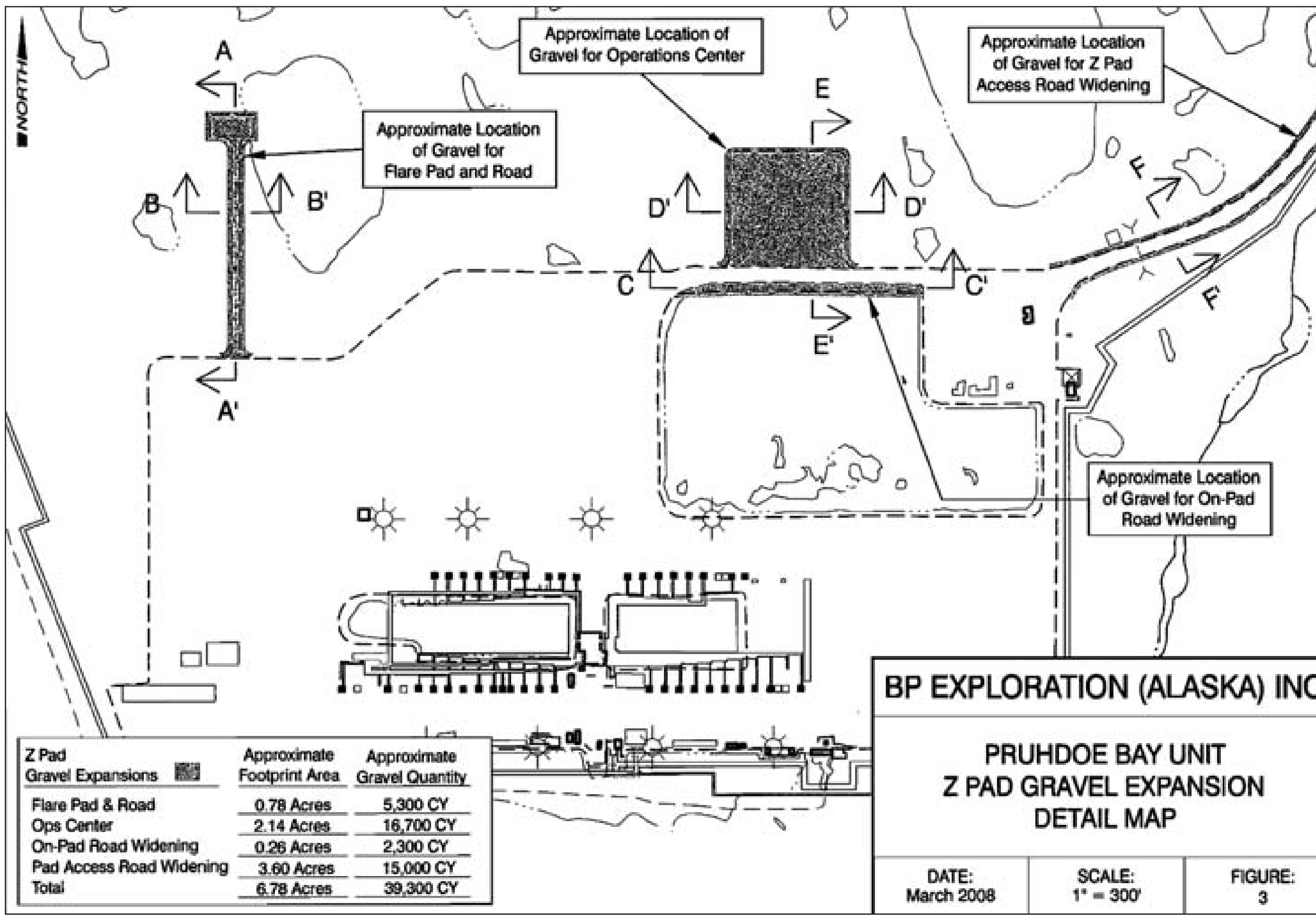
By ERIC LIDJI
Petroleum News

BP Exploration (Alaska) Inc. plans to start expanding the Z Pad this summer as part of wide-ranging efforts to develop the viscous oil deposits in the western region of Prudhoe Bay.

Starting in late June or early July, BP plans to place 40,000 cubic yards of gravel to extend the pad at two points along its northern edge and to bolster the access road leading to the site.

The expansion is part of the Western Region Development Program, a long-term effort to develop heavier oil fields in the western operating area of Prudhoe Bay, particularly the Orion and Polaris fields, and tap new reservoirs.

Z Pad sits near the southwestern corner of Prudhoe Bay along the Sakonowyak River.



COURTESY BP EXPLORATION (ALASKA)

Gravel fill would lay groundwork for GPP

The keystone of the expansion project would be a Gas Partial Processing plant, scheduled for startup around 2011.

The Gas Partial Processing plant will receive the three-phase production of oil-gas-water from four surrounding pads — Z, W, L and V — and separate out only some of the gas. That gas will be used to enhance oil recovery on the west side of Prudhoe Bay.

Pulling out most of the gas also makes the remaining fluid easier to ship through the pipelines leading back to Gathering Center 2 and on to the trans-Alaska oil pipeline.

The modules for the plant would be brought in by sea and trucked to Z Pad sometime around 2010. Trucking the pieces would require BP to upgrade and widen the access road this summer. The company is also weighing plans to replace four culverts along the road to improve drainage.

Through WorleyParsons, BP contracted ProSep Technologies, an American affiliate of the Canadian company TORR Canada Inc., to provide between $850,000 and nearly $5 million in engineering and design services involved with gas treatment on the project.

ProSep and TCI provide oil and gas separation services.

Future expansion includes new operations center

The expansion would also include construction of a new operations center and a new flare pad at the site between the spring and fall of 2009, according to an application filed with the state Division of Coastal Management.

While the expansion is focused on heavier oil deposits, BP also plans to recover light oil from the Borealis, Eileen West End and Northwest Eileen reservoirs using new drilling and processing facilities at Z Pad.

The Division of Coastal Management will take comments through April 21. Pending approval, BP would need to also

see **Z-PAD** page 15

continued from page 13

GUBIK

The fire destroyed the rig in a matter of minutes and continued burning for days.

The crew abandoned the well on Dec. 14, 1951.

Early attempts to develop failed

The USGS considered Gubik to be one of the biggest finds of the naval exploration program, along with the large and nearby Umiat oil field.

The USGS estimated the total reserves of the Gubik field at 600 billion cubic feet of gas, a figure still used today and one that Dalton considered sufficient for fueling the population center of Alaska in the years before statehood.

"The expansion of the natural gas market to take in the entire Railbelt area of Alaska, including Anchorage, the largest and fastest growing city in the Territory, is believed to be feasible," Dalton wrote.

He envisioned a 10-inch, above-ground pipeline running into Fairbanks with four pump stations along the way at a total cost of $20 million, around $155 million when adjusted for 50 years of inflation.

In November 1957, the U.S. Department of the Interior began opening a large swath of Arctic Alaska to oil and gas development, including the area around the Gubik field.

Dalton and others formed the Alaska Propane Gas and Oil Co. Inc. as a vehicle for developing the field, making distribution agreements with the city of Fairbanks and spending more than $100,000 on engineering, according to a Fairbanks Daily News- Miner article at the time.

"Estimates are that the known gas reserves in this field would supply Fairbanks, Anchorage and the adjacent military bases for at least 30 years," the article said.

Alaska Propane Gas and Oil increased the size of the project, imagining a 16-inch pipeline costing $46 million and a drilling program including four delineation wells and 12 production wells. The company also presented the possibility of extending the pipeline to the coalfields in Healy.

However, the project never got off the ground.

The federal government opened the area to bidding in 1958 and the land moved to state control following the Statehood Act.

Reporting on the early attempts to develop Gubik, the News-Miner recently published a quote from petroleum engineer John Rowlett, found in the paper's archives.

"Whether Fairbanks gets gas from Gubik or Anchorage, it's coming," Rowlett said on March 1, 1960. "If it comes from Anchorage, we're at the end of the line. If it comes from Gubik, we'll be an industrial center. Nobody knows just when natural gas will come to Fairbanks — but it's coming and the sooner it does, the more quickly Fairbanks will grow in industrial importance."

In 1963, the Colorado Oil and Gas Co. drilled at Gubik, but the well turned out to be dry.

Anadarko picked up the acreage during a state lease sale in 2006 and announced plans for a gas exploration program last year.

By Enstar estimates, the bullet line would begin delivering gas to Anchorage as early as 2014. ●

ASSOCIATIONS

AGS conference commemorates 40th anniversary of Prudhoe discovery

The Alaska Geological Society's 2008 technical conference will be April 17. It commemorates the 40th anniversary of the discovery of the Prudhoe Bay oil field.

The conference will be at the BP Energy Center in Anchorage from 9 a.m. to 5 p.m. For a map and more details see the society's Web site at: www.alaskageology.org/techconference.html.

The tentative program includes:

- Oil and gas in Alaska before Prudhoe and initial state lands selections (Tom Marshall, former state petroleum geologist);
- Exploration and discovery events (Gil Mull, former industry and DGGS geologist);
- Perspective of an exploration manager (written commentary by Harry Jameson);
- Historical context of the Prudhoe Bay discovery (John Sweet, author and former state legislator);
- Prudhoe Bay — from then to now (BP Engineering);
- Historical economic impact of Prudhoe Bay to Alaska (Scott Goldsmith, UAA economist);
- The great beyond — exploration after Prudhoe (Art Grantz, USGS emeritus); and
- State of the state in geology — or anything but Prudhoe (Bob Swenson, state geologist).

There is also a poster session; the deadline for poster abstract submission is March 31.

Pre-register by April 14 at vp@alaskageology.org.

Registration (includes lunch and abstracts with program): $25 for AGS members; $30 nonmembers.

NATURAL GAS

Juniors target British Columbia shale

Backed by a wealth of experience in their management teams, Crew Energy and Canada Energy Partners have entered a joint venture deal that could help raise the lid on British Columbia's shale gas prospects.

Their exploration program for 2008 will cover 35,500 acres of lands held by Canada Energy, starting with a three-dimensional seismic project and the drilling of five exploratory wells.

The lands are located in the Montney-Doig formation which is stirring investor interest as a result of successful commercial results.

Crew has C$120M budget

Crew, which is targeting shale gas, coalbed methane and conventional gas, has an exploration and development capital budget of C$120 million for 2008 and has a bank facility of C$180 million.

It produced 9,641 barrels of oil equivalent per day in the fourth quarter of 2007, up 55 percent from a year earlier, and is chasing 11,400-12,200 boe per day this year.

The joint venture expects to spend C$20 million-$25 million, with Crew as operator to earn a 50 percent working interest.

Crew also has 7,360 net acres in the Muskwa shale play where EOG Resources has claimed a possible find of 6 trillion cubic feet.

A third-party evaluation rates Crew's potential Muskwa gas-in-place at 400 billion to 1.2 trillion cubic feet.

Canada Energy has a net 41,000 acres in Montney-Doig. Its chairman, John Proust, acquired 34,000 shares for C64 cents each in early February.

—GARY PARK

continued from page 14

Z-PAD

secure a wetlands permit from the U.S. Army Corps of Engineers and permits from the state Division of Oil and Gas.

Economics still a question

BP put question marks around the Z Pad project earlier this year, saying recent tax increases complicated the economics of the Western Regional Development Program.

As a result, the company said it would defer around $1 billion of the program, estimated to cost around $1.8 billion overall.

The likelihood of BP installing a new I Pad is still uncertain.

BP plans to spend $800 million on capital projects in Alaska this year. Announcing the budget in January, the company said about half would go toward upgrading existing facilities, about $200 million would go toward infill drilling and around $150 million would go toward developing the Liberty project. ●

LAND & LEASING

Potential Alaska state and federal oil and gas lease sales

Agency	Sale and Area	Proposed Date
DNR	Cook Inlet Areawide	May 21, 2008
DNR	Beaufort Sea Areawide	October 2008
DNR	North Slope Areawide	October 2008
BLM	NE NPR-A	To be determined
BLM	NW NPR-A	To be determined
DNR	Alaska Peninsula Areawide	February 2009
DNR	North Slope Foothills Areawide	February 2009
DNR	Cook Inlet Areawide	May 2009
DNR	Beaufort Sea Areawide	October 2009
DNR	North Slope Areawide	October 2009
MMS	Sale 209 Beaufort Sea	2009
MMS	Sale 211 Cook Inlet	2009
DNR	Alaska Peninsula Areawide	February 2010
DNR	North Slope Foothills Areawide	February 2010
DNR	Cook Inlet Areawide	May 2010
DNR	Beaufort Sea Areawide	October 2010
DNR	North Slope Areawide	October 2010
MMS	Sale 212 Chukchi Sea	2010
MMS	Sale 217 Beaufort Sea	2011
MMS	Sale 214 North Aleutian basin	2011
MMS	Sale 219 Cook Inlet	2011
MMS	Sale 221 Chukchi Sea	2012

Agency key: BLM, U.S. Department of the Interior's Bureau of Land Management, manages leasing in the National Petroleum Reserve-Alaska; DNR, Alaska Department of Natural Resources, Division of Oil and Gas, manages state oil and gas lease sales onshore and in state waters; MHT, Alaska Mental Health Trust Land Office, manages sales on trust lands; MMS, U.S. Department of the Interior's Minerals Management Service, Alaska region outer continental shelf office, manages sales in federal waters offshore Alaska.

Business Spotlight

Udelhoven Oilfield System Services Inc.

FORREST CRANE

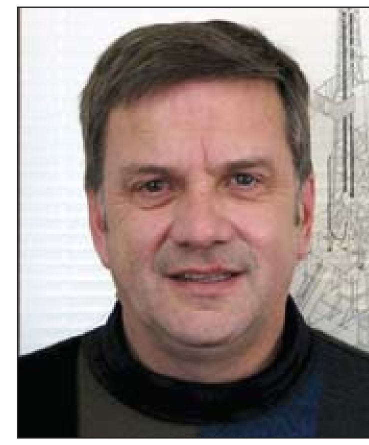
Barry Sossamon, Operations Consultant

Udelhoven is a progressive, quality oriented company that has seen long-term steady growth from providing technical, construction and maintenance services to Cook Inlet and Prudhoe Bay oilfield operations. The company believes in giving back to the community with its support of United Way, Salvation Army, the Red Cross and many other worthy organizations.

With 40 years of oil and gas industry experience under his belt, Barry Sossamon retired in 1999 from ARCO only to take on fulltime work with Udelhoven. After all, he says, retirement is doing what you want to do. It also involves golf and running marathons, including Boston and NYC. Barry and wife Sharon enjoy their Anchorage church activities, youth hockey with the grandkids, and having all the family close by.

—PAULA EASLEY

Lister Industries Ltd.



COURTESY PHOTO

Arnie Stevens, General Manager

Lister Industries Ltd. is a global leader in the design and manufacturing of rig mats. Its products are designed and built with quality craftsmanship from top grade materials and are built to last through years of rough field service. Lister's design team works with clients to meet their special needs, adding value through quality products such as Lister II rig mats and interlocking road mats.

Arnie Stephens joined the company as General Manager on March 3, 2008. Arnie's career began in the oil sands industry with Syncrude Canada followed by 10 years in the conventional oil and gas industry with Amerada Hess. More recently he has held executive positions in the technology industry in senior finance, marketing and sales roles. Arnie resides in Edmonton, Alberta.

—PAULA EASLEY

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

ADVERTISER PAGE AD APPEARS

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

Oil Patch Bits


COURTESY CROWLEY

Crowley delivers new assist tug to Cook Inlet for Tesoro

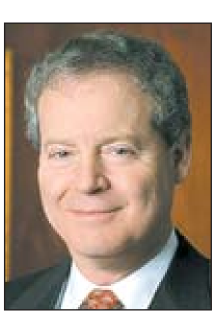
Cook Inlet RCAC said March 26 that Tesoro Alaska took a "major step" to improve oil spill prevention in Cook Inlet when it ordered a new tractor tug from Crowley Maritime Corp. The new assist tug, which will be operated by Crowley, arrived in Homer on March 25, and is "the first permanent vessel of its kind," CIRCAC said, noting that the M/V Vigilant will receive a few minor adjustments before it is permanently stationed in Nikiski. CIRCAC has long advocated for a full-time assist tug at Nikiski, but government regulations do not require it. "Tesoro should be applauded for their commitment to navigational safety by bringing this tug into Cook Inlet," CIRCAC's Executive Director Michael Munger said.

Mike Barcom joins Solstice Advertising

Mike Barcom recently joined Solstice Advertising as creative director. Barcom brings 20 years of experience as an art director and creative director to Solstice, and has worked in Alaska, Hawaii, Arizona and Colorado. He will be responsible for management of the creative department within Solstice, and will oversee all client projects. Barcom's past experience includes work with clients in healthcare, financial services, food and packaged goods, Native corporations, insurance, tourism and recreation, among others.

ConocoPhillips partners with NEED

In January ConocoPhillips announced a partnership with the National Energy Education Development Project to provide America's teachers with training and resources on key energy topics. "ConocoPhillips believes that the science of energy is an important topic for our nation's education system," said Jim Mulva, ConocoPhillips' chairman and chief executive officer. Mulva said it was "vital" to prepare today's students for careers in math and science. Among other things, the company will sponsor 24 energy education workshops in communities across the United States in 2008. For more information, go to www.need.org.


JIM MULVA

Editor's note: See full stories in the next edition of Petroleum Directory, a Petroleum News magazine that is published twice a year.

GOVERNMENT

Canada seeks oil sands exemption

U.S. legislation banning use of 'nonconventional' fuels by military, agencies, rising political tide sets off counter-arguments regarding Alberta oil sands development

By GARY PARK
For Petroleum News

Forget about greenhouse gas regulations, royalty hikes, construction costs and labor shortages.

The Alberta oil sands sector may be getting dragged into its toughest fight yet, especially if Democrats take over the White House and Congress in the November election.

Senators Hilary Clinton and Barack Obama have already pointed to tougher controls on unconventional fuels that generate more lifecycle GHGs than those derived from more conventional sources.

And just to compound the worries, if Sen. John McCain becomes president he has talked about introducing stronger measures to combat GHGs.

That gives added teeth to the United States Energy Independence and Security Act adopted in December 2007 that includes a provision banning military and federal agencies from buying those alternative fuels.

Section 526 specifies a prohibition on the purchase of "alternative or synthetic fuel, including a fuel produced from nonconventional petroleum sources."

Canadian concerns growing

At first, the law made scarcely a ripple in the Canadian government and the petroleum industry.

But, as the U.S. election year has unfolded, concerns have grown that the legislation will drastically affect oil sands development in Alberta.

"The Canadians do, in fact, have something to worry about, particularly from a Democratic administration," said Amy Meyers Jaffe, an energy expert at Rice University, although she pointed out that eliminating the oil sands as a source of fuel in the U.S. could end up making current oil prices "look cheap."

Currently half of Canada's 2.77 million barrels per day of oil production come from the oil sands and 65 percent of the combined output ends up in the U.S. By 2015, oil sands volumes are forecast to reach 3.5 million bpd, while conventional volumes are expected to shrink by 50 percent.

Faced with such an uncertain outlook in the U.S., the Canadian government has finally been stirred into action.

In a letter to Defense Secretary Robert Gates, Secretary of State Condoleezza Rice and Energy Secretary Samuel Bodman, Canada's ambassador to Washington, Michael Wilson, warned about the "unintended consequences for both countries" of any restriction on oil sands shipments from Canada.

He argued that only an "expansive interpretation" of Section 526 would include oil from the oil sands, which he said is not a "nonconventional petroleum source" because the output is processed in the same facilities as conventional crude.

"There was no indication when the legislation was considered in Congress that (the procurement rule) was intended to go beyond a limited scope," Wilson said.

He said the legislation puts the U.S. at risk of "preferring offshore crude from other countries over fuel made in part from U.S. and Canadian sources" and would undermine U.S. goals of improving energy security by reducing its dependence on oil from volatile political regions.

Canada largest foreign supplier to U.S.

Wilson pointed out to Gates that Canada has surpassed Saudi Arabia as the largest foreign supplier of crude oil to the U.S., in large measure because of rising production from the oil sands which has been encouraged by Washington and financed by a growing number of U.S.-based companies, such as ExxonMobil, ConocoPhillips, Marathon, Chevron and Devon Energy.

A spokesman for the American Petroleum Institute agreed with Wilson that the new law does not include a definition of nonconventional petroleum sources and, thus, should not include the oil sands.

He said "synthetic crude" is a term more properly applied to coal-to-liquid fuels, which are the result of a chemical process, whereas the oil sands are exploited by adding heat to sands.

However, the Natural Resources Defense Council argues that the oil sands spawn three times the carbon emissions of conventional crude on a per unit basis.

Stelmach: transportation a factor

Alberta Premier Ed Stelmach said that by the time low-carbon fuel standards are in place in the U.S., his government's own climate-change regulations will meet or exceed those standards.

He also argued that fuel derived from the oil sands is cleaner than imports from the Middle East because those shipments have to travel greater distances, generating greater GHGs in the process.

A spokesman for Stelmach said the U.S. drive, led by California, to target so-called "dirty" fuels may only discourage research and investment in technology that can reduce GHGs at the point of production.

Stelmach told the World Heavy Oil Congress in Edmonton March 10 that when his government releases a plan this fall to guide oil sands expansion it will ensure the industry grows in an "environmentally sustainable and responsible manner" and accelerate the gains already made by the industry which has lowered carbon dioxide emissions by 45 percent per unit of production since 1990.

Canada's most immediate hopes of a favorable resolution of the issue rest with a working group headed by the Department of Defense that is developing a detailed classification that will recommend whether oil sands production could be included in the "nonconventional" ban. ●

NATURAL GAS

AOGCC allows small Kuparuk gas sales

State regulators will allow ConocoPhillips to sell up to 5 million cubic feet of gas per day from the Kuparuk River Unit.

On March 20, the Alaska Oil and Gas Conservation Commission determined that the daily sales would "not meaningfully impact ultimate total oil production" from the Kuparuk River Oil Pool.

ConocoPhillips regularly makes small gas sales to the Kuparuk Transportation Co. and others, including the U.S. Air Force, but last year requested permission to sell up to 3 million cfpd to Pioneer Natural Resources Alaska Inc. ConocoPhillips later increased the request to 5 million cfpd.

ConocoPhillips has been making those sales on an approved "pilot program" for around four months while the AOGCC studied the long-term future impact of the sales.

The AOGCC decided the sale amount would represent only 0.39 percent of the annual production and 0.44 percent of the annual injection from the reservoir, both volumes considered "smaller than the margin of error for reservoir simulators."

The AOGCC did not require ConocoPhillips to take additional steps to lessen the potential harm to oil recovery, but is requiring the company to continue "careful surveillance" of the field and to report gas sales annually.

—ERIC LIDJI

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LAWSUIT

Rep. Les Gara in a statement. "Whenever a company interested in building one comes forward, Exxon and others simply say, 'You can't build one unless we sell you our gas, and we refuse to tell you we'll do that.'"

"If the producers are truly committed to bring Alaska's gas to market, they will balance Alaska's future against the bottom line, and make the best decision for everybody," said Rep. Harry Crawford of Anchorage.

Also signing the letter were Rep. Beth Kerttula, the House Minority Leader, and Rep. Andrea Doll, both of Juneau; Reps. Bob Buch, Mike Doogan, Berta Gardner and Max Gruenberg of Anchorage; and Rep. Scott Kawasaki of Fairbanks.

Call for gas commitment

In their March 20 letter the legislators said the resistance of major North Slope leaseholders to selling gas has been a "major impediment" to a gas pipeline project. "No pipeline builder will spend the billions of dollars necessary to begin construction without a commitment that companies will sell gas from their leases," the group said.

"Alaska law provides that a leaseholder cannot refuse to produce on a lease that is economic," but litigation to enforce this right would likely take many years to complete, so the group said it believes the state should prepare for the litigation "so that an informed and speedy decision can be made when the state decides we need to exercise this option."

In their March 20 letter the legislators said the resistance of major North Slope leaseholders to selling gas has been a "major impediment" to a gas pipeline project.

The group believes Alaska law "would allow a suit for a 'declaratory judgment' action, in which the court is asked to render a ruling on the producers' duty to produce gas into an economic gas project."

They said such a ruling would state that once a project is approved with transportation charges providing a reasonable return on investment, the leaseholders must sell their gas or give up their leases.

Under the Alaska Gasline Inducement Act — and under Federal Energy Regulatory Commission rules — gas would be committed to a pipeline at an open season. An open season has not yet been held for a North Slope gas pipeline project.

—PETROLEUM NEWS

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OUTPUT

Of those totals, 65.9 percent or 1.82 million bpd and 65 percent or 10.5 bcf per day of gas were shipped into the U.S.

Statistics Canada, a federal agency, said Canada also imported an average 85,233 bpd of crude, 48.4 percent from OPEC members, including 20.7 percent from Algeria, 8.7 percent from Saudi Arabia and 7.4 percent from Iraq. Other major contributors were Norway at 22.4 percent and the United Kingdom at 16.2 percent. The crude imports are destined for Quebec refineries.

Of the domestic crude and equivalent production, Alberta's bitumen volumes were up 8 percent and synthetic crude gained 3.7 percent, while Newfoundland climbed 21.3 percent after the Terra Nova field regained capacity following mechanical and maintenance shutdowns.

—GARY PARK

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TAPS

The pipeline owners and the State of Alaska appealed to the Alaska Supreme Court, which in a March 21 decision reversed the order of the Superior Court and directed that the decision of RCA be affirmed.

The Supreme Court said claims by Tesoro and Williams that RCA must complete every rate investigation that it initiates, "and therefore has no ability to accept a settlement … has no support in the statutes, case law, or regulations."

The court also said that claims by Tesoro and Williams "that their petitions to intervene and protest were timely is also unpersuasive."

Settlement reached in 1986

The trans-Alaska oil pipeline went into operation in 1977 and a 1986 settlement reached by the State of Alaska and the pipeline owners was submitted to RCA's predecessor agency, the Alaska Public Utilities Commission. That settlement set intrastate rates from the beginning of the pipeline through 1986, allowing protests for rates going forward, using the TAPS settlement methodology or TSM.

When the commission approved the settlement for rates prior to 1986 it said the "economically impacted parties … are knowledgeable and sophisticated," had the means and opportunity to object and "are either silent or actively support the imposition of the settlement rates," the court said, quoting the commission.

Tesoro and Williams (then known as Mapco Alaska Petroleum), the court said, were among the economically impacted parties actively supporting the decision.

Another shipper, Petro Star, did protest and the commission "began the process of determining whether or not the rates after that time were just and reasonable," a process which was still under way when Petro Star and the pipeline owners settled in 1991. In 1993, the commission accepted the Petro Star settlement. At that point, the commission said, there were no economically impacted parties protesting the intrastate rate settlement.

Under Alaska Administrative Code the commission was allowed to terminate a proceeding if all parties agreed, providing there was no public interest requiring continuation of the proceeding, the court said.

Tesoro and Williams did not protest the commission's 1993 acceptance of the Petro Star settlement and did not protest rates filed under TSM for 1986-93 as unjust or unreasonable. The companies also did not protest rates for 1994, 1995 or 1996.

No protest until 1996

In late 1996, Tesoro protested rates filed for 1997. The commission suspended the 1997 rates "and embarked upon an investigation of whether the rates were just and reasonable," the court said.

The commission issued Order 151 in November 2002. It found rates for 1997-2000 were not just and reasonable; set new, and much lower, rates; and said that rates charged through 1997 may have exceeded the reasonable cost of service by as much as $9.9 billion.

The commission then began looking at whether rates filed for 1986-96 were correctly calculated under TSM — the methodology approved in 1986 — and scheduled a prehearing conference for March 2003.

Tesoro and Williams moved to intervene and shortly thereafter asked the commission to adjudicate whether the 1986-96 rates were just and reasonable.

The commission declined to expand the scope of its investigation from whether the rates were correctly calculated under TSM to whether they were just and reasonable and found the Tesoro and Williams' petition to intervene not timely.

Tesoro and Williams appealed to the superior court, which in 2006 remanded the matter for further proceedings and told the commission to determine if it had acted properly in excluding Tesoro and Williams as economically interested parties and to look at each year separately.

The superior court told the commission it should determine just and reasonable rates for any years in which Tesoro and Williams were improperly excluded — in addition to determining if rates under TSM were properly calculated.

The commission, the pipeline owners and the State of Alaska filed for review of the superior court order.

Rates may be set based on a settlement

In its decision the Supreme Court said Tesoro and Williams argued that while the commission may decide whether to investigate rates, once it begins such an investigation it must determine just and reasonable rates.

If that were true, the commission would not be able to accept a settlement once it had begun an investigation, the court said, noting that Alaska statutes state that the commission may investigate pipeline rates and may prescribe just and reasonable rates, emphasizing the use of the word "may" in statute.

While there is a section of statute which says rates shall be just and reasonable that section, the court said, specifies what the pipeline owners must do, not what the commission is required to do.

The court said Tesoro and Williams provided no support, other than statutory argument, that the commission may not accept a settlement after it has initiated an investigation, while the commission provided "a cogent statutory analysis and also relies on case law and its own regulations."

Not timely

The March 2003 hearing the commission scheduled was on TSM calculations for 1986-96, and whether any party still believed it was necessary to verify those calculations.

In Order 68, issued later in 2003, the commission said Tesoro and Williams wanted the scope of the docket expanded to a determination on whether 1986-96 intrastate rates were just and reasonable. The commission declined, relying on its regulations for protests and petitions to intervene. The court said it reviews an agency's interpretations of its own regulations under a reasonable and not arbitrary standard, deferring to the agency on the intent of regulations.

The court said Tesoro and Williams did not make a timely challenge to the 1986-93 rates because they "did not petition to intervene in the Petro Star protest on the issue of whether the rates were just and reasonable until 2003." They would have had to have intervened before the first prehearing conference on Petro Star's protest of 1987 rates or show good cause to protest after that date.

The court said Tesoro and Williams might have had a good cause to intervene after 1987 for prospective years.

Or they could have "timely protested each temporary rate that was filed," which occurred for intrastate rates until 1993.

The court said nothing stopped Tesoro and Williams from protesting rates as they were filed. "The key point is that they did nothing. No petitions to intervene or protests were filed as to the justness and reasonableness of the rates until 2003."

The court said Tesoro and Williams gained an advantage by not intervening in the Petro Star protest.

"They did not have to pay for costly rate litigation but would have nonetheless reaped the benefits of any success Petro Star may have had in lowering the rates. At the same time they ran a risk that Petro Star would settle," the court said.

Tesoro and Williams might have intervened between 1991 and 1993 and the commission "might very well have had a reasonable basis for denying the petition as untimely."

But, the court said, Tesoro and Williams waited another 10 years before trying to intervene.

Broadening the issue

Regulations provide a separate ground for denying the petition to intervene, the court said, because regulations say the commission will consider "the extent to which participation of the petitioner will broaden the issue."

The issue was whether rates were correctly calculated under TSM, so, the court said, if the commission "had accepted the petition to intervene as to the issue of whether the rates were just and reasonable, it would have significantly broadened the issues before it," providing another basis for denying the petition.

The court also said the challenge of the 1994-96 rates was not timely, even though the commission said it was going to suspend rates to review them for compliance with TSM. The order "gave clear notice that this review would not include a determination of whether the rates were just and reasonable."

In 1996 the shippers did timely protest the 1997 rates. The court quotes the commission: "Tesoro's timely protest of the 1997 rates confirms that Tesoro was fully aware of the requirement of filing a timely protest in order to challenge TSM rates on grounds other than whether they were correctly calculated under TSM."

The court agreed with the commission, upholding its decision that the challenge to the 1994-96 rates was untimely.

On other issues raised by Tesoro and Williams the court disagreed, noting in one instance that while the rates for 1986-96 were protested by one or more interested party, Tesoro and Williams did not protest rates between 1986 and 1996. "They cannot rely on the fact that other parties, such as the Commission staff, Petro Star, or the Alaska Public Interest Research Group, protested the rates. They did not invest the significant costs involved in undertaking rate litigation. While they might hope that the efforts of others will be successful, they cannot initiate an investigation years after the other efforts fail on the basis that they did not have to timely protest because others did." ●

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NEWFOUNDLAND

about 400,000 barrels per day.

Topping the list of developments lately has been a three-way deal by Husky Energy, Petro-Canada and StatoilHydro to secure the semisubmersible Henry Goodrich to Newfoundland for 24 to 30 months.

Suited to the harsh operating environment, the rig holds the key to extending the operating lives of the White Rose and Terra Nova fields.

Husky expects to have the Henry Goodrich's services for 17 months to tie three satellite fields, holding more than 200 million barrels of estimated reserves, into the production stream by late 2009 or early 2010, adding other 12-15 years to the field's operating life.

Second semisubmersible secured

Husky has also secured the Transocean-owned semisubmersible GSF Grand Banks under a three-year contract valued at C$380 million, with the option to add two further one-year terms.

The satellite tiebacks are designed to extend the production platform from the 240-million-barrel South Avalon pool.

Husky, with a 35 percent interest, will also partner with StatoilHydro to use the Henry Goodrich to drill the Mizzen exploration well in the Flemish Pass basin, which the Canada-Newfoundland and Labrador Offshore Petroleum Board estimates holds 1.7 billion barrels equivalent of undiscovered oil and gas.

Norway's StatoilHydro said its goal is to develop an exploration portfolio on the Grand Banks, using the Flemish Pass as its springboard.

Petro-Canada, a 27.5 percent partner in White Rose and operator of Terra Nova, has scheduled the Henry Goodrich to drill a production and water injection well in Terra Nova by early 2009 to supplement production.

The next big hope for a commercial breakthrough rests with the Chevron Canada-operated Hebron field, which was discovered in 1981 and got shelved in 2002 when the partners deemed it uneconomic. Negotiations were resumed with the Newfoundland government over royalty and fiscal terms. The project was abruptly suspended two years ago in a dispute between the owners and the government and was brought back to life last summer when the government and the consortium signed a memorandum of understanding that included a 4.9 percent equity stake for Newfoundland at a cost of C$110 million.

At the time, Premier Danny Williams pointed to a construction start in 2010 to bring the 400 million-700 million barrel field on stream at 150,000-170,000 bpd, a target date he has since pushed to 2011-12 amid negotiations to reach a formal deal.

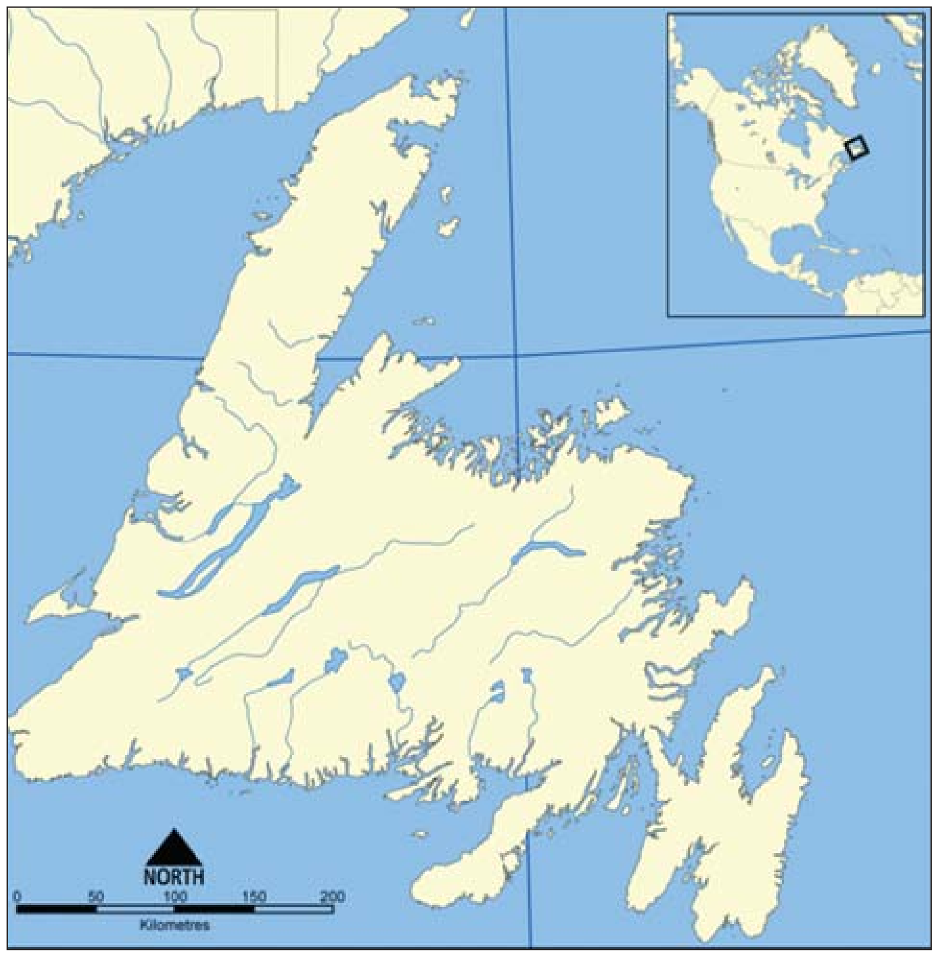
Newfoundland Natural Resources Minister Kathy Dunderdale told the provincial legislature March 19 she hopes the legal language will be resolved by June, although there is no hard deadline. The consortium is making no predictions.

Dunderdale said there are no specific hang ups and "no red flags anywhere. … It's a negotiation, so it's hard to predict."

"If there was something to be concerned about, we wouldn't mind articulating that," she said.

Second Orphan wildcat?

On the exploration side, the greatest anticipation surrounds a decision by the Orphan basin partners — Chevron



Canada 50 percent, Royal Dutch Shell 20 percent, ExxonMobil 15 percent and Imperial Oil 15 percent — to drill a second wildcat in a region believed to contain 6 billion to 8 billion barrels.

A spokeswoman for ExxonMobil told Petroleum News the partners have notified contractors they plan to drill the well in 2009 and have allocated funds for "long-lead" materials.

Rig problems delayed last year's Great Barasway well and, according to industry sources, pushed costs to an estimated $200 million, about $40 million more than originally hoped for.

There have been no reports of an oil discovery, but the well has been evaluated and remains a tight hole for now.

Ocean Ranger's semisubmersible Eirik Raude, which drilled Great Barasway, has been contracted to drill offshore Ghana and will not be available for the second Orphan well, forcing the partnership to start a global hunt for a rig.

ExxonMobil, as operator of the second well, is not disclosing which of eight exploration licenses will be targeted for the next well.

More than four years ago, the licenses covering 5.3 million acres were acquired for C$673 million.

The one hint of unease among the partners was Royal Dutch Shell's announcement earlier in March that it is seeking a partner willing to take an unspecified share of its 20 percent stake in the Orphan program.

A company spokesman said "we are simply looking to see if there are parties interested in sharing the costs and risks," but did not indicate whether Shell will remain a partner in any second well, whether or not it negotiates a farm-out deal.

The 8,205-square-mile exploration lease is in water depths ranging from 5,000 to 10,000 feet.

Then there's the west

For those who revel in big dreams, there's the seemingly unending hope of unlocking commercial quantities of oil in western Newfoundland.

The latest claim of a breakthrough occurred in late February when Canadian Imperial Venture Corp. and Shoal Point Energy (which CIVC has a deal to take over by May 30) claimed encouraging results from seismic testing on Port au Port Peninsula and immediately started test drilling to probe a depth of more than 13,000 feet at a 45-degree angle.

The companies are claiming a 90 percent chance of up to 20 million barrels of oil only a few miles offshore and expect to issue results sometime in May.

"We're not making this up," said CIV Chief Executive Officer Steve Millan. "We're saying we're very confident, as confident as you can be in an exploration project."

The partners are speculating that their find has the potential to deliver 500 million barrels, and, according to Shoal Point President George Langdon, it "could be twice as big."

But doubt also hangs over the effort, with memories fresh of CIVC's bankruptcy in 2003 after years of exploration on the peninsula fell short of expectations.

CIVC plans to grant directors, officers and consultants incentive stock options to purchase 11 million common shares at a price of C10 cents per share. Investors are biding their time after giving the shares a boost earlier this year to C11 cents from C6 cents.

Possible refinery work

Harvest Energy Trust, owner of the 115,000 bpd Come By Chance refinery, is pondering three options, each costing about C$1 billion, to boost capacity at the plant to 155,000 bpd. A decision is expected later this year.

The trust said it may also retool the refinery to process 30,000 bpd of low-value residual oil into more valuable low-sulfur diesel or gasoline, as well as add new equipment to process heavier crudes.

Harvest reported it achieved average throughput of 98,617 bpd in its first full year of operating the refinery. Most of the crude came from Iraq.

But plans by Newfoundland and Labrador Refining Co. to build a new refinery — North America's first in a generation — may get stalled by turmoil in the debt market.

The company said it is evaluating financing proposals from several major banks and investment banks for the C $4.6 billion, 300,000 bpd Southern Head project.

However, it conceded that "conditions in debt capital markets remain challenging" and unless there is an early improvement it may "slow the current pace of development." ●

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SETTLEMENT

During the remand hearing DNR Commissioner Tom Irwin asked Kevin Brown, BP Exploration (Alaska)'s gas business development leader, about discussions with DNR during 2004-06. Were there any discussions during that period about oil and condensate recovery, Irwin asked, or did the discussions center on gas discovery?

Brown said he had not been involved in discussions with DNR at that time.

In response to the commissioner's question, BP submitted an affidavit from Ken Konrad, who was BP's lead negotiator with DNR on Point Thomson during 2004-06.

Konrad, BP's vice president Alaska gas from January 2000 until March 2007, was responsible for fiscal contract negotiations with the State of Alaska which produced the May 2006 fiscal contract.

Among those negotiating for the state, Konrad said in his affidavit, were Gov. Frank Murkowski's chief of staff, Jim Clark; DNR Commissioner Mike Menge and Revenue Commissioner Bill Corbus.

22nd POD rejected: Irwin out

The director of the Division of Oil and Gas issued a decision rejecting the 22nd Point Thomson plan of development and on the same day, Oct. 27, 2005, Tom Irwin, then (and now) DNR commissioner, resigned, Konrad said. Menge was named DNR commissioner and extended the time of notice of appeal for the Point Thomson POD rejection decision.

Whether Point Thomson should be developed with gas cycling (liquids production first, then gas) or with gas sales was one of the issues in the director's decision, Konrad said. Another issue was whether the unit owners should be required to drill an additional well in the unit in the near future.

Konrad said the parties agreed to a provision dealing with Point Thomson in the fiscal contract, and discussed the issues raised by the director's decision in those negotiations.

"In the course of those discussions, the negotiators, including DNR Commissioner Menge, mutually agreed that the development of the PTU under a gas sales depletion plan delivering gas into a gas pipeline was the most appropriate development plan for the PTU area and that there was not a compelling technical reason to drill an additional well in the near term. It was also agreed that the expansion leases should remain part of the PTU," Konrad said.

Among those negotiating for the state under former Gov. Frank Murkowski was his chief of staff, Jim Clark (left); DNR Commissioner Mike Menge (middle) and Revenue Commissioner Bill Corbus (right).

The Point Thomson agreements are in article 23 of the fiscal contract and Konrad said that article "specifically provided that, in exchange for and subject to certain actions to be undertaken by BP and the other parties to the fiscal contract, the state agreed not to terminate the PTU."

Fiscal contract never approved

Although the fiscal contract was submitted to the Alaska Legislature for its approval in May 2006, it was never approved.

Konrad said BP relied on the agreements reached with the state negotiators, including Menge, and provisions of the fiscal contract, as resolutions to the director's Oct. 27 decision, "and specifically that the development of the PTU area under a gas sales depletion plan delivering gas into a gas pipeline was the most appropriate development plan" for Point Thomson.

On Oct. 18, 2006, ExxonMobil, the Point Thomson operator, filed a modified plan of development in response to the Oct. 27, 2005, decision; on Nov. 3, 2006, BP and others filed notice of appeal and submitted supplemental materials.

At that time Gov. Murkowski had announced he was considering a special session of the Legislature to consider the fiscal contract and the state was considering and ultimately did propose changes in its finding, but there was no indication from state negotiators that the state was considering changes to the Point Thomson provisions, Konrad said.

Menge's decision a surprise

In Oct. 18 and Nov. 3, 2006, submissions, BP and the other lessees submitted and supported a modified proposed plan of development previously reached with the state's negotiators, including Menge, regarding Point Thomson development — a gas sales depletion plan delivering gas into a gas pipeline consistent with the fiscal contract. The plan also included the drilling of an additional well "on the earliest prudent schedule," Konrad said.

The state issued interim findings and a determination related to the fiscal contract on Nov. 16, 2006, and did not propose any changes to the provisions relating to Point Thomson.

On Nov. 27, 2006, Menge issued the commissioner's decision on appeal from the director's Oct. 27, 2005, decision, and in that decision Menge "completely reversed the previous statements and course of conduct undertaken by him and others representing the state and relied on by BP" when it made its Oct. 18 and Nov. 3, 2006, submissions, Konrad said.

Menge terminated the Point Thomson unit on the basis of the proposal to develop the unit under a gas sales depletion plan.

Konrad said the Nov. 27 decision "was not anticipated by BP and was entirely inconsistent with the development plan for PTU that we had agreed" to with state negotiators as part of the fiscal contract, and had relied on in making the Oct. 18 and Nov. 3, 2006, submissions. ●

NORTH OF 60 MINING NEWS

The Red Dog Mine in northwest Alaska is the world's largest zinc mine. The zinc-lead concentrates produced at Red Dog are loaded onto ships at the Delong Mountain Transportation System Port owned by the Alaska Industrial Development and Export Authority. Alaska accounts for more than three-fourths of all U.S. zinc production.

PHOTO BY PAUL ANDREW LAWRENCE

A special supplement to Petroleum News
WEEK OF
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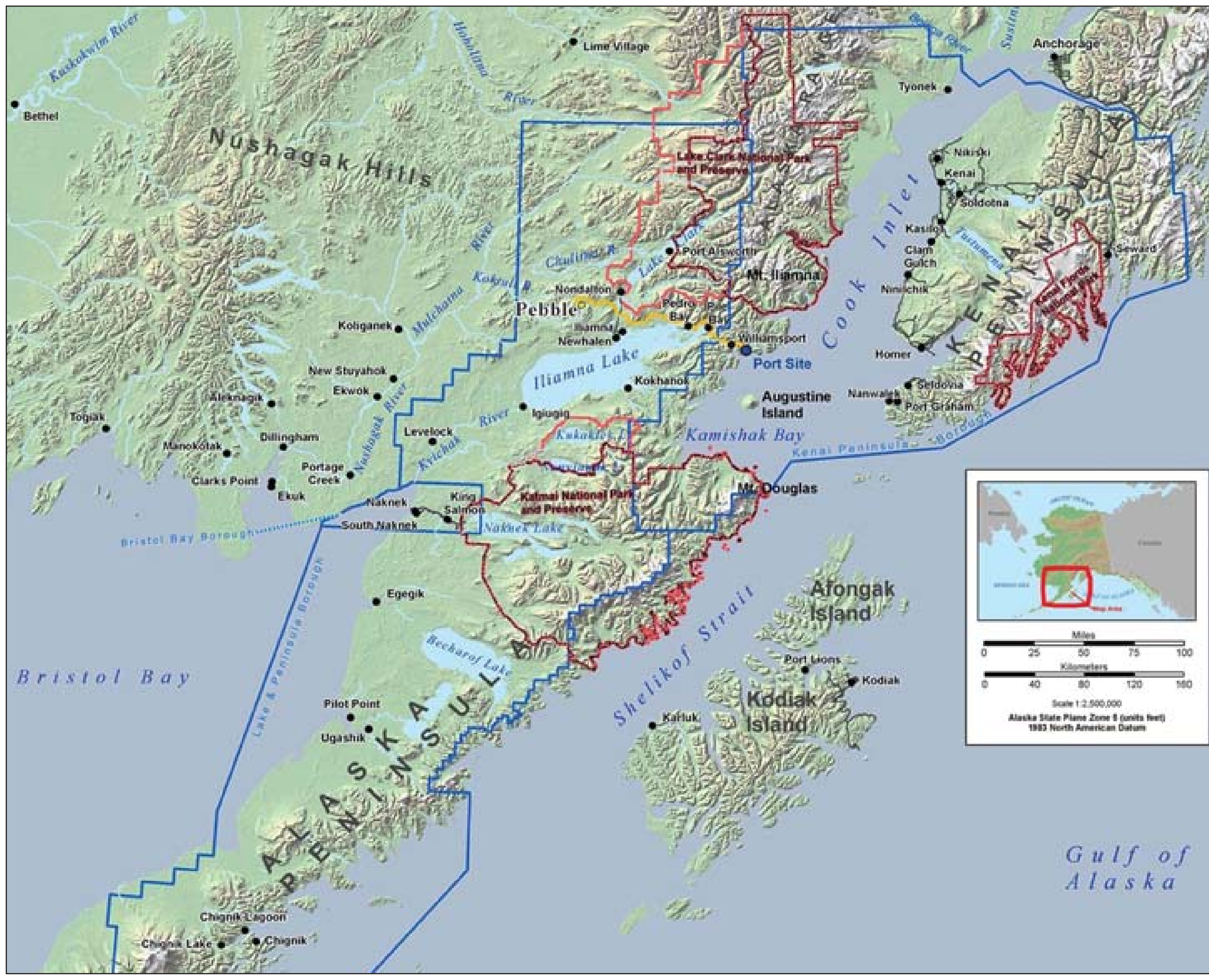
Petroleum news

● ALASKA

Should Pebble be developed?

Mines permitted under Alaska's stringent process prove responsible mining is possible; worldwide demand for copper grows

By SHANE LASLEY
Mining News



Taking into consideration that the planet's second largest porphyry copper-gold-molybdenum resource is located on a plot of land equal to 0.00076 percent of Alaska's total land mass, is being developed under one of the world's most stringent permitting systems, and could help meet the growing demand for copper worldwide; is it irresponsible and unfair to Alaska and its citizens not to develop the Pebble Project?

The real question begging for an answer is, "Why not Pebble?"

The fact that one of earth's largest porphyry copper-gold-molybdenum deposits is located in a watershed that hosts one of the world's most celebrated salmon runs is creating one of the planet's greatest resource development versus environmental protection debates.

Alaska large-scale mines have a good record

Pebble's primary opponent, The Renewable Resources Coalition, asserts that "toxic by-products are an inevitable result of large open pit mines like the proposed Pebble mine."

This has not proven to be the case for the modern large open-pit mines currently operating in Alaska. All large-scale mines currently in operation in the state can tout environmentally responsible track records. This is a testament not only to the mine operators but also to the state's permitting process.

Alaska's permitting process would require the Pebble Partnership, a 50-50 partnership formed between Anglo American plc and Northern Dynasty Minerals Ltd., to acquire around 50 separate permits to develop a mine at Pebble.

"If a mine is developed at Pebble, it will be the most strictly regulated and closely monitored mine on the planet," Office of Project Management & Permitting Director Ed Fogels told Mining News March 19.

Bristol Bay salmon are the primary expressed concern

The primary concern expressed by the Renewable Resource Coalition and others who oppose a mine at Pebble is the effect the operation might have on the Bristol Bay salmon fishery.

The Red Dog zinc-lead mine in Northwest Alaska and the Fort Knox gold mine in the Interior have two things in common. They are both large open pit mines, and they both have improved the fish habitat in the waterways leaving their operations, according to state regulators.

When it comes to large open-pit mines and water quality, the best example in Alaska is the world's largest zinc mine, the Red Dog Mine.

Before Teck Cominco and its Alaska Native corporation partner NANA Inc. developed the gigantic zinc-lead deposit near Red Dog Creek, the stream was so mineralized from naturally occurring acid-rock drainage that it could not support fish.

One of the state's permit requirements at the mine, and at all large mines in Alaska, is that all water flowing into the project be captured and treated to water quality standards, before being released as outflow. The result of treating water at the Red Dog mine is that fish can thrive in the water flowing out of the mine, and as a result, fish weirs have been installed to prevent the fish now living in the waters from swimming upstream above the mine.

Water must meet 'Aquatic Life Standards'

Water quality has been the central issue in the debate and in proposed legislation surrounding Pebble.

Fogels told Mining News that water discharged from a mine like the proposed Pebble Mine must meet or exceed Aquatic Life Standards, which sets a higher standard for water quality than those of most municipalities.

Water delivered to more than 210,000 Anchorage residents via the public water system contains around 321 parts per billion copper, more than 30 times the 10 ppb that large-scale mines are allowed to discharge to meet Aquatic Life Standards.

One of the critical aspects in achieving and maintaining large-mine permits in Alaska is having an aggressive program to monitor any discharges from the mine as well as keep track of water flow rates and other effects a mine might have on the environment.

Taking into consideration concerns about the Pebble Project, regulators agree that if Pebble is developed into a mine, the monitoring requirements would be the most stringent ever put in place.

Fogels told Mining News that large-scale mine monitoring programs are designed to detect the slightest changes to

see **PEBBLE** page 3

COURTESY HDR ALASKA

A Pebble environmental consultant uses video to document fish habitat near the Pebble Project exploration site. At the end of 2007 $87 million had been spent on environmental studies, an additional $32 million is expected to be spent in 2008.

continued from page 2

PEBBLE

the environment. In this way, the cause of such changes can be caught and corrected well in advance of a problem.

World demand for copper growing

During a Mar. 19 speech at the Alaska Miners Association biennial conference in Fairbanks, Rio Tinto plc CEO Tom Albanese said China recently surpassed the United States as being the world's largest consumer of copper, and its consumption is rising "at a rate that is phenomenal."

"World refined copper usage is estimated to have increased by 6.8 percent in the first 11 months of 2007, compared with usage in the same period in 2006, according to a February 2008 report by the International Copper Study Group. World usage growth was driven by China, where apparent usage grew by 37 percent as net imports of refined copper rose by 157 percent." The report does not take into account unreported uses, which could be significant.

U.S. Sen. Lisa Murkowski, R –Alaska, who also spoke at the AMA conference in Fairbanks, said the United States imports more than half of its minerals, which could become a serious concern when the growing demand overseas is taken into consideration.

Why not Pebble?

The estimated 67 billion pounds-plus of copper that Pebble could deliver would go a long way toward ensuring that the nation is able to meet its future need for copper.

The Pebble Partnership has not yet decided how it would like to develop the Pebble Project. Once the partners come forward with a mine plan, state regulators say it will take several years to permit and develop a mine.

If a mine is developed at Pebble it would provide thousands of jobs over several decades, many of which will be filled by Alaskans. A mine also would pump billions of dollars into state coffers and produce a resource that is becoming increasingly critical to the U.S. economy.

Why not Pebble? ●

NUNAVUT

Baffin Island project given 20-year life span

Baffinland Iron Mines Corp. Feb. 19 released the results of a definitive feasibility study on its Mary River Project iron ore deposits located on Baffin Island, Nunavut.

The study outlined a 20-year mine project based on proven and probable reserves of 160 million metric tons and 205 million metric tons, respectively, and annual shipment of 18 million metric tons of high-grade iron ore (64.7 percent iron) primarily to the European market. A moisture content of two percent and a 75:25 lump-to-fines ratio are assumed and reflect metallurgical test work.

The pre-tax internal rate of return was calculated at 20.5 percent, with a payback period of 3.7 years, assuming iron ore prices about 40 percent below the 2008 benchmark, the study said.

Baffinland said the project would have a capital cost C$4.1 billion with a contingency of C$438 million, the company said.

The pre-tax internal rate of return was calculated at 20.5 percent, with a payback period of 3.7 years, assuming iron ore prices about 40 percent below the 2008 benchmark, the study said.

Baffinland said the completion of the definitive feasibility study is a major milestone toward the development of a world class operation with direct shipping of iron ore deposits to European steel mills, and it results in significant reduction in project risk.

Further risk reduction is expected with the completion of a scoping study in the second quarter of 2008 that will demonstrate the scalability of the project by expanding output to 30 million metric tons per year based on the enormous resources delineated in Deposits 1, 2 and 3.

During the third quarter of 2008, further technical de-risking of the project is anticipated with the delivery of a bulk sample of 250,000 metric tons of lump and fine iron ore to certain European steel mills, according to Gordon McCreary, Baffinland's president and CEO.

—MINING NEWS

ALASKA

Anglo American posts record '07 earnings

Anglo American plc, a 50-50 partner in the Pebble Project in Southwest Alaska, posted record earnings of $5.8 billion, or $4.40 a share, and $10.1 billion in operating profits in 2007. The results compared with $5.5 billion, or $3.73 a share, in earnings and $9.8 billion in operating profits a year earlier.

Total group revenue, however, decreased 7.7 percent in 2007, dipping to $35.7 billion from $38.6 billion in 2006.

Anglo American pursued a combination of strategic restructuring and a period of building from a position of strength, including the identification and execution of opportunities to drive new growth and value, Carroll said.

"The strength of our performance was due to improved production volumes of ferrous metals, copper and zinc, an increased focus on operational discipline and a continuation of the supportive trading environment," Anglo American CEO Cynthia Carroll said in a statement.

Anglo American pursued a combination of strategic restructuring and a period of building from a position of strength, including the identification and execution of opportunities to drive new growth and value, Carroll said.

She also noted that Anglo American has "a tremendous $41 billion pipeline of projects approved and under consideration across three commodity businesses" – precious, base metals and bulks – which should generate significant profitable growth for the company, both in the near and medium term.

The Pebble copper-gold-molybdenum deposit is one project in this pipeline. In July 2007, Anglo American became a 50 percent partner with the Northern Dynasty Partnership, a wholly owned affiliate of Northern Dynasty Minerals Ltd., in the Pebble Limited Partnership for a staged cash investment of $1.425 billion. The partnership owns the Pebble Project which has the open-pit-style Pebble

West copper–gold–molybdenum deposit and the adjacent, deeper and higher grade Pebble East deposit. The resources at Pebble rank amongst the world's most important accumulations of copper, gold and molybdenum, according to Anglo American.

The company said the partnership's objective is to complete a pre-feasibility study in 2008, feasibility study around 2011 and to have a world-class mine in operation by 2015.

—ROSE RAGSDALE

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Petroleum news

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● GUEST COLUMN

Columnist offers apologies for lengthy discourse; no quick fix possible with 'sack full' of news

BY CURT FREEMAN
For Mining News

Let me extend my apologies to all those looking for a quick summary of the Alaska mining industry this month.

There is nothing "quick" about the tome you are about to read, but don't blame the messenger. I just report what I read, and this month it's a sack full! No need for more words, just read on!

Western Alaska

NOVAGOLD RESOURCES announced results of a newly released report on the Rock Creek project, nearing commercial production outside of Nome. The revised feasibility study envisions a 7,000-ton-per-day operation producing 111,000 ounces of gold at cash costs of $467 per ounce. Average strip ratio will be 2:26 to 1 with estimated capital costs of $158 million. In addition to mine site work, the company has committed $5 million toward exploration to expand existing resources.

NovaGold Resources and partner **BARRICK GOLD** have highlighted the potential to expand the Donlin Creek deposit gold resource in the East Acma area. Drill hole DC07-1556 returned 299 meters of 5.26 grams per metric ton of gold and DC07-1564 returned 308 meters of 4.60 g/t, the two best holes for contained gold yet drilled on the property. These holes targeted the shallowly plunging Donlin anticline, which contains the rhyodacite porphyry intrusive bodies that host the majority of the gold mineralization at Donlin Creek. Similar geology projects roughly 1,000 to 1,200 meters further to the east and south from this new East Acma drilling.

The author


CURT FREEMAN

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ALIX RESOURCES CORP. and joint venture partner **MILLROCK RESOURCES** announced updated 2008 plans at the Divide gold project near Nome. Exploration plans include 3,600 meters of reverse circulation drilling, 1,800 meters of core drilling, ground electromagnetic and magnetic geophysical surveys, and trenching, geologic mapping and channel sampling. Total approved budget is $1.5 million.

TRIEX MINERALS CORPORATION and **FULL METAL MINERALS** announced updated 2008 exploration plans at the Boulder Creek uranium project on the Seward Peninsula. Drill programs were completed in both 2006 and 2007, and total expenditures to date exceed $2.5 million. Work in 2008 has a preliminary budget of $800,000 and will focus on fully delineating the extent of anomalous surface soils and rocks mineralization previously discovered at the Fireweed prospect.

Full Metal Minerals and JV partner **FREEPORT-MCMORAN** Exploration Corporation announced plans to conduct a 2,000-meter drilling program at the Pebble South project near Iliamna. This $1 million exploration program, to be funded pending completion and favorable conclusions from an ongoing due diligence review, will test multiple geochemical and geophysical targets.

Full Metal Minerals and JV partner **HIGHBURY PROJECTS** announced plans to complete 3,000 meters of drilling at their Moore Creek project. The $1.2 million drill program will test coarse-gold bearing quartz stockwork within an open-ended 300-meter-by-400-meter area that was discovered during the 2007 trenching program. Results included 8.9 g/t over 11 meters.

Full Metal Minerals and JV partner **BHP BILLITON** will complete an airborne geophysical survey targeting multiple copper-gold-molybdenum porphyry targets on their Alaska Peninsula reconnaissance project. Follow-up will include surface mapping, sampling and ground geophysics. The partners have approved a $1.3 million budget for this work.

Full Metal Minerals announced that project operator **METALLICA RESOURCES ALASKA** is currently reviewing results from its 2007 exploration program on the Alaska Peninsula project. The undrilled Kawisgag and Mallard Duck Bay porphyry copper-molybdenum targets will likely be the primary focus of this year's exploration program. The 2008 program budget will be at least $400,000 to conduct surface mapping, sampling and geophysics which may be followed by a larger program involving 1,500 meters of first pass reconnaissance drilling of the Kawisgag porphyry target.

LINUX GOLD CORP. announced that a new technical report had been released for its Granite Mountain project on the Seward Peninsula. The report recommended a surface exploration program, designed to clarify existing aomalies followed by a drilling program. Total estimated cost for the work was $830,000.

The most significant news of the month came with the much-anticipated release by **NORTHERN DYNASTY MINERALS** and partner **ANGLO AMERICAN PLC** of the revised ore reserves at their Pebble East deposit. The 2007 drill program consisted of 157,000 feet of core drilling in 36 holes. The new inferred mineral resources stand at 3,860,000,000 metric tons grading 0.58 percent copper, 0.36 g/t and 0.033 percent molybdenum which equates to a 0.99 percent copper-equivalent grade. The new resource estimate contains 49 billion pounds of copper, 45 million ounces of gold, and 2.8 billion pounds of molybdenum. Significant 2007 drill intercepts which helped form the new resource estimates include Hole 7359 which intersected 2228 feet grading 1.42 percent copper equivalent comprising 0.92 percent copper, 0.50 g/t and 0.035 percent molybdenum; hole 7374 which intersected 2,449 feet grading 1.19 percent copper equivalent comprised of 0.61 percent copper, 0.42 g/t and 0.056 percent molybdenum; and hole 7378 which intersected 1,846 feet grading 1.45 percent copper equivalent comprised of 0.91 percent copper, 0.70 g/t and 0.021 molybdenum. Drilling re-commenced at the project in mid-February with 5 drill rigs and the companies intends to increase that number to 12 by the end of June. The 2008 program will focus on Pebble East and consists of delineation drilling and infill drilling. Infill drilling is designed to upgrade the resource of a high grade portion of the deposit to an indicated category in preparation for pre-feasibility mine planning.

GEOINFORMATICS EXPLORATION INC. announced regional target information surrounding its Whistler project in the western Alaska Range. A focus of this work was an area of about 15 kilometers by 7.5 kilometers surrounding the Whistler Zone that has been analyzed in detail and which hosts a cluster of at least 50 individual prospective exploration targets, most of which have not been drill tested. The company believes that results such as those from the Rainmaker prospect which returned a drill intersection of 184 meters grading 0.44 g/t and 0.16 percent copper, confirms that the Whistler Zone is not an isolated occurrence of mineralization on the project. The 15 kilometer by 7.5 kilometer target area is underlain by a large broad-wavelength magnetic anomaly interpreted to be the main intrusive body at depth in the Whistler Intrusive Suite and the underlying magmatic source of the Whistler Zone diorite porphyry. Targeting has focused on oval-shaped magnetic bodies in this area, which are potentially individual porphyry-related bodies, comparable to the Whistler Zone. The company intends to drill test as many regional targets as possible, which include the Rainmaker, Round Mountain, Raintree, Muddy Creek and Island Mountain prospects.

TNR GOLD CORP. announced the release of a new technical report on the Shotgun gold project north of Dillingham. Drilling during 2006 at the Shotgun Ridge prospect intercepted 210.5 meters grading 1.29 g/t. Results from this drill hole were key in enabling the company to identify two steeply dipping feeder zones and structurally reinterpret the Shotgun Ridge zone. Based on this new interpretation the zone appears to be open at depth. A $3.1 million exploration program has been recommended which includes drilling at both Winchester and Shotgun Ridge in addition to further surface work on the Shot and King prospects.

Gold Crest Mines, Inc. announced that it has signed two separate term sheets with Newmont North America Exploration Ltd. under which the parties propose to create two joint ventures to explore for gold deposits covering Gold Crest's AKO and Luna claim groups in southwestern Alaska. Under the proposed terms for each joint venture, Newmont can earn a 51 percent interest in the properties by spending $3 million which includes a minimum of 3,000 meters of drilling on or before

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FREEMAN

December 31, 2011. In addition, to earn its interest under each joint venture, Newmont must make cash payments of $25,000 on or before January 15, 2009 and $50,000 on or before January 15, 2010. Newmont has the option to increase its interest under either joint venture to 70 percent by completing an additional $6 million in exploration work, which includes a minimum of 3,000 additional meters of drilling on or before December 31, 2015.

Eastern Interior

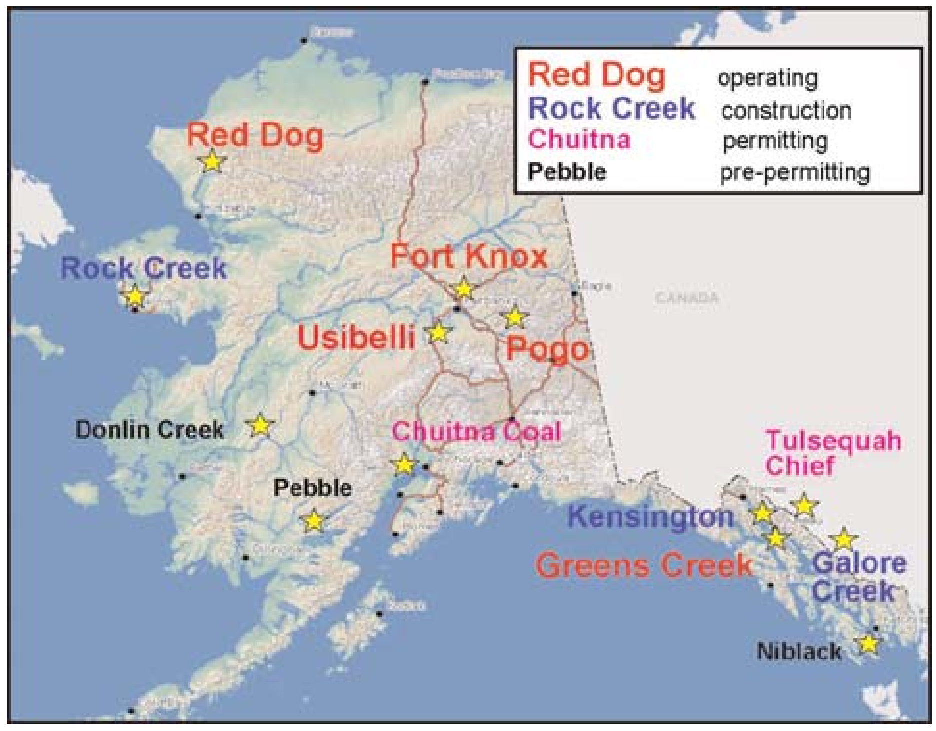
KINROSS GOLD announced year-end 2007 results from its Fort Knox mine. The mine produced 76,060 ounces of gold in the 4th quarter at a cash cost of $403 per ounce while year-end totals were 338,459 ounces of gold produced at a cost of $344 per ounce. While production was up slightly over 2006 due to a 7 percent grade increase, cost of production rose 11 percent due primarily to increased commodity and energy costs. Exploration spending for 2007 totaled $4.4 million while capital expenditures for the year were $30 million. During the year the mill processed 12,722,000 metric tons of ore ranging in grade from 0.84 to 1.01 g/t. Recovery ranged from 84 percent to 88 percent. The Fort Knox heap leach project is continuing its development phase and is expected to extend the remaining life of the mine from 2013 until 2018.

The company tabled its year-end 2007 resource updates that included proven and probable reserves of 240,915,000 metric tons grading 0.50 grams gold per metric ton, equivalent to 3,856,000 ounces of gold. An additional 35,791,000 metric tons grading 0.72 grams gold per metric ton, equivalent to 834,000 ounces, is classified as measured and indicated resources.

Kinross Gold and **FULL METAL MINERALS** announced formation of an exploration alliance covering properties in Alaska and the Yukon Territory. Under terms of the agreement, Kinross will make a one-time cash payment of $50,000 to Full Metal. Under an initial two-year term, Kinross and Full Metal have each agreed to budget in 2008, $150,000 for compilation and generative field work targeting one or more regions in Alaska and the Yukon with an additional amount in 2009 to be determined. Alliance projects will be funded on a 50/50 ownership basis for the first $1 million in initial project expenditures. Following completion of such initial work, Kinross would have an option to increase its ownership to 75 percent by completing a Feasibility Study in respect to each specific Project. At any time following the initial expenditures, Kinross may terminate its earn-in right for a 2 percent NSR royalty. Full Metal will have the right to pursue any non-gold targets within the target areas on a 100 percent basis.

FREEGOLD VENTURES LTD. announced resumption of exploration at its Golden Summit project. The company initiated a 40,000 foot Phase 2 continuation of the systematic rotary air blast drill program that was conducted from December 2006 through November 2007. Drilling will be conducted on the Cleary Hill, Beistline and Tolovana prospects. In addition, the company announced commencement of a 15,000 foot diamond core drilling program centered on the Fence 1 area of the Cleary Hill mine. The core program is designed to extend shear-hosted mineralization to depth below the shallow rotary air blast drilling previously completed in this area.

LINUX GOLD CORP. announced that after a review of the Lost Dog prospect in the Fairbanks District, it has elected not to exercise its option to acquire the property. The company indicated that it is currently reviewing additional properties in Alaska.



INTERNATIONAL TOWER HILL MINES announced initial gold resource estimates for its Livengood gold project north of Fairbanks. Initial inferred gold resources came in at 3.1 million ounces of gold at an average grade of 0.54 g/t at a cutoff grade of 0.3 g/t. The company indicated that the 2008 work program will focus on doubling the overall resource, converting a large portion of the inferred resources to indicated and measured and gathering the data needed to complete a preliminary economic scoping study by the middle of 2009. The company has budgeted a total of $7.5 million to complete this program. The company also announced the results from a preliminary gold characterization study involving bottle roll cyanide recovery testing which indicates very high, rapid, cyanide extractions for the oxide and weakly oxidized ores (averaging 96.7 percent) with moderate to lower extractions for the deeper non-oxidized ores (averaging 58.7 percent). Findings of the resource study suggest that the primary ore controls appear to be the intersection of favorable host lithologies with major structural zones which are interpreted to have acted as conduits for intrusion-related gold bearing fluids. The volcanic rocks form a particularly favorable host and are persistently mineralized. Mineralization in the Money Knob area occurs at surface and forms stratiform and cross-cutting bodies in a folded and faulted sedimentary and volcanic sequence. The main body of mineralization lies along an east-west structural zone that is at least 2 kilometers long and varies in width from 300 to 800 meters. This large structural zone has localized a series of 90 million year old dikes, sills and plugs that are believed to be related to the gold mineralization.

LITTLE SQUAW GOLD MINING CO. reported that it has canceled an Exclusivity Agreement pertaining to the potential purchase of the Livengood Bench placer gold deposit in the Livengood District.

Full Metal Minerals announced approval of a $6.5 million program to include 15,000 meters of drilling and additional exploration on its Fortymile project near Chicken. The Phase 1 program will include step-out, and infill drilling at the LWM discovery as well as target the highly prospective Oscar, Eva and Drumstick prospects. Additional surface sampling programs will be completed at numerous other showings and anomalies on the project.

Alaska Range

FULL METAL MINERALS announced that it is currently awaiting results from metallurgical testing from the high-grade Lucky Shot gold property north of Anchorage. The company is considering an underground exploration, development and bulk sampling program within the Lucky Shot shear zone, as well as surface drilling testing of multiple targets on the property. A minimum $2.5 million exploration program is planned for 2008.

Northern Alaska

NOVAGOLD RESOURCES announced results from the 2007 work at its Ambler project in the Brooks Range. The company completed 3,000 meters of core drilling in five holes, and two exploration holes identified the existence of a deeper limb of a recumbent fold structure containing the same stratigraphy as the Arctic massive sulfide deposit. These drill results outline an area of about 4.5 square kilometers of productive stratigraphy within drill depth below and adjacent to the Arctic deposit. The company also has upgraded the historical Ambler resource which now stands at 16.8 million metric tons of Indicated Resource grading 4.14 percent copper, 6.03 percent zinc and 0.8 g/t and an Inferred Resource of 11.9 million metric tons grading 3.56 percent copper, 4.99 percent zinc and 0.7 g/t. The revised resource is estimated to contain an Indicated Resource of 1.5 billion pounds of copper, 2.2 billion pounds of zinc and 0.4 million ounces of gold, with an additional Inferred Resource of 0.9 billion pounds of copper, 1.3 billion pounds of zinc and 0.3 million ounces of gold. On an equivalent metal basis, the average metal content exceeds 8 percent copper equivalent grade. Little Squaw Gold Mines has received draft results of an independent economic scoping study on its alluvial gold deposit discovery in the Little Squaw Creek drainage at its Chandalar project in the Brooks Range. The study concludes gold-bearing gravels contain a minimum of 231,000 ounces of recoverable gold that could be extracted from 8 million cubic yards of pay gravel at a cash cost of $442 per ounce and a full cost of $711 per ounce. The company believes the deposit can be substantially expanded through additional drilling and that an increase in its size would significantly increase profitable mine life and lower unit costs. The scoping study envisioned an open-pit mine plan that would begin with production at 30,000 ounces of gold per year and yield an average of 21,000 ounces of gold per year over an 11-year mine life. Required start-up capital is estimated at $17.9 million with life-of-mine capital costs at $30.6 million. Cash flow analyses run at $900-per-ounce gold show a 33 percent internal rate of return on capital investment with a 3.6-year payback. Cumulative net revenues are projected to total $204 million (after transport cost deduction and refining losses), net cash flow projection totals $44 million and the net present value of cash flow projection totals $12 million using a 15 percent discount rate. Additional engineering and exploration work is planned for 2008.

SILVERADO GOLD MINES reported

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● GUEST COLUMN

UAF School of Mineral Engineering: All dressed up and nowhere to go

By J. P. TANGEN

For Mining News

An essential element of the Communist Manifesto was a free education to all qualified young men and women, followed by a rich and rewarding career that would produce endless benefits for the state and, by extension, all people. We, of the People's Republic of Alaska, are fortunate to have realized this basic Marxist objective, at least in the area of mining and geological engineering.

I am told, in fact, that despite the presence of a vital mining industry, there is a shortage of qualified Alaskans to work at those mines. Currently, there are five large operating mines within the People's Republic, and there are at least five more in the "pipeline." I am further told that at the University of Alaska Fairbanks there are engineering programs begging for students and scholarships for all to mitigate any conceivable financial hardship.

Many of the mines, both those now operating and others on the drawing board are situated in rural areas where they do, or will, represent substantial infusions of cash into local economies. In addition, it appears that these jobs substantially favor local residents who are otherwise disproportionately under-employed.

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.

Given the foregoing, I must concede confusion. One would think that such need and opportunity could not thrive simultaneously in our socialist heaven. Yet it does. It appears that the People's representatives are allowing a disconnect to exist, without comment or cure. Possibly, there are in Alaska young men and women who do not wish to step into $80,000-per-year jobs upon graduation or who cannot resist the temptation to migrate to some far off place to pursue more menial careers. On the other hand, it seems incredible that there are fewer than 200 young Alaskans who can be induced annually to embrace these opportunities.

Currently, it is said that the national demand for engineers in the mining industry grows at a steady 300 new positions every year, yet schools across the nation can only produce candidates at less than half that rate, while here in the People's Republic we are producing only a fraction of that total.

Every schoolteacher in Alaska is afforded the opportunity to learn about minerals in general and the mineral potential of Alaska through the AMEREF program. (For those who live in trees and eat snakes, AMEREF is the acronym for Alaska Mineral & Energy Resource Education Fund.) The AMEREF program has been putting educational kits into the hands of Alaska's teachers for decades. In many instances, the teachers have even opened the box. Presumably, as the result of this initial exposure, every kid in the Republic knows that over the course of the average lifetime each of us will need huge amounts of copper, lead, zinc, silver, gold and many other mined commodities – all the fruits of our own backyard.

With that tidbit of information, it would seem to follow as night follows day that out of that fertile field young minds emboldened by curiosity would want to know how green rocks became copper pipes and how a person could make a living digging humongous holes in the ground.

I recently had the privilege of touring the state-of-the-art facility at the Fort Knox Gold Mine near Fairbanks. High above the pit, in command of the entire show, sat the operations manager. He had half a dozen computer screens arrayed across the desk in front of him from which he directed shovels and trucks and everything else happening in the pit 1,000 feet below. It has to be one of the coolest jobs on the face of the earth.

What kid in modern America would not happily spend his life in this wonderful world of modern science and technology? I have to believe that the reason we cannot find youngsters who want to be mining engineers when they grow up is because they don't know what a brilliant opportunity they have. The demand is great, the education is available in our own university system, the price is right, and surely our kids are bright enough. Hey folks, this is the utopia people have fought and died to create. Karl Marx would be rolling over in his grave if he only knew how we were letting it pass us by. ●

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FREEMAN

assay results from recently completed underground exploration at Workman's Bench on its Nolan Creek project returned gold grades up to 1.04 ounces per ton and antimony grades up to 64.34 percent. To date three main mineralized zones have been identified through the correlations between the underground observations with the drill intercepts from the 2007 Workman's Bench drilling program. The company is planning an extensive drilling program at Workman's Bench to define the gold and antimony mineralization at depth over a strike length of 1,500 feet.

Southeast Alaska

HECLA MINING announced year end 2007 production results from the Greens Creek mine on Admiralty Island. The total cash cost per ounce of silver produced at Greens Creek for the year was a negative $5.27 per ounce with total production costs for the year of negative $1.93 per ounce. The average grade of ore mined during the year was 15.45 ounces of silver per ton, nearly unchanged from the average grade of 15.78 ounces per ton that was mined in 2006. For the year the mine produced 8,646,824 ounces of silver, 68,005 ounces of gold, 21,029 tons of lead and 62,603 tons of zinc. Exploration efforts from surface and underground continued in 2007 with most of the underground exploration focused on the silver-rich 5250 North Extension zone and the West Gallagher zone. In the 5250 zone, a hole was drilled 1,000 feet above and along strike of the known reserve and resource and intersected silver grades of 30 ounces per ton (opt) with 18 percent zinc and lead. This is about 50 percent greater than the average ore grade at Greens Creek, and could lead to a possible addition to resource in 2008. Surface drilling included 17,540 feet of drilling and included an intersection of the current mine workings that identified multiple zones of mineralization indicative of "mine horizon" intervals. This intersection could open up a new area to explore for mine extensions in close proximity to the existing underground infrastructure. The company also announced revised resource estimates for the mine which include probable reserves of 2,513,000 tons grading 13.7 ounces of silver per ton, 0.11 ounces of gold per ton, 3.8 percent lead and 10.2 percent zinc, mineralized material of 103,400 tons grading 5.6 ounces of silver per ton, 0.13 ounces of gold per ton, 3.4 percent lead and 7.9 percent zinc, and other resources of 673,700 tons grading 14.5 ounces of silver per ton, 0.13 ounces of gold per ton, 4.0 percent lead and 10.5 percent zinc. The company also reported that exploration efforts at Greens Creek has produced a total of about 150 million ounces of silver and 1 million ounces of gold since 1987 and it currently has 116 million ounces of silver reserves and resources, with a mine life extending to 2019.

FULL METAL MINERALS and JV partner **ALTAIR VENTURES** are currently mobilizing to the CJ gold property near Hollis. A 1,700 meter core drilling program will target the historic Dawson Mine. This $650,000 exploration program will commence immediately following final receipt of exploration permits.

Full Metal Minerals announced that it is planning a minimum 1,000 meter drilling program at its Mt. Andrew copper project on the Kasaan Peninsula. Step-out and infill drilling of areas drilled in 2006 and 2007 are planned for this $500,000 program.

UCORE URANIUM INC. reported the final assay results from 422 meters of core drilling in the I&L zone during its 2007 drilling program at its Bokan Mountain uranium project on Prince of Wales Island. Results included 50.24 meters grading 0.47 percent U3O8 in hole LM07-01 which included 2.68 meters grading 1.24 percent U3O8 and 3.90 meters grading 2.43 percent U3O8, 0.42 percent U3O8 over 15.23 meters in hole LM07-05 and 1.28 percent U3O8 over 1.2 meters in hole LM07-04. The company is planning a drill program in 2008 to test more of the 30 known mineral prospects on the project.

BRAVO VENTURE GROUP INC. reported today the company has acquired 100 percent interest in the Woewodski Island volcanogenic massive sulfide project near Petersburg following successful re-negotiation of certain terms in an underlying agreement with the vendors of the property, Olympic Resources. Bravo reported that in 2007 it completed detailed gravity and 3D IP geophysical surveys and two core holes totaling 432.6 meters at the East Lake target, where previous drilling encountered mineralized boulders of massive sphalerite and several horizons of semi-massive pyrite and fine grained black to grey argillite. Both holes drilled in 2007 contained +16 meter thick down hole intervals of anomalous silver (>1 part per million) and Zn (>0.1 percent). In addition to the East Lake drilling, the company completed 33 relatively short core holes, for a total of 2,541 meters, in gold-quartz veins which occur within broad, up to 10 meter thick, strongly carbonate altered shears. Higher grade results include: 1.13 meters grading 4.0 g/t, and 0.73 meters grading 7.2 g/t however, the high gold grades obtained in surface samples were not obtained in drill core. No further work is planned on these veins at this time.

CONSTANTINE METAL RESOURCES LTD. announced that a drill contract has been signed for two drills for its Palmer massive sulfide project near Haines. Drilling planned for 2008 will follow up on two thick high grade massive sulfide intersections drilled late in the 2007 drill season. The two 2007 drill holes located about1400 feet apart returned 45.90 ft of 3.79 percent copper, 7.24 percent zinc, 0.37 g/t and 47 grams of silver per metric ton in hole CMR07-07 and 79.5 feet assaying 6.46 percent zinc, 1.19 percent copper, 0.45 percent lead, 0.67 g/t and 49.8 grams of silver per metric ton in hole CMR07-09. ●

● ALASKA

Group protests Chuitna coal mine idea

Coalition files suit challenging DNR commissioner's rejection of petition to designate watershed as off limits to development

By ROSE RAGSDALE
For Mining News

The Chuitna Citizens NO-COALition filed an appeal Mar. 19 in Alaska Superior Court challenging a decision by Alaska Department of Natural Resources Commissioner Tom Irwin to reject its petition to designate all land within the Chuitna River watershed as unsuitable for coal mining.

Irwin rejected the petition last summer on the grounds that the evidence submitted to support the petition's claims did not make a compelling argument and the petition itself was overly broad, arbitrary and did not give the petitioner credibility in its assertions.

"For the State to determine that there will be no coal mining at all in the Chuitna River watershed is a very big deal," said DNR mining coordinator Ed Fogels. "It would be a long, drawn out process that would take more than a year under state and federal laws. If someone came forward, they would have to offer very good reasons to initiate the process, especially since coal mining regulations are so strict, and there have been successful coal mining reclamation projects around the nation."

Chuitna Citizens NO-COALition is opposed to a coal mine that PacRim Coal LP is considering developing. The venture group is seeking regulatory permits to develop a mine from the rich sub-bituminous coal deposits west of Anchorage. PacRim estimates it could recover 300 million metric tons of sub-bituminous coal, roughly equal to the energy of a billion barrels of oil, over 25 years.

Trustees for Alaska, an environmental law firm that represents the coalition, filed the petition with DNR in June 2007, asserting that the watershed area is primarily wetlands that cannot be reclaimed, and therefore, under state law should be designated as unsuitable for mining.

In a 61-page petition, the coalition argued that mining the area for coal could result in a reduction of long-range productivity of water supply, food or fiber products; would affect areas of unstable geology and other natural hazards in which the operations could endanger life and property; and are not exempt from a designation of being unsuitable.

Irwin rejected the petition on numerous grounds, including the fact that a large part of the Chuitna watershed is already subject to coal leases — PacRim owns 20,570, acres and a joint venture between Barrick Gold Corp. and Cook Inlet Region Inc. owns 17,690 acres.

He also noted that the Environmental Protection Agency in the 1990s found that the "acidic, muskeg-like wetlands that are widely dispersed throughout" the Chuitna watershed "are not highly productive," and "adverse impacts to the area would not be significant on a regional scale."

Upset that Irwin rejected the petition last summer and reaffirmed that decision on reconsideration in February, the citizens group filed suit, appealing the decisions in Anchorage Superior Court on March 17. ●

● ALASKA

Kinross soars on higher output, prices

Fort Knox Mine owner posts sharply higher earnings for fourth quarter, full year '07; board OKs heap leach, pit expansion project

MINING NEWS

Thanks to higher production and higher prices, Kinross Gold Corp. Feb. 21 posted 2007 earnings of $334 million, or 60 cents per share, up substantially from $165.8 million, or $0.47 per share, in 2006.

The Toronto-based owner of the Fort Knox gold mine also reported fourth-quarter 2007 earnings of $173.1 million, 29 cents per share, up more than 322 percent from $41 million, or 11 cents per share, for the same period in 2006. The fourth-quarter earnings included a gain relating to an asset swap transaction with Goldcorp.

Full-year revenue rose 21 percent to a record $1.1 billion from $905.6 million in 2006, and the average realized gold price was $697 per ounce. Revenue for the fourth quarter totaled $281.4 million, up 22 percent from the same period last year, and the average realized gold price was $796 per ounce.

Gold production at Fort Knox near Fairbanks increased slightly in 2007 to 338,459 ounces from 333,383 ounces during 2006. Overall, Kinross produced nearly 1.59 million gold equivalent ounces, up 7.7 percent from 1.48 million gold equivalent ounces a year earlier.

At Fort Knox, ore mined in 2007 jumped 41 percent from 2006 volumes due to increased stockpiling of low grade material, Kinross said. Gold equivalent ounces produced increased in 2007 due to a grade increase of 7 percent, however, ounces sold decreased slightly, due to timing of the sales. Lower sales of gold equivalent ounces were offset by a higher gold price, which increased revenues by 10 percent over 2006 results.

Project should double life-of-mine production

Kinross said cost of sales at Fort Knox rose 11 percent in 2007, reflecting higher costs for consumables such as fuel and electricity. Exploration costs also increased to $4.4 million from $1.4 million in 2006 as a result of increased core drill activity, in support of the Fort Knox Project: Heap Leach Addition and Phase 7 Pit Expansion.

The project will increase Fort Knox production to an average 370,000 gold ounces per year for five years beginning in 2010. It also will reduce the average life-of-mine cost of sales to about $390 per ounce.

Kinross said its directors gave final approval for the $270 million heap leach and pit expansion project, which is expected to extend the life of the mine by five years and double life-of-mine production to 2.9 million gold equivalent ounces.

Fort Knox currently mines and stockpiles large volumes of low grade ore and mineralized waste material that cannot be economically processed at the existing mill. The heap leach facility will allow the mine to process some of these low-grade materials, as well as zones of lower-grade ore that have not yet been mined.

The project will increase Fort Knox production to an average 370,000 gold ounces per year for five years beginning in 2010. It also will reduce the average life-of-mine cost of sales to about $390 per ounce.

Capital expenditures for the project are expected to total $175 million in 2008 and 2009, with annual deferred development costs of about $30 million per year related to the pit expansion from 2010 to 2012. The heap leach project is expected to begin production at the end of 2009 and Phase 7 will begin to contribute production in 2010.

Exploration at site is continuing, with some 5,900 meters of drilling completed, and 1.2 million ounces of additional gold reserves declared as of the end of 2007.

Kinross said it has received all federal and state permits required for the project. ●

ALASKA

NovaGold seeks funds in public offering

NovaGold Resources Inc. March 20 said it has priced a public offering of $95 million in convertible bonds due May 1, 2015 and net proceeds before deducting estimated offering expenses are expected to total $92.15 million.

NovaGold said a day earlier that cash raised in the offering will be used to repay short-term debt, fund exploration and development projects and pay bills. J.P. Morgan Securities Inc., the underwriter, also received the option to issue another $14 million in notes to cover over-allotments, if any. If the over-allotment option is exercised, net proceeds from the offering would total $105.73 million.

NovaGold is scheduled to begin production this year at the Rock Creek, Big Hurrah and Nome Gold deposit in western Alaska. It also aims to continue efforts to develop the Donlin Creek gold project in western Alaska, which it owns 50/50 with Barrick Gold, and the Galore Creek copper-gold-silver project in northwestern British Columbia, which it owns 50/50 with Teck Cominco Ltd.

The bonds have a semi-annual cash interest coupon of 5.5 percent and are convertible into NovaGold common stock based on a conversion rate of 94.2418 shares per $1,000 principal amount of notes, equivalent to a conversion price of about $10.61 per share (equivalent to C$10.77 per share), subject to adjustment. The conversion price represents a 35 percent premium to the closing price of NovaGold common stock on March 19. The Vancouver, B.C.-based junior said it will pay back about C$16 million that it borrowed under a C$30 million short-term credit facility and finance ongoing work in Alaska and British Columbia.

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The junior is also earning a 51 percent interest in the high-grade Ambler copper-zinc-silver-gold project in Northwest Alaska as project manager in partnership with Rio Tinto plc.

—ROSE RAGSDALE

● ALASKA

Alaskan dreams of finding the mother lode

After more than 30 years of prospecting, Herschbach fears gold-seeking opportunities will peter out in face of anti-mining initiatives

By SHANE LASLEY

Mining News

When Steve Herschbach began his personal quest to find the mother lode with a metal detector on Moore Creek in Alaska's Iditarod Gold District in 1973, gold prices averaged about $70 an ounce. Nearly 35 years later, the 49-year-old miner may be nearing his goal at the very place he started looking.

Herschbach was 14 years old when he talked his dad into giving him a front row seat on a gold hunting expedition by airplane to Flat in southwest Alaska. Young Herschbach had research the property and was ready to do some prospecting. To his dismay, the area he chose was already crawling with miners and prospectors, and there was no place left for the young prospector to look.

Disappointed, the father and son team turned the plane back toward their home in Anchorage. On the return trip, the pair spotted some old abandoned mine workings on Moore Creek, and landed the plane and did some prospecting.

When the younger Herschbach did not have much luck finding gold with his metal detector, a change in techniques panned out for the duo. Finding a good source, the pair was able to return home with a significant amount of gold. Ever since that first prospecting trip to the region, Moore Creek has held Herschbach's attention and inspired in him a dream to discover the lode source for the area.

Herschbach acquires Moore Creek claims

The father-son duo soon discovered that they were inadvertently "claim jumping" the mining claims of an old-timer in the area. Over the years, the Herschbachs frequented the area and got to know Don Harris, the old-timer who owned the claims.

Though he tried, Steve Herschbach was never able to convince Harris to sell the claims to him. But the subsequent owner, who knew of Herschbach's interest in the property, offered to sell him the claims in 2003.

Herschbach, his dad and two other partners joined forces to form Moore Creek Mining LLC and purchased 480 acres of mining claims.

Three decades after their first fateful trip to Moore Creek, the father and son team flew out to their newly purchased claims. This trip was not to prospect, even if they did make a little time for it, but to stake up an additional four claims, giving them a total of 1,000 acres on Moore Creek.

COURTESY OF MOORE CREEK MINING CO.

Steve Herschbach (right) and his father Bud Herschbach (left) at the Moore Creek gold property. The duo first discovered the property on a prospecting trip in 1973.

New owners discover coarse placer

Anxious to explore the mine as soon as weather permitted the following spring, Herschbach, along with three family members, loaded up his father's plane with gear and headed out to prospect for gold.

Dredging turned out to be mediocre due to their dredges' limited ability to suck up coarse gold common at Moore Creek, the trip overall was a success. While Herschbach was recovering smaller (rarely larger than a quarter ounce) gold with his six-inch dredge, his cousin Bob discovered a 5.13 ounce rock with a huge gold vein running through it. Later testing revealed that the rock's 2.94 ounces of quartz hosted an impressive 2.19 ounce gold vein.

COURTESY OF MOORE CREEK MINING CO.

The 24.79 ounce nugget discovered by a pay-to-miner from Pennsylvania in 2005 is an example of gold-veined quartz typical of the Moore Creek placers.

Finding two ounces of gold is a good day for any prospector, but the rock itself excited Herschbach. The coarse gold vein still lodged in the native rock confirmed his belief that the mother lode was close by and might just be in the hills above his claims.

Tenacious prospector searches for eager explorer

Moore Creek Mining staked about 200 additional lode claims at Moore Creek, adding 33,000 claims to the 1,000 acres of placer claims they had purchased.

In 2004, Herschbach loaded a briefcase with samples of the gold he discovered on the Moore Creek property and took it to the annual Alaska Miners Association convention in Anchorage. There he hoped to catch the interest of a larger mining company with resources to explore Moore Creek for its hard rock potential.

Herschbach determined that the Vancouver-based Full Metal Minerals would be the type of company that would take a chance on a prospect like Moore Creek and approached company representatives with his gold-bearing rocks and a presentation designed to convince them that Moore Creek was the place for them to explore.

The folks from Full Metal politely listened, examined the rocks, and told Herschbach that they would look into it.

Time passed and Herschbach heard nothing from Full Metal. Instead, he worked on a plan to generate cash-flow with the property, using a pay-to-mine operation on the claims. The plan offers prospectors a place to hunt for gold in exchange for paying a flat fee.

The pay-to-mine business turned out to be a good one in 2005, with eager prospectors frequently unearthing gold nuggets ranging from one to six ounces in size. The most spectacular find that summer was a 24.79 ounce chunk of gold-rich quartz discovered by a visitor from Pennsylvania.

That fall, a tenacious Herschbach returned to the miners' convention and again approached Full Metal. This time he succeeded in getting their attention. It wasn't long before Rob McLeod, the company's vice president of exploration, called and expressed interest in taking a closer look at Moore Creek.

Full Metal options Moore Creek

In May 2006, Full Metal agreed to purchase the lode claims held by the Moore Creek Mining Co.

That summer, Moore Creek experienced a population explosion. While Full Metal's geologists were exploring the 200-plus surrounding claims looking for the lode-source, nearly 65 pay-to-mine prospectors were searching for placer gold that had eroded from that source.

Full Metal's team turned up some good results from samples taken in 2006, and the company decided to trench some targets discovered by their geologist.

Getting even the smallest of excavators into Moore Creek to do trenching was a logistics challenge. The airstrip is only large enough to land planes with a 4,000-pound payload and a small excavator weighs 16,000 pounds. So the trenching machine had to be disassembled and flown in piece by piece and reassembled on site.

In July, when the ground thawed enough to start trenching, Full Metal crews returned to Moore Creek and started trenching for gold. After about 10 days, the geologists had not turned up anything exciting, so the company pulled out.

Herschbach began to think his dream of discovering the Moore Creek mother lode would remain just a dream. But McLeod called again, saying Full Metal wanted to take another look.

The decision to return to Moore Creek turned out to be a good one for all parties involved. Three zones of mineralization – Spring, Troy, and Broken Shovel zones – were discovered during the phase-2 trenching program.

It wasn't long before Herschbach got a call from McLeod telling him that early assay results were showing good mineralization over large areas.

Spring, Troy and Broken Shovel

At the Spring zone, Full Metal completed seven trenches spanning 300 meters of the strike length. The best intersect was 8.86 grams per metric ton of gold over a span of 11 meters in Trench 20. All the trenches in the Spring zone encountered gold mineralization along their entire length, leaving the prospect open in all directions.

The Troy zone is just to the north of the Spring zone. Trenching in Troy intersected quartz veins hosting strong, coarse gold mineralization running in a large zone of lower grade mineralization. One quartz vein was sampled in three locations over a 50 meter span of the strike length. One 0.2 meter intersect of this vein had an assay return of 88.53 g/t gold.

Three trenches were completed at the Broken Shovel prospect about 200 meters north of Troy. All three trenches encountered gold mineralization. The best of the three averaged 0.7 g/t gold along its length.

Full Metal brings partner to Moore Creek

Last August Full Metal inked a joint venture agreement with the Vancouver-based Highbury Projects Inc. The pact allows Highbury to earn 60 percent interest in the Moore Creek property by spending $2.1 million on exploration. Full Metal will be the operator for the first two years.

Herschbach told Mining News that the first loads of supplies and personnel were sent to Moore Creek Mar. 19. Crews will get the camp set up and clear the airstrip to bring in the drill and additional supplies needed for the 2008 exploration season.

Jodie Gibson, exploration geologist for Full Metal, told attendees at the Alaska Miners Association Fairbanks Biennial Mining Conference Mar. 20 that the first crew sent in to set up camp at Moore Creek encountered nearly six feet of snow and it could take a little longer than expected to prepare drilling.

Gibson told Mining News that the airstrip is cleared and equipment is being delivered. Drilling is planned to begin in April.

3,000 plus meter program scheduled

The new JV is planning a 3,000 meter phase-1 drill program. Gibson said Full Metal will drill the Spring and Troy zones on 100 meter centers along strike length. The exploration geologist said gold grades seem to be increasing to the southeast, and step-out drilling is planned in that direction to test for mineralization. The company also hopes to locate the Iditarod-Nixon Fault with the step-out drilling. The huge Donlin Creek gold deposit is located 55 miles from

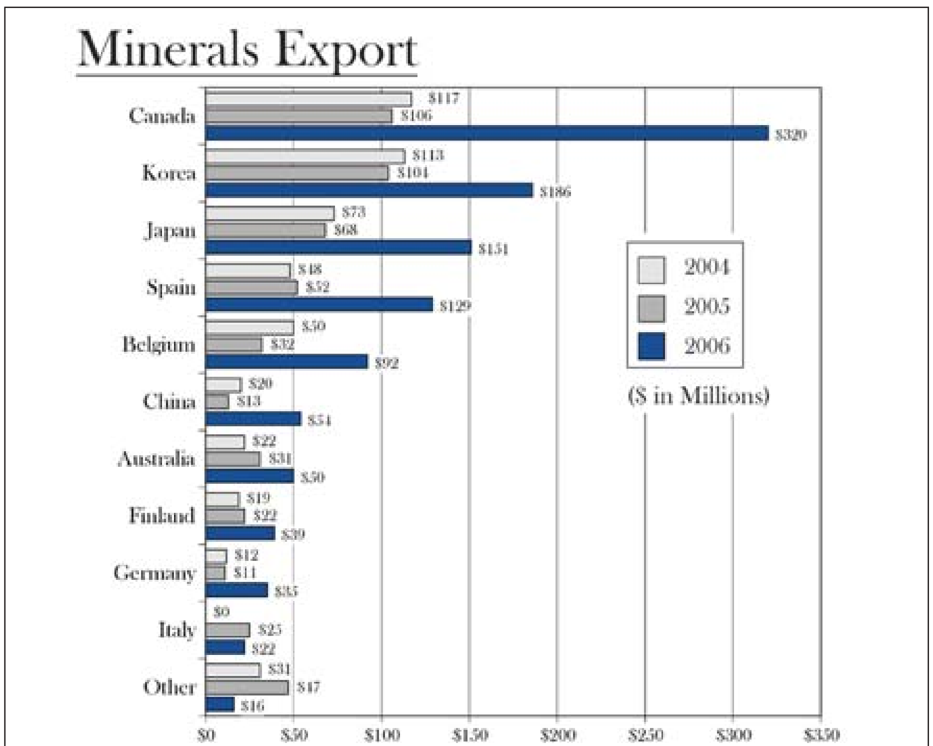
see **MOORE CREEK** *page 11*

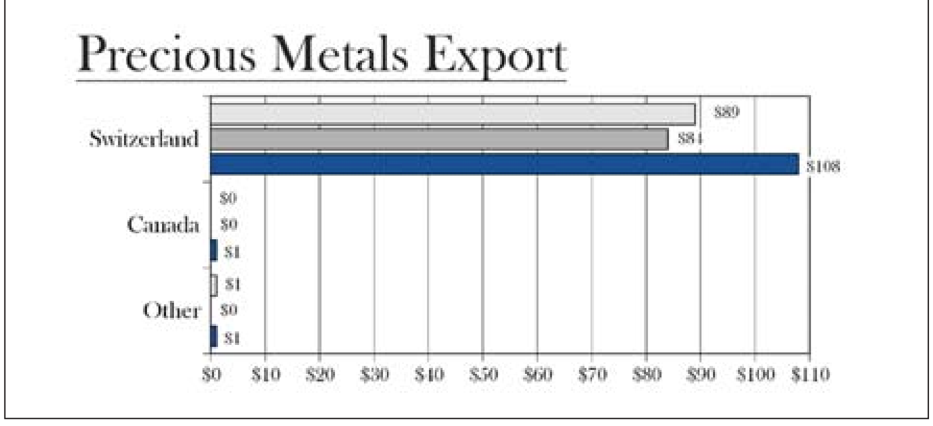
● ALASKA

Minerals top growth among state exports

High mineral prices, stronger output boost value of sector's shipments of base, precious metals to Canada, Asia and Europe

STATE OF ALASKA





By ROSE RAGSDALE
For Mining News

Alaska's miners have powered their way to No. 2 among the state's top exporting sectors in the past two years. Overall, the value of Alaska's exports fell 3.8 percent in 2007 to $3.9 billion from $4.1 billion in 2006. Last year's results reflect record-setting totals for mining exports and the second best year ever, overall.

"This is great news for Alaska, and I commend all of the Alaskans whose hard work benefits our state and its trade and foreign investment," said Gov. Sarah Palin in announcing U.S. Census totals for Alaska exports March 20.

High world market prices and strong sales were primarily responsible for boosting the value of Alaska's mining products to a record $1.3 billion in 2007. The performance was more than double the state's total mineral exports of $595 million in 2005 and compared favorably with the previous record of $1.2 billion in 2006.

Minerals accounted for 30 percent of the total value of Alaska exports, second only to the seafood industry's 51 percent share. The value of seafood exports, however, actually lost ground in 2007, slipping from $2.02 billion in 2006 to $1.98 billion last year. In 2005, the value of Alaska seafood exports totaled $1.97 billion.

Zinc and lead ore exports led the mineral sector's growth, climbing 8.5 percent to a record $1.2 billion in 2007. Alaska's Office of International Trade attributes the growth primarily to high zinc prices. Alaska accounts for more than three-fourths of all U.S. zinc production. Red Dog Mine, in northwest Alaska, is the world's largest zinc mine.

Canada was Alaska's largest ore market in 2007 followed by Korea, China, Japan, Spain, Finland, Belgium, Germany, and Italy.

Switzerland, however, dominated the state's markets for precious metals with Canada a distant second and other markets lagging behind. The higher price of gold in 2007 and an increase in export volume resulted in a 22 percent increase to $132 million for Alaska's exports of precious metals. By comparison, Alaska exported $108 million worth of precious metals in 2006 and $81 million worth in 2005.

The value of Alaska's coal exports in 2007 approached $5 million, and the coal was exported to Chile. This is the third year for coal exports to Chile, according to Trade officials.

The Trade office blamed the decrease in the overall value of Alaska exports in 2007 on a decline in value of Cook Inlet natural gas supply exports and value-added exports of liquefied natural gas and fertilizer.

Palin said exports and foreign direct investment have been important to Alaska for more than six decades. Companies based in Japan, Canada and Europe have invested significantly in the state's natural resources.

"We are competing in domestic and international markets, and let's remember we prepare best for that competition through a strong educational system and workforce development" she added.

Both exports and foreign direct investment have been important to Alaska for more than six decades. Companies based in Japan, Canada and Europe have invested significantly in the state's natural resources.

U.S. Census Bureau export totals for Alaska do not reflect the state's natural resource products that are first transported to and warehoused in other states before export. ●

NORTHWEST TERRITORIES

Junior seeks signs of Arctic diamonds

Almaden Minerals Ltd. has launched a sonic, overburden drill program on its ATW diamond project in Northwest Territories, the company said March 18.

Almaden and Williams Creek Explorations Ltd. each own about 41.5 percent interest in the project. The remaining 17 percent is held by other parties, which collectively would be diluted to about 12 percent working interest should they elect not to contribute to the present work program.

The ATW property covers the likely source area of a significant indicator mineral train that is known to be at least 20 kilometers long. It is located at Lac de Gras, near all of the major diamond finds in the Northwest Territories.

Past microprobe work on the indicator minerals on the ATW property identified G10 garnets and other minerals that are interpreted to have been derived from at least one kimberlitic source that is also interpreted to be at least moderately diamond bearing. Till sampling efforts in the past have narrowed the indicator mineral source to an area that is roughly 1-by-1.5 kilometers in size. This work was also confirmed by abrasion studies carried out on the indicator minerals, the results of which indicated a very local source for the mineral grains studied, the company said.

The results of a 2005 survey defined several targets; however, after evaluation of the data, Almaden and Williams Creek have elected to carry out a further program of indicator mineral sampling with roughly 80 holes laid out in a grid pattern designed to cover the area of the indicator train.

Almaden is a mineral exploration and development company with a track record of making new discoveries in Canada and Mexico. Almaden's founder and CEO, Duane Poliquin, is credited with discovering the Santa Fe gold deposit in Nevada, the Apex germanium-gallium deposit in Utah, the Nevada Scheelite Extension and the Trinidad Gold Mine in Mexico. Ed Balon was responsible for the discovery of the Elk Gold Mine in Merritt, B.C.

Almaden has an interest in 22 properties that are being actively exploration.

—MINING NEWS

● BRITISH COLUMBIA

B.C. moly mine gears up for expansion

Thompson Creek Metals aims to more than double production at the Endako Mine over the next five years with $280 million upgrade

By ROSE RAGSDALE

For Mining News

Thompson Creek Metals Co. Inc., one of the world's largest publicly traded, pure molybdenum producers, plans to expand the processing capacity at its Endako Mine in British Columbia in hope of more than doubling the mine's output over the next five years.

Thompson Creek March 12 said the expansion will boost the amount of ore processed at Endako to 50,000 metric tons per day by 2010. Currently, the mine processes 28,000 metric tons of ore daily.

"Our estimates show that the Endako expansion will add to Thompson Creek's profitability and provide an attractive rate of return in the coming years even using price assumptions that are well below the current price of molybdenum," said Kevin Loughrey, Thompson Creek's chairman and CEO.

"The expansion project also involves a needed modernization of the mill, which has been in operation since 1965, and ensures we will have an efficient processing operation at Endako that will be beneficial for the long term. The Denver-based producer said it expects to spend C$280 million, or 75 percent of a feasibility study estimate of C$373.6 million, on the expansion project between 2008 and 2010, plus ongoing sustaining capital.

The Endako Mine is operated as a joint venture, with Thompson Creek holding a 75 percent interest and Sojitz Corp., a Japanese company, holding the remaining 25 percent interest.

Thompson Creek, formerly Blue Pearl Mining Ltd., said it expects to generate sufficient cash flow from existing operations to fund its share of expansion costs as well as meet capital requirements anticipated at its other properties.

COURTESY OF THOMPSON CREEK METALS CO. INC.

The operators of the Endako Mine in British Columbia aim to improve processing efficiency in the mill and roasting facility by upgrading major processing equipment.

Annual molybdenum production as a result of the expansion at Endako is expected initially to be about 17 million pounds and will decline within two years of startup to 16 million pounds. Without the expansion, annual moly output at Endako would decrease to about 8 million pounds by 2012 and remain near that level for the remaining life of the mine.

In estimating return on investment from the expansion, Thompson Creek assumed future molybdenum prices of US$27 per pound in 2009, US$23 per pound in 2010, US$17.50 per pound in 2011, and US$14 per pound thereafter. Based on those prices, the company estimates that the expansion will generate an internal rate of return of more than 20 percent over a 16-year mine life.

Average production costs as a result of the expansion are projected to be C$7.93 per pound of molybdenum, down from C$10.39 per pound projected in the absence of an expansion.

All of the calculations assume an average exchange value of the Canadian dollar of 94 cents (US) throughout the production period.

The mill expansion will include the installation of a new grinding circuit consisting of semi-autogenous grinding and ball mills, a modern flotation circuit and the upgrading of the roaster circuit. The result will be a more cost-efficient mill with fewer mechanical items and with the ability to handle a variety of ore more easily and achieve greater recoveries than the existing mill, the company said.

Thompson Creek also plans to purchase new trucks and other equipment to supply the mill with a higher volume of ore.

The expansion plan still is subject to approval by Sojitz, and financing adjustments, the company said.

Thompson Creek owns the Thompson Creek open-pit molybdenum mine and mill in Idaho and a metallurgical roasting facility in Langeloth, Pa. The company is also developing the Davidson Deposit, a high-grade underground molybdenum project near Smithers, B.C.

The company reported a profit of US$28.9 million in the fourth quarter, compared with a loss of $12.5 million during the same period a year earlier. Results from mining and processing operations in both years were negatively affected by a non-cash acquisition expense related to the company's purchase of Thompson Creek USA. ●

continued from page 9

MOORE CREEK

Moore Creek on the other side of the Iditarod-Nixon Fault.

Full Metal also designated a drill rig to be flown to the project site and remain there for the entire season. If the phase-1 assay results are encouraging, a phase-2 program is anticipated for the remainder of the 2008 season.

Gibson said the company is intrigued by the mineralization of the area and will have a 100 percent analysis performed on the samples from the phase-1 drill program.

He said the company also will conduct an extensive mapping and ground geophysical program of several monzonite targets on the Moore Creek property. Maybe Creek, Camel Back, Deadwood Creek and Willow will be the targets scrutinized. Depending on the results of early sampling, a trenching program may be conducted to further explore the targets.

Gibson said he will compare the mineralization of the Willow prospect with mineralization discovered at the Troy and Spring zones to the south across Willow Creek.

32 years of selling recreational mining equipment

Herschbach, meanwhile, continues to operate Alaska Mining and Diving Supply, a business he started in 1976 with high school buddy Dudley Benesch, who shared his passion for gold prospecting. The young entrepreneurs started out selling metal detectors, gold dredges, and related diving equipment.

The timing for a gold-hunting business could not have been more opportune. Gold prices averaged about $130 per ounce in 1976, nearly double what they were when Herschbach first visited Moore Creek three years earlier. By 1980 the price of gold had reached the staggering price of $850 per ounce.

Over the years, the Alaskan entrepreneurs have seen gold prices dip as low as $100 per ounce, and most recently, soar past $1,000 per ounce. Meanwhile, they expanded their store to included wood stoves, chainsaws, boats, outboards, and snow machines. Diversity allowed the business to prosper through the long Alaska winters and the ups and downs in gold prices.

Anti-mining initiatives worry Herschbach

These days a big worry for Herschbach is the anti-mining initiatives headed to the ballot in August. He said he is not only concerned that the initiatives might dash his hopes for making the big discovery, but also about the effect they will have on his anticipated small-scale placer operation.

As part of his agreement with Full Metal, Herschbach has retained the right to mine the placer gold on Moore Creek. With gold prices flirting with $1,000 per ounce, he hopes to start mining soon.

Though his placer operation would be small in scale, Herschbach is concerned because it would include 1,000 acres of mining claims and the ambiguous wording of the initiatives targets "metallic mines in excess of 640 acres," and could be interpreted to include his operation.

"Explain to me how I am to placer mine my more than 640 acres for metallic minerals without storing tailings within 1,000 feet of the water," he wrote in a recent letter to an Alaska newspaper. "There are no salmon in my creek, but we are a tributary to one that has salmon. If you count just streams that are tributaries to the Yukon, Kuskokwim and Copper rivers, you are talking a lot of streams.

"This mom-and-pop miner would be out of business. It would, in fact, crush the childhood dreams of a lifelong Alaskan. I dreamt of making that big strike, and am on the verge of making it happen. And now these people want to wipe me out. All in their vendetta to kill Pebble," he wrote.

Herschbach, meanwhile, is gearing up for a busy summer. High gold prices mean Alaska Mining & Diving is set for its busiest summer in two decades. More than 50 people with dreams of Alaska gold have signed up for Herschbach's pay-to-mine operation.

Moore Creek Mining will be working toward establishing a placer mine on Moore Creek, and the company also will support Full Metal in its exploration efforts.

Herschbach may see his dream come true, after all. ●

● ALASKA

Gold giant kicks rocks prior to JV deal

Newmont Mining considers joining Gold Crest Mines in exploring western Alaska properties as March 30 due diligence deadline looms

By SHANE LASLEY

For Mining News

Spokane, Wash.-based Gold Crest Mines Inc. has signed agreements with a subsidiary of gold mining giant Newmont Mining Corp. in which the companies propose to enter into two separate joint ventures to explore Gold Crest's AKO and Luna gold properties in the Kuskokwim region of southwest Alaska about 90 miles east of Bethel.

Denver-based Newmont will be the operator of the proposed venture and can earn 51 percent in each of the properties by spending a minimum of $3 million by Dec. 31, 2011. The major has the option to increase its interest in either property to 70 percent by spending an additional $6 million before Dec. 31, 2015.

COURTESY GOLD CREST MINES INC.

A geologist's backpack leans against a vein swarmed intrusion at the Ako property in southwest Alaska.

Ako property

The Ako property consists of 45 State of Alaska mining claims totaling 7,200 acres staked in 2006 by Kisa Gold Mining, Inc., the Alaskan subsidiary of Gold Crest Mines.

Gold Crest Mines' vice president of exploration told Mining News, that "Ako is likely similar to other Kuskokwim and Tintina Belt mineralized intrusive systems such as Shotgun, Fort Knox, Vinasale Mountain and others."

The company uncovered several targets with an airborne magnetic and electromagnetic survey during the winter of 2006-2007. The airborne surveys focused on a geophysical anomaly near the center of the Ako claims that Gold Crest finds intriguing.

Based on the results of the airborne survey, the Spokane-based junior followed up with a detailed stream sediment sampling, prospecting and reconnaissance mapping program. Several mineralized zones were identified and the geologist completed soil grid and rock chip sampling of the areas.

Gold Crest geologists surmised that the mineralization at Ako is associated with several different types of alteration. "Field evidence suggests several ages of intrusive activity may be present," the company said in a statement.

Reconnaissance work performed by a previous operator about 20 years ago discovered a large stream geochemical anomaly, but did limited follow-up work on the find. A few years later, USGS geologists completed additional stream sediment and pan concentrate sampling in the same area and published their results, indicating a large gold-bismuth-arsenic-antimony anomaly associated with the intrusion.

Luna property

In early 2007 Gold Crest discovered gold stream sediments that coincided with what the company interpreted to be a favorable structural zone at the Luna prospect. Follow-up field work revealed a large area of silica-sulfide-clay alteration associated with this structure.

Last summer the company staked 50 state mining claims for a total of 8,000 acres, blanketing the area of primary mineralization of the Luna prospect. For the remainder of the 2007 exploration season, the junior completed 16 line-miles of induced polarization resistivity surveying and an additional 40 line-miles of ground magnetics, which outlined about six square miles of strong IP and magnetic responses. Follow-up mapping and prospecting turned up several gold-bearing stratiform sulfide replacement lenses. Rock chip samples have returned assay values up to 0.75 ounces per ton.

Newmont and others stake adjacent claims

"We are pleased that one of the world's largest gold producers has recognized the potential on our claim groups," Gold Crest President and CEO Tom Parker said in a statement announcing the agreement.

Newmont has staked two more claim blocks contiguous to the Ako claim group and a large claim block adjacent to the Luna claims, according to Gold Crest.

A spokesman for the junior told Mining News that NovaGold Resources as well as another unnamed company also staked extensive claim groups in the area.

Gold Crest's joint venture pact with Newmont is subject to a 30-day due diligence period by the major in regard to the properties. The companies said they will prepare, approve and execute definitive joint venture agreements. As of Mar. 27 neither company had announced a final decision by Newmont. ●

● YUKON TERRITORY

Yukon players pool resources in new entity

Firestone Ventures spins out Canada assets in venture that will benefit from properties, database and alliance with Sherwood Copper

By ROSE RAGSDALE

Mining News

In a move aimed at maximizing the value of its Canadian assets, Firestone Ventures Inc. March 3 said it will spin out the Sonora Gulch gold project in Yukon Territory into a new public company, Northern Tiger Resources Inc.

The aggressive junior also signed a memorandum of understanding with Sherwood Copper Corp. and its wholly owned subsidiary, Minto Explorations Ltd., to help guide the fledgling enterprise in exploring Yukon's Dawson Range.

The moves will allow Vancouver, B.C.-based Firestone to focus its resources and efforts on advancing the Torlon Hill project and other interests in the emerging Cuchumatanes zinc-lead-silver district in Guatemala, while giving its shareholders an opportunity to realize additional returns from an effort focused primarily on Yukon exploration and other interests in Canada. "We are confident that Firestone shareholders will benefit from the experience, knowledge and capabilities of the Northern Tiger-Sherwood Copper exploration alliance in advancing the Sonora Gulch project and identifying other quality projects in the Dawson Range mining district," said Firestone President Lori Walton.

Under terms of the MOU, Sherwood, which has successfully developed copper resources at Minto Mine in central Yukon, will vend to Northern Tiger 100 percent interest in four Dawson Range exploration properties and an extensive historical exploration database for the region.

In addition, Northern Tiger and Sherwood will enter into a regional exploration alliance that will provide for input and cooperation on planning and executing exploration programs and long-term strategies for the area. They also will share proprietary technical expertise to assist in exploration and project advancement, and Northern Tiger will gain access to Sherwood's infrastructure to facilitate area exploration, the companies said.

Stephen Quin, president and CEO of Sherwood Copper, said the transaction give the company exposure to exploration targets outside the Minto Mine property, having both (1) a back in right to any deposits discovered close to its existing mine infrastructure that could be processed at the existing infrastructure and (2) equity exposure to any other discoveries made through this alliance.

see NORTHERN TIGER page 19

● ALASKA, WESTERN CANADA

Alaska tumbles in mining policy ranking

Mining survey reflects growing uneasiness in industry about Alaska's public policies, mixed results among Canadian jurisdictions

By ROSE RAGSDALE
Mining News

Alaska would be a great place for mining companies to do business if not for the state's increasingly onerous regulatory and fiscal policies, according to the latest results of a well-respected industry survey.

The state lost significant standing in comparison with 67 other jurisdictions around the world in the 2007-2008 Annual Survey of Metal Mining and Exploration published by the Fraser Institute in February.

"When you consider current regulations, Alaska goes down in the rankings considerably," said Fraser Institute spokesman Fred McMahon. "Miners' taste for Alaska has declined in the last year.

"Remember this is relative; miners are less confident of predictability and transparency of regulations in Alaska. Also, they are somewhat concerned about uncertainty regarding Native lands claims."

In the Policy Potential Index, a composite index that measures the overall policy attractiveness of the 68 jurisdictions in the survey, Alaska dropped 20.2 points to 49.8 from 70.0 in 2005-2006.

Out of a possible 100, Quebec scored the highest with a PPI of 97 and was the leader in other categories.

In the United States, Nevada took the top spot, climbing 4.5 points to earn a PPI of 93.8. Other high PPI scorers were Finland, Alberta, Manitoba, Chile, Utah, Wyoming, Ireland, and Sweden.

Honduras, new to the survey this year, scored lowest in every category with an index of 0.0. Other jurisdictions with lowest PPI scores were Zimbabwe, Ecuador, Panama, Bolivia, India, Indonesia, Mongolia, Philippines, and Venezuela.

In other categories, Alaska fared both better and worse.

> *"Among jurisdictions assuming what miners consider best practices regulations and policies, it's no surprise that Alaska scores very well. Last year, the state ranked No. 3 among all the jurisdictions in the survey."*
> **– Fred McMahon, Fraser Institute**

In Mineral Potential, Assuming Current Regulations/Land Use restrictions, Alaska lost much of the ground it gained last year, dropping to 60.0 to 78.0 in 2006-2007 after leaping 28 points from 50.0 in the 2005-2006 survey.

But in Policy/Mineral Potential, Assuming No Land Use Restrictions in Place and Assuming Industry "Best Practices," Alaska scored an index of 94.0, only 3.0 points lower than its 97.0 index in the same category in 2006-2007, and 2 notches below its 96.0 rating in 2005-2006.

"Among jurisdictions assuming what miners consider best practices regulations and policies, it's no surprise that Alaska scores very well," McMahon said. "Last year, the state ranked No. 3 among all the jurisdictions in the survey.

"In general, Alaska hasn't gone down so much as other jurisdictions have risen," he added.

Yukon tops for miners in Western Canada

In Canada, results were mixed with the average score of the Canadian provinces and territories declining slightly by 3.1 points.

After several years of strong improvement, British Columbia's progress stalled out last year. However, this year it resumed its upward progress in the policy potential category, climbing to 68.8 from 60.7 last year.

Nunavut and the Northwest Territories, with PPIs of 32.6 and 49.3, respectively, lagged other Canadian jurisdictions, except for Newfoundland and Labrador.

Yukon scored ahead of Ontario, Nova Scotia and British Columbia with a PPI of 71.4.

In Policy/Mineral Potential, Assuming No Land Use Restrictions in Place and Assuming Industry "Best Practices," British Columbia scored the highest among western Canadian jurisdictions with an index of 96.0. The Northwest Territories was a close second with 95.0 followed by Yukon Territory with 93.0. Nunavut fell to last place with an index of 88.0, down 8.1 points from 96.1 last year.

To review the full survey, visit http://www.fraserinstitute.org/COMMERCE.WEB/product_files/SurveyofMiningCompanies20072008.pdf

Fraser opens mining research center

The Fraser Institute has conducted the annual survey since 1997 to assess how mineral endowments and public policy factors such as taxation and regulation affect exploration investment. This year's results are based on responses from 372 companies that accounted for 14.8 percent of global exploration spending last year.

The Fraser Institute also recently opened a new mining research center to conduct research into major mining policy issues worldwide.

"We'll decide our own research agenda, no one gets an advance look at our findings and all research will be independently peer reviewed, said McMahon, who is director of the new center.

He also said one project on the center's front burner is a look at "resource curse literature," or studies showing that the richer a jurisdiction is in natural resources, the slower its economic growth.

"We aim to look at literature and do our own empirical study, McMahon added. ●

ALASKA

Hecla Mining posts strong 2007 results

Hecla Mining Co. Feb. 21 posted 2007 income applicable to common shareholders of $52.2 million, or 43 cents per common share, on revenue of $222.6 million. Though the results reflected nearly a 24 percent drop in yearly earnings from $68.6 million, or 57 cents per common share, on revenue of $218.9 million in 2006, Hecla observed that it was still the second-strongest outcome in the company's 117-year-old history despite a significant reduction in gold production from its La Camorra unit as mining transitioned to a single deposit.

Revenue and cash provided by operations for 2007 set record highs for Hecla. The company's average total cash cost for silver in 2007 was the lowest on record, at negative $2.81 per ounce, after by-product credits. The 2007 financial results included a non-cash charge in the second quarter of $46 million for environmental accruals, offset by a gain of $63 million on the sale of the Hollister Development Block. In 2006, earnings were positively impacted by a gain of $41 million on sales of investments and other assets.

"The resurgence in metals prices, operational excellence at our silver mines, a 25 percent improvement in safety, and exploration success all contributed to another remarkable year for Hecla in 2007," said Phillips S. Baker, Jr., Hecla's president and CEO. Hecla stressed that it ended 2007 with a strong balance sheet, with an 8.8:1 current ratio, no corporate debt and a record high of $400 million in cash and cash equivalents and short-term investments.

The company also reported a 10 percent increase in silver resources at year-end 2007.

Hecla said Feb. 12 that it has agreed to purchase the remaining 70.27 percent interest in Greens Creek from subsidiaries for $750 million. After the anticipated close of that transaction in the second quarter, Hecla will control 100 percent of the fifth-largest silver mine in the world, and its annual production will nearly double to about 11 million ounces of silver.

—MINING NEWS

NORTH OF 60 MINING NEWS

Companies involved in Alaska and northwestern Canada's mining industry

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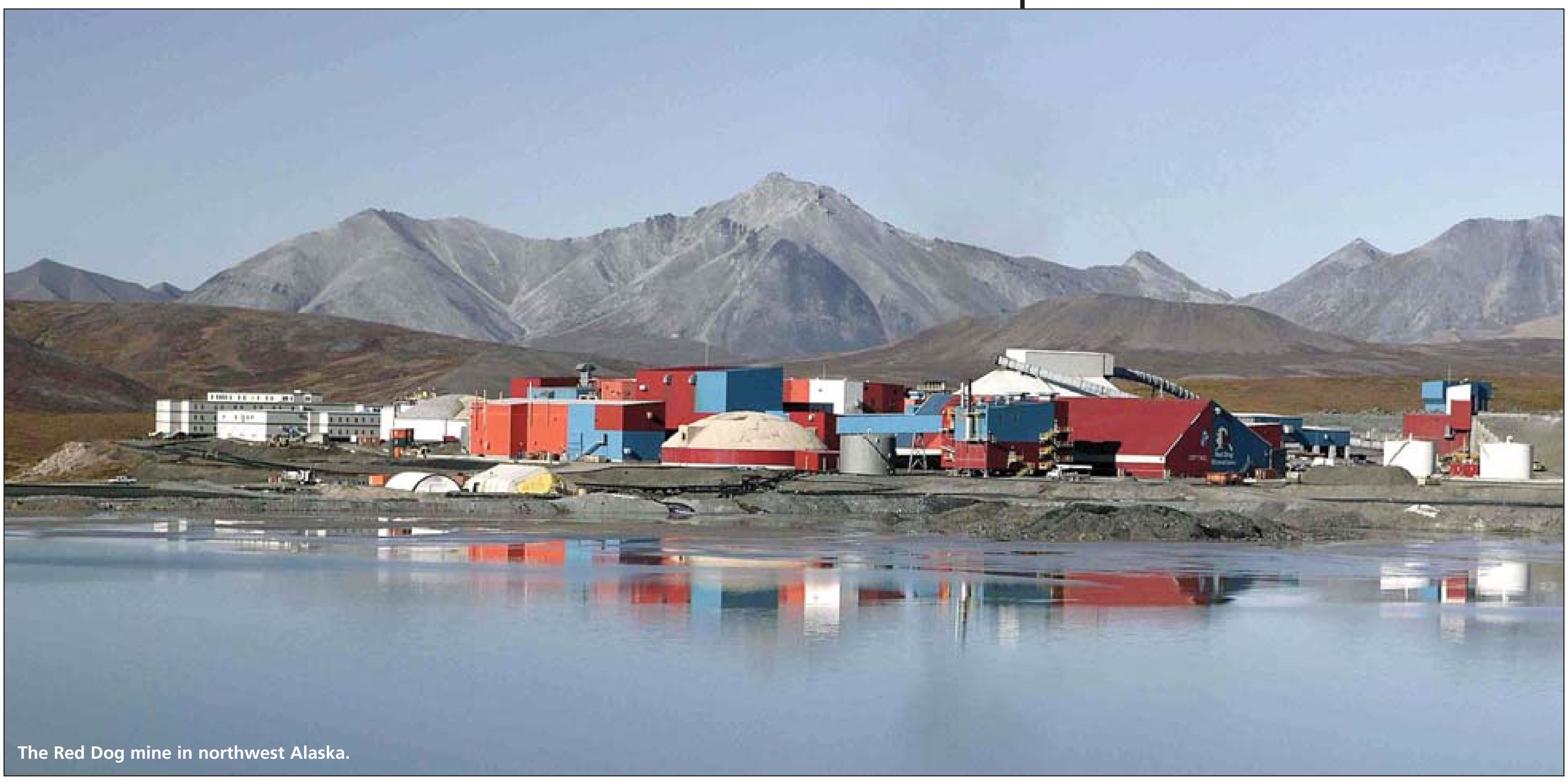

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● ALASKA

Power trio speaks out on Alaska mining

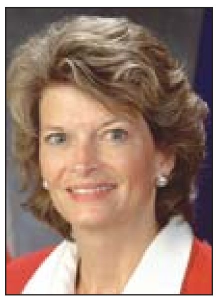
Albanese, Murkowski, and Irwin share their perspectives on Alaska's mining industry at AMA conference in Fairbanks

By SHANE LASLEY

Mining News

Attendees of the Alaska Miners Association Fairbanks Biennial Mining Conference had the honor of hearing the views of three heavyweights on many issues facing Alaska's mining industry.

Tom Albanese, CEO of Rio Tinto plc, says he is worried about the current political environment in Alaska.



On her March 19 visit to Fairbanks, Sen. Lisa Murkowski told AMA conference attendees that Alaska's mine operators have earned their social license to operate.

Albanese, a featured speaker at the Mining Conference March 19, cited a recent mining industry survey by Canada's Fraser Institute lowered Alaska's rank to 34 in 2007 from 13 in 2005 among 68 jurisdictions where companies do business around the world.

Albanese said Alaska is not the only place where mining companies are being held to a higher standard. Increased expectations for how mining projects are managed and how stakeholders are engaged are "global phenomena," he said.

Albanese attributes Alaska's fall from grace on the global stage to controversy surrounding the proposed Pebble copper-gold-molybdenum mine in Southwest Alaska.

The mining industry as a whole and certainly Pebble are coming up against a "very well-organized, very well-financed, very sophisticated opponent," Albanese said.

The Rio Tinto executive advised the crowd to never underestimate the opposition.

Rio Tinto owns nearly a 20 percent interest in Northern Dynasty Minerals Ltd., one the two companies that own the Pebble Project in a 50-50 partnership. The co-owner is Anglo American plc.

Albanese said one of the problems Pebble is facing right now is that the project can currently be defined as an exploration, prefeasibility, or feasibility project. He said he has suggested to both of Pebble's owners that they initially pursue developing the higher-grade underground resource at Pebble East.

Albanese, who recently succeeded at Rio Tinto in rebuffing an unwanted takeover bid from BHP Billiton, said if either of the anti-mining initiatives, 07WATR or 07WTR3, currently headed to the ballot were enacted, mining investment in Alaska would be seriously affected.

However, in his opinion, the people behind the anti-Pebble effort made a tactical error by moving the debate from a regional issue to a statewide issue, Albanese said.

SHANE LASLEY

Rio Tinto's CEO Tom Albanese said that he sees a lot of opportunity in Alaska for his company when he addressed a lunch crowd at the Alaska Miners Association Fairbanks Biennial Mining Conference.

Alaska could help supply global demand

Albanese said global demand for base metals, especially China's rapidly growing hunger for mineral resources, is an important development. If the Alaska mining community wants to attract mining investment to meet this global demand, he said it needs to manage its involvement in stakeholder engagement that is growing ever more sophisticated.

In response to a question raised by its recent sale of the Greens Creek Mine to Hecla Mining Co., of whether Rio Tinto has left Alaska, Albanese replied, "Categorically, no!, Alaska has the providence for world-class resources," and he "sees lots of opportunities in Alaska for Rio Tinto."

U.S. Sen. Lisa Murkowski, R-Alaska, also addressed the subject of global demand for minerals in the context of mining law reform currently being debated in the U.S. Senate.

On the mining law reform legislation currently before the U.S. Senate, she told the conferees that the issues involved are complicated and controversial. She also said she does not expect a final draft of the bill to be ready for a Senate vote before the end of the legislative session.

A national minerals policy is another issue Murkowski said she is raising in Washington, D.C in mining law reform discussions.

"Minerals are no different (than oil and gas) in terms of our reliance on commodities," the senator said.

Murkowski also said the U.S. is dependent on foreign sources for more than half of its mineral supply. That, combined with China and India's growing demand for those same resources has her and others concerned.

"We are talking about a national stockpile of strategic minerals back in Washington D.C.," she said.

Miners, permitting process lauded

As for the controversial initiatives, Murkowski said they are not about responsible mining.

"They are all about no mining," she said.

Murkowski said mining opponents don't want to hear success stories of responsible mining in Alaska. She cited Fort Knox, Greens Creek, and Pogo as examples of environmentally responsible operations.

"The current slate of operators has earned that social license to operate," she said.

Alaska Department of Natural Resources Commissioner Tom Irwin echoed Murkowski's assessment.

He said the current large-scale mining operations in Alaska are examples of the success of the state's large-mine permitting process in Alaska.

Citing Red Dog and Fort Knox as examples, Irwin asked, "Have you heard much about the healthy fish they have downstream?

"Much more than when the mines started," he said.

Irwin told the conferees that when environmental groups point out mistakes made by mining, they are pointing at things that happen somewhere else.

SHANE LASLEY

Department of Natural Resources Commissioner Tom Irwin informed the Alaska mining community that it is against the law for him to take sides on ballot initiatives.

"We have a strong functional process as evidenced by our operating Alaska mines," he added.

Administration supports resources development

While Murkowski and Albanese were outspoken on the initiatives, Irwin made it clear why he must remain silent on the issue.

"Folks you need to understand by Alaska law I cannot take sides on an initiative," he explained.

But the DNR Commissioner, who works closely with Alaska Gov. Sarah Palin, also reassured the audience. "The governor, the administration, I — we support resource development in this state," he said.

Irwin urged the conferees to read the Alaska Constitution, which supports resource development, and assured them that Palin knows the constitution well.

On behalf of the administration, Irwin said, "We support the constitution, and we support resource development."

Sen. Murkowski best summarized the message from all three speakers when she said, "The future of Alaska's mining industry is golden, (and) I urge my fellow Alaskans not to take the current level of mining industry interest in our state for granted." ●

● ALASKA

Junior to resume exploration in Southeast

Bravo Venture Group chases Greens Creek-style prospect on Woewodski Island after acquiring 100 percent ownership of property

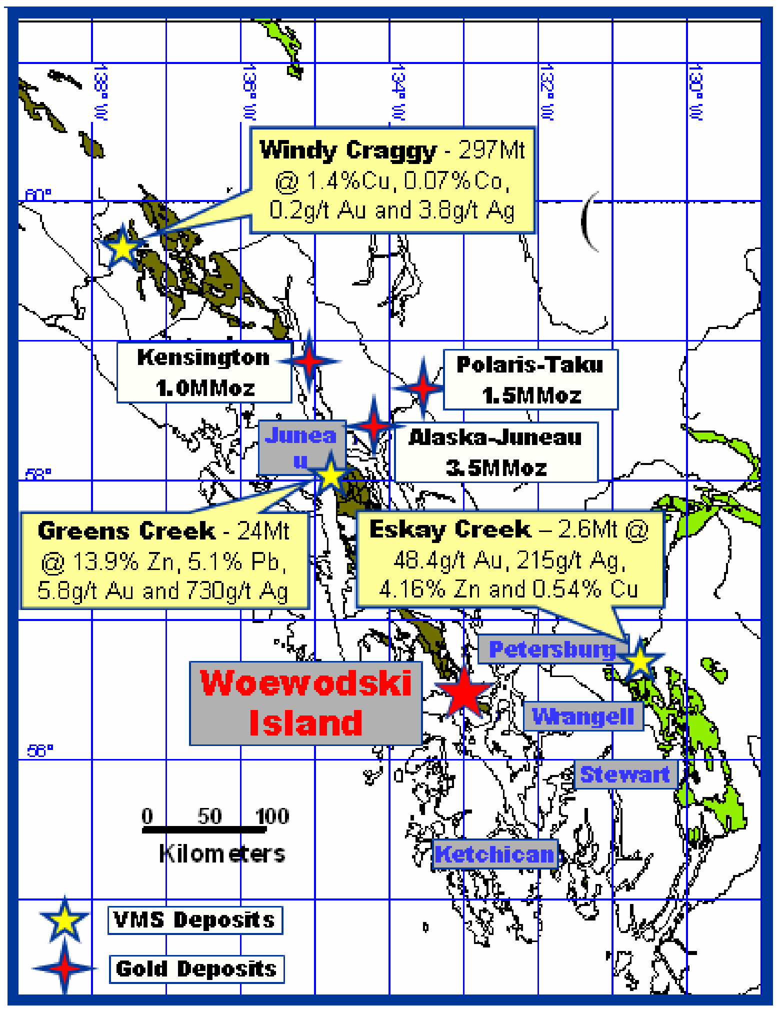
By ROSE RAGSDALE
For Mining News

Bravo Venture Group Inc. March 17 said it has acquired 100 percent interest in the Woewodski Island volcanic massive sulphide project in southeast Alaska following successful renegotiation of certain terms in an underlying agreement with vendors of the property.

Bravo said its ownership of the property is subject to a 3 percent net smelter royalty on all metals, of which 1 percent can be purchased for US$1million anytime prior to production and another 1 percent can be purchased anytime for US$1.5 million. The property would be subject to a total of 1 percent NSR, if both reductions are purchased. No further cash payments are due, but there is a work commitment of $250,000 in 2008, the company said.

The Vancouver, B.C.-based junior also reported results of the company's 2007 exploration program at Woewodski Island, which included detailed gravity and three-dimensional IP geophysical surveys and two core holes totaling 432.6 meters at the East Lake target. Both holes (WW07-034 and -035) contained more than 16-meter-thick downhole intervals of anomalous silver mineralization (greater than 1 part per million) and zinc (greater than 0.1 percent) with associated anomalous, but less continuous, barium and gold values.

Bravo geologists say this indicates that a long-lived and widespread plume of VMS-style mineralization may be present. Previous drilling at the site encountered mineralized boulders of massive sphalerite (hole EL04-01) and several horizons of semi-massive pyrite and fine grained black to grey argillite. Significantly, intervals of black argillite within mineralized horizons on the property are interpreted as equivalent to the "Mine Argillite," which hosts Hecla Mining Co.'s silver-rich Greens Creek deposit located 145 kilometers, or about 90 miles, to the north on Admiralty Island near Juneau.



Much of Bravo's 2007 exploration program focused on several gold prospects along the western and southern margins of Woewodski Island where 33 relatively short core holes were drilled for a total of 2,541 meters. Drilling targeted gold-quartz veins, which occur within broad, up to 10-meters thick, strongly carbonate-altered shears. Quartz veins were intersected in many of these holes. Higher grade results include: 1.13 meters grading 4.0 grams per metric ton gold, and 0.73 meters grading 7.2 g/t gold; however, the high gold grades obtained in surface samples were not obtained in drill core. No further work is planned on these veins at this time.

Bravo said most of the exploration planned for 2008 will consist of shallow "Winkie" core holes that will provide data for metal zoning and basin reconstruction within the "Mine Argillite" at Woewodski Island.

The VMS Woewodski Island Project includes 501 federal claims and three state claims covering 3,260 hectares, or about 1,349 acres, in southeast Alaska. This "deep-water, tide-water" accessible property is located about 30 kilometers south-southwest of Petersburg with multiple targets hosted within the same volcanic-sedimentary rocks that host Green's Creek and the Windy Craggy VMS deposit in British Columbia.

Bravo also has exploration properties in Nevada and British Columbia. In February, the company reported assay results that confirmed high-grade silver mineralization at the Homestake Silver zone, which is at its Homestake Ridge project in the "Eskay Creek" region of northwestern British Columbia. ●

● ALASKA

Teck Cominco delivers despite setbacks

Higher lead prices, diverse assets buoy Canadian producer amid reverses at Red Dog, Highland Valley, Jericho and Galore Creek

By ROSE RAGSDALE
For Mining News

Hammered by several significant reverses in the fourth quarter of 2007, Teck Cominco Ltd. managed to still turn a substantial profit and deliver $1.6 billion in full-year earnings.

Earnings plummeted to C$280 million, or 64 cents (Canadian) per share, in the fourth quarter, down nearly four-fold from C$866 million, or C$2.01 per share, during the final quarter of 2006.Year-over-year earnings also fell, dipping about one-third to C$1.62 billion from C$2.43 billion a year earlier.

Fourth-quarter revenues fell 26 percent to C$1.54 billion, compared with C$2.09 billion during the same period in 2006. Full year revenues also decreased slightly to C$6.37 billion from C$6.54 billion in 2006.

Teck Cominco blamed significantly lower prices for zinc (-38 percent) and coal (-26 percent), a stronger Canadian dollar and its effect on the company's cost base, lower zinc sales volumes from the Red Dog mine in Northwest Alaska and reduced sales from the Highland Valley Copper Mine in Canada due to its life extension program for lower fourth-quarter revenues.

The reduced revenues were partially offset by higher lead prices and revenue increases from three new copper mines acquired from Aur Resources Inc. Teck Cominco also recorded C$51 million in after-tax asset impairment charges for its interest in financially troubled Tahera Diamond Corp. and the Lennard Shelf and Pend Oreille zinc mines as well as a C$50 million pre-tax (C$33 million after-tax) equity loss related to its investment in the costly but promising Galore Creek Project.

"While we faced a number of challenges in 2007, it was still a year with several solid accomplishments for the company," Teck Cominco President and CEO Don Lindsay said in a statement. "We delivered the second highest earnings in our history at $1.6 billion and returned just over $1 billion to our shareholders through dividends and our share buy-back program, amongst the very highest returns in Canadian business," said Mr. Lindsay.

Disappointments at Red Dog

At Red Dog, Teck Cominco's operating profit in the fourth quarter decreased 72 percent to C$174 million from C$623 million in the final period of 2006 due to lower sales volumes related to timing of shipments in 2006, lower zinc prices and negative pricing adjustments. During the quarter, negative settlements totaled C$49 million, of which C$10 million were price adjustments relating to sales from the prior quarter and C$39 million related to revaluation of current quarter sales that had not been priced at the end of the period.

The mine's operating profit for the full year totaled C$819 million, down 24 percent from C$1.08 billion in 2006.

Zinc sales volumes at Red Dog in 2007 increased 7 percent to 575,700 metric tons due to higher production and the timing of shipments. Lead sales volumes rose 20.4 percent to 144,300 metric tons in 2007, up from 114,800 metric tons in 2006 due to higher production and strong smelter demand.

Zinc production in the fourth quarter was similar to a year ago at 134,300 metric tons, while lead production increased by 9 percent to 36,100 metric tons, compared with last year due mainly to higher grades. For the full year, zinc production totaled 575,700 metric tons, up 4 percent from 557,500 metric tons in 2006. Lead output for 2007 climbed 10 percent to 136,200 metric tons from 123,500 metric tons a year earlier.

In the third quarter of 2006, in accordance with the operating agreement governing the Red Dog mine, a royalty paid to NANA, the Alaska Native regional corporation partnered with Teck Cominco at Red Dog, increased to 25 percent of net proceeds of production. Earlier, the company paid an advance royalty of 4.5 percent of net smelter returns. The increase in royalty rate is partially offset by a decline in the base on which royalties are calculated as operating, distribution, selling and management fees, an allowance for future reclamation and closure costs, capital costs and deemed interest are deductible in the calculation of the royalty. The new 25 percent royalty became payable in the third quarter of 2007 after the company had recovered cumulative advance royalties previously paid to NANA. The NANA royalty charge in the fourth quarter of 2007 totaled US$68 million, compared with US$32 million expensed under the previous advance royalty regime in 2006. The net proceeds of production royalty rate will increase by 5 percent every fifth year to a maximum of 50 percent. The increase to 30 percent of net proceeds of production is set to occur in 2012. NANA ultimately will share about 62 percent of the royalty with other Alaskan Native corporations.

Improvements at Pogo

At the Pogo Mine in Interior Alaska, gold production improved dramatically in the fourth quarter of 2007. The mine's output, 80,900 ounces, represented a 40 percent improvement over the third-quarter performance, but remained below full capacity due to poor equipment availability, which impacted online time and throughput rate. For the full year, gold production at Pogo totaled 259,800 ounces. Cash operating cost per ounce was US$514 in the first quarter, but comparable costs for the full year are unavailable because operating results prior to April 1, 2007, the date the operation achieved commercial production, were capitalized as start-up costs.

Teck Cominco said its operating profit at Pogo totaled $2 million for the fourth quarter, but it suffered a $1 million loss overall for 2007.

The company made progress in addressing the processing challenges it has encountered at Pogo. Ore from the Pogo deposit is extremely abrasive, but continuous adjustments are improving equipment reliability. Mill recoveries are improving and various improvement projects are under way, including automation of the flotation circuit, which is expected to be completed in the first half of 2008.

Mine workers also made good progress on reducing dilution by using smaller equipment in the narrow ore headings during the second half of the year. Operating costs are expected to improve slightly in 2008, but will remain high over the next two years due to the large number of optimization projects and the need to develop additional areas underground to sustain planned production levels, the company said.

Gold sales of 74,400 ounces in the fourth quarter were lower than production due to the timing of shipments, and the average realized gold price was US$796 per ounce in the quarter. Efforts to reduce in-process gold inventory are ongoing with gold sales expected to exceed production in the first quarter of 2008.

Teck Cominco also said gold production at Pogo is expected to be between 340,000 and 360,000 ounces in 2008. ●

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NORTHERN TIGER

Sherwood will retain back-in rights to acquire a 65 percent interest in any of Northern Tiger's projects located within a 50-kilometer, or 31-mile, radius of Sherwood's existing Minto Mine facilities that are found to have mineralization amenable to processing there.

The Vancouver, B.C.-based miner also will gain 25 percent of Northern Tiger's common stock immediately prior to a private placement planned to provide operating and exploration funding for the new company.

"I believe this is a win-win transaction for our respective shareholders, (which) accelerates the exploration activity in the area of the Minto Mine and in the Yukon, beyond what Sherwood would do on its own," Quin added.

The transaction is subject to a formal agreement as well as Northern Tiger completing a successful private placement and obtaining required TSX-V, court, shareholder and regulatory approvals. ●

CMI Sales Team

EC700 Excavator loading A35D Truck at Fairbanks Gold Mine Inc. Fairbanks, Alaska