Petroleum news

page 5 First well completed and tested at Alpine satellite Fiord

Vol. 10, No. 35 • www.PetroleumNews.com *A weekly oil & gas newspaper based in Anchorage, Alaska* Week of August 28, 2005 • $1.50

August Mining News inside

Among the features in this month's Mining News is a story on the Shulin Lake diamond venture.

Martin says Canada will 'pull out all stops' on ANWR

The Canadian government will not wait idly for the U.S. Congress to pass legislation opening up the Arctic Wildlife Refuge for drilling, Prime Minister Paul Martin said Aug. 23.

Having raised Canada's objections "on a number of occasions" with President George W. Bush, he said he is "not going to give up" at this late stage.

Martin said his government will "pull out all of the stops in trying to maintain the ecological integrity" of ANWR.

Beyond that he did not specify what measures might be taken.

Canadian Prime Minister Paul Martin

Canada has argued that drilling on the 1.65 million acres of the refuge's coastal plain could threaten the calving grounds of the Porcupine caribou, an important food source for the Yukon's Vuntut Gwich'in people.

see **MARTIN** *page 20*

BREAKING NEWS

7 ConocoPhillips applies for Cronus unit: Exploration well to target Albian Torok sand interval on edge of Meltwater

8 Alberta puts royalties under review: Current return after taxes, operating costs near 20%; government looking at 25% objective

10 Aurora to drill for oil near Anchor Point: Geology looks similar to the neighboring Cook Inlet Cosmopolitan prospect

NORTH SLOPE

Eni enters Alaska

Houston affiliate of Italian mega-major buys Armstrong's North Slope assets

By KAY CASHMAN
Petroleum News Executive Editor

Eni Petroleum Exploration Co. has purchased the assets of Armstrong Alaska, which include 104 oil and gas leases on the North Slope where Eni said "reserves are expected to exceed 170 million barrels." The leases encompass 341,500 gross (273,000 net) acres onshore and offshore in state and federal waters (see map). As part of the deal Eni will inherit Armstrong's minority working interests with Pioneer Natural Resources and Kerr-McGee in northern Alaska, including the proposed Oooguruk and Nikaitchuq developments (see related article below).

An affiliate of Italy's Eni SpA, Houston-based Eni Petroleum told Petroleum News Aug. 26 that it con-

see **ENI** *page 19*

Italy's Eni SpA reaches around the globe

It may not be a household name in North America, but Italy's Eni SpA is a major presence in the world oil industry, easily ranking in the top ten by any measure of company size. Fortune ranked the company 17th in its list of the 50 most profitable companies in the world, behind industry rivals ExxonMobil, Shell, BP, Chevron, Total and Malaysia's Petronas.

In terms of production, Eni is about the size of ConocoPhillips, though its revenue is barely more than half the amount generated by the

see **REACH** *page 18*

NORTH SLOPE

Armstrong staying in game

By KAY CASHMAN
Petroleum News Executive Editor

Armstrong Alaska, the small independent instrumental in bringing three new oil companies to Alaska in less than three years, has sold all of its oil and gas leases (see above story) in Alaska to the last of those three new companies, Eni Petroleum Exploration Co., but Armstrong is staying in Alaska.

JUDY PATRICK

Bill Armstrong, president and CEO

"We're definitely not leaving Alaska," Armstrong Oil & Gas President Bill Armstrong told Petroleum News after the sale of Armstrong Alaska's assets to Eni Petroleum, an affiliate of Italy's Eni SpA, in mid-August. Armstrong Alaska is an affiliate of Denver-based Armstrong Oil and Gas, and Bill Armstrong is president of both companies.

"We were not capitalized enough to do the things our North Slope partners Pioneer Natural Resources and Kerr-McGee wanted to do. They've both been incredibly great partners for us. It was important to me not to slow them down and be a drag on development at Oooguruk and Nikaitchuq, so we sold our assets to Eni," he said.

"Eni will be a great asset to Alaska," he said.

Bill Armstrong says Armstrong Alaska will stay in the state and continue to put together exploration prospects.

The company, he said, will continue to focus on

see **ARMSTRONG** *page 15*

GULF OF MEXICO

Gulf OCS showdown looms

Eastern Gulf leasing area could nearly triple under MMS 2007-2012 sale plan

By RAY TYSON
Petroleum News Correspondent

Industry could be headed for another showdown with Florida over the possible reopening of at least a portion of what remains in the Eastern Gulf of Mexico lease planning area, closed to oil and gas activities in 2001 following a political dispute between the Bush administration and President Bush's younger brother, Florida Gov. Jeb Bush.

Depending on public interest in the Eastern Gulf leading up to adoption of the federal government's 2007 to 2012 offshore leasing program, additional acreage that would more than double the current sale area could be included in the Gulf's eastern planning area, according to the U.S. Minerals Management Service.

MMS timeline for 2007-2012 OCS lease sales

Aug. 24, 2005 — Solicitation of comments begin
Winter 2005 — Draft proposal issued with 60-day comment period
Summer 2006 — Proposed program and draft EIS issued with 90-day comment period.
Winter 2006 — Proposed final lease program and final EIS issued with 60-day waiting period.
Spring 2007 — Approval of five-year leasing program

"We're asking for public comment," MMS spokeswoman Caryl Fagot said. "This is the time when these issues can be addressed."

see **SHOWDOWN** *page 16*

contents

Petroleum News *A weekly oil & gas newspaper based in Anchorage, Alaska*

Gulf of Mexico Activity Report

Current Deepwater Activity

Operator	Area/ Block	OCS Lease	Rig Name	Prospect Name	Water Depth (ft)
Anadarko Petroleum	LL 95	G23463	T.O. DEEPWATER MILLENNIUM	Dardevil	9,143
BHP Billiton Petroleum (GOM)	WR 206	G16965	GSF C.R. LUIGS	Casade	8,160
Chevron U.S.A.	WR 758	G17015	T.O. DISCOVERER DEEP SEAS	Jack	6,959
BP E&P	GC 826	G09982	DIAMOND OCEAN CONFIDENCE	Mad Dog	6,736
Shell Offshore	MC 687	G07954	DIAMOND OCEAN VICTORY	Mensa	5,295
Chevron U.S.A.	WR 29	G16942	T.O. CAJUN EXPRESS	Big Foot	5,286
Kerr-McGee Oil & Gas	GC 768	G21817	DIAMOND OCEAN STAR	Deep Blue	5,272
Kerr-McGee Oil & Gas	GC 767	G24182	NOBLE AMOS RUNNER	Conquest	4,964
ConocoPhillips	GB 783	G11573	NABORS MODS 201	Magnolia	4,674
BP E&P	GC 782	G15610	PRIDE MAD DOG SPAR RIG	Mad Dog	4,430
BP E&P	GC 645	G11080	HOLSTEIN SPAR RIG	Holstein	4,344
Anadarko Petroleum	GC 652	G21810	ENSCO 7500	Genghis Khan	4,331
Anadarko Petroleum	GC 518	G21801	NOBLE PAUL ROMANO	K2 North	4,049
BP E&P	GC 821	G16806	T.O. MARIANAS	Puma	3,944
Eni Petroleum Co.	GC 562	G11075	GSF CELTIC SEA	K2	3,926
Shell Offshore	MC 934	G07976	NOBLE JIM THOMPSON	Europa	3,853
Kerr-McGee Oil & Gas	EB 602	G14205	DIAMOND OCEAN VALIANT	Nansen	3,646
BP E&P	AT 398	G16910	T.O. DEEPWATER HORIZON	Bonsai	3,619
Union Oil Company of CA	GC 512	G26315	T.O. DISCOVERER SPIRIT	Knotty Head	3,557
Pioneer Natural Resources USA	GC 299	G15571	DIAMOND OCEAN AMERICA	Clipper	3,452
Shell Offshore	GC 434	G21207	T.O. DEEPWATER NAUTILUS	Pathfinder	3,448
Murphy E&P	GC 338	G21790	NABORS MODS 200	Front Runner	3,330
Shell Offshore	GC 158	G07998	H&P 202	Brutus	2,985
Anadarko E&P	MC 711	G14017	DIAMOND OCEAN VOYAGER	Gomez	2,975
Shell Offshore	MC 807	G07963	H&P 201	Mars	2,945
Walter Oil & Gas	MC 161	G21163	DIAMOND OCEAN QUEST		2,924
Shell Offshore	GB 426	G08241	AUGER	Auger	2,862
LLOG Exploration Offshore	GC 157	G24154	DIAMOND OCEAN SARATOGA	Citrine	2,614
BHP Billiton Petroleum (GOM)	GC 282	G26302	NOBLE MAX SMITH	Boris North(GC)	2,346
Petrobras America	GB 244	G15860	NOBLE LORRIS BOUZIGARD	Basal Peak	2,118
Chevron U.S.A.	GC 236	G15562	THERALD MARTIN	Typhoon	1,987
Chevron U.S.A.	VK 786	G12119	ENSCO 25	Petronius	1,754
Spinnaker Exploration	MC 413	G26257	GSF ARCTIC I		1,750
Amerada Hess	GB 200	G17307	DIAMOND OCEAN CONCORD	Northwestern	1,736
Eni US Operating	EW 965	G12145	T.O. AMIRANTE	Morpeth	1,694
Shell Offshore	GC 65	G14668	H&P 206	Bullwinkle	1,353
BP E&P	VK 989	G09771	NABORS POOL 143	Pompano I	1,290

Total Deep Water Prospects with Drilling/WO Activity: 37

New Deepwater Activity

Operator	Area/ Block	OCS Lease	Rig Name	Prospect Name	Water Depth (ft)
Anadarko Petroleum	LL 95	G23463		Dardevil	9,143
Walter Oil & Gas	MC 161	G21163			2,924
Spinnaker Exploration	MC 413	G26257			1,750

Baker Hughes North America rotary rig counts*

	August 19	August 12	Year Ago
US	1,433	1,429	1,230
Canada	511	579	391
Gulf	99	98	91

Highest/Lowest

US/Highest	4530	December 1981
US/Lowest	488	April 1999
Canada/Highest	558	January 2000
Canada/Lowest	29	April 1992

*Issued by Baker Hughes since 1944

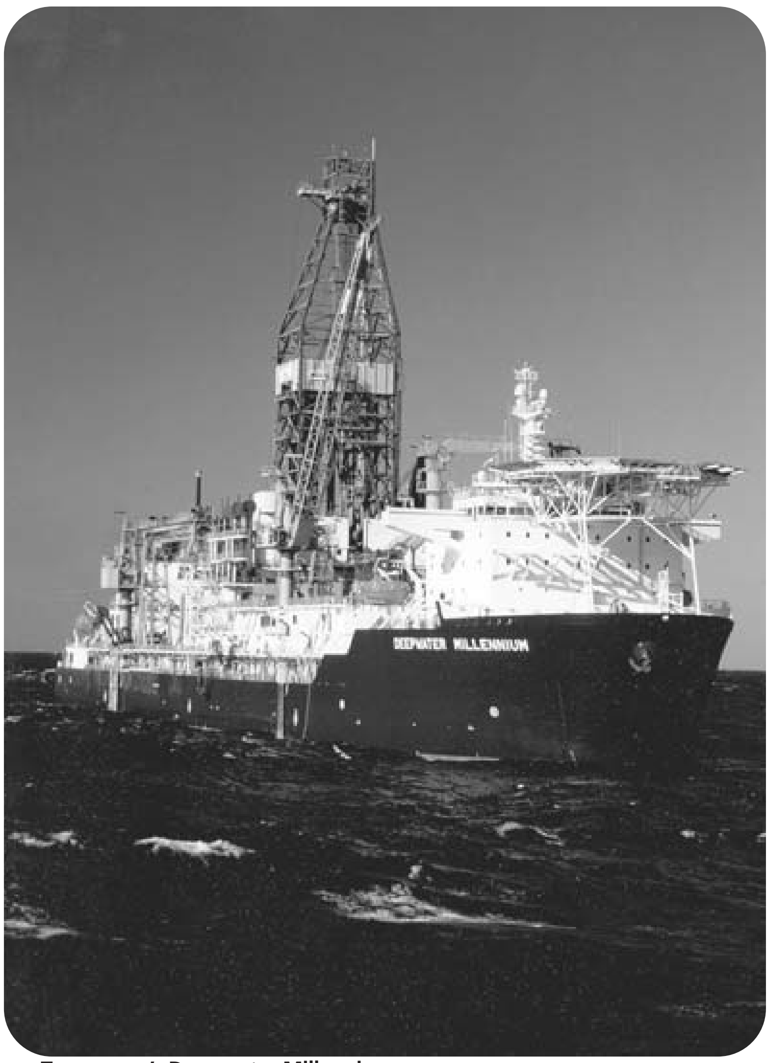
The Gulf of Mexico Activity Report as of August 22, 2005. Active drilling companies only listed.

TD = rigs equipped with top drive units WO = workover operations
CT = coiled tubing operation SCR = electric rig

This platform report was prepared by Tom Kearney


COURTESY BP

BP's Holstein Spar rig



COURTESY TRANSOCEAN INC.

Transocean's Deepwater Millennium

ALBERTA

Mega-mining project before regulators

ExxonMobil offshoots — its wholly owned Canadian subsidiary and 69.6 percent owned Imperial Oil — expect to recover 4.4 billion barrels of bitumen over 50 years from their joint Alberta oil sands project, according to documents filed with regulators.

The Kearl project, due on stream at 2010, ramping up to 100,000 barrels per day by 2012, is expected to cost C$6.5 billion (US $5.4 billion).

Plans call for a second phase of 100,000 bpd by 2014, with a third train scheduled for start up in 2019, adding another 100,000 bpd.

The scheme also includes an on-site bitumen extraction facility and a co-generation power plant.

Current plans do not include an on-site upgrader to convert raw bitumen into refinery-ready crude, although that is under consideration.

If they choose not to build an upgrader in northern Alberta, the partners would move the bitumen to plants in Canada or the United States.

The sister companies said they did not believe grassroots upgrading was economic in the 1990s because of the narrow price spread between light oil and bitumen.

However, the "large volumes" of bitumen expected to be produced from new projects, along with the prospect of severe shortages of traditional sources of diluent (used to facilitate the flow of bitumen through pipelines) in the next 10 years "could change this business environment," they said.

If they choose not to build an upgrader in northern Alberta, the partners would move the bitumen to plants in Canada or the United States.

A 580-page application filed with the Alberta Energy and Utilities Board is targeting completion of the regulator review phase by the end of 2006.

If approval is given at that stage, detailed engineering will start, followed by site preparation in early 2007 and a final decision to fund the project in early 2008.

—GARY PARK

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● ANCHORAGE

Shell has stranded discoveries, prospects

Hammerhead, Kuvlum on company's Beaufort Sea leases; official says Shell looking at other opportunities in Alaska

By KRISTEN NELSON
Petroleum News Editor-in-Chief

Shell had some of its top Americas' exploration staff in town the week of Aug. 22 for an open house at the company's Anchorage office. The newly opened office is staffed by geologist Tom Homza, Anchorage office manager, and Edna Beuhler, Anchorage office coordinator.

Annell Bay, Shell's vice president of exploration for the Americas, said Shell is in Alaska because "we're really excited about the potential in Alaska and we believe that Alaska certainly has the large resource base that we need and we want to see grow for our company."

Shell, which formerly operated in Cook Inlet, returned to the state with a bang in March, taking 84 leases in a Minerals Management Service Beaufort Sea lease sale for $44 million.

Bay said at a media briefing Aug. 23 that Shell first came to Alaska some 50 years ago and was here until 1998. "We were an active explorer and operator and producer here primarily in Cook Inlet," she said. Shell sold its leases and two platforms in Cook Inlet to Cross Timbers, now known as XTO, which continues to produce oil from the platforms off the Kenai Peninsula.

Extensive review

What brought Shell back? It was an extensive review, Bay said, "geological, technical, environmental, political, social and certainly commercial. We have relooked at the elements and the opportunities in Alaska and feel like now is the time to come back" and build "another successful venture."

The company's "ambition and plan" is to make "additional investments here in Alaska," Bay said. "And we think we have the experience … to build a significant position and make a significant presence for Shell here in Alaska." The position the company took in the Beaufort outer continental shelf lease sale includes "some stranded discoveries" and the company also hopes "to make some new discoveries here," she said, calling the Beaufort lease position "a platform for us to build on from here."

Wilhelm Chandler, Shell's Houston-based exploration manager responsible for Alaska, called Alaska "a great and vast land. It's for people who think big; it's for people who are not afraid to face big challenges, and we recognize that that's what we are doing."

The company's "ambition and plan" is to make "additional investments here in Alaska. And we think we have the experience … to build a significant position and make a significant presence for Shell here in Alaska."
—Annell Bay, Shell vice president of exploration for the Americas

Chandler said Shell plans "to be a responsible operator and we plan to be an active and constructive member of the communities in which we operate …"

Initial focus on Beaufort

Bay said the company's initial focus will be on the tracts it took in the Beaufort lease sale. "And then we're certainly looking at other opportunities all over the state. We continue to evaluate opportunities and Shell is committed to growing globally through exploration, new material oil and integrated gas, and Alaska offers us a lot, so that's why we're here."

The Beaufort Sea leases Shell took earlier this year include Unocal's mid-1980s Hammerhead discovery and ARCO Alaska's early 1990s Kuvlum discovery, both on the eastern side of the North Slope, Hammerhead some 10 miles off Point Thomson and Kuvlum some 15 miles off the coastal plain of the Arctic National Wildlife Refuge. MMS data indicates that neither reservoir has been fully delineated, but the agency estimates 100 million to 200 million barrels of oil at Hammerhead and 160 million to 300 million barrels at Kuvlum. ARCO Alaska said in October 1993 that while the wells at Kuvlum found a substantial accumulation of hydrocarbons, the discovery was not commercial as a standalone development. The Kuvlum No. 1 well flowed 3,400 barrels per day of 34 degree API gravity oil, the No. 2 well confirmed the existence of hydrocarbons, including the reservoir found in the discovery well; a third well to the north found hydrocarbons, but not in a commercial quality reservoir. ●

● NORTH SLOPE

First well completed and tested at Fiord

2005-06 winter construction season at Alpine expected to be busier than last as two satellites, facilities enhancements completed

By KRISTEN NELSON

Petroleum News Editor-in-Chief

ConocoPhillips Alaska and its partner Anadarko Petroleum are on schedule for first production from Alpine satellite fields Fiord and Nanuq at the end of 2006. The projects were approved in December and construction began last winter.

Mark Ireland, ConocoPhillips Alaska's Western North Slope development manager, said gravel was laid for both projects over the winter, vertical support members for the pipelines were installed as well as some of the bridge crossings. Three small channels in the Colville River have to be crossed by the pipelines between Fiord, the CD3 (Colville Delta 3) drill site, and the main facilities at CD1.

Gravel was mined, excavated and laid for the pads, an aircraft landing strip at Fiord — a roadless development — and the road from Nanuq, CD4, to CD1. "We got some very high-quality gravel," Ireland told Petroleum News, making it easier to pack it this summer, as the gravel is worked to get water out and give final shape to roads and pads.

Fiord is in the Colville Delta, and is roadless because of environmental concerns, he said. "It's a large bird-nesting area," and the company treats it "as highly sensitive" and does its "utmost to avoid any impact that can be avoided," he said.

Because Fiord is roadless, drilling is restricted to the winter, which "will help to minimize any activities in the summertime when the birds are actually there." And because there is no road, there will be no road traffic, he said.

First wells drilled at Fiord

Drilling began at Fiord this winter, using Doyon 19, the rig which has done all of the development drilling at Alpine.

Three wells were started at Fiord; one was drilled to completion, Ireland said. Each of the satellites has two reservoirs. "Fiord consists of a Kuparuk zone, which is underlain by a deeper Nechelik sand," he said. Both satellites "will be developed with all horizontal wells from the start, similar to the development plan for Alpine." There will also, as at Alpine, be a miscible water alternating gas enhanced oil recovery implemented at startup.

There will be 20 wells or less at each of the satellites, compared to Alpine which has more than 100 wells, so the satellites are "much smaller in scale and scope, but the same technology is being applied as far as the drilling and enhanced recovery goes."

FORREST CRANE

Mark Ireland, ConocoPhillips Alaska

The Fiord well which was completed was tested; the other two were "drilled just to the casing point in the reservoirs and the horizontal sections on those will be drilled out this coming winter," he said.

Depending on the winter season, "three to four to five at the most" wells would be drilled at Fiord in a winter, Ireland said: "So we expect it will take another three seasons or more to complete the drilling."

Doyon 19 moved from Fiord to Alpine to drill more development wells there at the end of the ice road season, and will move to Nanuq in the October-November timeframe to begin development drilling there. That will be the pattern for the next several years, Ireland said: The rig will move to Fiord during the ice road season and then back to Nanuq as the ice road season closes.

Startup for both satellites is targeted for the fourth quarter of 2006, with combined peak production expected to hit 35,000 barrels per day gross in 2008, Ireland said.

Alpine production has increased for five years in a row, every year since production started, he said. "We're on track to do that again this year."

ACX3 also under way

Alpine hit new production records at the end of July and the beginning of August, topping 129,000 bpd. This production level comes as a result of phase 1 and 2 of the Alpine capacity expansion, ACX1 and ACX2.

ACX1 was completed last year and ACX2 was completed in June during a maintenance shutdown, Ireland said. A lot of the ACX2 work was completed last year; this year "we installed the final cooling equipment," and when the field came back up, production rates began to rise. Production in August has been lower because of warm weather. Ireland said Alpine production is expected to average 125,000 bpd in August because the warm weather limits gas compression ability and hence oil production, since gas is produced with the oil and must be reinjected.

Alpine production has increased for five years in a row, every year since production started. "We're on track to do that again this year." **—Mark Ireland, ConocoPhillips Alaska Western North Slope development manager**

ACX1 increased produced water handling, with some increased oil production. As "water injection matures, our patterns would start to produce more water," Ireland said. The company knew from the beginning it would need to increase its water-handling capacity, he said, and the investment was made when it became necessary. ACX1 also increased oil and gas handling capacity somewhat.

"ACX2 was primarily geared at increasing our oil capacity," and production levels increased when it was completed.

ACX3, which will be completed next summer, is a condensate stabilizer which provides a cleaner break between the oil and the gas leaving the facility, providing more hydrocarbon components to aid in enhanced oil recovery, allowing the company to fine tune miscible injectant at Alpine, so this project will have longer-term results, geared to increasing production through EOR, rather than to immediate production increases.

Logistics a challenge

Logistics are a challenge in the Alpine area. "We've got no road connection back," so for eight or nine months everything has to be flown out, and then "in the few months of the year that we have the ice road, it's just truckload after truckload," Ireland said. Some 1,600 truckloads of materials went out last winter, "and that's not an unusual amount for us."

All of the tubulars needed for drilling have to go out on the ice road, along with bulk products for drilling. And with pipelines to be built, the pipe also has to go out on the ice road, along with the modules to be installed: "all the materials for the new projects as well as the ongoing operations, maintenance-type work."

Planning goes on year-round, he said: "And it's really paid off for us. The project folks and operations folks that are involved with this planning effort have just done a tremendous job for us," Ireland said, allowing "us to accomplish the things that we have."

Next winter busier

During last winter's construction season about 450 people worked on the Fiord and Nanuq projects at Alpine. Among the larger contractors working on the project are VECO and ASRC Energy Services, he said. AIC-Kuukpik joint venture has done the gravel work for the project.

Next winter the construction season should be even busier, Ireland said: "with the two satellites, Fiord and Nanuq, completing another season of construction there and then ACX3 construction going on, we expect to have even more people … employed, than we did last year." ●

● CANADA

Hu's on first, Cheney's at bat

China, United States on back-to-back missions to Canada as both countries take aim at oil sands to shore up energy security

By GARY PARK
Petroleum News Canadian Correspondent

With North American trade relations at their lowest ebb in anyone's memory, the stakes will be raised in September, if only symbolically, when Canada plays host to two of the world's most influential politicians.

U.S. Vice President Dick Cheney and Chinese President Hu Jintao are staging back-to-back visits at a time when their interest in Canadian oil, especially the Alberta oil sands, is climbing to new heights.

For those trying to discern some deeper significance, Hu's visit is a lengthy, elaborate affair; Cheney's itinerary seems to have been hastily assembled.

So far, in fact, only the Alberta government and the Fraser Institute, a right-wing think tank, have even said Cheney is heading north of the 49th parallel. There has been no confirmation from Washington.

The program, according to the Canadian sources, includes a tour of the oil sands and a Sept. 8 dinner in Calgary for a select group of high-profile business leaders and provincial premiers, some of whom will pay C$10,000 a plate for a chance to bend the ear of President George W. Bush's right-hand man.

Hu's first trip to North America since becoming China's supreme leader in 2003 covers the Sept. 8-17 period, with stops in Vancouver, Ottawa and Toronto and a state banquet hosted by Prime Minister Paul Martin.

High-level talks have been abandoned

Cheney will arrive amid a brittle state of affairs over the softwood lumber dispute that has prompted the Martin government to abandon high-level talks, pending an unscheduled call when Martin plans to register his concerns with Bush about what one Canadian government official said are the "fundamental tenets of the trading relationship between the two countries."

Faced with the Bush administration's refusal to abide by four trade panel rulings favoring Canada in the lumber dispute, some federal, provincial, business and labor leaders are urging Martin to retaliate against Washington by playing the ultimate trump card.

Brian Payne, president of the 162,000-member Communications, Energy and Paperworkers Union of Canada, thinks it is time for Canada to "show some guts" by turning off the taps on oil and gas exports.

"What's the point of having a mechanism to resolve trade disputes when the other side just simply ignores it?" he said.

"Obviously it's a dramatic thing to say, 'Close the tap.' But there's got to be some quid pro quo in this life. That's the point. This is not nickels and dimes. We're talking billions," Payne told the Vancouver Sun.

Peter Clark, a Canadian trade consultant, suggested the federal government should cut off U.S. access to Canada's energy reserves.

"The best strategy is always to find out where the soft underbelly is and than target it," he said.

Softwood negotiator cautions against revenge

Paul Tellier, Canada's lead negotiator in the softwood talks, cautioned against exacting revenge from the United States, arguing that an angry response would be a "bit like pissing in a snowbank — you get a bit of relief, but it's not that long-lasting."

"I'm not for a trade war," he said, when reacting to those calling for holding back energy shipments. "I'm very much in favor of negotiations and making sure agreements we have are respected."

Tellier agreed with David Wilkins, U.S. ambassador to Canada, that the dispute should be resolved through negotiations.

Wilkins said both countries have a responsibility to reach a settlement.

"People should downplay what's happened so far, close the door and roll up their sleeves," he said.

While generally taking a measured approach, senior cabinet ministers in the Canadian government indicated how close they are to breaking point.

Industry Minister David Emerson said he was in a state of "disbelief at how the Americans have just thumbed their nose at the rule of law. It starts to force people to look at the whole big picture of what we're going to do in terms of trade strategy over the next decade or two.

"I think we've become somewhat dependent on a trading partner who just refuses to play by the rules that we need to diversify our markets," Emerson said, fueling the notion that Canada should look as much to Asia as the United States in exporting production from its oil sands.

Harsh message from Ottawa

Finance Minister Ralph Goodale delivered the harshest message from Martin's inner circle.

He said Canada has felt the "painful sting of knee-jerk protectionism" over the last couple of years with Washington closing the door on the "free and fair movement" of Canadian wheat, lumber and beef.

Without getting into specifics, he said Canada is determined to see that the United States is forced to abide by "clear, legal, unequivocal, unambiguous" legal trade rulings.

Goodale and Emerson said Aug. 23 that the government is identifying sectors where Canada could impose tariffs on U.S. imports and place maximum pressure on Washington.

There is nothing to indicate the timing of the Cheney and Hu visits is more than coincidence, but they occur at a pivotal time as China scours the globe for energy supplies, having seen China National Offshore Oil Corp's bid for Unocal so resoundingly spurned.

Three of China's state-owned oil enterprises have staked claims in the oil sands sector — two with junior production startups and one with Enbridge's planned Gateway pipeline — giving a strong vote of confidence to a resource that has enabled Canada to elbow Saudi Arabia out of its No. 1 spot as crude supplier to the United States.

Although Hu has no oil sands stop on his agenda, the length of his visit is a major step for Canada-China relations, said Yuen Pau Woo, vice president of the Asia Pacific Foundation of Canada.

He told the Vancouver Sun that Hun is not merely "dropping by for a quick handshake. This is a commitment to forge a relationship at the highest level." ●

Asian tigers maul each other over oil and gas

So much for the non-compete deal between China and India as the two energy-hungry Asian giants battle over some of the planet's largest oil and gas prospects.

Less than a week after they signed agreements to bid jointly for foreign assets, the Chinese have outbid India for PetroKazakhstan, tightening a grip on the oil rich former Soviet republics of Central Asia.

China National Petroleum Corp. or CNPC, China's biggest oil firm, appeared to clinch a US$4.18 billion cash bid for PetroKaz — a 21 percent premium over the previous closing price — edging out an Indian consortium consisting of state-owned Oil and Natural Gas Corp., ONGC, and Indian steel billionaire Lakshmi Mittal, which reportedly had outbid the Chinese until CNPC was asked to rebid.

The Indian consortium, which is targeting purchases in 22 countries, may yet return with a higher bid, said ONGC Chairman Subir Raha.

PetroKaz cannot solicit offers

The deal with CNPC blocks PetroKaz from soliciting any offers, but the company can accept a superior bid so long as CNPC has a chance to submit a matching offer and it is prepared to pay a US$125 million break-up fee.

Another wild card could be the mercurial Kazakhstan government, which made life so miserable for PetroKaz because of its apparent collusion in a series of legal

see **MAUL** *page 7*

● NORTH SLOPE

ConocoPhillips applies for Cronus unit near Meltwater

Exploration well targets Albian Torok sand interval at prospect southwest of Kuparuk River unit

By KRISTEN NELSON

Petroleum News Editor-in-Chief

ConocoPhillips Alaska will drill an exploration well west of Meltwater this winter, according to a unit application filed with the state in late July.

ConocoPhillips applied to the State of Alaska to form the Cronus exploration unit immediately west of Meltwater on the North Slope. Meltwater is a noncontinuous portion of the Kuparuk River unit, southwest of Tabasco.

In exchange for formation of the two-lease exploration unit, ConocoPhillips would drill a well at the prospect this winter. One of the leases was acquired in state North Slope sale 87 and expires Oct. 31. The other was acquired in the 1999 areawide North Slope lease sale and expires June 30.

ConocoPhillips told the state that the Cronus unit "encompasses all or part of a potentially oil-bearing reservoir in the Albian Torok formation" …

The company's plan of exploration calls for an initial test well within the boundaries of the proposed Cronus unit by June 1, 2006. It would be a vertical well on state oil and gas lease ADL 389161, in township 8 north range 6 east, Umiat Meridian, and would be drilled to depths sufficient to penetrate the Albian Torok sand interval correlative to that found in the Nanuk No. 1 well between 6,140 feet to 6,300 feet measured depth, or 6,100 feet to 6,300 feet subsea true vertical depth, whichever is lesser, the company said in its July 27 application to the Department of Natural Resources. That well was drilled in section 19, T11N-R5E, UM, and the accumulation is being developed as an Alpine satellite (see most recent Nanuq story in Aug. 21 issue of Petroleum News), with production planned to begin at the end of 2006 from both Nanuq and Kuparuk sands.

Earlier well planned at prospect

ConocoPhillips told the state that the Cronus unit "encompasses all or part of a potentially oil-bearing reservoir in the Albian Torok formation" and said the proposed unit consists of all of the acreage in ADL 389161 and ADL 389056. Geological, geophysical, engineering and well information submitted as part of the application is confidential.

ConocoPhillips has asked for a three-year term for the plan of exploration.

If the well at Cronus is not drilled, the unit would terminate and leases beyond their term would expire.

If the well at Cronus is not drilled, the unit would terminate and leases beyond their term would expire.

A participating area would be required within five years of approval of the Cronus unit.

ConocoPhillips filed to drill a well at Cronus in 2002, reactivating a 2001 permit application. That well was proposed for section 4 of T8N-R6E, UM. Cronus was one of a group of exploration prospects ConocoPhillips was looking at west of Kuparuk early in the decade.

The Cronus prospect was originally part of the larger SE Delta exploration unit approved by the state in 2001. Phillips drilled the Atlas prospect in SE Delta in section 11-T9N-R6E, UM, to a measured depth of 7,335 feet and a TVD of 7,278 feet. That well was plugged and abandoned, as was an Atlas sidetrack.

Work to maintain the SE Delta unit included a commitment by ConocoPhillips to drill the Cronus well by June 1, 2002. ●

continued from page 6

MAUL

actions that it forced the Calgary-based company to fold its tent.

The government has right of first refusal on the disposal of assets, but PetroKaz Chief Executive Officer Bernard Isautier insists that legislation is not relevant because Canadian securities are being sold, not oil assets.

He did not expect any legal challenge given CNPC's "excellent relationship" with the Kazakh government and with Russia's KazMunaiGaz, which was listed among companies in the running for PetroKaz.

If CNPC locks up the purchase, China gets access to 550 million barrels of reserves and potentially 170,000 barrels per day of production.

The Kazakh and Chinese governments are also working on plans for a 1,900-mile pipeline from the giant Caspian fields to China's own Xinjiang pipeline system.

In addition, PetroChina has ownership stakes in Kazakh oil and gas condensate fields which were pumping 124,000 bpd earlier this year.

What the outcome holds for the China-India pact is not immediately clear.

Some observers believe the entente may even have been a result of the competition for PetroKaz and an acceptance by both countries that they were in danger of overpaying for assets in their quest for energy security.

—GARY PARK

Petroleum Geologist
State of Alaska/Division of Oil and Gas

The Department of Natural Resources, Division of Oil and Gas, is seeking applications from qualified, experienced petroleum geologists to fill two Petroleum Geologist vacancies in the Resource Evaluation Section. Located in Anchorage, these are permanent, full-time, Range 26, exempt positions. Starting salary is dependent on experience and qualifications.

Primary responsibilities include:

- Interpretation of surface and subsurface geological, geophysical and other geo-technical data for the purpose of evaluating the petroleum potential of State of Alaska lands.
- Utilization of that information to provide technical expertise and guidance on issues such as lease sales, quantification of oil and gas resources and reserves, royalty determination, lease stipulations, unit and producing area applications, proposed legislation and policy, regulatory matters and other oil and gas issues.
- Participation in geologic field parties to acquire geologic data necessary for assessment of the petroleum potential and value of State of Alaska lands. Preparation and presentation of the results of such geologic investigations for internal use and/or publication.
- Providing statistical and technical data and information to the offices of the director, commissioner, governor and legislative bodies.
- Respond to requests for technical information from other agencies, organizations, companies and individuals.
- Participation in development and analysis of reservoir simulation models to determine predictive or history-based resource allocations.
- Provide written or oral expert testimony supporting the stateís position before legislative committees and in conferences, public meetings and legal proceedings.

Each position requires an appropriate college degree(s) and a minimum of five years of industry experience (ten years preferred) as an exploration and development geologist in Alaska. Applicants must have experience with the GeoGraphix Discovery application utilized by the Division or with similar applications and with analysis of well log data. Applicants should have knowledge of State of Alaska statutes and regulations governing petroleum exploration and development and excellent interpretive and communication skills.

The State of Alaska is an equal opportunity employer and supports workplace diversity. Individuals requiring accommodations call 800-587-0430 Voice or 800-770-8973 TTY/TDD (Relay Alaska). Submit resume with a complete work history, application materials, and a technical writing sample by 4:00 p.m., Monday, August 22, 2005, to Sheila Westfall, Administrative Manager, Alaska Division Oil and Gas, 550 West 7th Avenue, Suite 800, Anchorage AK 99501-3560.

● ALBERTA

Alberta government puts oil and gas royalties under review

Return after taxes, operating costs, general expenses close to 20 percent; Alberta looks at 25 percent

By GARY PARK

Petroleum News Canadian Correspondent

The Alberta government wouldn't make such a concession, but it appears to be answering criticism that it is under-selling the province's oil and gas reserves.

Energy Minister Greg Melchin said a decision will be made this fall on whether to hike royalties from net oil and gas production revenues (after taxes, operating costs and general expenses) closer to its high-end objective of 25 percent of net oil and gas production revenues from the current return that is close to 20 percent.

He told the legislature's energy committee that a review is under way covering the "whole question of fair share" for Alberta.

Whatever happens, Melchin said the government will not waver from its overall goal of a balanced and stable relationship with the industry to promote development.

The action comes a year after the Pembina Institute for Appropriate Development issued a scathing report, accusing provinces in Western Canada, the Yukon and the Northwest Territories of "not providing maximum compensation (to their residents) for the development of oil and gas resources."

The report, covering the 1995-2002 period, said "big machinery, shiny logos and business suits often overshadow the fact that provincial oil and gas reserves are public — not corporate — resources."

But the institute was emphatic that "we are not getting nearly our money's worth," especially when measured against Alaska and Norway.

CAPP says royalties could hit C$14B

Provincial energy ministers and the Canadian Association of Petroleum Producers said the institute did not understand the complexity of developing oil and gas resources and was essentially dead wrong in its conclusion.

The review coincides with an association forecast that royalties for 2005-06 could soar to C$14 billion, up 84 percent or C$6.4 billion from the budget forecast in March, so long as commodity prices remain close to US$66 per barrel for oil and C$9.50 per thousand cubic feet for gas.

On the issue of oil sands royalties, Melchin was disinclined to meddle with the current structure, which offers a 1 percent incentive royalty on new projects, climbing to 25 percent once construction costs are paid off.

He said frequent changes to oil sands royalties are not desirable when the current regime has been "successful in accomplishing what it was designed to do," noting that oil sands capital spending will climb 40 percent this year to C$8.5 billion.

Melchin said Alberta is anxious to encourage even greater investment, while ensuring that royalties don't force operators to abandon wells prematurely because of declining flow rates. ●

ALASKA

Port Authority proposes B.C. LNG landing

The Alaska Gasline Port Authority has submitted a third draft contract to the State of Alaska under the Alaska Stranded Gas Development Act, proposing movement of LNG to a receiving terminal in British Columbia, as well as to U.S. West Coast ports.

Shipment to British Columbia does not require Jones Act tankers, the authority said Aug. 22. For the U.S. West Coast, the authority said it has a memorandum of understanding with the American Shipping Group/Totem Ocean Trailer Express to ship liquefied natural gas "with a Jones Act-compliant price quote that is competitive with foreign built LNG tankers."

The authority said its economic analysis indicates it would provide a well head of $2.56 per million British thermal units.

The authority said its economic analysis indicates it would provide a well head of $2.56 per million British thermal units.

The authority proposes purchasing the state's royalty gas "to the maximum extent available."

But the project would need additional volumes of gas, and the authority requests the state's assistance in negotiating for additional gas. That assistance would include negotiating third-party commitments, enforcing the state's legal rights "to terminate existing leases/unit agreements, potentially bringing suit against leaseholders in the unit for a failure to meet a duty to develop or market ANS gas and assistance in the statutory clarification of AGPA's right to the use of eminent domain to acquire the needed gas from leaseholders."

—PETROLEUM NEWS

GULF OF MEXICO

Exxon, Statoil form deepwater pact

ExxonMobil and Norwegian-based Statoil have entered into an agreement to drill at least one deepwater exploration well in the Gulf of Mexico's Alaminos Canyon, Statoil said.

The two big companies also agreed to jointly evaluate exploration acreage in Walker Ridge, which is on trend with Gulf lower tertiary discoveries Jack and St. Malo. Statoil holds equity interests in the discoveries.

"These arrangements with ExxonMobil represent a further strengthening of Statoil's presence in the deepwater Gulf of Mexico," Statoil said in an Aug 22 press release. "It is in line with the growth strategy for this new core area." Statoil noted that its deal with ExxonMobil is near federal leases acquired by Statoil from Canadian-based EnCana earlier this year and "enhances its potential value for Statoil."

—RAY TYSON

● CANADA

Squeezing more oil out of aging fields

Kinder Morgan raises hopes of using CO2 expertise to exploit 70-80 percent of crude still beyond reach in Alberta reservoirs

By GARY PARK
Petroleum News Canadian Correspondent

The carbon dioxide business is on a convergence path in Canada, with the impending arrival of Kinder Morgan, the biggest name in CO2 marketing and transporting in the United States, and the emergence of more leading companies ready to inject the gas to enhance oil recovery.

Once its takeover of Terasen is completed, Kinder Morgan is eager to apply its CO2 expertise over the long term, said Chairman and Chief Executive Officer Richard Kinder.

That prospect is being welcomed by Penn West Energy Trust, which hopes to have a major deal in place by the end of September to buy CO2.

For Alberta Energy Minister Greg Melchin these developments raise hopes of using new technology, led by CO2 injections, to extract more of the 70-80 percent of oil that remains in the ground because it is too costly to remove.

Kinder Morgan Energy Partners, a division of the Houston-based pipeline giant, runs the CO2 businesses, which accounts for 27 percent of its earnings from refined-products pipelines, natural gas pipelines, terminals and CO2 production, transport and marketing.

CO2 investment opportunity in Canada

Richard Kinder told analysts in a conference call that CO2 is on his company's list of investment opportunities in Canada beyond Terasen's pipelines and natural gas distribution operations.

He said sequestering CO2 is a natural extension of his company's role in operating pipelines and compression equipment in both Canada and the United States.

Because of Canada's decision to implement the Kyoto Accord and Alberta's enthusiasm for squeezing more out of aging oilfields "we would not be surprised if eventually there's … CO2 sequestration opportunities up there," he said. "We think we will be able to apply our CO2 expertise."

Kinder Morgan has substantial interest in CO2 in the United States, notably as operator and 50 percent owner of the McElmo Dome in southwest Colorado which has one of the world's largest accumulations of the gas.

Now in its 21st year of production, the McElmo Dome is currently pumping about 950 million cubic feet per day from fewer than 50 wells. After being dehydrated and compressed, the CO2 is shipped 500 miles to Texas through Kinder Morgan pipelines for use in Permian Basin oilfields.

EOR in West Texas

It has also made gains in enhanced oil recovery in two large West Texas fields — Sacroc, which has since quadrupled output to 32,500 barrels per day, and Yates, which is now yielding 24,000 bpd. The two fields have a combined 8 billion barrels of oil in place.

Canada's participation in Kyoto is seen by industry as leverage to move from dabbling in CO2 floods to start exploiting the vast majority of conventional light oil that is being left in the ground.

Saskatchewan talks optimistically of exploiting 30 billion barrels beyond what is accessible by traditional, vertical well drilling, and expanding on the modest beginning by EnCana, which has pointed the way with its Weyburn venture to recover 130 million barrels and left 14 million metric tons of CO2 in the process.

One of the greatest current needs is the absence of a large source of pure or near-pure CO2 and the absence of a regional pipeline to capture CO2 from bitumen upgraders, rather than vent the leading source of greenhouse gases.

Penn West President Bill Andrew pointed to a possible breakthrough from talks involving the Canadian and Alberta governments and industry partners to advance a possible C$500 million pipeline network, with possible connections to the oil sands region.

The company has a long-range plan to spend C$1 billion in the Pembina field of central Alberta, with the initial goal of tripling CO2 production to 36,000 bpd.

Andrew said Kinder Morgan's "very aggressive" style should ultimately see it have a big impact on the CO2 business.

That could give added encouragement to EnCana, Penn West and Apache Canada, the three pacesetters in the CO2 field. ●

● KENAI PENINSULA

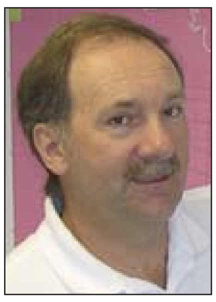
Aurora to drill for oil near Anchor Point

Drilling could start in November in onshore geology that looks similar to the neighboring Cook Inlet Cosmopolitan prospect

By ALAN BAILEY

Petroleum News Staff Writer

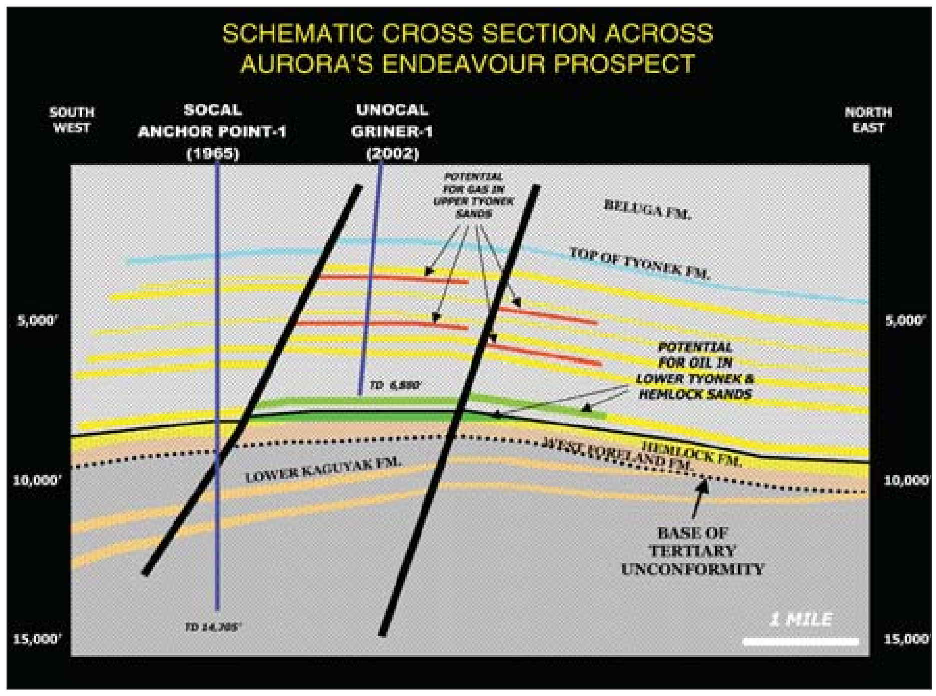
Aurora Gas LLC plans to drill a wildcat oil well at the company's Endeavour prospect, onshore near Anchor Point on the Kenai Peninsula. And drilling could start as soon as November, Andy Clifford, the company's vice president for exploration, told Petroleum News.



ANDY CLIFFORD

"We've been going through a marketing effort to get an industry partner or two to join us (in the Endeavour prospect) since late last year and now we're in negotiations with two companies," Clifford said. Clifford declined to comment on which companies are involved in the negotiations.

On Aug. 22 Aurora held an informational meeting at Anchor Point to inform local people of the company's plans, to discuss possible impacts on the community and to discuss the steps that the company will take to mitigate environmental impacts.



COURTESY AURORA GAS

The Endeavour prospect is in the Hemlock and lower Tyonek formations, at depths between 8,000 and 9,000 feet. Clifford said that the stratigraphy and structure of the prospect exactly mirror the nearby, offshore Cosmopolitan prospect — Cosmopolitan is known to contain oil.

"There's just one syncline between Cosmopolitan offshore and Endeavour onshore," Clifford said.

Consolidating leases

Although Aurora acquired the Anchor Point leases from Anadarko some time ago, the company has only recently consolidated its lease holdings to a point where drilling can start — the land ownership situation is fairly complex, with a mix of state, Native and other private land holdings.

"We've also got a lot of fee minerals down there too — it's all subdivisions," Clifford said. " … It's taken two years to accumulate the lease position down there."

However, because of the extent of private landownership many Anchor Point residents have become stakeholders in the Endeavour project, he said.

And the company has now reached a point where it wants to form a unit.

"We've had the first meeting with DNR to investigate the formation of a unit," Clifford said.

Simpler than offshore

Although the onshore lease situation is fairly complex, exploration and development should prove much simpler and less expensive than offshore at Cosmopolitan, Clifford said.

In fact Aurora plans to drill from the pad that Unocal constructed for its Griner well a number of years ago. And drilling a vertical well to an onshore prospect is substantially cheaper than drilling a directional well to an offshore target — Clifford said that it should cost about $3.5 million to drill a well at Endeavour and that it would probably take four or five wells to delineate the structure.

"Onshore there at Anchor Point we can use existing roads, existing gravel pads, everything will be hidden and buried and tucked away," Clifford said.

But drilling to depths in excess of 8,000 feet will require a contract for the use of a reasonably powerful rig — the rig that Aurora uses on the west side of the Cook Inlet drills relatively shallow holes.

An ability to use the route of the highway from Anchor Point to Nikiski to build a buried pipeline should simplify pipeline construction.

"It's probably the best place to have to

see **ENDEAVOUR** page 11

NORTH SLOPE

State OKs 480-acre Kuparuk PA addition

The Alaska Division of Oil and Gas has approved a 480-acre addition to the Kuparuk participating area in the Kuparuk River unit, the 10th such expansion. The acres added are around the KRU 1D-30L1 lateral, the 1D-32L1 lateral and the proposed 1D-34L1 lateral wells. Data submitted by unit operator ConocoPhillips Alaska "indicate that the proposed expansion acreage is capable of producing or contributing to the production of hydrocarbons in paying quantities," the division said in an Aug. 15 findings and decision. The expansion acres are in state oil and gas lease ADL 28248; working interest owners in the lease are ConocoPhillips, BP Exploration (Alaska) and ExxonMobil. The area is on the eastern edge of the unit.

The expansion is in the Kuparuk reservoir within the unit; the expansion acreage was within the unit, but outside the participating area.

The KRU 1D-30L1 and 1D-32L1 are producing 1,087 and 513 barrels per day of oil, respectively; development plans include the drilling of a third lateral, 1D-34L1, during September, and future conversion of 1D-32L1 from a producer to an injector.

continued from page 10

ENDEAVOUR

do it — it's along an existing highway," Clifford said.

And the potential for finding gas in addition to oil reduces the economic risk of the project.

"There's gas all the way down … so we may make a gas well out of it rather than nothing," Clifford said.

Not seasonally restricted

Because Aurora will be drilling from private land, permitting should prove fairly straightforward. And the use of existing roads and drilling pads eliminates any seasonal restrictions on when drilling can take place.

"We can basically drill any time as soon as we're ready," Clifford said.

Aurora expects that the use of existing roads and pads will minimize any environmental impacts from the work. However, the company is planning substantial measures to protect the environment and to minimize disturbance to the local community. For example, berms will prevent oil spillage from the drilling rig and there are minimum spacing requirements between wells and rivers, lakes or streams. Aurora has joined Cook Inlet Spill Prevention and Response Inc., the oil spill response cooperative for the Cook Inlet.

Long time interest in oil

Clifford said that although in the past Aurora has explored and developed gas prospects the company has been interested in oil exploration for a long time. The company sees tremendous potential for oil onshore as well as offshore, he said. And the acquisition of Anadarko's leases a few years ago helped gel the company's oil plans.

"We always had the intention from the beginning … to look at the oil potential because this basin's produced over a billion barrels of oil since the first discoveries in Swanson River back in '59," Clifford said.

Aurora is picking the sweet spots for oil from its portfolio of leases and in some cases shooting some seismic, he said.

Clifford sees onshore oil potential on the west side of the Cook Inlet, as well as on the Kenai Peninsula. In particular, he thinks that the string of oil plays offshore at Trading Bay probably continues onshore north of Granite Point, an area where the Jurassic source rocks for the Cook Inlet oil occur beneath the surface.

"As a geologist I know that the geology doesn't change at the coastline," he said. "… (the oil geology) — it's got tremendous plumbing,"

> *"There's just one syncline between Cosmopolitan offshore and Endeavour onshore."*
> **—Andy Clifford, Aurora Gas vice president for exploration**

In fact, after the drilling on the Endeavour prospect Aurora expects to do some deep drilling for oil in the Tertiary at the company's Aspen prospect; Aspen lies onshore due north of Granite Point. However, the company's other Kenai Peninsula oil prospect, near Swanson River, requires further investigative work before planning any drilling.

"We're not quite ready for that one yet," Clifford said.

Meantime the company is forging ahead with its plans for Endeavour.

"We're excited by it, Clifford said. "I can't remember the last time an oil wildcat was drilled in the Cook Inlet." ●

● CANADA

Testing times loom for pipelines

Shippers give thumbs up to Canada's pipelines; National Energy Board says debate builds around shipping arrangements and tolls

By GARY PARK

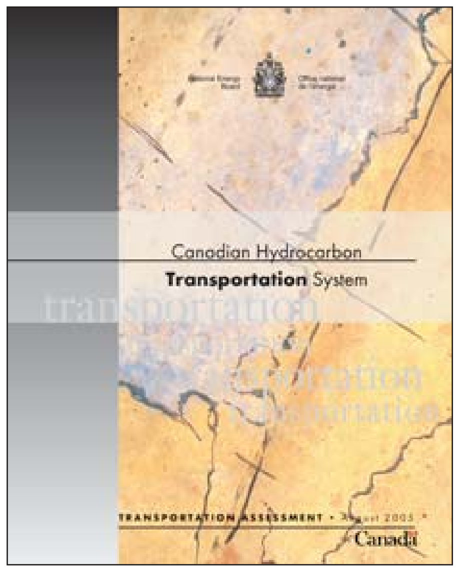
Petroleum News Canadian Correspondent

For more than four years, the mainline crude and natural gas pipelines of Enbridge and TransCanada, respectively, have been operating well below capacity, with only the Alliance gas system functioning at its peak, a National Energy Board report shows.

Based on a survey of shippers, the federal regulator, in its first report focusing on hydrocarbon transportation, said pipeline users give a high rating to the physical reliability of the systems and are generally satisfied with the services provided by the companies.

The level of satisfaction was partly reflected in the fact that less than one-quarter of shippers responded to the survey.

But there are clouds building in the view of respondents, who would like to see more competitive tolls, more continuous improvement and innovation and a more collaborative and reasonable method of resolving differences.



To that, the Canadian Energy Pipeline Association said the call for more competitive tolls was normal, while shipping arrangements are increasingly being negotiated through settlements rather than costly, contentious toll-and-tariff hearings.

The system moves more than C$100 billion in petroleum products and natural gas each year, with export revenues amounting to C$59 billion in 2004, representing 15 percent of total Canadian exports.

Ample gas carrying capacity

The National Energy Board reported that the flattening of conventional natural gas production in the Western Canada Sedimentary Basin in recent years has ensured that there is ample carrying capacity. That excess has given producers "flexibility to access their market of choice." Canadian gas exports to the United States hit a record C$26.5 billion last year.

On the crude side, a greater variety of oil types from the basin are finding their way to Canadian and U.S. markets, despite tightness on Terasen's Trans Mountain Pipe Line to the Burnaby refinery in the Greater Vancouver area, and producers are convinced there is a need for even greater access to heavy crude markets in the United States.

The answer over the next decade, according to a spokesman for the Canadian Association of Petroleum Producers is a combination of expanded pipelines and more upgraders (with seven on the drawing boards).

Long-term uncertainties stemming from LNG

Over the longer term, the regulator said there are uncertainties in the pipeline sector, stemming from the number of liquefied natural gas terminals proposed for North America and the impact those might have on supply and demand and on North American gas flows. Within Canada, Ontario's decision to remove 7,500 megawatts of coal-fired power generation capacity from its system and to not spend C$1.9 billion refurbishing a major nuclear plant, could affect domestic gas flows.

The board said the leveling off of gas production in Western Canada and the introduction of the Alliance pipeline from northeastern British Columbia to Chicago has changed the equation for older pipelines that are experiencing a sharp drop in long-term shipping contracts.

A Canadian Energy Pipeline Association spokesman said the industry may be forced to look at ways of reviving longer-term contracting to back-stop large pipeline projects, such as the Mackenzie Delta and Alaska projects, which require heavy financial commitments.

The regulator said that although the erosion of long-term contracts has not yet impaired the cost-of-service framework, "new tolls design structures may need to be considered to equitably share costs and maintain the system's competitiveness."

Board finds pipeline companies financially sound

Looking to the bottom line, the board said regulated pipeline companies are financially sound, which is crucial to investors, given the long life of assets and their need to be reasonably assured of the existence of long-term supply and markets.

The board said its regulatory challenge is to provide a fair and effective process that does not distort investment decisions that should be made in the marketplace.

It said new investment can be frustrated when regulatory processes and timelines are stretched out and unexpected hurdles appear. The end result then is that costs to energy users rise as development of new supplies is constrained.

Since the start of 2001, the Alliance pipeline has operated at 1.4 billion-1.6 billion cubic feet per day (with 1.325 bcf per day of contracted capacity); TransCanada's mainline has fluctuated over a narrow band over either side of 6 bcf per day; Enbridge has fluctuated since 2000 at 68 percent to 86 percent of capacity and stayed close to about 2.2 million barrels per day; and Terasen ran at near capacity in 2003 and 2004, prompting a program of expansions.

On a scale of one to five, the survey respondents rated the overall quality of service at 3.78, climbing to 4.13 on the physical reliability of pipeline operations and dropping to the lowest level on 17 questions of 3.12 when asked whether transportation tolls were competitive. ●

● NORTH SLOPE

Ultrastar identifies North Slope prospect

Company plans to drill once it has negotiated access to existing drilling and production facilities at Point McIntyre and Lisburne

By ALAN BAILEY
Petroleum News Staff Writer

Ultrastar Petroleum LLC has identified a new oil prospect west of Point McIntyre on Alaska's North Slope, Jim Weeks told Petroleum News on Aug. 23. Weeks is a managing member of Ultrastar and sister company Winstar Petroleum LLC.

"We see potential at several levels — the Kuparuk level and the Sag/Ivishak level," Weeks said. "We think we can drill it from Point McIntyre No. 1 drill site with a deviated well."


JUDY PATRICK
Jim Weeks, Ultrastar Petroleum

Although the prospect shows good potential, the oil accumulations are likely to be modest in size — the drilling isn't going to find 100 million barrels, Weeks said.

Some additional 3D seismic data that Ultrastar obtained from the Prudhoe Bay Unit owners proved to be a key to finding the prospect. The additional seismic increased the coverage from eight square miles to 23 square miles, a critical factor in tying seismic times to depths under the permafrost.

"Eight square miles wasn't really enough to tie the seismic into existing wells," Weeks said. "We were fortunate that the PBU owners were willing to license us a bigger area …We got that, had it analyzed and we do have a prospect that we're anxious to evaluate with a drill bit."

Ultrastar would like to drill during the coming winter but delayed negotiations regarding access to drilling and production facilities seem set to push the schedule back.

"They're coming along — it's just a question of priorities," Weeks said.

ARCO well

Weeks said that the preferred drilling option is to re-enter and sidetrack a well that ARCO drilled in 1991. So Ultrastar has been trying to establish terms of access to that well bore, in addition to negotiating access to the Point McIntyre No 1 drill pad.

"If we can't get access to the well we're prepared to drill a separate well, but I think the surface location still needs to be on the Point McIntyre No. 1 drill pad," Weeks said.

Use of the Point McIntyre drill pad and the associated permanent road infrastructure would greatly simplify the logistics of drilling, by avoiding the need for ice roads and an ice pad. However, BP does have a self-imposed restriction to only drill from the pad during the winter, when the Beaufort Sea is frozen over — the drill pad is on the coast, Weeks said.

In addition to drill pad access, Ultrastar will need to process oil from the prospect through the Lisburne production center. Weeks thinks that there is sufficient capacity at the Lisburne center to process Ultrastar oil but the company needs to agree on issues such as backout procedures with BP.

"We need to investigate access to Lisburne before we invest the kind of money that it's going to take to look at this thing," Weeks said.

Leases near Badami and Liberty

Ultrastar also owns some leases east of Prudhoe Bay, near the Badami and Liberty fields. The company is still having seismic from that area evaluated.

"We've probable spent $400,000 over there acquiring a 3D license, getting it evaluated, getting some older 2D data, getting it evaluated and it's still under evaluation," Weeks said.

However, any development in that area will be contingent upon reducing the tariff rates for the Badami pipeline by increasing throughput in the line, Weeks said. So, unless Ultrastar makes a huge find, viable tariffs will depend on fields such as Liberty or Point Thomson coming on stream.

"Anything there would have to be done in conjunction with BP's Liberty (field)," he said.

Meantime, Weeks hopes that negotiations regarding the new prospect near Point McIntyre can speed up.

"It takes two to tango," he said. ●

ANCHORAGE

Valdez can levy property tax on oil tankers

The city of Valdez can impose a property tax on tankers entering its port to pick up crude oil, according to a recent ruling in Alaska state Superior Court.

But Judge Peter Michalski of Anchorage also said the city has likely overtaxed the vessels, and could owe refunds to oil companies ConocoPhillips and Irving, Texas-based ExxonMobil.

Michalski explained his ruling on July 28 by saying a vessel should pay taxes in the place it does business at rates similar to those paid by locals for as long as the vessel is in the area.

About one tanker a day comes to Valdez to pick up North Slope crude oil headed to West Coast refineries. Valdez in 2000 imposed the tax on large vessels, particularly tankers, to make up for falling property tax collections on the Alyeska Pipeline Service Co. tanker port and to recoup the cost of providing services such as fire protection.

The shipping subsidiaries for the oil companies sued the city, saying a property tax on tankers merely visiting the Port of Valdez was unlawful.

Bill Walker, Valdez city attorney, said Aug. 23 the tanker tax may need some reworking, but said the port city does not owe the oil companies large refunds. The decision to uphold the tax was most important, Walker said.

The city and the companies each have their own formulas for calculating the tax and the rate must be resolved, Walker said. Lawyers for both sides also said they may appeal the case to the state Supreme Court.

Since 2000, Conoco's subsidiary, Polar Tankers Inc., has been levied at least $5 million while Exxon's SeaRiver Maritime Inc. has been charged more than $3.7 million.

A third major tanker operator, BP, in 2003 struck a 10-year deal with Valdez officials to pay a reduced levy on its ships.

—THE ASSOCIATED PRESS

ALASKA

Tentatively scheduled Alaska lease sales

Agency	Sale and Area	Proposed Date
DNR	Alaska Peninsula Areawide	Oct. 26, 2005
BLM	NE NPR-A	2006
DNR	North Slope Areawide	February 2006
DNR	Beaufort Sea Areawide	February 2006
MMS	Sale 199 Cook Inlet	May 2006
MMS	Sale 202 Beaufort Sea	March 2007
MMS	Chukchi Sea/Hope Basin	May 2007
MMS	Norton Basin	interest based

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.

NORTH AMERICA

Rig count drops by 40 to 1,968; Canada down 44, U.S. up four in drilling survey

The number of rotary drilling rigs operating in the United States and Canada during the week ending Aug. 19 totaled 1,968, down 40 rigs from the prior week but still up 347 rigs compared to the same weekly period last year, according to rig monitor Baker Hughes. Canada, which accounted for the entire decrease in the North American rig count, lost 44 rigs compared to the previous week for a total of 535 rigs. However, Canada's rig count was up 144 rigs vs. the year-ago period.

The number of rigs operating in the United States during the recent week stood at 1,433, an increase of four rigs compared to the previous week and an increase of 203 rigs from the same period last year. Compared to the previous week only, offshore rigs increased by two to 103 rigs, while inland water rigs increased by two to 24 rigs. Land rigs were unchanged for a total of 1,306 rigs.

Of the total number of rigs operating in the United States during the recent week, 1,221 rigs were drilling for natural gas and 207 for oil, while five rigs were being used for miscellaneous purposes. Of the total, 887 were vertical wells, 356 directional wells and 190 horizontal wells.

Among the leading U.S. producing states, Texas gained five rigs compared to the previous week for a total of 627 rigs. Wyoming picked up two rigs for a total of 80 rigs, while California gained one rig for a total of 27 rigs and Colorado gained one rig for a total of 75 rigs. Oklahoma's rig count dropped by four to 159 rigs and Louisiana's fell by one to 201 rigs. Alaska's rig count was unchanged at nine rigs.

—RAY TYSON

INTERNATIONAL

Experts say crude price will stay high

The price of crude oil backed off slightly on Aug. 25, after hitting another all-time high at $68 a barrel in Asia.

The International Monetary Fund says it is likely oil prices will remain high in the medium term.

"We expect that oil prices will not recede in the medium term ... not even to (the level of) 2004," IMF Managing Director Rodrigo de Rato said in an Aug. 25 Dow Jones Newswire report.

Rato said oil prices are likely to stay high, driven by high demand not only from China and India but also by increased consumption in the United States. He said inefficiencies in the supply of oil products by state-run oil companies and refinery bottlenecks also add upward pressure on crude prices.

He acknowledged that there was a "high degree of speculation" in the oil markets, but even without it, Rato said "demand forces and supply constraints" will keep prices high in the medium term.

On Aug. 22 Dow Jones Newswires carried a story on a Center for Global Energy Studies report that said even with high oil prices starting to slow demand, prices will stay high this year and next because of lagging new oil output and the Organization of Petroleum Exporting Countries' new $50-a-barrel price target.

"There is little prospect of oil prices falling far either this year or next," CGES, a leading London-based oil consultancy said in a research note.

—PETROLEUM NEWS

COURTESY ALASKA PETOGRAPHY

● HONOLULU

Hawaii: Gas cap could raise prices 30 cents

State's price cap law goes into effect Sept. 1, tying prices to mainland rates, so initial limit higher than current gasoline rates

THE ASSOCIATED PRESS

The price of regular unleaded gasoline on Oahu could rise to nearly $3 a gallon under the price cap law that goes into effect on Sept. 1, according to the state Public Utilities Commission.

Because the gas cap is based on mainland rates, which are at record highs, the price limit initially will be set higher than current prices.

In a "dry run" in preparation for implementing the law, the commission posted on its Web site on Aug. 17 a sample of weekly maximum pretax wholesale prices of gasoline which will become the upper limit on wholesale gas prices in the state once the law takes effect.

The PUC calculated the wholesale cap for regular unleaded on Oahu at $2.85 a gallon, including taxes.

If wholesalers charge the maximum $2.85 and retailers keep their usual 12 cent per gallon markup, prices could approach $3 a gallon.

The state's major wholesalers have not said whether they plan to charge the maximum allowed under the cap, but economists and state consultants expect they will.

The statewide average price of a gallon of regular unleaded reached a record $2.77 on Aug. 18, according to AAA. In Honolulu, the average price hit a record $2.68.

The new law allows the Public Utilities Commission to set a maximum wholesale price at which gasoline can be sold in Hawaii, based on the weekly average of spot prices in Los Angeles, New York and the U.S. Gulf Coast.

Commission can set maximum wholesale price

The new law allows the Public Utilities Commission to set a maximum wholesale price at which gasoline can be sold in Hawaii, based on the weekly average of spot prices in Los Angeles, New York and the U.S. Gulf Coast.

The law would not put a cap on retail prices.

State Sen. Fred Hemmings, R-Lanikai-Waimanalo, said he wasn't surprised by the commission's figures.

"Even if the numbers were a little more favorable, the principle is still entirely wrong," he said. "You don't come into a marketplace and have politicians set prices on consumer products."

Despite the possible rise in prices, the gas cap legislation should go forward, said House Speaker Calvin Say, D-St. Louis Heights-Wilhelmina Rise.

But he said if prices are at higher levels than elsewhere in the country, the governor can consider suspending it.

Under the law, Gov. Linda Lingle can suspend the cap if there is a major adverse impact on the economy, public welfare or the health and safety of people.

But Hemmings said lawmakers shouldn't be "passing the buck" to the governor. He said the majority Democrats in the Legislature should instead call a special session to rescind the law in its entirety. ●

● BILOXI, MISS.

Mississippians want what's left of the view

Residents rally against offshore natural gas drilling; one resident says we want what's left of the view after casinos took most

THE ASSOCIATED PRESS

An estimated 3,000 people rallied Aug. 21 against proposals to drill for natural gas within sight of Mississippi's coastal islands and beaches, saying the process could harm natural vistas and put a dent in tourism.

The rally at the Coast Coliseum was sponsored by the 12 Miles South Coalition, a group that wants to keep rigs a dozen nautical miles south of the barrier island national parks.

The crowd criticized Gov. Haley Barbour and Mississippi's two U.S. senators, Trent Lott and Thad Cochran, who did not attend.

"In spite of what certain politicians tell us, your mother is right. You can't have your cake and eat it too," said engineering consultant Jeffrey Bounds. "Keep that in mind when anyone wants to talk to you about drilling." The cake comment referred to Lott, who recently said he hopes to work with both sides on the drilling issue.

Bounds said the amount of natural gas estimated to be under Mississippi waters, 350 billion cubic feet, would meet the nation's demand for only four or five days. And extracting the gas would take 10 to 20 years.

Concern with loss of tourism

He said the state could lose millions of dollars if tourism on the Gulf Islands National Seashore declines because of drilling. Speaking on video, state Rep. Diane Peranich, D-Pass Christian, referred to "regrettably shortsighted politicians and their cronies who just don't get it."

U.S. Rep. Gene Taylor, D-Miss., mentioned the 17,000 casino and tourism jobs on the Coast and said, "We're doing all that we can to make things better, and I do think drilling in state water jeopardizes that."

He also told the crowd that the move toward drilling near the islands "can't be turned around without the help of Gov. Barbour."

Barbour earlier in August said he had asked the Department of Marine Resources to study the impacts that testing, exploration and development of energy resources could have on the state's coastal waters.

"Because of the need to protect the natural and economic well being of the Gulf Coast, I am determined we will thoroughly evaluate all aspects involved with the implementation of the 2004 law before any final actions are taken," he wrote in a letter to the department's director.

Residents should decide

Attorney General Jim Hood said at the rally that he wouldn't want to see anything imposed on the Coast that the residents don't want. Taylor said he, Lott, Cochran, Barbour and state lawmakers have the power to stop drilling in federal and state waters near the islands. State Sen. Billy Hews, R-Gulfport, said people on the Coast have a passion for their natural resources.

"Most issues have a shelf life of a couple of weeks," Hews said. "But I think this is one of those issues that won't go away."

Betty Bittner of Gulfport and Rosemary Wallace of Biloxi, who attended the rally together, both want to save coast's natural beauty.

"We don't want oil rigs in sight of us or in sight of the barrier islands," Bittner said.

Wallace said: "I want what's left of our pristine beaches, what's left after the casinos have taken most of our views." ●

CANADA

Condensate needs could spur larger pipeline

Strong interest from potential customers is prodding Enbridge to consider a substantial expansion of a condensate pipeline that is part of its planned 720-mile dual-pipeline Gateway project.

The company said the first phase of an open season to test market response to the 150,000 barrel per day system from the British Columbia coast to Edmonton indicated a desire for up to 265,000 bpd.

Enbridge Vice President Richard Bird said the open season confirmed the high level of interest in diversifying condensate supplies for oil sands producers.

He said that ensuring "adequate, competitively priced access to diluent is an important ingredient in maximizing the production from Alberta's oil sands."

The price of domestic condensate has climbed in recent months, with Shell Canada reporting a 35 percent hike to C$63.67 per barrel in the first half of 2005. Posted prices for condensate at Edmonton have since broken through the C$80 barrier.

The condensate is needed to facilitate the movement of oil sands crude by pipeline.

Enbridge has set a Sept. 30 deadline for the second phase of the open season, when prospective shippers will be asked to execute a precedent agreement that will become binding when accepted and executed by Enbridge.

If those contracts exceed the original target of 150,000 bpd, Enbridge is open to building a larger line.

The proposed 400,000 bpd Gateway pipeline from the oil sands to deepwater British Columbia ports for shipment to Asia and California and the condensate line, although separate ventures, could cost C$3.6 billion if built simultaneously, C$600 million less than two standalone projects.

—GARY PARK

continued from page 1

ARMSTRONG

northern Alaska. "We still see huge opportunities on the North Slope. … It's a great place to be and it's a great petroleum system.

"There are certain things we're pursuing. We're really looking forward to continuing our relationship with all the players on the North Slope and the State of Alaska," Armstrong said.

"There were a lot of companies interested in what we had in Alaska. I think you'll see more companies coming to the North Slope" in the near future, he said.

Track record of success

Armstrong Alaska shouldn't have a problem attracting partners for new prospects as its track record to date has been three out of four — i.e. in three out of four North Slope prospects drilled by its first two partners discoveries have already been announced — first at Oooguruk by Pioneer in 2003 and then by Kerr-McGee at Nikaitchuq in 2004 and again by Kerr-McGee in 2005 at Tuvaaq and nearby Kigun, a well in the Kuparuk unit that essentially confirmed the Tuvaaq discovery.

There has been no news yet from Kerr-McGee on drilling this past winter at the Two Bits prospect (also called Ataruq). The company has said it is still evaluating well results.

Pioneer and Kerr-McGee are moving toward development of Oooguruk and Nikaitchuq, respectively. If sanctioned by both companies (and their new partner Eni), Nikaitchuq is expected to come online in the first half of 2006 and Oooguruk in 2007. (Both Pioneer and Kerr-McGee have said they need royalty relief from the State of Alaska to approve their projects.)

The lead players in Armstrong's Alaska team are Bill Armstrong, Vice President of Operations Stu Gustafson, Vice President of Geoscience Matt Furin, and Vice President of Land Ed Kerr.

The company's philosophy in Alaska was summed up by Gustafson in a 2004 speech in Anchorage when he said Armstrong's mantra is, "Smoother, faster, better, cheaper: everyday that's what we try to do." ●

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SHOWDOWN

However, the U.S. Department of Interior said the lion's share of the Eastern Gulf, currently under a leasing moratorium, will remain closed to exploration and development until at least 2012 when restrictions could be lifted.

U.S. Interior Secretary Gale Norton, in an Aug. 22 press release, reaffirmed the Bush administration's pledge not to conduct any new leasing within 100 miles of Florida's coast under the next five-year leasing plan.

Nevertheless, the Bush administration is asking the public to comment specifically on whether the existing withdrawals or moratoria should be modified or expanded to other areas of the outer continental shelf, and whether Interior should work with Congress to develop more environmentally friendly "gas-only" leases.

More than 85% of Lower 48 OCS off limits

In fact, presidential withdrawals and congressional moratoria already have placed more than 85 percent of the OCS in the U.S. Lower 48 off limits to drilling.

In fact, presidential withdrawals and congressional moratoria already have placed more than 85 percent of the OCS in the U.S. Lower 48 off limits to drilling.

Large portions of the Gulf of Mexico and Alaska are the only regions currently open to offshore leasing in U.S. waters.

Interior emphasized that recent energy legislation passed by Congress calls for a comprehensive inventory and analysis of the oil and natural gas resources for all areas of the OCS in the United States, including areas currently off limits to leasing.

"The OCS contains billions of barrels of oil and trillions of cubic feet of natural gas that can be safely produced," Norton asserted. "With our reliance on imports of foreign oil climbing each year, we would be irresponsible if we did not consider how we might develop these abundant domestic resources."

Most Gulf exploration in west, central

Most exploration and development in the U.S. Gulf of Mexico occurs in the western and central areas where thousands of blocks are available annually through MMS' areawide leasing program. That compares to just 233 blocks, or a mere sliver of the more than 1,000 blocks initially included in what already was a scaled-down Eastern Gulf of Mexico Lease Sale 181, held in December 2001 following the dispute over the size and reach of the proposed sale area.

The Bush administration, yielding to Jeb Bush and other politicians and environmentalists worried about the potential effects of drilling on Florida's tourism, turned aside industry pleas and slashed the proposed sale area by some three-quarters.

That decision not only resulted in a sale area much reduced from its original dimensions, but left most of the remaining 233 blocks in water depths over 8,000 feet. Critics said the sale would favor the majors and deep-pocketed independents over less able smaller companies.

Specifically, the withdrawal of gas-prone tracts in shallower waters of the Eastern Gulf's continental shelf brought a predictable howl from small independents that simply did not have the resources to compete against the financial might of larger companies active in deepwater Gulf.

Interest strong in eastern area

Eastern Gulf of Mexico Lease Sale 181, despite a barrel full of political spats and remaining uncertainties, including untested geology and other issues, was among the strongest lease sales pound-for-pound in the history of the U.S. Gulf, generating a surprising $340.5 million in high bids from 17 companies on 95 of the 233 blocks offered in the sale. Competition was keen with six different tracts receiving five bids and eight receiving four bids. Anadarko Petroleum submitted a sale-high $26 million bid for a single block in Lloyd Ridge.

Sale 181 also was the first offering for the Eastern Gulf in 13 years. Thus far exploration activities in the scaled-down sale area, measuring roughly 100 miles north to south and 25 miles east to west, have produced mixed results. On the negative side, no commercial oil has been found in what has turned out to be largely gas-prone geology.

However, exploration drilling in the Eastern Gulf has turned up enough natural gas discoveries over the past four years to help support a $665 million investment in a floating central production facility, called Independence Hub, and pipeline system capable of handling 800 million cubic feet of gas per day. The project is expected to come on stream in 2007.

Available eastern area lacks quality blocks

The problem now is a lack of quality prospects on the remaining unleased blocks in the tiny sale 181 area. While the first lease sale was a boomer at more than $340 million in high bids, the second sale (189) in December 2003 drew just $8.4 million in high bids on 14 blocks with just six companies participating. The third and last sale (197), held in March 2005, took in a paltry $6.9 million in winning bids on 12 tracts with nine companies taking part. Clearly, industry needs more exploration acreage in the Eastern Gulf.

Prior to whittling down the proposed Eastern Gulf sale area in 2001, the area consisted of 1,033 blocks covering 5.9 million acres extending from three miles offshore Alabama and Florida's western Panhandle to several hundred miles south into the deep waters of DeSoto Canyon and Lloyd Ridge, and then eastward toward Florida's Tampa Bay.

Some 633 new blocks could be opened to leasing

Reopening the first 144 blocks from the Alabama-Florida border near the coast to just past the DeSoto Canyon boundary in deepwater would be out of the question because of the 100-mile restriction. However, from DeSoto Canyon and Lloyd Ridge eastward toward central Florida there are around 633 new blocks that were withdrawn from the initial sale 181 area that could be opened to leasing, depending on support, according to MMS.

The eastern boundary of the original plan is 213 miles from the coast near Tampa and well outside the 100-mile restriction area. Moreover, the 633 new blocks would nearly triple the 233 blocks offered in sale 181.

The Interior department, in addition to the Eastern Gulf, is asking industry "to provide information indicating interest in the opportunity to lease and develop additional OCS oil and gas resources," specifically within the 2007-2012 time frame.

The resource inventory mandated under the new U.S. Energy Policy Act also directs Interior to analyze "available data on oil and gas resources … offshore Mexico and Canada that can aid in establishing hydrocarbon trends in the U.S. areas of the OCS."

Moreover, Interior also has directed MMS to seek industry comment on ways the leasing program can be designed to further promote increased production of natural gas from the OCS. Interior calls this "gas-only leasing."

"Natural gas has been identified as the environmentally preferred fossil fuel and currently accounts for at least 25 percent of the nation's fuel needs," Interior said. "It is expected to remain a critical component of the nation's energy demand well into the 21st century." ●

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

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

Business Spotlight

By PAULA EASLEY

FORREST CRANE

Brian Skinner, Business Development

Sourdough Express

Sourdough Express has been on the road since 1898. It has provided dedicated transportation services for Alaska's oil industry since the 1960s. The company's equipment list consists of flatbeds, bulkers, pipe dollies, lowboys, refrigerated vans and dry vans. Sourdough's motto is "We're big enough to do the job, small enough to care." Offices are in Anchorage and Fairbanks.

Before joining Sourdough 13 months ago, Brian Skinner owned B and C Trucking (and still does) for nine years, hauling Pepsi from Anchorage to Fairbanks. He likes driving off the job as well — snow machining in Petersville, Alaska, and four-wheeling. Brian is active in the Alaska Trucking Association, Owner-Operators Independent Drivers Association and attends Anchorage Bible Fellowship. He and his wife Cyndi have been married eight years.

FORREST CRANE

Paul Brooks, Government Liaison Director

AeroMap U.S.

AeroMap offers aerial photography services with airborne GPS and IMU positioning, remote sensing data acquisition and airborne sensor image processing, digital orthophotos and topographic mapping, GIS services, surveying, historical film reproduction, and custom software development. From data acquired using land, airborne and satellite sensors, AeroMap defines the earth's topographic shape, identifies and measures its natural and man-made features, and chronicles conditions.

Paul Brooks joined AeroMap five years ago after retiring from the Alaska USGS — he was the director's Alaska representative and chief of the national mapping program. Paul is captain of the company's hockey team and serves on the Alyeska Ski Patrol. He and college sweetheart Gayle had two children — Paul Jr. (deceased) and Jody — and enjoy their five wonderful grandchildren.

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REACH

Houston company. By either measure, it's significantly smaller than its European rivals.

But unlike some of the other super majors, Eni is making major gains in the amount of oil and gas it brings out of the ground.

In the second quarter, Eni's production jumped 6.4 percent to 1.725 million barrels of oil equivalent daily, from 1.621 million BOE per day in the same period a year earlier. And that increase came despite the impact of production-sharing arrangements, where host countries take a slice of production that increases with higher oil prices. Profits rose 44 percent for the quarter.

Production rising

For the year as a whole, Eni is expecting a 5 percent gain in production, after showing 4 percent growth in 2004.

There are plenty of reasons to expect the company to meet that target. Last month, two big developments started producing major amounts of oil.

In Iran's Darkhovin oil field near the border with Iraq, Eni started bringing in 55,000 barrels daily. That's the first stage of a $1 billion project that will be pumping 160,000 bpd as early as the fourth quarter of next year.

Meanwhile, the Kissanje and Dikanza fields in deepwater offshore Angola started production, with 250,000 bpd expected by the end of the year. Eni's share of that will be 45,000 bpd. Eni has a 20 percent share in that development, half as much as operator ExxonMobil. BP and Statoil are the other partners.

Overall, Eni's reserves are more than 7.2 billion barrels of oil equivalent, most of it in Italy and Africa. It has 71,000 employees around the globe.

Active in U.S. Gulf

In the United States, Eni's activities up to now have all been in the Gulf of Mexico, where the company's deepwater drilling expertise has been a big asset. Total U.S production, all from the Gulf, runs about 45,000 bpd.

The company is operator and sole owner of Allegheny and Morpeth, and operates King Kong with a 50 percent interest. It is also involved in the Medusa, Timon and K2 fields in the Green Canyon.

Caspian role

Among the company's big international projects is the giant Kashagan field in the Caspian Sea, where Eni is operator and holds an 18.5 percent interest. The field, with recoverable reserves estimated at up to 13 billion barrels, is expected to start production in 2008 and reach 1.2 million bpd at peak production. Eni also is co-operator of the Karachaganak field in Kazakhstan, with a 32.5 percent interest there and current production to the company of more than 70,000 bpd.

Just more than half of Eni's oil reserves and production are in Africa, where the company has been operating for decades. It has been aided by U.S. laws and policies that have kept — or booted — some of its competitors out of countries such as Libya and Iran.

Eni is the leading international operator in Libya, where fields operated by the company produce nearly a fifth of Libya's oil. The company also has a major presence in Italian neighbors Egypt and Algeria. It also operates fields accounting for about a tenth of Nigeria's oil.

The company gets 25 percent of its oil production from North Africa, 28 percent from West Africa, 19 percent from its North Sea assets and 8 percent from Italy. The rest of the world provides 20 percent.

Mideast presence

The company is active in Iran at the big offshore South Pars gas concentration. Eni is also working in Saudi Arabia with a license for gas extraction in the Rub al Khali basin near Qatar and the United Arab Emirates.

In Asia, it's a partner with ConocoPhillips in the Bayu-Undan field in the Timor Sea near Australia, which just started LNG production. Eni has a 12 percent interest there.

Earlier this year, Eni made a move toward Unocal, but bowed out after the bidding went well beyond the $58 a share Eni was reportedly willing to pay. Chevron won that one with an offer worth more than $66 for each Unocal share.

In oilfield services and contracting, Eni subsidiaries Saipem and Snamprogetti both have offices in Houston. Saipem leases a fleet of floating production and storage vessels as well as providing offshore drilling services, mainly in Africa, the Middle East, and the North Sea. It's also been involved in the maintenance, modification and operations segment, taking over various oilfield operations for owner companies.

LNG expertise

The group has also been involved in major new LNG facilities, with Saipem promoting its expertise in design and construction of regasification facilities, tanks and vessels, as well as the offshore floating systems that may be used more extensively if terrorism concerns affect siting

see **REACH** *page 20*

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ENI

siders the "North Slope and Beaufort Sea as areas with exploration potential for new finds" and said Eni has "decided to establish a position in the area with an emphasis of consistent growth."

When asked if it is looking for other oil and gas properties in Alaska — and anything outside of northern Alaska — the company said it is "always looking for opportunities to further enhance its competitive presence in the areas where it operates. Alaska is no exception and Eni will consider all opportunities available, and continue to invest in regional studies to assess the potential of new areas, with special attention to the Beaufort and Chukchi sea areas."

In response to written questions from Petroleum News, Eni wrote that it is "evaluating" whether or not to set up an office in Alaska. The company has not yet selected a person to oversee its Alaska assets, but said if an Alaska coordinator is named that person would report to Eni Petroleum's Houston office which "manages E&P operations in (the) Gulf of Mexico and will also manage the operations in Alaska."

Although Armstrong was the first company to cut a deal with Eni in Alaska, Eni made its decision to enter Alaska "based on its internal studies and evaluation, while keeping a close eye on all the available opportunities. In addition, Eni intends to leverage the experience gained from its operatorship in other challenging areas such as Kazakhstan, where there are similar requirements for high levels of technology, as well as analogous operating conditions."

Eni's comparison of Alaska to Kazakhstan could bode well for Alaska. Eni operates Kazakhstan's huge Kashagan field in the Caspian Sea. Since it entered Kazakhstan in 1992 (10 months after the country's independence from the former Soviet Union), Eni has made itself part of the new nation's future. Among other things, Eni undertook the expense of training some of Kazakhstan's new oil ministry employees at its headquarters in Italy and it funded the construction of the Kazakh national library.

When asked if Eni plans to be an operator in Alaska, the company said it operates in other Arctic areas, and "generally takes a leadership role in its joint ventures worldwide."

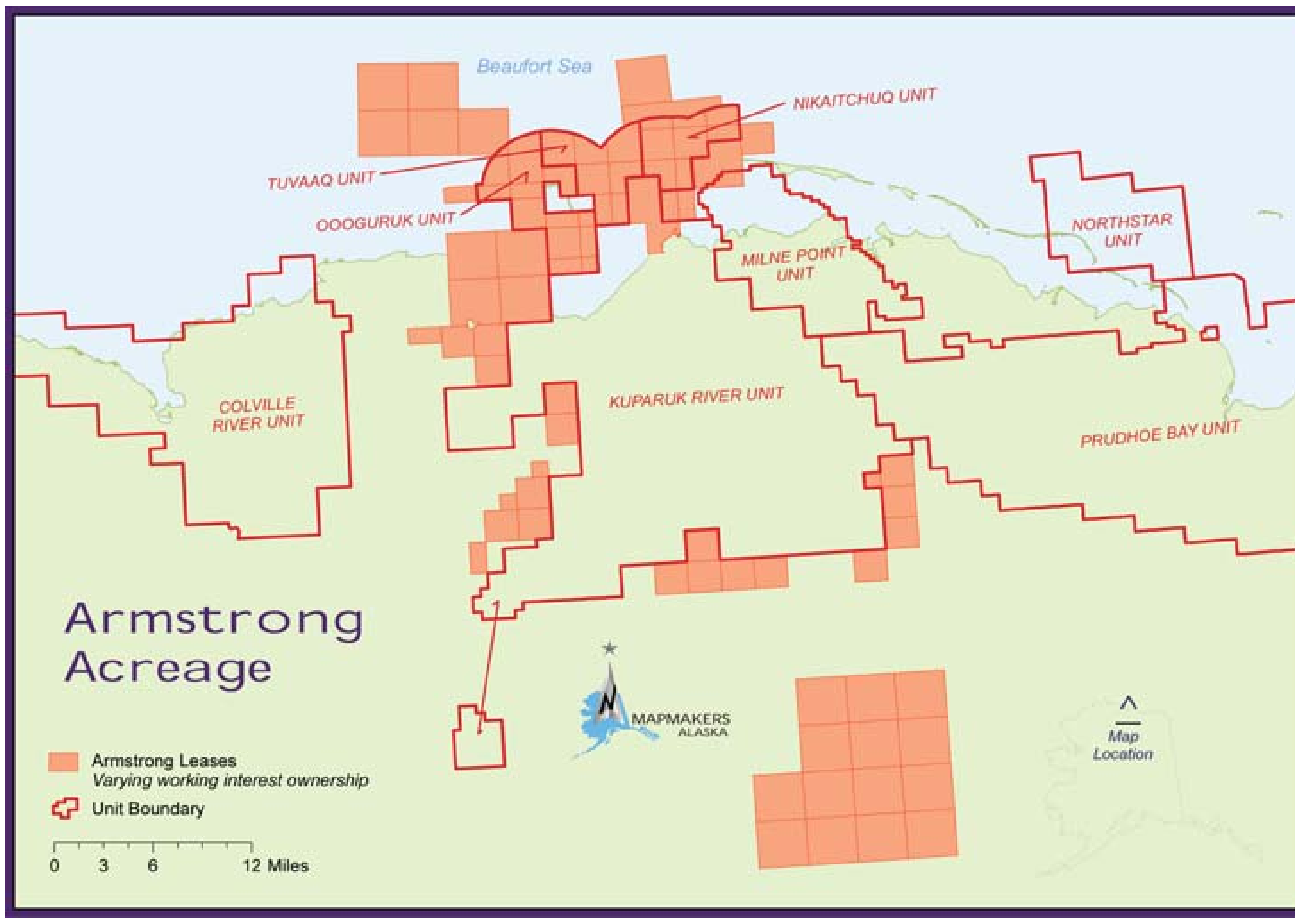
Initially, Eni said it "intends to fully cooperate with its partners who operate some projects in the pre-development stage. It is Eni's intention to bring its experience onboard while taking the time to understand the peculiarity and challenges of the area." The company has not yet decided whether it will drill any of its 100 percent-owned acreage this coming winter: "It is too early to comment. This will be evaluated during our 2006 budget and planning process."

Although Eni said it will evaluate the possibility of partnering with Shell on Shell's planned Beaufort Sea seismic shoot for next summer, no decision will be made until Eni has completed its 2006 budget and planning process.

In Alaska, "as in all of its activities, Eni is fully committed to sustainable development and environmental protection of the areas in which it operates. In the Gulf of Mexico, Eni has received several nominations for Safety Awards from the Minerals Management Service," the company said in its correspondence with Petroleum News.

Eni did not disclose the terms of its deal with Armstrong.

And when asked if it was looking at buying EnCana's acreage in Alaska, Eni said no. ●



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MARTIN

Hard line related to trade irritants

Martin's stance on ANWR was part of a hard line he is developing against Washington over a series of trade irritants.

During a three-day meeting in Regina, Saskatchewan, of Liberal government Members of Parliament, he said his government intends to retaliate against the United States over its refusal to heed a North American Free Trade Agreement panel ruling to lift import duties on Canadian softwood lumber.

"The American position is absolutely untenable," he said.

Martin, Industry Minister David Emerson, Finance Minister Ralph Goodale and Foreign Affairs Minister Pierre Pettigrew said penalties will be slapped on some U.S. imports once the government determines what retaliatory tariffs will be most effective as a wake up call to the Bush administration.

"Any means to get their attention, as far as I am concerned, would be fair at this time," Pettigrew said.

Emerson, however, said Canada should not try to penalize the U.S. by imposing tariffs or quotas on energy exports.

Martin has indicated he will speak with Bush once the retaliatory measures have been chosen.

—GARY PARK

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REACH

of onshore terminals.

Snamprogetti has been involved extensively in engineering and contracting for LNG facilities, as well as traditional natural gas processing units. It has been part of the construction and design group for seven liquefaction trains with total capacity of more than 26 million tonnes annually. The company is active in huge projects in Nigeria and Qatar, for example.

Eni has shown recent interest in LNG in the United States, announcing a contract with Sempra in early August to take capacity of 600 million cubic feet daily for 20 years at the proposed Cameron terminal in Louisiana.

Broad range of operations

Along with its E&P activities, Eni has an extensive refining and marketing operation in Italy under the Agip brand name. It has a power generation arm, and also natural gas transmission and pipeline operations in Italy. The pipeline business is likely to be sold, generating cash that could be used for other investments.

The company already has a major war chest of cash and stock — a recent Smith Barney report said it could afford to return up to $10 billion to stockholders. Indeed, the company had been buying back stock under former CEO Vittorio Mincato.

Future direction unclear

But Mincato was replaced in June by Paolo Scaroni, who was picked for the job by the Italian government. Scaroni, who has scarce background in the oil industry, came from Enel SpA, a huge utility that, like Eni, is government-controlled.

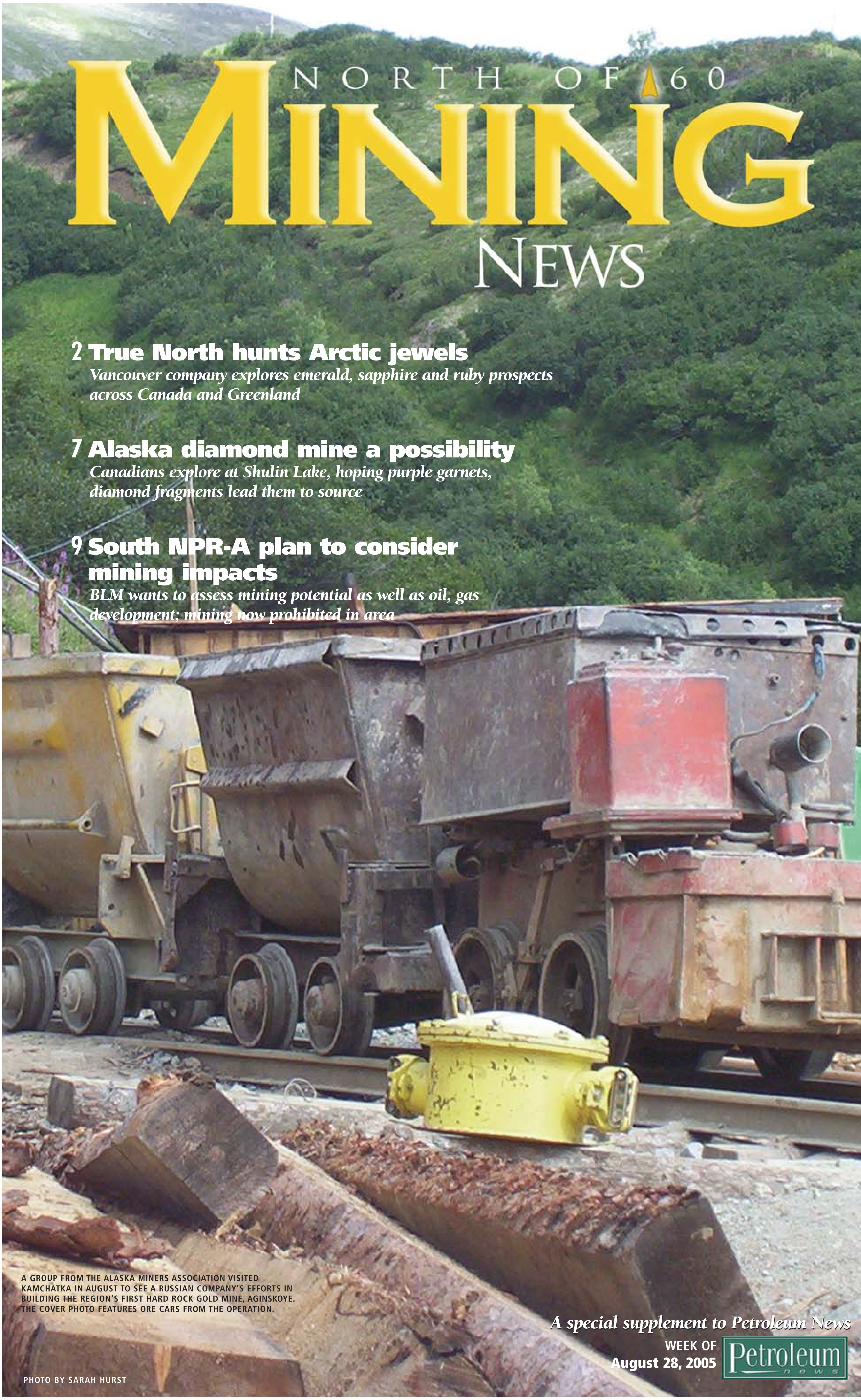
Scaroni hasn't detailed his vision for the company's future, and his own future as well as the company's direction could change if the Italian government takes advantage of high oil prices and cashes out its 30 percent stake in Eni to pay off some of the country's debt.

—ALLEN BAKER

Eni at a glance

Production: 1,725,000 barrels of oil equivalent daily (2Q)
Production growth: 6.4 percent (2Q 2005 vs. 2Q 2004)
Worldwide oil production: 1,034,000 bpd (2004)
Worldwide oil production areas: North Africa 25%, West Africa 28%, North Sea 19%, Italy 8%, rest of world 20%
Worldwide natural gas production: 3,540 million cubic feet per day (2004)
Natural gas production areas: Italy, 32%, North Africa 20%, West Africa 5%, North Sea 18%, rest of world 25%
U.S. production: 45,000 boe per day
U.S. operations: all in Gulf of Mexico
Reserves: 7.2 billion barrels of oil equivalent
Activities outside E&P: Refining, oilfield services, contracting and engineering; refining and marketing, natural gas distribution and pipelines, power generation
Market Capitalization: $109 billion
Annual Revenue: $74 billion
Employees: 71,000
CEO: Paolo Scaroni (since May 2005)
Ownership: Italian government controls 30 percent
NYSE trading symbol: E

NORTH OF 60
MINING NEWS



A GROUP FROM THE ALASKA MINERS ASSOCIATION VISITED KAMCHATKA IN AUGUST TO SEE A RUSSIAN COMPANY'S EFFORTS IN BUILDING THE REGION'S FIRST HARD ROCK GOLD MINE, AGINSKOYE. THE COVER PHOTO FEATURES ORE CARS FROM THE OPERATION.

PHOTO BY SARAH HURST

A special supplement to Petroleum News

WEEK OF
August 28, 2005

Petroleum news

● CANADA/GREENLAND

True North Gems hunts jewels in the Arctic

Pioneering Vancouver-based mining company explores emerald, sapphire and ruby prospects across Canada and Greenland

By ROSE RAGSDALE
Mining News Contributing Writer

In the far north, one Canadian firm is trying to do for sapphires, emeralds and rubies what explorers did for diamonds in the 1990s.

True North Gems, a Vancouver, British Columbia-based mining company formed in 2001, is pursuing three advanced exploration projects for precious gemstones, two in Canada and a third in nearby Greenland.

"True North's efforts are a direct spinoff of Canada's success in the diamond trade," said President William Rohtert, who heads the company's exploration team. "Canada, in the last few years, has gone from nowhere to being the third-largest diamond producing country in the world. And it may soon become the second-largest producer of diamonds."

In a recent interview, Rohtert told Mining News how True North Gems got its start. He said geologists recently found northern latitudes were under-explored for precious gems, and no longer was it cost-prohibitive to explore the Arctic.

A geologist and a gemologist, Rohtert worked for RTZ at the huge Diavik diamond mine in Northwest Territories for most of the 1990s.

He and others realized that it is just as easy to explore for emeralds as diamonds. "Diamonds and colored stones have more in common than do diamonds with metals," Rohtert said. "Stones are stones."

Emeralds in the Yukon

An emerald discovery in the Yukon Territory in 1998 and subsequent work by Expatriate Resources demonstrated the potential for Canada's first emerald mine. The work attracted the interest of Bernard Gaboury and Andrew Smith in 2001. The two geologists formed True North Gems and entered into a 50 percent option agreement with Expatriate for the Tsa da Glisza property, 93 claims covering 18 square kilometers on a high alpine ridge in the Finlayson mining district of the Yukon. Since then, True North has acquired 100 percent ownership of Tsa da Glisza, the company's most advanced exploration project.

In 2003 and 2004, True North extracted nearly 200,000 carats of emerald from Tsa da Glisza, including 7,512 carats of gem; 71,671 carats of near-gem; and 115,132 carats of non-gem quality emerald. The stones range in value from a low of $1.37 a carat for non-gem quality stones to a high of $46.77 for gem quality emeralds in wholesale prices, according to a company valuation released in June.

TRUE NORTH GEMS

Greenland ruby from True North Gems prospect

Sapphires in Nunavut

True North is conducting a $1.6 million exploration program this summer aimed at confirming grade, continuity of grade and mineralization along the strike and to depth along with recovering enough emeralds to complete requirements for a pre-feasibility study in winter 2005-spring 2006.

As of June, True North had drilled 50 tightly spaced holes, and emerald had been observed in eight targets over a 900-meter strike and 200 meters in elevation.

True North is also exploring for sapphires along the south coast of Baffin Island, Nunavut, on two mining claims covering nearly 9.9 square kilometers near the village of Kimmirut. The company acquired the Beluga sapphire property in 2003 through a lease option agreement with Inuit prospectors who made the initial discovery in November 2002. True North must make cash payments totaling C$390,000 by Dec. 1, 2007, to earn 100 percent interest in Beluga, subject to a 2 percent gross overriding receipts royalty on the sale of all extracted gemstones.

The 2004 exploration season yielded one new discovery of blue, yellow and clear sapphires, and 213 sapphires extracted in sampling with a total weight of 41.74 carats and a value of $2,448.98.

This year, True North is spending $1.08 million in an exploration program to define and delineate the Beluga sapphire occurrence using diamond drilling and mini-bulk sampling. The company said it will test for gemstone grade and value by means of a 100 to 500 tonne mini-bulk sample of sapphire-bearing material collected at the surface.

Beluga sapphires are generating considerable excitement in northern Canada. The Government of Nunavut and the Hamlet of Kimmirut, for example, are investing in development of a gemstone prospecting course for training residents of the territory.

Rubies in Greenland

But Rohtert told Mining News that True North's more recent ruby exploration project 400 miles to the east in Greenland should be exciting interest in the world of gemstones.

The Fiskenaesset Ruby property covers 5,500 hectares in the Qeqertarsuatsiaat district, 160 kilometers south of Nuuk, Greenland's capital. To date, 50 tonnes of high-grade ruby ore in six occurrences has been produced from the property.

True North, which acquired the right to earn 100 percent interest in the property, confirmed a seventh occurrence in July of gem-quality, barrel-shaped ruby crystals, measuring 2-by-1 centimeters.

"In the gemstone business, you care how big gems are," Rohtert said.

Ruby, the red variety of the mineral corundum, is one of the rarest and most valuable gemstones on earth. Large, high-quality rubies can exceed diamonds in value and sell in the range of $1,450 to $25,000 per carat. Other types of corundum are known as sapphires.

This summer, True North is spending C$900,000 to aggressively explore 110 square kilometers in the Fiskenaesset district and further define ruby mineralization. The team also will sample five or six unexplored occurrences.

Rohtert, who spent the past two months working on the Fiskenaesset property, said True North is very encouraged by what geologists are finding in Greenland.

"There are thousands of occurrences of sapphires in the world; hundreds of occurrences of emeralds; but 80 percent of the rubies in the world are found in Burma," he said.

In July 2003, the United States banned all imports, including rubies, from Burma — also known as Myanmar — because of that country's alleged human rights violations.

Rohtert said 30 jewelry retailers, including Cartier, recently joined the embargo, "refusing to buy 'blood rubies' from Burma."

"That's why Greenland is important," he said. "If True North can supply the world with a major source of rubies, then that's major news."

No development decisions yet

Though decisions to develop the three gemstone properties are still a few years away, Rohtert said he is confident True North will succeed in its quest to mine gemstones.

"It took 12 years for explorers to begin producing Canadian diamonds, but I don't think it will take that long for the colored stones," he said.

Part of Rohtert's optimism stems from True North's marketing plan.

"The reason companies before True North failed is they did not capitalize on the market," he explained.

Unlike diamonds, which have had a ready market for 100 years thanks to DeBeers, Rohtert said there is no established market for colored stones. "It's like starving to death with a refrigerator full of food," he observed.

To overcome this hurdle, True North decided to vertically integrate its business from mine to market. As a result, the company not only finds gemstones, it also sells them and invests in programs that promote the use of colored gemstones in Canada.

"The use of color is arguably the fastest growing aspect of fine jewelry design," Nick Houghton, True North's managing director, jewelry manufacturing and marketing, said in announcing the company's support of a national jewelry design competition.

Meanwhile, True North has attracted investment, but the company is still undervalued, said Rohtert. "The average investor in Canada doesn't quite know what is happening yet. It requires a learning curve. The same thing happened with diamonds," he said. "Regardless, we're going to succeed because we can mine and sell our stones." ●

● ALASKA

Pogo, Red Dog mines hit with the unexpected

Operators of Teck Cominco properties in Alaska cope with Pogo underground construction slowdown; seasonal sales slump in zinc

By ROSE RAGSDALE

Mining News Contributing Writer

Coping with the unexpected is a challenge facing Teck Cominco in Alaska this summer, as both its Pogo Mine project near Delta Junction and the Red Dog Mine near Kotzebue encounter the unexpected.

Construction of the Pogo gold mine is rapidly moving toward completion in time for an early 2006 startup. But workers are grappling with poor ground conditions in underground development at the project.

The mine, 85 miles southeast of Fairbanks, is estimated to contain 7.7 million tons of ore that should yield just under a half-ounce of gold per ton.

A construction force of 400 is working on the site this summer, and Teck Cominco reported the project 75 percent complete at the end of June. Underground mine pre-production development work, however, was only about 30 percent finished.

"Productivity has been lower than anticipated and progress has also been slowed by poor ground conditions in portions of the access drift areas," Teck Cominco told shareholders in its second quarter report in July.

Ore to be trucked to mill

As a result, workers will have to truck ore to the mine's 2,500-ton-per-day mill next year until construction of a conveyor system from underground is completed.

Bob Jacko, Pogo's general manager, said workers encountered the poor ground conditions in a key area under the ore bin where it connects to the conveyor belt. But the delay in completing the conveyor system will result in only minimal additional costs, he said.

Teck Cominco subsidiary, Teck-Pogo Alaska, began underground development in 2004, essentially building 12,000 feet of tunnels for men and equipment to gain access to the buried ore body.

Current plans call for a production start at Pogo in the first quarter of 2006 and a phased ramp-up to full production by mid-year 2006.

An estimated $321 million capital cost — up nearly 8 percent from $298 million estimated earlier this year — will not change significantly despite continued upward pressure on project costs, according to Teck Cominco. The reason: $285 million, or 89 percent, of the total has already been committed.

Manpower shortage felt

Meanwhile, Teck-Pogo is advertising widely for a number of production positions, including entry-level geologists, at the mine. "We're having trouble finding people these days because so much is going on in Alaska," Teck Cominco spokesman Peter Dunsford said Aug. 17.

"I'd go further and say the labor market for qualified mine workers is tight in the whole country," Jacko said. "It's getting so tight that Newmont Mining of Nevada is advertising for (underground) miners in the Fairbanks paper."

Jacko said the ads are unusual because Pogo is the only underground mine operation near Fairbanks, and it has only just started hiring. "Yep, the market's tight and not just for miners, but also for engineers, geologists and metallurgists," he added.

Zinc sales, production dip

At Red Dog, Teck Cominco saw a 46 percent drop in zinc sales in the three months that ended June 30 as the volume fell to 52,000 tonnes from 96,300 tonnes sold in the second quarter of 2004.

The Vancouver, British Columbia-based mining company blamed the unusual sales decrease on customers buying ore in earlier quarters and noted that a 20 percent jump in zinc prices, before a special charge, partly offset the lower sales volume. Operating profit totaled $9 million, down 10 percent from $10 million during the second quarter of 2004.

Zinc production at Red Dog, one of the largest zinc mines in the world, fell 3.6 percent in the second quarter, down to 134,000 tonnes from 139,000 tonnes.

Lead production at the mine also dipped 4 percent to 24,000 tonnes in the second quarter, while the company recorded no sales of lead concentrate.

Teck Cominco said Red Dog should produce 560,000 tonnes of zinc and 97,000 tonnes of lead concentrates in 2005.

Shipping season under way

Red Dog produces zinc and lead concentrates year-round but ships them to market during a short period in the summer when Chukchi Sea ice melts enough to allow barges to load and transport the ore.

"We ship everything in 100 days and sell it over 365 days," adds Rob Scott, mine manager at Red Dog.

This year's shipping season began July 4. The company plans to ship 1 million tonnes of zinc concentrate and 190,000 tonnes of lead concentrate, down slightly from year-ago levels.

Red Dog has encountered seasonal slumps before, and sales should rebound this fall, Teck Cominco managers say. Most of the mine's zinc and lead sales occur in the last five months of the year. ●

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● COLUMN

Mining news update from Curt Freeman: Alaska miners out in the field this summer

High summer in high north has people out breaking rocks, drilling holes and crushing ore; some results out, others still busy in field

I have had numerous people ask me the same question over and over again for the last month — "What's going on in Alaska; everyone is so quiet?" My response has been and remains the same — everyone is too busy breaking rocks, drilling holes or crushing ore to be bothered with new releases and grandiose public announcements. After all, it is high summer in the high north, a time of seasonal frenetic activity that makes the lot of us look and feel like a mouse in a habitat wheel! Despite the fact that a dozen or so companies announced results of their recent activities, well over a dozen other companies and projects remained off the radar screen as they collect and evaluate data from field exploration, development and production activities. I suspect August will be similar — lots of work but not a lot of hot air (that comes later in the year)!

The author

CURT FREEMAN

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Western Alaska

TECK-COMINCO'S Red Dog mine saw continued strong operating profits in the second quarter of 2005 as a result of strong zinc and lead prices which averaged 55 cents and 45 cents per pound, respectively. Operating profit was $9 million vs. an operating profit of $10 million in the same period in 2004. For the quarter, the mine generated 134.4 tonnes of zinc and 23.7 tonnes of lead in concentrate vs. 138.8 and 25.6 tonnes of zinc and lead, respectively, in the second quarter of 2004.

The mine sold 52,000 tonnes of zinc and no lead during the second quarter. Average zinc and lead grade mined was 21.7 percent and 5.5 percent vs. 22.3 percent and 5.6 percent, respectively, in the second quarter of 2004. Mill throughput of 741,000 tonnes in the second quarter was significantly up from the 728,000 tonnes milled in the second quarter 2004.

NOVAGOLD RESOURCES said at its Donlin Creek project JV partner Placer Dome has increased the 2005 exploration budget from $11 million to $13 million. Placer Dome is completing detailed engineering and design studies for all capital and operating cost estimates to bring information to a Pre-Feasibility level and is preparing extensive baseline environmental data to initiate the permitting process by late 2005.

PLACER DOME currently owns a 30 percent interest in the project and has the right to earn an additional 40 percent interest from NovaGold by expending US$32 million toward development of the property, completing a bankable feasibility study and making a positive construction decision by November 2007.

TONOGOLD RESOURCES INC. announced initial results from its Nyac gold project in southwestern Alaska.

To date more than 1,400 samples have been collected from the Wallace, Bonanza Ridge and Bonanza Creek prospects and four adjacent or newly recognized areas. Of the 518 surface geochemical samples reported to date for the Bonanza Ridge prospect, 58 soil grid samples ranged from 0.105 parts per million gold to 2.86 parts per million gold. Seven rock chip samples taken during grid sampling ranged from 0.121 parts per million gold to 15.1 parts per million gold.

One rock chip sample from the Wallace Prospect reported 7.2 parts per million gold. The company anticipates another 630 assay results from Bonanza Ridge and other prospects within a few weeks.

LIBERTY STAR GOLD CORP. said drilling began in mid-June at the White Sox prospect on its Big Chunk copper-molybdenum-gold project near Iliamna. The initial drilling intersected strongly quartz veined and silicified rock with occasional chalcopyrite blebs. A total of 7 holes have been drilled so far; results are pending.

Drill sites were chosen to test a combination of airborne magnetic anomalies, geochemical anomalies and induced polarization geophysical anomalies. To date approximately 45 line-miles of induced polarization surveys have been completed, including 9.5 linear miles of responsive IP over five different geochemical anomalies. Induced polarization and geochemical sampling programs surveys are continuing.

The company also said it had staked an additional 261 Alaska state mining claims covering approximately 65 square miles of prospective lands identified by previous geochemical sampling. Liberty Star now owns a total of 1,242 Alaska state mining claims covering about 302 square miles.

GEOCOM RESOURCES INC. said it has amended its exploration agreement with **TNR GOLD CORP.** on the Iliamna copper-gold project in southwestern Alaska. Geocom and TNR have earned an interest on the H Claims from property owner BHP Billiton and are in the process of establishing a formal joint venture agreement to govern the continued exploration of this block.

Geocom has now spent in excess of the required funds set forth for the D and H claims in the original agreement, and as a result the partners have amended their option agreement to provide for the establishment of a joint venture on the D Claims as well. Geocom agreed to reduce its potential earned interest from 75 percent to 51 percent, in return for which TNR agreed to begin funding its 49 percent interest immediately. Exploration permits have been filed with the Bureau of Land Management and it is anticipated that drilling will occur on the D claims in late August or early September.

Eastern Interior

TECK-COMINCO said construction of the Pogo gold mine in Alaska continues to progress on schedule except for underground development work. A construction work force of more than 400 is currently working on the site. At the end of June the construction was estimated to be 75 percent complete with underground pre-production development work currently about 30 percent complete.

Productivity has been lower than anticipated and progress has also been slowed by poor ground conditions in portions of the access drift areas. As a result, it is anticipated that the overall project completion schedule will be met but that the initial ore feed to the mill will be trucked rather than conveyed from underground.

Production start-up is expected in the first quarter of 2006 with a phased ramp-up to full production in the first half of 2006. The current estimate of total capital costs for the project is US$321 million.

GOLDEN SPIRIT MINING said it will change its main course of business from mineral exploration to online poker. Management has decided that for now its current Ester Creek Gold property near Fairbanks and its other mineral interests will be held in a wholly owned subsidiary of the parent public company.

Alaska Range

PIPER CAPITAL INC. said drilling has begun at its Golden Zone prospect in the central Alaska Range. Phase 1 drilling consists of approximately 9,000 feet of core drilling in 18 to 20 holes on the Golden Zone Breccia Pipe, veins, mineralized dikes, and replacements in the BLT and Mayflower prospects northeast of the Breccia Pipe and at the Long Creek prospect approximately 1.5 miles south of the Breccia Pipe.

The company also said revised resource estimates for the Golden Zone Breccia Pipe have been completed and include measured and indicated resources of approximately 2,027,000 tons grading 0.106 ounces per ton gold, 0.47 ounces per ton silver and 0.12 percent copper (utilizing a 0.05 ounces per ton gold cut-off). These resources contain approximately 214,862 ounces of gold, 948,636 ounces of silver and 24,000 pounds of copper.

GOLCONDA RESOURCES LTD. announced results from previous drilling at its Shulin Lake diamond project west of Talkeetna. One white, transparent diamond fragment has been recovered from sample B3 in drill hole 25. The dimensions of the diamond are 0.46 by 0.26 by 0.14 millimeters. Nine samples obtained from drilling of three different magnetic anomalies were sent to **SGS LAKEFIELD RESEARCH LTD**. for analysis. The other eight samples did not contain any diamonds.

The samples had a total weight of 2,400 kilograms and consisted of volcanic tuffs. The results thus far indicate that different

see **FREEMAN** page 11

● KAMCHATKA

Alaska miners visit Kamchatka Aginskoye mine

Russian region's first hard rock mine is being developed by a local company with international ambitions, KoryakGeoldobycha

By SARAH HURST
Mining News Editor

The Kamchatka peninsula in Russia's Far East was off-limits to mining in the Soviet era. Exploration took place, but no mines were built because Kamchatka — a short hop across the Bering Sea from Alaska — was home to numerous military bases. After the Soviet Union collapsed in 1991, a group of geologists and investors formed a company, KoryakGeoldobycha, KGD, hoping to take advantage of the region's vast mineral potential. But they had to fight to prevent some of it from being closed again: this time because of the creation of new parks and other conservation units.

1 2 SERIES

In August the Alaska Miners Association organized a group visit to Kamchatka, hosted by KGD, to see how the company has been succeeding in overcoming years of opposition to its plans. Construction of the region's first hard rock gold mine, Aginskoye, is close to completion. AMA members visited the mine and had the opportunity to discuss all aspects of the project with KGD's management.

"The really exciting thing for me was to see that project going forward after the incredible level of attack it withstood," AMA Executive Director Steve Borell said of Aginskoye. "The dry stack tailings facility is as good as I've seen anywhere. There's a bypass under the dam, a really neat concept. I'd heard of that, but I hadn't seen one before. The camp facilities are as nice as you'd find anywhere, in any remote camp. The original exploration will cause them some additional challenges. They were driving on the ore zone, which is less competent than the wall rock."


SARAH HURST

Andrei Kozlov, general manager of Bystrinsky Mining Co., stands in front of a SAG mill at Aginskoye

Environmentalists opposed to Aginskoye

Kamchatka legislators created a 235,000 hectare protected area called the Ichinsky Zakaznik in 1994. That same year, KGD's subsidiary Kamgold won the license to mine the Aginskoye gold deposit. The Kamchatka administration subsequently withdrew 52,000 hectares, including the Aginskoye deposit, from the nature reserve. But in 1995 the then Kamchatka governor, Vladimir Biryukov, signed a decree creating three parks. One of the parks, the Bystrinsky Nature Park, included Aginskoye. The following year, Biryukov redrew the boundaries of Bystrinsky Park to exclude Aginskoye.

All this provided ammunition for environmentalists, who pressed for multilateral lending agencies not to finance or provide political risk insurance to the Aginskoye project. Then, in December 1996, KGD suffered another blow when UNESCO designated the "Volcanoes of Kamchatka" a World Heritage Site, including Bystrinsky Park and other protected areas. Kinross Gold, which had purchased a 25 percent interest in Aginskoye from Asarco for $4 million in 1995, eventually withdrew from the project. There are some 160 volcanoes in Kamchatka, 29 of which are still active.

Today the boundaries issue is resolved: Aginskoye is outside Bystrinsky Park, and KGD's subsidiary Bystrinsky Mining Co. is developing and financing the mine by itself, without a foreign partner. The company is making use of the enormous amount of exploration work that was carried out in the 1970s and '80s by the Soviet Union's Ministry of Geology. At the height of geological exploration, 1,200 people lived on site, and a total of 52 kilometers of exploratory tunnels were built — far more than were needed to establish gold reserves. The wife of KGD's present general manager, Vasily Knoll, was one of the geologists who explored Aginskoye, during which period she was tragically killed in an underground accident there.

Intense Soviet-era evaluation

"During the Soviet era there were armies of professional people that systematically evaluated many USSR mineral deposits, like Aginskoye, with little concern about the cost of acquiring the exploration data," said Tom Bundtzen of Fairbanks-based Pacific Rim Geological Consulting, who led the AMA trip to Kamchatka. "The Ministry of Geology put hundreds or thousands of diamond drill holes into deposits like Aginskoye, including underground tunneling. ... It wouldn't be done quite that intensively in the West." Bundtzen is president of the AMA this year and has been regularly visiting the Russian Far East since 1989, originally as part of a scientific exchange and more recently as a consultant.

Licenses to develop deposits that were explored in the Soviet era are sold at auction by the Russian federal government. Companies are given a set amount of time to develop a mine, and if they fail to do so, the license can be withdrawn. In practice they are usually able to apply for an extension on the license, as long as they give a legitimate reason for the delay. The amount that the winning company bids in the auction is considered a start-up payment, and the government must receive it within 30 banking days after registration of the license, or the company automatically loses the license.

Environmental assessment, permits required

Construction of a mine in Russia also requires an environmental impact assessment and a host of permits. The draft of a new federal law on the subsoil, likely to be passed by the Russian Duma by the end of this year, would make the penalties for failing to develop a mine within the time limits of the license agreement less severe. Instead of losing the license, a company would have to pay financial penalties. The new law would also allow a company to sell its mineral rights to another company. Foreign companies may participate in Russian auctions, unless the mineral deposit is designated as strategic, such as the giant Sukhoi Log gold deposit in Irkutsk, in which case the company must be at least 51 percent Russian-owned. One recent auction in Kamchatka was also closed to foreign companies because the deposit was located in a military district.

Last year London-based Peter Hambro Mining, which focuses on Russian properties, considered purchasing the license for the Ametistovoye gold deposit in

see AGINSKOYE page 7

COURTESY TRANS-SIBERIAN GOLD

The Asacha deposit is located on a caldera, where 3-4 meters of snow can fall in winter.

● SIBERIA

Trans-Siberian deal funds Russia projects

UK company moved in where others feared to tread, to build a gold mine in Kamchatka with assistance from AngloGold Ashanti

By SARAH HURST
Mining News Editor

The UK's Trans-Siberian Gold is blazing a trail as one of the first foreign mining companies to operate in the Kamchatka region of Russia. Trans-Siberian is developing the Asacha and Rodnikova gold deposits, just outside the city of Petropavlovsk-Kamchatsky, and plans to have a producing hard rock mine by the end of 2006. The process hasn't gone altogether smoothly, but Trans-Siberian is determined to proceed, unlike Kinross Gold, which departed Kamchatka when faced with environmentalists' roadblocks.

After four years of going it alone, Trans-Siberian sold a 29.9 percent stake for $31.6 million to South Africa-based major AngloGold Ashanti in July 2004. This guaranteed the financing Trans-Siberian needed to build a mine at Asacha. "If AngloGold Ashanti wanted to start from scratch, it would take them two or three years, and they probably wouldn't get to where we are," said Jocelyn Waller, Trans-Siberian's founder and managing director. "So it gives them the entry point and it's a recognition that Russia is on the map for every global player."

Waller acknowledged that a takeover could be in the cards. "It's very unusual for AngloGold Ashanti to take a minority stake, although they have made some statements recently, that this may be the way forward, rather than big-scale mergers," he said in an interview on the company website. "So, to some extent, this is experimental. But I think it is possible, obviously, that if this works and we are successful, that they would be of a mind to consolidate Trans-Siberian Gold into AngloGold Ashanti."

Six-year life could be extended

Trans-Siberian initially plans to produce 100,000 ounces of gold per year at Asacha for a six-year mine life, but there is a strong chance this could be extended, especially if the nearby Rodnikova deposit is also mined. Like Koryakgeoldobycha's Aginskoye gold deposit, Asacha and Rodnikova were extensively explored in the Soviet era, but Trans-Siberian will undertake further exploration there with a view to obtaining open pit mining licenses in addition to the hard rock mining license it currently holds. The grade at Asacha is high, although not quite as high as Aginskoye's: 20 grams per metric ton.

A bankable feasibility study for Asacha was completed in March 2004 and a 140-page environmental assessment of the project was written by UK-based MDS Mining & Environmental Services the following November. "Hopefully we can give the final green light," Waller told Mining News in a telephone interview. "We've (been) given an amber light. In Russia you need permitting to construct the mine, and we got the environmental sign-offs in Moscow a couple of months ago. We're putting together the final financing arrangements and now we're poised — by the end of September we hope to give the final go-ahead. We have a very clear-cut plan. It's a question of the board being satisfied that we have the funding in place."

Road to mine built

Trans-Siberian has already built a 60-kilometer road to the mine and part of the camp has been completed. The mine will be on a caldera, where three to four meters of snow have been known to fall in winter. Although the site is close to the Mutnovsky geothermal power station, the mine will generate its own power because if lines to the power station were constructed, the snow would inevitably cause outages.

"To get the environmental clearance was a lot of work, it took about two years," Waller said. "It's a very pristine part of the world. If you're going to mine there, you really ought to mine in a very responsible way. ... They need mining in Kamchatka. The fishing industry is depressed and there are a lot of ex-military without jobs."

People underestimate the fact that Russia is very regulatory, Waller said. "For everything you do, there's paperwork to be done. I would say it's excessive — that's the legacy of the Soviet system." Companies that hold licenses to develop Russian deposits must do so within a certain time-frame. "It's not a drop-dead situation. Most license-holders, their licenses are not totally in conformity. You have to explain why. For example, we had a delay of six months with our environmental clearance because there was a reorganization of Russian ministries."

Trans-Siberian used a Western design for Asacha, which had to be adapted for the Russian regulations. "It's not an absolutely straightforward project," Waller said. "I think we should have attacked it more aggressively earlier on. We're pioneers in Kamchatka." The company also holds the licenses for the Veduga and Bogunay deposits in Siberia's Krasnoyarsk region. A bankable feasibility study is being undertaken for Veduga.

Waller chose to focus on Russian projects because the country is one of the last frontiers for gold mining, he said. "There has been very little exploitation of the hard rock, technically more difficult mining. There is a good risk-reward ratio. It seemed to be a place to have a go. It's a fairly dynamic environment." ●

● CENTRAL ALASKA

Chance of Alaska diamonds not so remote?

Canadian companies have teamed to explore at Shulin Lake, hoping purple garnets, diamond fragments will lead them to the gems' source

By SARAH HURST
Mining News Editor

There has never been a diamond mine in Alaska, but that may change if Golconda Resources has anything to do with it. The Calgary-based junior, in partnership with Shear Minerals and Shulin Lake Mining, is exploring for diamonds at the Shulin Lake property in central Alaska.

Diamonds have been found across the border in Nunavut and Northwest Territories. But in Canada, diamonds are brought to the surface in kimberlite pipes, igneous structures that rise due to their high temperature and the extremely high pressures that exist deep in the Earth. Kimberlite mainly occurs in the stable cores of the continent, not in mountain chains.

Explorers looking for diamonds in Alaska, Washington and California are not expecting to find kimberlite, but the source of the diamonds they have been finding may be lamproite, another type of igneous rock.

Golconda recently recovered a white, transparent diamond fragment (0.46 by 0.26 by 0.14 millimeters) from a Shulin Lake drill hole.

The company sent nine samples from the drilling of three different magnetic anomalies to Ontario-based SGS Lakefield Research for analysis. Golconda hopes that one of the three magnetic anomalies will be the center of volcanic activity, company President Guenter Liedtke told Mining News.

The first holes that Golconda drilled on the south side of Peters Creek produced a mixture of volcanic material, sand and debris washing down from the Alaska Range, Liedtke said.

"Last year we finally found that the material consisted nearly exclusively of angular little grains that had not been transported far, so we knew we were very close. My guess is we're within one or two miles of the source. The question is, which direction to go in, so we went back to the magnetic survey. We're figuring out where to drill at the moment."


COURTESY GOLCONDA RESOURCES

Drilling at Shulin Lake is on hold while the magnetic survey is examined for clues.

Placer mining previously in area

Indicator minerals that have turned up in the Shulin Lake area include chromite and purple garnet. Shear leased the property in 1999, but decided to focus on its big kimberlite discoveries in Canada. Golconda now has a 51 percent interest in Shulin Lake, with Shear owning 9.2 percent and Shulin Lake Mining 39.8 percent.

"This is an out-of-the-box type target, and Golconda has the right kind of experience for it," Pamela Strand, president and CEO of Shear, told Mining News.

Liedtke formed Golconda in 1986, having previously worked in uranium mining in South Africa and his native Germany. The company, which mainly explores for gold, has also been exploring for diamonds in California and Idaho.

Canada third in world for diamonds

Liedtke was not involved with diamond mining in South Africa. "In South Africa everything was controlled by De Beers, exploration was compartmentalized," he said. "You never found out the results from your samples, because someone else would take over. It was very boring work, it did not interest me."

In the last decade Canada has cut into De Beers' share of the market. The company now controls less than 50 percent of the world's known diamond reserves. In third place after Russia and Botswana, Canada has surpassed South Africa in terms of diamond production by value.

"Canadian diamonds are extremely high quality," Strand said. "They're beautiful when they're cut, internally flawless and completely colorless."

At Shulin Lake the grade and size of the diamonds is impossible to predict without locating their source, because Golconda is finding splinters from larger diamonds, rather than micro-diamonds. "The splinters are all from clear, white diamonds, which is what you want to find," Liedtke said. "These have the highest value."

These kinds of diamonds have also been found in Australia and Borneo, where they are placer mined in significant quantities, but their source has not been located.

Golconda has spent approximately C$1 million so far on the Shulin Lake project. "The amount of indicator minerals that I ran across since 1998 or so would indicate that the system seems to be very large," Liedtke said. "The reward compensates for the risk." (One diamond sample costs about $1,000 and takes six to 12 months to analyze, compared with $10-$20 and two days for a gold sample.)

Strand agrees that exploring in Alaska could pay off. "Fifteen years ago they were laughing at people looking for diamonds in Canada," she said. "If you can find an economic diamond mine, the rewards are huge. Two mines in Canada will have a revenue of C$25 billion over a 25-year mine life; they cost $1 billion to build, and their capital costs are paid back after three years. They are money-making machines."●

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continued from page 5

AGINSKOYE

Kamchatka from KGD. Ultimately the deal fell through. Earlier this year the Russian company Renova purchased an estimated $150 million stake in KGD. Renova is owned by one of Russia's richest men, Viktor Vekselberg, who is also an owner of aluminum giant SUAL and a major shareholder of Russian-British oil venture TNK-BP. Vekselberg attracted the attention of the world's media last year when he paid the Forbes family more than $90 million for a collection of Fabergé imperial Easter eggs, saying he wanted to bring them back to Russia.

Vekselberg for governor?

In August, while the AMA group was in Kamchatka, President Vladimir Putin's envoy to the Far East Federal District suggested that Vekselberg should be on the list of candidates for the next governor of Kamchatka. "Vekselberg is now actively developing gold and other metal deposits in Kamchatka ... and invests big sums in the territory," Konstantin Pulikovsky said. Pulikovsky is in charge of drawing up a preliminary list of candidates for Putin, who recently abolished elections for regional governors and replaced them with presidential appointments.

The Kremlin responded to Pulikovsky's comments by calling them "premature," according to Russian news agency Itar-Tass. The appointment of an oligarch as governor would be highly controversial. Russia's richest man, Roman Abramovich, is governor of the neighboring Far East region of Chukotka, and although he has invested hundreds of millions of dollars in the region, he has also been criticized for obtaining tax breaks for his oil company, Sibneft, by registering it in Chukotka.

Kamchatka and Koryakia regions to be merged

Putin also plans to merge Kamchatka and Koryakia, in the north of the peninsula, into one region. A referendum is due to be held in October. The world's largest placer platinum mines, also owned by KGD, are in Koryakia. KGD's former general manager, Vladimir Loginov, went on to become governor of Koryakia until March this year, when he became the first regional governor to be fired by Putin, reportedly for mismanaging the heat and electricity sector. Winter energy shortages required an emergency operation to deliver fuel to freezing villages.

Far East politician Oleg Kozhemyako was appointed by Putin to replace Loginov. The current governor of Kamchatka is Mikhail Mashkovtsev, a member of the Communist Party, who nevertheless has good relations with KGD. The company does not expect its operations to be affected much by Russian politics, officials told the AMA visitors, and in fact is about to step onto the international stage. KGD is having its reserves audited and put into the Western format with the intention of holding an IPO on London's Alternative Investment Market.●

● MAT-SU BOROUGH

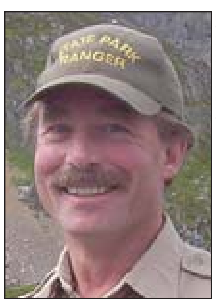
Bringing Independence Mine back to life

It's easy to stroll around old miners' bunkhouse and mess hall north of Anchorage, where gold was produced before World War II

By SARAH HURST
Mining News Editor

Chief Ranger Pat Murphy has a dream. Restore the bunkhouse at the historic Independence Mine, north of Anchorage. Bring visitors to stay there overnight and watch old movies in the building's 90-seat theatre on the first floor. In the morning, take them to the mess hall and serve a huge miners' breakfast, loaded with calories. Then give them an underground tour of a mine that was one of Alaska's largest gold producers before World War II.

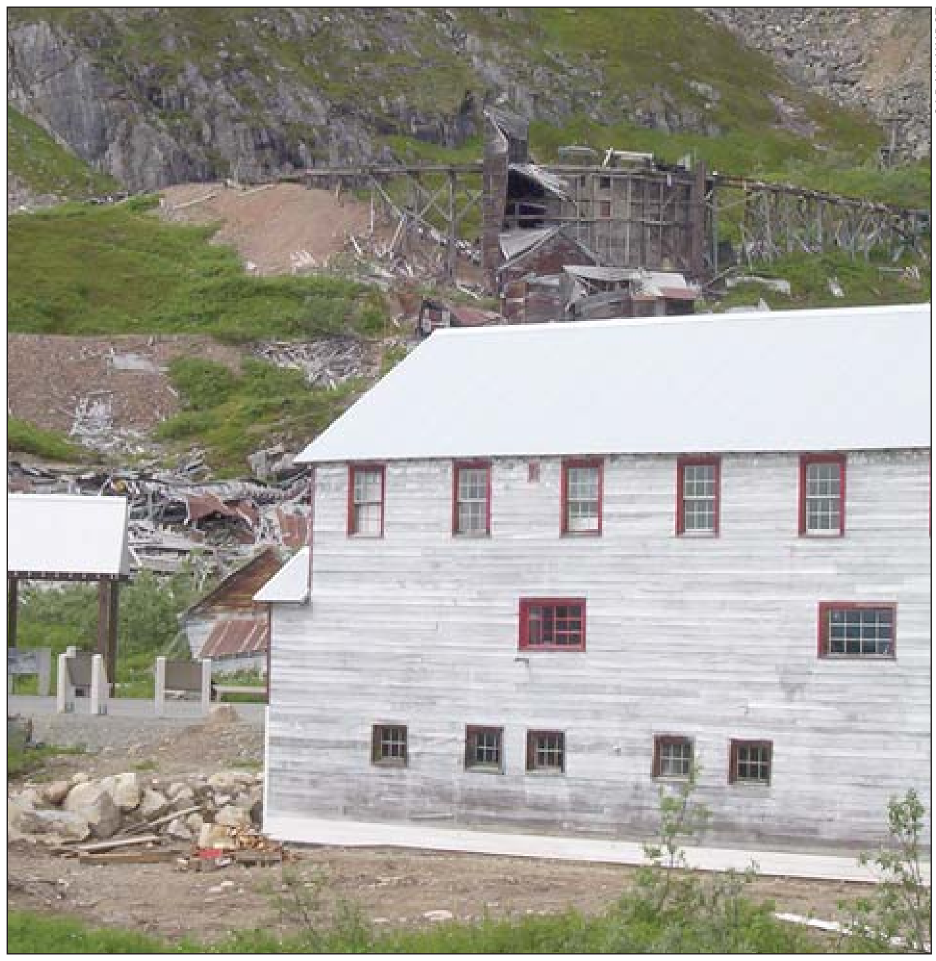
Murphy is the kind of active guy who is likely to achieve his dream. Driving around the Independence Mine State Park, he advises hikers on the best places to look for blueberries and how to bake a great pie. He is also mentally armed with information about the mine's history, backed up physically by the 50 or so videotapes he has made of former mine employees recounting their stories about the arduous life here.



SARAH HURST

PAT MURPHY

Independence Mine is in Hatcher Pass, a scenic mountain route between the towns of Palmer and Willow, popular in winter with cross-country skiers. The visitor center, which used to be the mine manager's office, is about 3,500 feet above sea level. The portals that are still visible in the granite could only be reached on foot, a steep trek for the miners each day, and their shifts didn't begin until they arrived at work. The main portal is at a height that is the equivalent of a 22-story building, or 400 steps. The miners were paid $1.04 per hour, which was a decent rate in those days.



SARAH HURST

Mill building in pieces

The collapsed wooden mill building is the most dramatic sight at Independence Mine. When equipment was removed, the walls had to be taken down, and now jagged pieces of the building are strewn all over the mountainside, beneath the skeletal remains of the original structure. The mine's other buildings have fared much better. Thanks to funding from the Matanuska-Susitna Borough and the federal government, obtained by Alaska Senator Ted Stevens, many of them have new roofs and foundations. They are painted silver and red, the colors that prewar mine manager Walter Stone chose, in an effort to make the place more cheerful.

The gold here occurs in quartz veins, and after the arrival of placer miners in the late 19th century, Robert Lee Hatcher discovered and staked the first hard rock claim in the Willow Creek Valley in 1906. Two hard rock mines were developed: the Martin Mine on Skyscraper Mountain, and Independence Mine on Granite Mountain. They were brought together in 1938 under one company, the Alaska-Pacific Consolidated Mining Co. In its peak year, 1941, Alaska-Pacific employed 204 men, blasted nearly a dozen miles of tunnels, and produced 34,416 ounces of gold worth over a million dollars — equivalent to over $17 million today.

Ice for drinks

"Way in there they had a core of solid ice and they started mining it," Murphy said, pointing to the mountain. "The miners all hung out at the South Seas Lounge on Spenard (Road in Anchorage), and the owner sent up trucks to buy the 10,000-year-old ice." Murphy relishes these stories and has no problem balancing his responsibilities as a park ranger and his admiration for mining. "I've always really respected the fact that these guys can come out here and developed a mine and some economy," he said.

When the state received the mine as a donation in 1980 and made the area into a park, the manager's building was not included. It was a bar and grill called Independence Lodge, a base for skiers who ascended on a t-bar that used to be here. The state purchased the lodge and converted it into the visitor center, which is now a cozy set of rooms decked out with antiques, the old-time atmosphere heightened by the sounds of swing crackling from some distant gramophone (or perhaps a CD player).

Mine draws 350 visitors a day in the summer

An average of 350 visitors a day passes through the visitor center, totaling around 22,000 people each summer. "Most people are interested in the historical aspect, how they found the gold, extracted the gold, milled the gold," Murphy said. "Most are pretty amazed at how they built the mine up here." RVs can drive up the smooth, paved road that exists today, but when the mine was operating, this road was just a tractor trail. Tractors would come up pulling wagons or wooden freight sleds. There are rusty iron wagon wheels on display at the mine.

To realize his dream of enhancing the mine's attractions, Murphy would like to find an organization to partner with. Power would have to be extended to the mine buildings. There is already an underground tour, but it only takes place once a year, as a fundraiser. Murphy would like to do five or six such tours a day. For now visitors can have an hour-long guided tour of the buildings, some of which have been decorated to look the way they did when miners lived and worked in them.

Volunteers, usually retired people, work as guides at the mine in the summer. Ray Carlton from North Carolina, in his first year at Independence Mine, already has a hefty stock of tales to tell. The mine operated 363 days a year, the two holidays being Christmas Day and — of course — Independence Day. You could tell when the miners had hit high-grade ore, because their lunchboxes would rattle, Carlton said. Good food was valued almost as highly as the gold. "It was said that one of the cooks made a bad batch of donuts on his first day at work and didn't get to work the second day," Carlton recounted.

Kitchen work warm and dry

In the bakery, where there is an old oven, plywood cupboards, and an empty 48-pound metal tub of Swift's Jewel Shortening, Carlton described how the "flunkeys" enjoyed their work serving food in the mess hall, because it was warm and dry, and they didn't have to shovel ore. The miners liked the camp, too, because of the relatively luxurious facilities: a jukebox in the mess hall, running water and even flush toilets — that emptied into the creek.

Officially a "dry" camp, when the miners took off their wet clothes the little silver flasks would come out, according to Carlton. Mine Manager Walter Stone also liked to invite the foremen to his office to discuss the day's events and have a nip of his special Scotch whisky, which he kept in his safe along with two other important items — his gold and his Cuban cigars. Stone ensured that the commissary sold items at cost to mine employees, and fired one person for overcharging. But there was no way to stop the workers from frittering away their hard-earned cash at card games, one of the few forms of entertainment at the mine. On one occasion there was $10,000 on the table at a card game, or so the legend goes.

see INDEPENDENCE page 11

● NPR-A

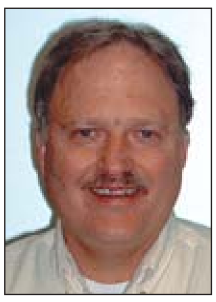
South NPR-A plan to consider mining impacts

BLM wants to assess the potential for mining in addition to oil and gas development; mining currently prohibited in area

By ALAN BAILEY

Petroleum News Staff Writer

At an Anchorage scoping meeting on Aug. 16, Bob Schneider, manager of BLM's Fairbanks District Office, invited public comments on the criteria for bureau's planning effort for the southern portion of the National Petroleum Reserve-Alaska. As part of the south NPR-A plan the Bureau of Land Management intends to assess the potential for hard rock mining and coal leasing, and the possible impacts of these activities, Schneider said.



Bob Schneider, manager of BLM's Fairbanks District Office

In recent years BLM has issued land use and activity plans for northeast and northwest NPR-A and has just started preparing the plan for south NPR-A. The agency is holding a series of public meetings to gather comments on the scope of the plan and to identify issues that need to be considered as part of the planning process. BLM doesn't expect to complete the plan until 2009.

The planning area includes much of the Brooks Range foothills and part of the Brooks Range itself. The southern part of the area is thought to contain rich mineral resources, including lead, zinc, phosphates and barite.

Rich mineral resources

The planning area includes much of the Brooks Range foothills and part of the Brooks Range itself. The southern part of the area is thought to contain rich mineral resources, including lead, zinc, phosphates and barite.

"We want to know whether or not there's public interest in making areas available for hard rock mining in the National Petroleum Reserve in the south planning area," Schneider said.

Schneider also said that BLM wants to find out if there is interest in making portions of the area available for coal leasing — 100 to 300-foot coal seams are known to exist in the more northerly part of the area.

"NPR-A is thought to contain about 40 percent of the nation's coal reserves," Schneider said.

The area also exhibits significant oil and gas potential.

Currently prohibited

The Naval Petroleum Reserves Production Act of 1976 prohibits mining activities within NPR-A. So, opening the reserve for mining activities would require legislative action by the U.S. Congress. That doesn't preclude BLM assessing the potential for mining, Schneider said.

"The plan may analyze alternatives that would consider recommendations for opening some acreage to either hard rock mining or coal leasing," he said.

However, some people attending the Anchorage meeting questioned the point of including mining within the plan, when mining activities are currently prohibited. Some also cautioned about the potential scale of mining impacts resulting from infrastructure requirements such as roads, railroads or ports.

Others, however, stated an essential need for natural resource development in the area and viewed the BLM plan as a step towards recommending that Congress remove mining and coal leasing restrictions — people need the resources and resource development would contribute to the local economy.

Wild and Scenic River recommendations

BLM also plans to "consider eligible rivers within the planning area for inclusion in the Wild and Scenic River System," although actual designation within the system would require U.S. Congressional action. But some meeting attendees questioned even the possibility of such designations, saying that the Alaska National Interest Lands Conservation Act of 1980 included a clause stating that there would be no more land withdrawals in the state. However, Schneider said that as part of the south NPR-A plan BLM wants to determine whether rivers such as the Colville River would or would not need

"NPR-A is thought to contain about 40 percent of the nation's coal reserves."
—Bob Schneider, manager of BLM's Fairbanks District Office

to be in the Wild and Scenic River System for successful management and protection.

However, concurrent with the development of the south NPR-A plan, BLM will be developing a separate Colville River Management Plan to address management issues for the river in all of the NPR-A planning areas. This Colville River plan will deal with issues that include recreational and subsistence use of the river; the plan should be completed within six months of completion of the south NPR-A plan, Schneider said.

Wildlife habitats

The south NPR-A planning area does include some critical wildlife habitats, especially for the western Arctic caribou herd in the uplands of the area and for raptors along the Colville River.

Several meeting attendees expressed support for the need to protect wildlife in the area and some people emphasized the need to consider the cumulative effects of any development, especially in places and communities outside the planning area. For example, the transportation of resources extracted from the area would probably require pipelines or roads extending well beyond the boundaries of the reserve.

Schneider noted that BLM has invited the North Slope Borough to become a cooperating agency, to participate in plan development.

Other issues raised at the meeting included the need for more geological knowledge of the area and the need for technical innovation for resource development in an area that is relatively dry and lacks plentiful supplies of gravel.

Although the public scoping period for the south NPR-A plan was originally scheduled to end in August, BLM has extended the period to Oct. 17. The revised schedule includes scoping meetings in several northern Alaska communities and an additional meeting in Anchorage on Sept. 20. Information about the plan and the scoping meetings can be obtained from BLM's Alaska state office at 907 271-5960. ●

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Full Metal Minerals takes aim at Lucky Shot

Exploration near Alaska's Independence Mine is just one of several projects in the state for confident Canadian junior company

By SARAH HURST
Mining News Editor

If Lucky Shot lives up to its name, it could net Vancouver, British Columbia-based junior Full Metal Minerals millions of dollars. But the chances are slim. Less than 1 percent of exploration projects eventually develop into operating mines, according to Full Metal's vice president, Rob McLeod. Still, McLeod hopes that this or one of his company's other Alaska projects will be as lucrative as Pierina in Peru, which his cousin Catherine McLeod-Seltzer discovered and sold to Barrick Gold for a not-so-small fortune.

The Lucky Shot property is one of the few Alaska exploration projects that can easily be accessed by road. It is just a few miles away from Independence Mine, which was the biggest gold producer in the area before World War II. Full Metal has begun an eight-hole drilling program covering 1,200 meters at Lucky Shot, which the company leased recently from Scott Eubanks, owner of the Lucky Shot Bed & Breakfast.

Eubanks is an underground miner himself, having worked at the Lucky Shot mine when it was operated in the 1980s by oil and gas company Enserch. "They just threw money at it, like most oil companies deal with a problem," Eubanks told Mining News. "Based on a couple of drill holes they drove tunnels and built a mill to start producing gold, and they did produce some until prices crashed," Rob McLeod added. There was also a gold mine here between 1908 and 1951.

Lucky Shot a low-sulfide system

Full Metal got involved with the property when they hired Eubanks to do some blasting at their nearby Gunsite copper-gold project. Eubanks told them about Lucky Shot, and this summer Full Metal is using the Bed & Breakfast as its base, for four drillers, a geologist and an assistant, as well as consultants from Alaska Earth Sciences. Full Metal's employees come from Canada, as there aren't enough drillers in Alaska to accommodate all the projects that are under way this season.


SARAH HURST
Full Metal Minerals Vice President Rob McLeod inspects core samples at Lucky Shot, with drillers from Canada.

Lucky Shot is a very low sulfide system, which means it doesn't conduct electricity, and there isn't enough contrast between the rocks for IP (induced polarization) geophysics to be effective. So the work here is fairly straightforward. The drillers ride ATVs up to the top of the ridge which everyone calls Lucky Shot Ridge, although Chief Ranger Pat Murphy has officially named it Black's Ridge. They return with core samples, and the samples are inspected visually for the elusive traces of gold, before being sent to the assay lab in Fairbanks. When the hard facts about the core samples come in, Full Metal can issue a press release on its results.

> *"Exchanges in Canada have reformed, they look at our press releases under the microscope. It is a quite heavily regulated industry now. Resources have to be audited by an independent qualified person."*
> **—Rob McLeod, Full Metal Minerals vice president**

Full Metal serious about finding a mine

Full Metal completed a C$2,875,000 IPO in May 2004, and in July of this year the company completed a C$1 million non-brokered private placement. "Success in the junior mining game is very nebulous, you can be considered a success if you don't find a mine but you made your shareholders a lot of money," McLeod said. However, Full Metal is serious about finding a mine. "The ambition for us is to find economic deposits that we could hopefully sell to a major mining company," he added.

Since the huge Bre-X scandal in the 1990s, when the junior Canadian mining company by that name was found to have made fraudulent claims about a property in Indonesia, boosting its stock price from one penny to C$286.50, the people who invest in mining are much more educated, according to McLeod. "Exchanges in Canada have reformed, they look at our press releases under the microscope," he said. "It is a quite heavily regulated industry now. Resources have to be audited by an independent qualified person."

McLeod himself comes from a mining family. His cousin, McLeod-Seltzer, is an advisor to Full Metal Minerals, and McLeod's father was an underground miner in Stewart, British Columbia. Rob's uncle, Don McLeod, designed and built three mines. Other members of Full Metal's senior management team have an impressive track record. David de Witt, a director of Full Metal, was also a director of the company that discovered the massive Voisey's Bay nickel, copper and cobalt deposit. John Robins, chairman of Full Metal, staked millions of acres of diamond claims in Nunavut.

Few U.S. states pro-mining

Only a few U.S. states are pro-mining, and Alaska is one of them, in McLeod's opinion. The others are Nevada, Utah, Arizona and New Mexico. "One of the main selling points for us in Alaska is that all the Native land claims have been settled," McLeod said. Last January the company entered into an agreement with the Bristol Bay Native Corporation to explore 565,000 acres on the Southwest Alaska Peninsula. Full Metal has a previous agreement with the Aleut Corporation to explore in the Aleutian Islands. The company will also be working closely with Native corporations at its Pebble South property.

"Alaska is a great place to invest because of its size and mineral potential," McLeod said. "The amount of mineral endowment is very impressive, and it's under-explored compared to other places in the world." ●

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INDEPENDENCE

Families lived in Boomtown

Single women were not allowed at the mine, but married employees could live with their families in one of the 22 houses that formed the nearby Boomtown. Children attended school here, and someone has creatively scrawled on the blackboard: "March 8, 1939. Good Morning Class! Today's lesson: Geography. 'Ain't' ain't a word and you ain't s'pose to say ain't. Say ain't five times and you ain't goin' to heaven!"

Like all gold mines in the United States, as a non-essential industry the Independence Mine was supposed to shut down when war broke out. But the management found a creative way to remain open. They got an exemption for one year to mine scheelite, which can be used to make hardened steel. "They put all the scheelite quartz into burlap bags, buried them under a building and never shipped out an ounce," Murphy said. "For some reason they also had to keep mining gold. The war production board found out what was going on and closed the mine down in 1943." The burlap bags weren't discovered until 1978.

There were no recorded fatalities at Independence Mine between 1936 and 1943, although there was one in 1980 when the mine re-opened for a short time. There is no record of the illnesses or deaths that may have been caused in the long-term to miners when they worked with mercury, painting it onto metal plates with their bare hands so it would adhere to the gold. This process enabled the mining company to extract 94-96 percent of the gold from the ore. How much gold remains in the mountains, though, is a mystery that may never be solved.

The visitor center at Independence Mine is open from 10 a.m. to 7 p.m. daily, and the entry fee is $5. There may still be places left on this year's underground tour, which takes place Aug. 27, and costs $125. For more information call (907) 745-3975. ●

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FREEMAN

phases of tuff exist, at least one of which is closely associated with diamonds. The company is currently devising a program that will test three potential diamond source areas to determine the origin of the diamondiferous tuff phase, which the company believes is not more than two or three kilometers from the tested areas.

Southeastern Alaska

QUATERRA RESOURCES said it plans to conduct a 1,500 meter diamond drill program at its Duke Island copper-nickel-platinum group element project near Ketchikan. The August program will target recently identified gravity, magnetic and electromagnetic anomalies. The drill program follows up on surface sampling that returned values ranging from anomalous up to 2.8 percent copper, 0.25 percent nickel and 1 gram per tonne platinum and palladium and on four earlier widely spaced drill holes that intercepted disseminated semi-massive and massive sulfides over extensive lengths.

ALASKA ELECTRIC LIGHT AND POWER has entered into a 15 year sales agreement to sell hydroelectric power to Kennecott/Hecla's Greens Creek polymetallic mine. The power, to be provided by a 9.5 mile long underwater cable, would replace the more costly diesel-generated electrical power now being generated on-site by the mine.

The new cable also would connect Juneau to the town of Hoonah. The companies hope to have power flowing to the mine by early 2006.

SELECT RESOURCES CORP. INC. has purchased the Admiral Calder calcium carbonate deposit from Sealaska Corp. and SeaCal LLC. The original deposit was discovered around 1905 and mining commenced in 1907 for high white and statuary grade marble. The original quarries ceased operation in about 1910.

The current mine began production by Sealaska and SeaCal in 1999.

The deposit consists of 13.9 million tons of drill-proven and probable reserves and 12.5 million tons of possible resources of high chemical grade (+98 percent), high brightness and whiteness (+95 Hunter brightness @ -200 mesh) calcium carbonate for use in the paper, plastics and paint filler, whitener, extender and loader markets.

In addition, the property also contains +20 million tons of possible resources of high chemical grade (+98 percent) and medium brightness (+89 Hunter brightness @ -200 mesh) calcium carbonate for use in chemical applications and as off-white fillers, loaders and extenders.

The current resource covers only 15 acres of the 572 acres property of patented mining ground, and includes all operating permits and tideland leases. ●