Petroleum news

page 8 Mingé named BP's Alaska president; Suttles new COO for global E&P

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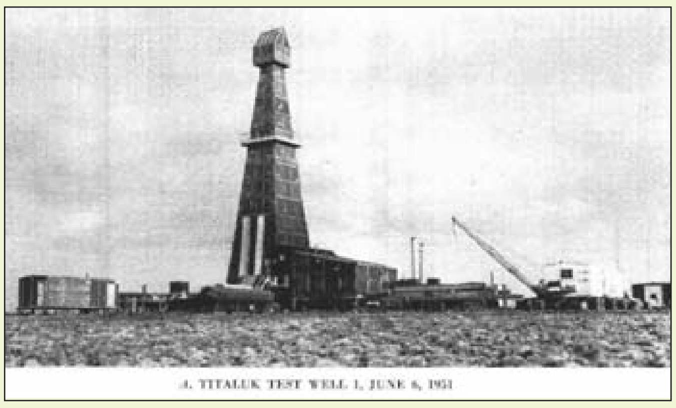
Anadarko permits 4 gas prospects



Anadarko Petroleum recently began permitting a four-year exploration program covering four different prospects spread across an 80-mile swath of Native, federal and state lands. The company previously outlined a three-well exploration program in the region for this coming winter, but in filings made public on Oct. 20, Anadarko unveiled plans to drill as many as 11 wells between now and early 2013. See story inside this issue.

Bracing for 15% cap-ex cut

Tight capital markets and slumping commodity prices are starting to leave their mark on North American oil and gas companies, with U.S. investment bank Barclays Capital predicting a 15 percent cut in exploration and production spending across the continent in 2009.

A Canadian investment dealer, Peters & Co., said some junior upstream companies are up against shrinking credit lines, compromising their access to capital, further cutting into capital spending plans for next year.

In a research note to investors, Barclays said it has reversed its earlier predictions of a spending increase across North America next year.

"Lower natural gas prices due to supply growth, budget cuts, pressure on cash flows, credit market issues and con-

see CUT page 25

Chukchi lease sale will trigger major increase in federal grant money

TOM IRWIN

The question of who gets the government revenue from oil and gas activities on Alaska's outer continental shelf is the subject of a continuing debate that has heated up following recent industry interest in exploring the Beaufort and Chukchi seas. The OCS consists entirely of federal land, so that royalties and taxes generated outside the state's three-mile limit go to Uncle Sam, rather than into the coffers of the state or the coastal communities.

But since offshore activities impact local communities and require onshore support, should not the federal govern-

see GRANTS page 26

BREAKING NEWS

3 Conoco profits fall in Alaska: Lower production, volatile prices and higher taxes end run of increasingly profitable quarters

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14 CI belugas on endangered list: NOAA says beluga numbers continue to decline in Cook Inlet, despite subsistence regulation

LAND & LEASING

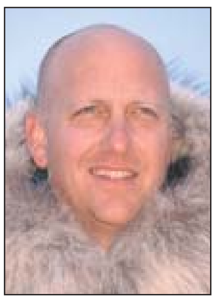
Armstrong's back

Denver independent has returned to northern Alaska, as bullish on oil as ever

By KAY CASHMAN
Petroleum News

The Denver-based independent instrumental in bringing three new oil companies to northern Alaska in less than three years is back. On Oct. 22 an Armstrong Oil and Gas affiliate accounted for 77 percent of the high bids in the State of Alaska's North Slope oil and gas lease sale and 71 percent of the high bids in the state's Beaufort Sea sale.

The last Armstrong affiliate holding acreage north of the Brooks Range Foothills was called Armstrong Alaska LLC. The affiliate that picked up more than 200,000 acres in the Oct. 22 areawide lease sales is called 70 & 148 LLC.



Bill Armstrong, chief executive of all the Armstrong firms

According to the top executive of all the Armstrong companies, Bill Armstrong, 70 and 148 are the latitude and longitude coordinates for Prudhoe Bay, North America's largest oil field.

Why that name?

"It's got good karma," Bill Armstrong told Petroleum News in an Oct. 22 interview.

After selling its northern Alaska assets in 2005 to Eni Petroleum, the last of the three new compa-

see ARMSTRONG page 29

NATURAL GAS

Hydrate estimate set at 85 tcf

USGS publishes assessment of technically recoverable North Slope gas hydrates

By ALAN BAILEY
Petroleum News

The potential volumes of natural gas tied up in gas hydrates in northern Alaska dwarf the volumes being used to drive the economics of a North Slope gas line — a 1995 USGS assessment of U.S. gas hydrate resources estimated that just the gas hydrates associated with permafrost under Alaska's North Slope might contain as much as 590 trillion cubic feet of natural gas. And an evaluation of the known gas hydrates in the area of the oil fields of the central North Slope suggested that these deposits by themselves may contain more than 100 tcf.

But how much of this vast gas resource could actually be developed?

Assessment

As a first go at answering this question, USGS has published its assessment of technically recoverable gas from gas hydrates on the North Slope. USGS has estimated a mean recoverable gas resource of 85 tcf, with a possible range of 25 tcf to 157 tcf, from a 55,000-square-mile region that encompasses the central and southern North Slope; a major portion of the National Petroleum Reserve-Alaska; much of the coastal plain of the Arctic National Wildlife Refuge; and some nearshore areas of the Beaufort and Chukchi Seas.

The high range of uncertainty in the estimate reflects the geologic uncertainty regarding the

see HYDRATES page 16

LAND & LEASING

Alaska takes in $9.1M

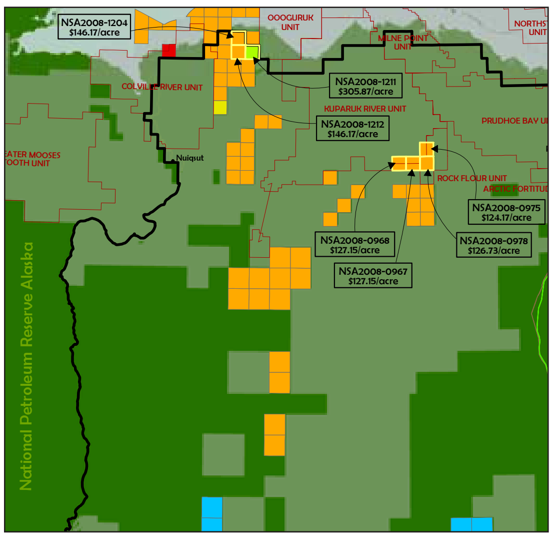
New Armstrong subsidiary mystery bidder in North Slope, Beaufort Sea lease sales

By KRISTEN NELSON
Petroleum News

The State of Alaska brought in more than $9.1 million in apparent high bids at two oil and gas lease sales Oct. 22, more than $2.6 million at the Beaufort Sea areawide sale and more than $6.5 million at the North Slope areawide sale.

These could have been relatively small sales since many of the state tracts on the North Slope and Beaufort Sea are already under lease, but a large number of bids by "70 & 148 LLC" of Denver — a total of almost $6.9 million — kicked up the total acreage receiving bids, as well as the state's high bonus bid take, accounting for 75 percent of the dollar value of high bids.

see LEASE SALE page 30



See full map on page 31 of this issue.

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Chevron moves to new Midtown Anchorage offices

SUSAN CRANE

Chevron's Anchorage office has moved to the JL Tower, 3800 Centerpoint Drive, Suite 100, in Midtown. The phone number remains the same at 907-276-7600.

● FINANCE & ECONOMY

Conoco profits fall in Alaska in 3Q

Lower production, volatile prices and higher taxes end a run of increasingly profitable quarters

By ERIC LIDJI

Petroleum News

Planned maintenance and an increased tax burden significantly decreased profits for ConocoPhillips Alaska in the third quarter of the year, according to data released Oct. 22.

The largest producer in the state earned $556 million over the three months ending Sept. 30, down 27 percent from the $765 million earned during the same period last year.

Companywide, ConocoPhillips earned $5.2 billion during the quarter, a 41 percent increase over the $3.7 billion earned during the same period last year.

ConocoPhillips is the first of the major oil companies to report third-quarter earnings, and typically the only major to report Alaska-specific figures in quarterly filings.

Summer production drops

The third quarter of the year is typically a period of lower production in Alaska, because operators use the summer months for maintenance activities across the North Slope.

A two-day planned shutdown of the trans-Alaska oil pipeline in August, combined with regular maintenance work at the ConocoPhillips Alaska-operated Alpine field in the western North Slope, accelerated regular production declines during the quarter.

ConocoPhillips produced 231,000 barrels of liquids per day in Alaska during the third quarter of 2008, down 9.7 percent from the 256,000 barrels of crude oil and natural gas liquids produced on average each day over the same period last year.

The company recovered some of those losses through higher prices. The price of a barrel of Alaska North Slope crude oil delivered to the West Coast averaged $121.51 during the third quarter of 2008, up 65 percent over the average price from the same period last year.

The company might not be so lucky in the short term, though, because a recent drop in oil prices canceled out record highs hit this summer, keeping prices relatively even across the second and third quarters of this year after five consecutive quarters of rising prices.

Oil prices have fallen more than $25 a barrel since the fourth quarter began on Oct. 1.

Alaska accounted for 72 percent of domestic oil production and 5 percent of domestic gas production for ConocoPhillips during the quarter.

ConocoPhillips produced 102 million cubic feet of natural gas per day in Alaska during the third quarter of 2008, down 12 percent from the 116 million cubic feet produced on average each day over the same period last year.

Nationally, ConocoPhillips saw lower than expected production volumes because a pair of late summer hurricanes in the Gulf of Mexico forced companies to pause operations.

Sales at the Kenai liquefied natural gas plant held steady at 89 million cubic feet per day.

Tax impact year-over-year

Oil prices during the third quarter still remained high enough to trigger new progressive elements of a revised tax code enacted by state lawmakers in November 2007.

Because major portions of the tax went into effect retroactively, ConocoPhillips bore the largest brunt of the tax during the fourth quarter of last year. Therefore, the revised tax covered profits from the third quarter of 2008, but not the same period last year, accounting for some of the discrepancy between production, prices and profits.

Exploration spending down

ConocoPhillips spent $19 million in exploration charges during the third quarter of the year, down from $31 million spent during the third quarter of 2007.

Through the first nine months of the year, the company has spent $55 million on exploration charges in Alaska, down from $80 million over the same period last year.

Considering the size of the exploration programs sanctioned by the company for Alaska over the past two years, some of that decline may be related to increased tax credits for exploration expenses offered by the state through the revised tax passed last fall.

Nationally, ConocoPhillips spent $91 million on exploration during the quarter, down from $119 million spent during the same period last year. But worldwide, exploration expenses rose 22 percent in the quarter, signaling added investment outside the U.S.

ConocoPhillips spent $152 million on depletion, depreciation and amortization expenses in Alaska during the third quarter, down from $165 million over the same period in 2007. ●

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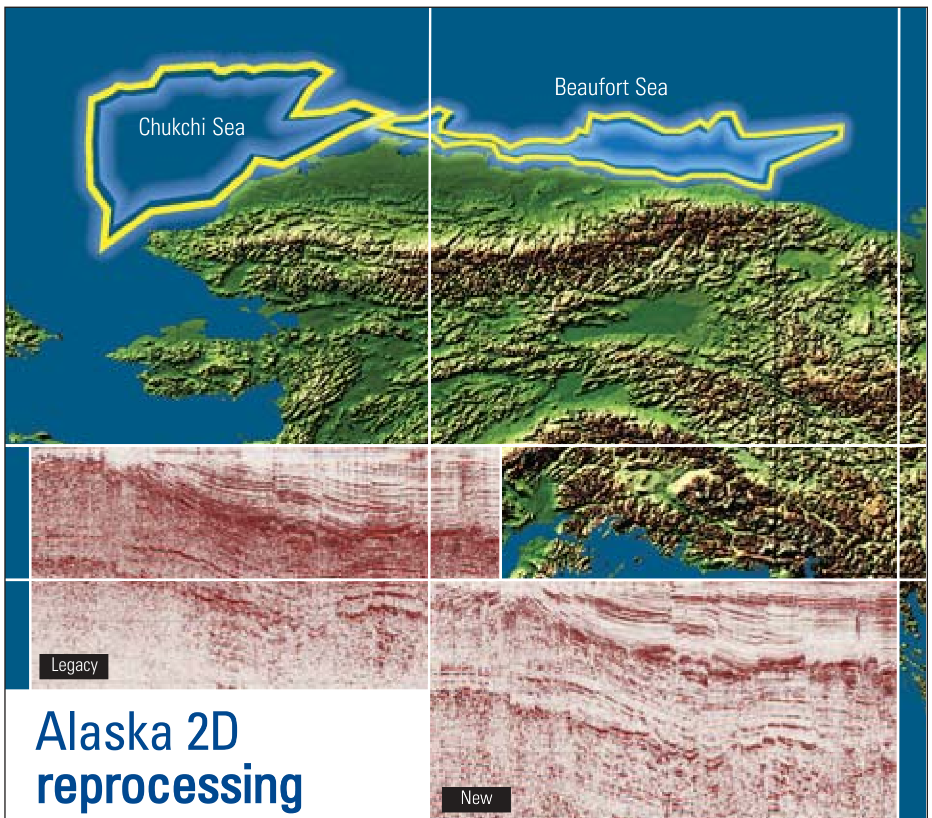

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WesternGeco has completed reprocessing 30,000 miles of Alaska 2D seismic, including 20,000 miles in the Chukchi Sea and 10,000 in the Beaufort Sea. Data processing technology has advanced significantly and is enhancing this valuable legacy data. This new reprocessing incorporates advanced true amplitude and prestack time migration processing flows to generate a far superior image compared to existing data.

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CLARIFICATION

Petroleum News: Clarification on proposed tax for some of Alaska's natural gas reserves

An article from the Oct. 5, 2008, issue of Petroleum News titled "Lawmakers revive reserves tax as proposed ballot initiative after measure failed in 2006" (www.petroleumnews.com/pnarchpop/081005-04.html) reported on a proposed ballot measure to tax natural gas reserves on the North Slope.

The proposed ballot measure follows a similar bill voted down in 2006.

In response to a request for the new 2008 measure, the state accidentally furnished Petroleum News with a copy of the failed 2006 measure. Although the two bills are similar, the sponsors made several changes before reintroducing the proposed ballot measure this year.

The story reported, "The proposed measure would apply to conventional reserves in state units created since 2002 and known to contain at least 1 trillion cubic feet of known natural gas reserves." However, those criteria come from the failed 2006 ballot measure.

In the updated proposal filed in late September 2008, the sponsors changed the requirement to cover conventional reserves in state units in "continual existence" since 1990 and known to contain at least 1 trillion cubic feet of known natural gas reserves.

The new measure also does not apply to gas "first discovered after December 31, 2005."

The sponsors of the bill say the changes were designed to keep the tax from applying to any new discoveries and to future production from the Point Thomson unit, which is currently under litigation after the state moved to terminate the leases earlier in the year.

The new measure also gives lessees longer to use gas for field development without facing the reserves tax, sets out guidelines for how the state should measure reserves and changes the criteria for repealing the tax with construction of a gas pipeline.

The article correctly reported, "The new measure would allow leaseholders to reclaim the entire tax through annual credits. The previous measure included a similar provision, but stopped reimbursing companies after 2030. The newly proposed measure contains no such deadline."

Petroleum News regrets the errors

EXPLORATION & PRODUCTION

Shell moves on carbon storage

Shell Canada will proceed with a C$20 million carbon dioxide storage research project that could result in 1 million metric tons of CO_2 from its Edmonton upgrader being injected into a well 7,500 feet deep.

The Alberta government will contribute C$6.6 million over three years as part of its push to develop and commercialize CO_2 capture and storage.

Rob Seeley, manager of the Shell Quest study, said the undertaking will now move to public information sessions and the drilling of three to five test wells as preliminaries to preparing an application.

—GARY PARK

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ADDRESS
P.O. Box 231647
Anchorage, AK 99523-1647

NEWS
907.770.3505
publisher@petroleumnews.com
or Elidji@petroleumnews.com

CIRCULATION
907.522.9469
circulation@petroleumnews.com

ADVERTISING
Susan Crane • 907.770.5592
scrane@petroleumnews.com

Bonnie Yonker • 425.483.9705
byonker@petroleumnews.com

FAX FOR ALL DEPARTMENTS
907.522.9583

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● NATURAL GAS

FEDC forms in-state natural gas task force

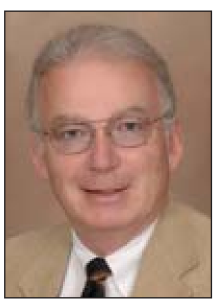
Fairbanks Economic Development Corp. applies think-tank approach; one goal to be sure Fairbanks has a voice in decisions

By STEFAN MILKOWSKI

For Petroleum News

The Fairbanks Economic Development Corp. is applying the same think-tank approach to in-state natural gas as it did last year to the cost of energy in Interior Alaska.

At a preliminary meeting Oct. 22 in Fairbanks, FEDC Chief Executive Officer Jim Dodson, said a new task force would be established within FEDC's Interior Issues Council to focus on the various proposals to provide natural gas for instate use.



JIM DODSON

"As we look at some of the projects moving forward, we want to make sure that Fairbanks has a voice in those projects," he said.

Dodson said the group was not meant to advocate for any specific plan.

Fairbanks North Star Borough Mayor Jim Whitaker, who also spoke at the meeting, said Fairbanks has struggled in the past to ensure that its voice was heard.

"As individuals have thought about public policy and statewide policy, most of that thought has emanated from our friends to the south — from Anchorage," Whitaker said. "And therefore we've had Anchorage-centric solutions that have been ... imposed upon Fairbanks and the rest of Alaska."

Whitaker stressed the need to focus on two key goals identified last year by the cost of energy task force — reduce and stabilize the cost of energy and decrease the emission of small particulate matter in accordance with federal regulations. High energy costs are drawing large amounts of money out of the community, he said, and particulate pollution jeopardizes a potential expansion at the Fort Wainwright Army Post.

Options have challenges

Whitaker described the various gas delivery options as promising but not without challenges.

Large-scale projects like those pursued by TransCanada, Denali, and the Alaska Gasline Port Authority are subject to market forces and have unfavorable timelines, he said.

Fairbanks Natural Gas' plan to bring liquefied natural gas from the North Slope to Fairbanks faces supply limitations, Enstar's proposal to build a "bullet line" from the North Slope foothills to Southcentral faces an uncertain timeline, and the Alaska Natural Gas Development Authority's proposal to bring gas north from Cook Inlet would not meet Fairbanks' gas needs, he added.

Whitaker described ANGDA's plan as well-intentioned but geared toward addressing Southcentral gas supply issues. The proposal would bring gas only as far as Golden Valley Electric Association's North Pole power plant.

"What is being proposed doesn't meet our imperatives," Whitaker said.

Taskforce deadline Jan. 1

According to Dodson, the taskforce will be open to anyone interested in participating. The group will have a deadline of Jan. 1 to complete its findings, a deadline Dodson said was set with the expectation that in-state gas issues will be considered during the legislative session beginning Jan. 20. In light of the short timeline and complexity of the issue, a manager will be hired to chair the group.

"As individuals have thought about public policy and statewide policy, most of that thought has emanated from our friends to the south — from Anchorage. And therefore we've had Anchorage-centric solutions that have been ... imposed upon Fairbanks and the rest of Alaska."

—Fairbanks North Star Borough Mayor Jim Whitaker

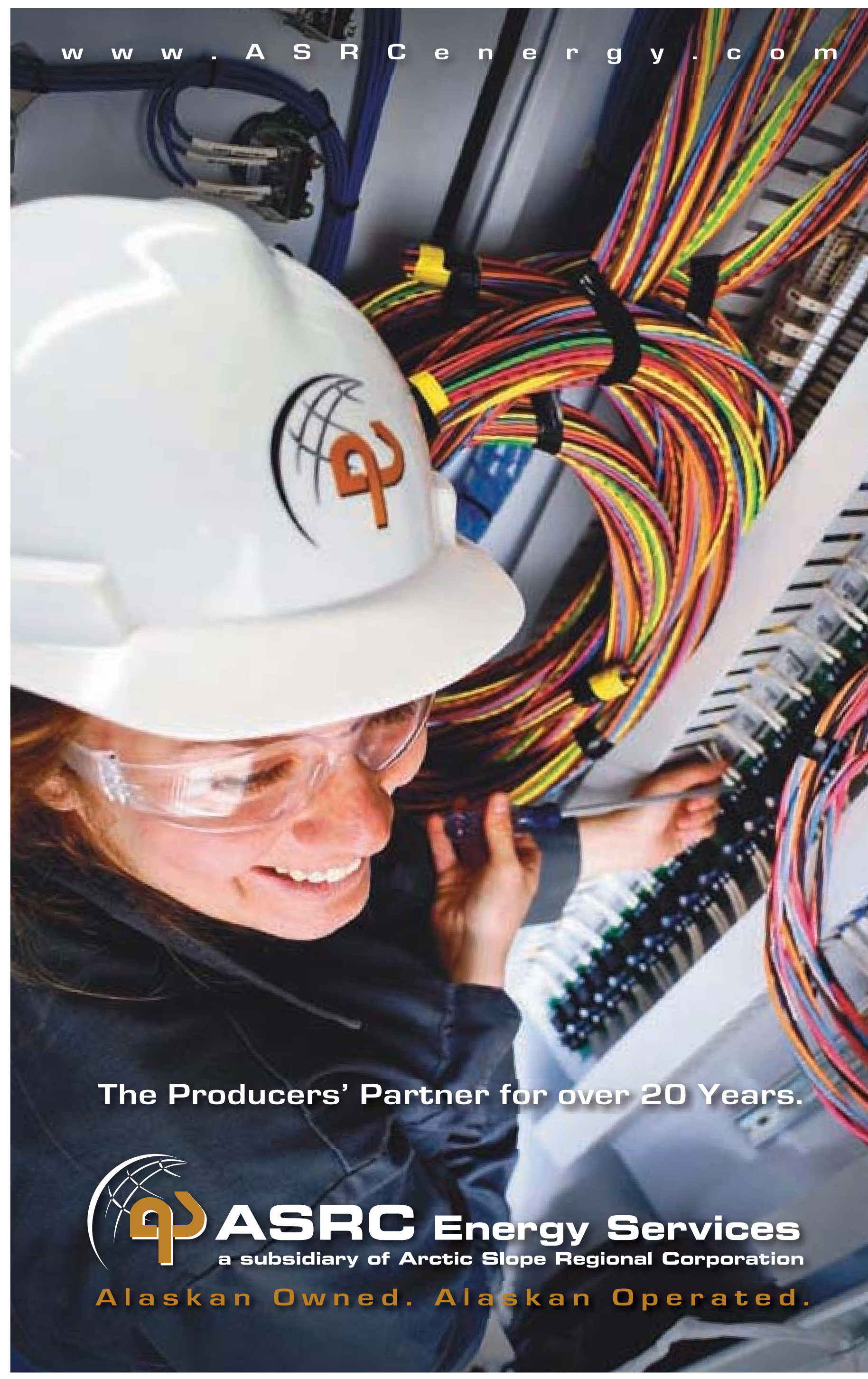
Dodson said in an interview Oct. 20 that FEDC's push for natural gas would not interfere with the group's pursuit of a large-scale coal- and biomass-to-liquids project aimed at providing jet fuel, heating fuel, and electricity for the area.

"I don't see any energy project as competing because we are in such dire need of good energy projects," he said. "We're trying to take a good, hard look at all of them."

About 50 people showed up for the preliminary meeting in Fairbanks, including state lawmakers, legislative candidates, and representatives from Enstar, Anadarko and Fairbanks Natural Gas.

Enstar president Colleen Starring said her company was committed to its bullet line project and planned to spend up to $20 million on it next year, in addition to the $5 million spent this year.

"It's simple," she said. "We need the gas, just like you do." ●



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● UTILITIES

RCA starts net metering discussions

After rejecting federal standards, regulators set out to craft state-specific rule for connecting renewable systems to larger grid

By ERIC LIDJI

Petroleum News

State regulators have started crafting Alaska-specific standards that would let small renewable electric generation facilities hook into major utility systems.

The Regulatory Commission of Alaska opened the dockets on Oct. 22 following an August decision to reject federal net metering and interconnection standards.

Net metering is used nationally to promote small-scale renewable and alternative energy projects, like wind and solar, by paying individual customers for excess power they feed into the large utility grid. Alaska is one of only eight states without net metering laws.

Interconnection rules govern how utilities integrate these facilities with the large system.

Through the new dockets, the commission created two "straw man" proposals, one for net metering and one for interconnection, to serve as a starting point for discussions.

Through the new dockets, the commission created two "straw man" proposals, one for net metering and one for interconnection, to serve as a starting point for discussions.

Two "Straw man" proposals

The net-metering proposal would limit generation to 25-kilowatt systems from a range of renewable sources, as well as landfill gas. The combined output of all net-metered facilities would be restricted to 1 percent of peak demand for a given utilities.

Customers would get first-dibs on the power they create, and utilities would buy excess electricity at the avoided cost of power, a calculation of the amount a utility saves from buying, rather than making, power. Utilities would check meters monthly, rather than yearly, to more accurately account for seasonal fluctuations in temperature.

Net-metered customers would not be allowed to "double-dip," by also participating in a utility-sponsored program like Sustainable Natural Alternative Power, or SNAP, which funds small-scale alternative power projects through voluntary donations from customers.

The interconnection proposal would use Institute of Electrical and Electronics Engineers standards as a starting point to crafting more Alaska-specific guidelines.

The commission previously rejected those standards, saying they "may not be applicable to Alaska given the isolation of our grid and the smaller size of our electrical utilities."

The new regulations would apply to all systems covered by the net metering proposal.

The commission plans to hold "technical conferences" on each proposal to get comments on the standards. The commission is required to rule on the dockets within two years.

Debate over federal standards

The Environmental Policy Act of 2005 created new guidelines for net metering and four other standards related to energy creation. While the federal law did not force individual states to adopt the measures, it did require state regulators to consider the proposals.

State regulators decided not to adopt those federal measures after two years of discussions, workshops and public hearings that occasionally pitted Alaska utilities against local advocacy groups and individual customers.

Proponents of net metering believe it would plant the seeds for a renewable energy industry in Alaska by encouraging customers to build, install and maintain a diverse portfolio of generation facilities, eventually decreasing the need for fossil fuels.

But many utilities believe federal net metering standards would violate "cost causer-cost payer" principles, the idea that customers pay only for services they use.

A central component of net metering regulations concerns how utilities compensate small generators for excess electricity. The federal standards required utilities to buy power at the same retail rates they charge. Local utilities challenged that rule, saying rates include fees to recover costs not incurred by net-metered customers, like the long-term expense of building new transmission lines, or system-wide maintenance.

The decision to build Alaska-specific standards around the avoided cost of power is an attempt to find a compromise between advocates and opponents.

Alaska electric utilities differ considerably from those across the Lower 48. To serve a small population spread across a large area, almost every electric utility in Alaska is an integrated cooperative or municipally owned monopoly covering a specific region with utility-owned generation, transmission and distribution facilities. ●

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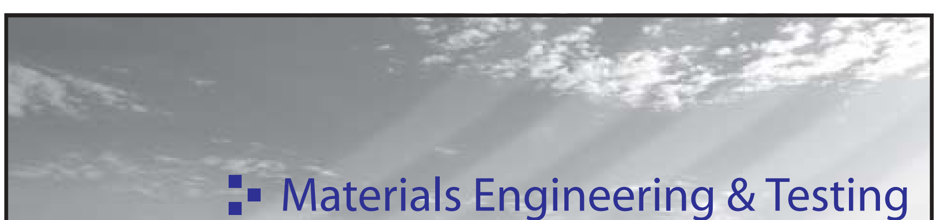

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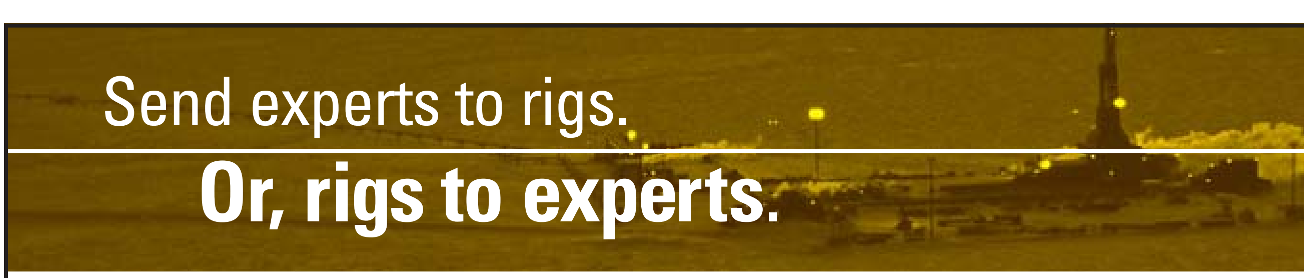

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● LAND & LEASING

B.C., Alberta fastening seat-belts

Land sales steady in British Columbia, Alberta sales down; both provinces bracing for pullback; tougher for small companies

By GARY PARK
For Petroleum News

British Columbia continues to flourish, while Alberta flounders at government-run auctions of exploration rights, although both are bracing for a sharp industry pullback.

What would previously have been a headline-grabbing event, but is now in the hum-drum category, saw the British Columbia government rake in C$151 million at its October sale, raising the year-to-date total to C$2.46 billion (compared with C$591 million at the same time last year), with two auctions to come.

Meanwhile, Alberta collected just under C$39 million, lifting its tally from 20 sales this year to C$1.07 billion, about C$110 million behind a similarly undistinguished performance at the same time last year.

But the Alberta government is digging in, refusing to bend at this point on plans to impose royalty increases on Jan. 1.

Energy Minister Mel Knight told a Calgary conference that adjustments are only possible if the province finds the increased take damages its economy.

"It is only fair for me to tell you that implementation of the new royalty framework will proceed," he said.

At the same time, Knight said "the door is never shut and we continue to work with our industry partners to be sure that as we move forward ... we do so in a manner that does not have negative effects on our economy."

He said "this isn't the first time the energy industry and the government of Alberta have been called upon to partner up, get in harness and pull this thing together and make it work for Albertans and for Canadians and I believe we will be able to do that again."

Concerns about credit, taxes

John Brussa, senior partner with the law firm of Burnet Duckworth and Palmer, was less upbeat, arguing the Canadian oil industry will find it tougher today to "drill for oil on Bay Street (the Canadian equivalent of Wall Street) than it is in Alberta."

Murray Edwards, vice chairman of Canadian Natural Resources, said the pending royalty hike along with a high-cost environment and current commodity prices mean Alberta is "the least attractive regime for conventional natural gas in North America right now."

He told reporters at the conference that given Alberta's punitive royalty regime, the current fragile condition of capital markets and the free-fall in commodity prices, new gas projects in Alberta would be uneconomic.

Edwards said Alberta is misreading the tea leaves in the prevailing economic and business environment by not throttling back on its royalty changes.

"I think the industry was hoping to see some kind of step back or pause from government to reflect what's happening globally and given what we're seeing in other jurisdictions. I think there's still a fair bit ... of concern about where we sit in Alberta relative to other jurisdictions," he said.

Dave Collyer, president of the Canadian Association of Petroleum Producers, offering a candid assessment of the investment outlook, said that if he was on the board of a company "I would not be recommending that decisions should be made now, whether it's on a big project or the future of the company."

He said there is a "need for good public policy in this environment with a view to some of the longer-term issues ... not getting too caught up in the near term but also recognizing there's some tough public policy decisions that need to be taken around some of these near-term issues."

Edwards said it will be tougher for smaller companies to ride out the storm, given the state of their balance sheets and cash flows, but he is not counting on a wave of mergers and acquisitions in the short-term, expecting instead that larger companies will focus on "keeping their own house in shape" rather than taking out rivals.

"I don't see anybody having great aspirations to look for acquisitions given the uncertainty out there," he said.

B.C. concerned with sales

Even British Columbia Energy Minister Richard Neufeld is conceding his province's run of blockbuster land sales is likely winding down because of the economic downturn and the fact that the most desirable land positions have been locked up.

"As B.C.'s oil and gas industry moves towards the production stage, interest remains solid," he said in a statement. "We continue to be very pleased at the level of investor interest."

The latest sale generated leases and drilling permits for 99 parcels covering 68,429 hectares (one hectare is 2.471 acres), while the Nov. 12 sale is offering 57 parcels covering 41,793 hectares, reinforcing Neufeld's outlook.

Regardless, British Columbia has seen its average per-hectare price soar to C$3,657 this year from C$1,441 in 2007, while Alberta has slumped to an average C$364 from C$458. ●


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FINANCE & ECONOMY

Mingé to head BP Exploration (Alaska)

BP Exploration (Alaska) said Oct. 17 that John Mingé has been named president effective Jan. 1, 2009.

Mingé has held engineering and executive posts with BP around the globe and will continue BP's commitment to a long-term future in Alaska, the company said. He is currently president of BP Indonesia and head of BP's Asia Pacific unit.


JOHN MINGÉ

He replaces Doug Suttles, who becomes chief operating officer for BP's global exploration and production business. Suttles will report to E&P chief executive Andy Inglis; Suttles' area of responsibility will include Alaska, the North Sea and other regions and functions, the company said. Suttles became president of BP Exploration (Alaska) Jan. 1, 2007.

"I've known John for many years," Suttles said in a statement. "He is a skilled engineer, an experienced operator and a talented businessman. I know he will be very effective at continuing to drive efforts to unlock our next 50 years in Alaska."

"I am glad to have the chance to lead one of the largest and most important businesses in BP's global portfolio," Mingé said. "I am impressed at the quality of BP's team in Alaska."

BP said Mingé began his 25 years with BP as a drilling engineer in the Gulf of Mexico. Prior to his position as BP Indonesia president, he was president of exploration and production for Vietnam and China. He holds a Bachelor of Science degree in mechanical engineering from Washington State University. He will be joined in Alaska by his wife, Jackie, and their two children.

—PETROLEUM NEWS

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● FINANCE & ECONOMY

EnCana rocked and rolled

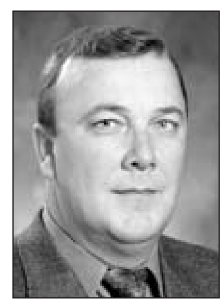
Two bomb attacks on sour gas pipelines in British Columbia; buffeting from markets forces postponement of company split

By GARY PARK

For Petroleum News

EnCana, one of North America's largest oil and gas companies, has experienced a week it won't look on with anything other than despair.

Citing the uncertain times, it shelved indefinitely plans to split the company into separate units to run its natural gas and oil businesses, an announcement that was wedged between two potentially deadly bombing attacks on sour gas pipelines in northeastern British Columbia.


EnCana CEO Randy Eresman

Following quickly on a commitment to proceed with the corporate reorganization, despite global financial turmoil, it did a swift about-face as its market value nosedived from a peak of $75 million in May to barely $30 billion.

The Globe and Mail reported Oct. 10 that the rising costs of loans due to new interest rates and covenants, along with a shortage of lenders, would likely delay the creation of newly labeled Cenovus Energy to run the integrated oil operations (dominated by its oil sands projects), leaving EnCana as a pure natural gas producer.

EnCana Chief Executive Officer Randy Eresman said there was "too much uncertainty in global debt and equity markets to proceed with external approvals at this time."

"We cannot predict when the appropriate financial and market conditions will return, but EnCana will be prepared to advance the proposed transaction when it determines the conditions are appropriate," he said.

EnCana held $10 billion in long-term debt at the end of June, indicating Cenovus, with one-third of the assets, would be faced with arranging $3.3 billion in debt of its own.

Analysts: takeover possible

In addition, Canaccord Adams analyst Richard Wyman told clients he "surmised the delay ... is based on concerns that the successor entities are each small enough to be susceptible to unwelcome takeovers."

Terry Peters, an analyst at Canaccord Capital, had previously calculated that ExxonMobil, Shell, BP, Total and Chevron had a combined $65 billion in cash and a record of buying when oil stocks were out of fashion.

He pinpointed EnCana (either in whole or in part) as a takeover target along with Suncor Energy, Canadian Natural Resources, Talisman Energy and Nexen.

Wyman said the current commodity price environment suggests EnCana will put more emphasis on investing for return on capital than growth in 2009.

"EnCana is one of the lowest-cost operators in the industry, so its financial performance is reasonably resilient to natural gas price volatility," he said.

Philip Skolnick of Genuity Capital Markets told the Globe and Mail EnCana has a smart management team that apparently "decided it doesn't make sense to get rid of the synergies they have now with the cash flow of the combined company."

Esther Mui, senior vice president at Dominion Bond Rating Service, said the company made the right move.

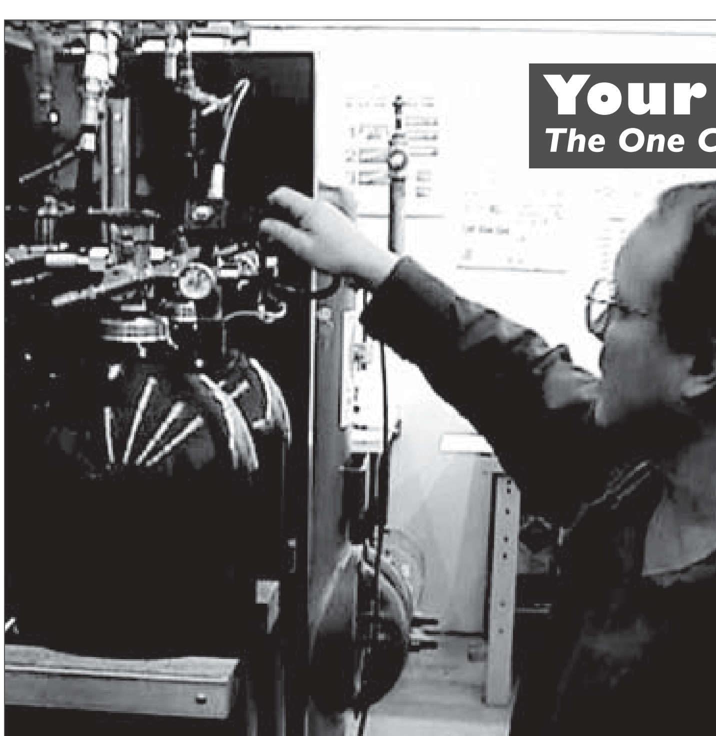
"They are more diversified, the market is difficult, and they don't have a lot of financing needs in the next couple of years," she told the Financial Post.

Valuation a concern

When the split was unveiled in May, EnCana was certain it wasn't receiving proper value on the stock market. At that time in New York it was heading towards $90 and there were no worries about negotiating the necessary debt to complete the split in December.

Robert Plexman, a CIBC World

see ENCANA *page 9*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continued from page 8

ENCANA

Markets analyst, said the right decision was made at the time when "valuation multiples, especially for high-growth natural gas exploration and development companies were at a premium and it made sense for EnCana to try and capture some of that."

He underscored EnCana's accompanying decision to hedge 2.5 billion cubic feet per day (or about 60 percent of its total production) at an average US$9.15 per thousand cubic feet for the 2009 gas year.

"EnCana typically likes to hedge about half of its production at about $8.50 per thousand cubic feet ... so, by my calculation, they've done exceptionally well here in locking in 62 percent of their production," Plexman said.

Eresman also said EnCana is taking a "measured approach" in developing its 2009 budgets by maintaining "capital discipline" and being "even more focused on capital preservation" than usual.

Plexman interprets those comments as a sign that EnCana plans to slow down, but a company spokesman said that for now the company is on track to meet its guidance numbers and 2009 remains an unknown until the budgets are set.

However, the company tried to calm any anxieties among shareholders by noting that 78 percent of its outstanding debt is fixed-rate.

Upcoming debt maturities of $250 million in August 2009 and $200 million in August 2010 are modest alongside EnCana's committed bank credit lines of about $4.8 billion, of which $2.7 billion was available at Sept. 30.

Even so, Michael Tims, chairman of investment dealer Peters & Co., said EnCana's oil sands and its natural gas assets (because of short-lived reserves) require it to "keep spending in order to generate the necessary cash flow."

In addition, the fluctuations in refining and marketing margins pose a challenge for investors to assess risk, Tims said.

Two explosions reported

While grappling with one monumental decision, EnCana suddenly found itself in the international spotlight as the possible target of ecoterrorists in what the Royal Canadian Mounted Police said were attempts to damage "important Canadian infrastructure."

The police believe two explosions along sour gas pipelines in British Columbia are tied to a letter sent to news media in the region demanding that oil and gas projects be shut down.

RCMP Sergeant Tim Shields said the two events appeared to be related and were being taken "very seriously," to the point of involving Canada's Integrated National Security Enforcement Team.

The role of INSET, according to the RCMP, is to "detect, prevent, disrupt and investigate terrorist targets and ultimately bring terrorists to justice prior to serious, violent, criminal acts being perpetrated in Canada and/or abroad."

Letters sent to regional media outlets, including the Dawson Creek Daily News, set a deadline for "EnCana and all other oil and gas interests," warning "we will not negotiate with terrorists, which you are as you keep endangering our families with crazy expansion of deadly gas wells in our home lands."

EnCana said it had received no direct warnings of sabotage aimed at its facilities.

In addition, Canaccord Adams analyst Richard Wyman told clients he "surmised the delay ... is based on concerns that the successor entities are each small enough to be susceptible to unwelcome takeovers."

The second explosion left a small crater beneath the pipeline that carries 40 million to 50 million cubic feet per day of gas with a significant hydrogen sulfide content.

A small leak was "quickly contained by pipeline workers," Shields said.

The blasts revived memories of oil patch bombings and vandalism in the 1990s, which resulted in almost two years behind bars for an Alberta rancher, Weibo Ludwig. He is now believed to live in northwestern Alberta, not far from where the British Columbia incidents took place.

Andrew Nikiforuk, who wrote a book on the Ludwig story, said that in the space of two years before the attacks by Ludwig, there were more than 600 acts of vandalism and industrial sabotage in the region, including six other bombings.

He said workers have died from exposure to sour gas and landowners have lost horses and cattle on both sides of the Alberta-B.C. border.

Tensions have been high over recent years as many landowners have been forced to allow access to their properties by oil and gas companies which own the subsurface rights. Gwen Johansson, president of the Custodians of the Peace Country Society, said the interests of landowners must be recognized, "otherwise if you back people into a corner they have nowhere to go."

Her call for legislation to provide a dispute mechanism was rejected by John van Dongen, British Columbia's Solicitor-General and Minister of Public Safety.

"This is a totally inappropriate, totally unacceptable, totally despicable criminal act," he said, suggesting there were other ways to make a case for changes to land-use and energy industry decisions. ●

FINANCE & ECONOMY

Elton warns of effect of falling oil price

A state senator says the downward trend in crude oil prices could have State of Alaska budget writers figuring how to make ends meet next session.

Juneau Democrat Kim Elton, a member of the Senate Finance Committee, says the price of Alaska crude oil needs to be about $75 to $80 per barrel to cover current state spending.

The price Oct. 17 fell below $70 per barrel.

State lawmakers set aside $5 billion of a projected surplus last session that Elton says was in anticipation of a potential rainy day.

He says he now sees thunder clouds on the horizon.

Elton says the last session was spent deciding how to spend a huge surplus but the next session may be a throwback, with a discussion of a fiscal plan.

—THE ASSOCIATED PRESS

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FINANCE & ECONOMY

Alaska perm fund to again get 50% of royalties after bill passed in '03 repealed

Beginning in October, 50 percent of the royalties generated from mineral leases issued after Dec. 1, 1979 will be placed in the Alaska Permanent Fund, increasing from the 25 percent that has been transferred since 2003. The increase is due to the automatic repeal of House Bill 11, passed in 2003, which temporarily set the rate at 25 percent, down from the original rate of 50 percent, the Alaska Department of Revenue said Oct. 23.

Article IX, Section 125 of Alaska's Constitution provides that at least 25 percent of all mineral lease rentals, royalties, royalty sale proceeds and federal mineral revenue sharing payments and bonuses received by the state shall be placed in a permanent fund, Revenue said.

Under legislation passed in 1980, 50 percent (instead of the constitutionally required 25 percent) of the royalties from mineral leases issued after Dec. 1, 1979, was placed in the Alaska Permanent Fund.

In 2003, at a time when oil prices were low and the state was concerned over finances, the 1980 legislation was modified by the passage of HB 11 which became effective on Aug. 15, 2003. Since then, 25 percent of rents and royalties from all leases have gone to the Permanent Fund.

HB 11 had conditional repeal language that provided that when the cumulative effect of the reduction in deposits to the Permanent Fund caused by HB 11 resulted in a $20 or more reduction in the Permanent Fund Dividend, HB 11 would be repealed and the deposit amounts would return to 50 percent. The calculated reduction of the 2008 dividend was $23.67, exceeding $20, so HB 11 was repealed as of Oct. 1.

—PETROLEUM NEWS

GOVERNMENT

December rollout for state energy plan

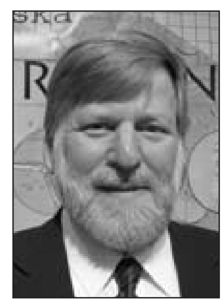
Alaska Energy Authority to hold public meetings to vet plan for lowering energy costs in local communities across the state

By ERIC LIDJI

Petroleum News

The state expects to roll out a short-term plan to reduce energy costs in Alaska at the start of December, the state energy coordinator told lawmakers on Oct. 21.

The plan is designed to help communities prioritize local energy projects, Steve Haagenson told the Alaska Renewable Energy Task Force, a joint committee.



STEVE HAAGENSON

Tailored to distinct regions and individual communities, the plan will compare current costs for energy produced from diesel fuel against probable costs for energy created from alternative sources. This "focusing tool" is meant to help communities choose projects, as well as guide state lawmakers and the private sector in funding and business decisions.

"We may have to do some partnering between these two entities," Haagenson said.

Gov. Sarah Palin appointed Haagenson to be the first state energy coordinator in March 2008. Through the position, Haagenson also became the executive director of the Alaska Energy Authority, a public corporation of the state.

Over the summer, Haagenson and a team from the Alaska Energy Authority traveled to nearly 30 communities learning about energy habits, untapped fuel sources and the local attraction or objection to different energy projects.

The plan to be unveiled in December will include a detailing of all the energy used in Alaska for electricity, heating and transportation, compiled by the Institute of Social and Economic Research, an arm of the University of Alaska Anchorage.

Haagenson said the Alaska Energy Authority would hold 12 to 15 public meetings in rural Alaska starting in January, after releasing the new plan. He said the meeting will allow communities to question the "assumptions and methodology" of the plan.

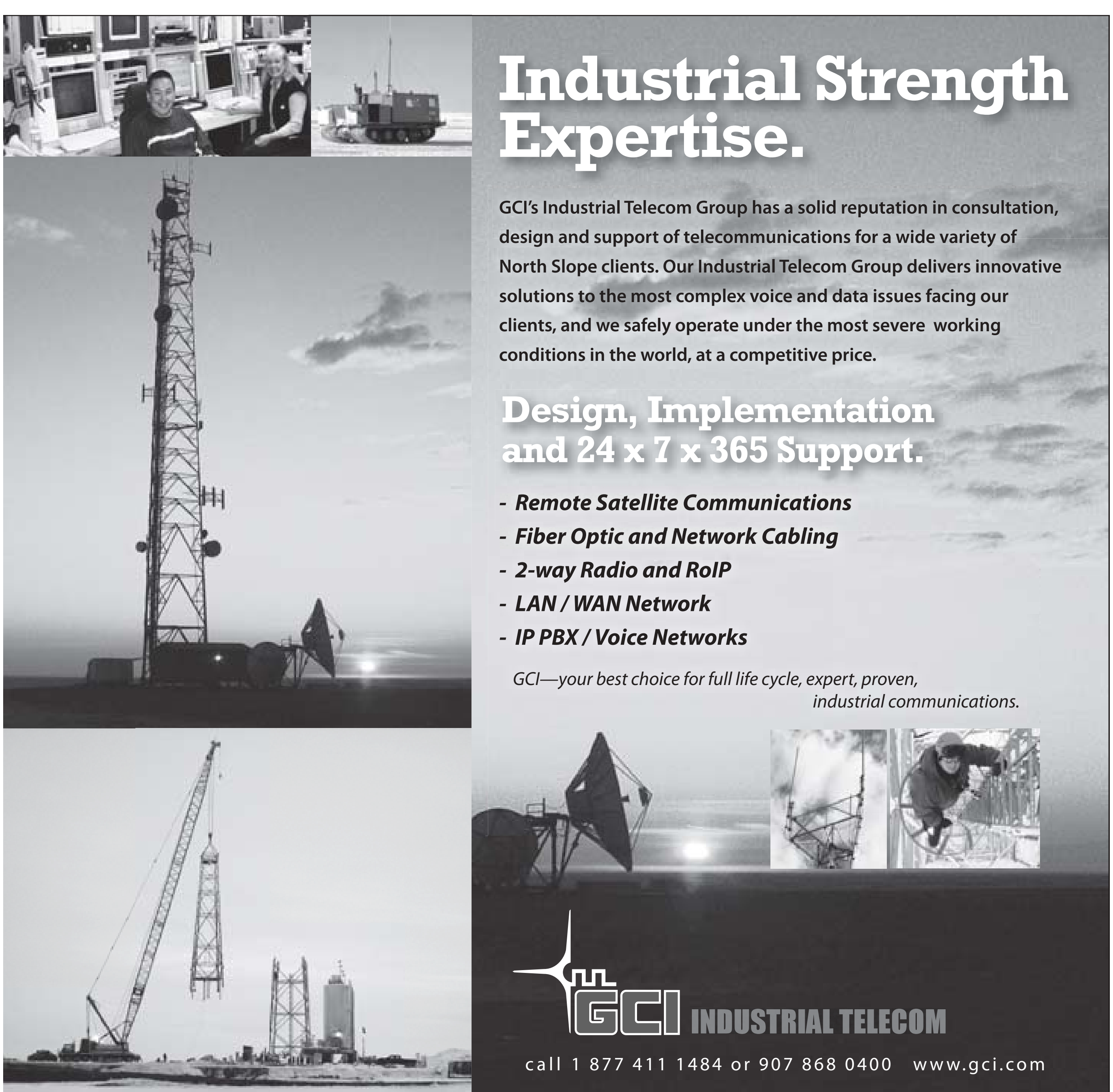
Concerns about overload

Haagenson said the Alaska Energy Authority has substantially increased its activities since the passage of a bill earlier this year creating a renewable energy grant fund.

The program puts the Alaska Energy Authority as the lead agency in charge of funneling state dollars to renewable energy projects. Various proposals thrown around this summer included spending $21 billion on energy projects over the next seven years.

Haagenson expressed concern about that increased workload impacting the Alaska Energy Authority and permitting agencies in the state Department of Natural Resources.

"We definitely have bumped the ceiling on what we can produce. … I got the egg in our mouth. We closed our jaw back together. But if you give me an egg that's ten times bigger next year, I'm not sure how we're going to handle that," Haagenson said. ●



● GOVERNMENT

Canada votes for status-quo

Harper builds on numbers without achieving absolute majority and faces three parties with strong environmental policies

By GARY PARK
For Petroleum News

Stephen Harper will remain Canada's prime minister with a slightly strengthened hold on power, but facing three opposition parties which claimed a combined 54 percent of the total vote and all advocating a tougher approach on greenhouse gas emissions.

Whether they will be eager to test their policies in the House of Commons during a time of economic chaos is another matter.

Harper has said his re-elected government will press ahead with its plan to reduce GHGs in absolute terms by 20 percent from 2006 levels by 2020.

He has also vowed to work with governments in Canada's provinces and northern territories and North American trading partners to develop and implement a continental cap-and-trade system for GHGs and air pollution, targeting implementation over the 2012-2025 period.

No clear majority

Having seen his hopes for a clear majority evaporate in Quebec, where voters rebelled against plans to slash cultural spending, Harper's Conservative Party will send 143 Members of Parliament to the new House of Commons, up 19 from the pre-election level.

The once-dominant Liberal party went into a tailspin, electing 76 MPs, down 27 from the 2006 vote, and the Bloc Quebecois, which only contests seats in Quebec where its ultimate goal is separation of the French-speaking province from Canada, was virtually unchanged with 50 MPs.

Easily the biggest winner was the left-leaning New Democratic Party under Jack Layton, which climbed from 29 MPs to 37.

Although unable to win any of Canada's 308 constituencies, the Green Party collected 7 percent of the vote, eating into areas where the Liberals might otherwise have bolstered their numbers.

In an election where issues other than the economy were wiped off the table, Harper declared his top priority will be to take "whatever steps are necessary" to protect Canadians from the ravages sweeping the globe.

"These are challenging times ... but I want to assure Canadians that, together, we will weather the storm," he said.

Harper did not outline specific measures that are being explored by the government, Bank of Canada and major banks, although there is speculation that his six-point plan could involve government guarantees on bank loans.

He would only concede the options being studied "do not involve a significant outlay of taxpayers' money."

The plan involves the recall of Parliament this fall and the tabling of a fiscal update by the end of November.

He will also convene a meeting of provincial and territorial premiers to discuss the financial crisis.

Most political observers think there won't be much appetite among politicians or Canadians to advance costly environmental measures. They believe it's unlikely that Layton will get enough backing for his promise to halt any new oil sands development until carbon emissions are capped.

Almost by default, given the shaky outlook for oil prices and the inability of companies to finance multi-billion dollar ventures, the oil sands seem headed for a drastic slowdown.


STEPHEN HARPER

Similarly, there was little evidence of support among voters for the Liberals' so-called Green Shift plan, outlining plans for a revenue-neutral carbon tax that would offset such a tax by introducing lower income taxes to limit the impact on Canadians.

The policy would have immediately imposed a tax of C$10 per metric ton of GHGs, rising to C$40 within four years — almost a copy-cat version of British Columbia's highly unpopular carbon tax.

David Keith, a climate change scientist at the University of Calgary, accurately predicted that the Green Shift plan would get "thrashed pretty hard" by voters.

Gary Leach, executive director of the Small Explorers and Producers Association of Canada, said the Liberals had failed to adequately explain how their approach would reduce GHGs.

He noted that even environmental activists had conceded they could only "resonate and connect" with the bulk of Canadians when everyone had regained a feeling of economic security and felt confident about the future.

Raw bitumen ban still alive

The one troubling issue that remains alive is Harper's pledge to stop companies from exporting raw bitumen for upgrading to any countries with lower GHG standards than Canada — a policy seen as taking direct aim at plans by Enbridge and Kinder Morgan Canada to build pipelines from Alberta to tanker ports on the British Columbia coast for shipment to Asia.

Layton's NDP had made a similar promise, stating that "because the need for oil and gas will not disappear overnight we will discourage bulk exports of our unprocessed resources to the U.S. and China and encourage responsible upgrading, refining and petrochemical manufacturing here in Canada."

The NDP also said it wants to make "big polluters pay" through a cap-and-trade system, setting fixed limits on pollution and tough penalties on those who exceed the limits.

The party's long-term target is to reduce GHGs to 25 percent below 1990 levels by 2020 and 80 percent by 2050.

Although Harper has shown no taste for NDP policies, he may be forced to make some concessions to keep his hold on power, given that the Conservatives and NDP together have more than enough votes to pass legislation.

Harper has yet to lay out the specifics of his bitumen export ban, leaving Enbridge's Northern Gateway project in an uncertain state.

However, Chief Executive Officer Pat Daniel doubts a ban would affect Gateway because his company is eying a broader market in Asia and California rather than a localized market in China.

Interest in Gateway

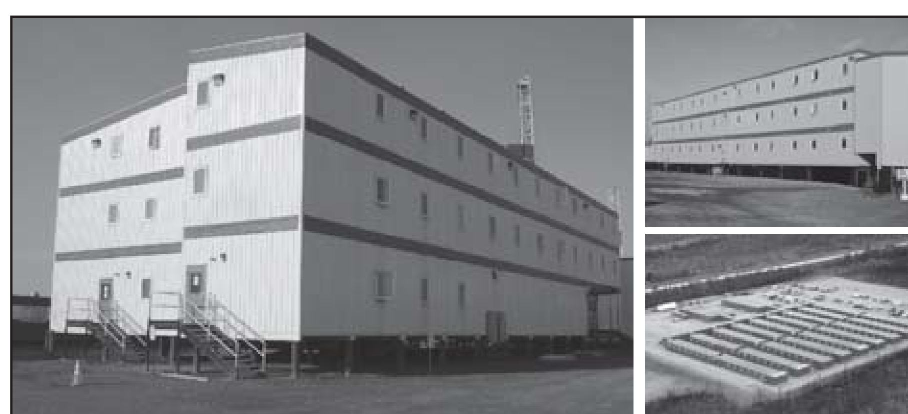
Regardless, the project is drawing a lot of interest and Enbridge is pondering making additional investment units available to potential shippers, giving them priority access to the project that is designed to ship 525,000 barrels per day of bitumen out of Canada and import 193,000 bpd of condensate to thin petroleum products for pipeline transport, with an in-service date of 2014-15.

So far, Enbridge has raised C$100 million from Western Canadian producers and Asian refiners through the sale of 10 units at C$10 million each, giving those backers an option to have status as founder shippers and to take an equity stake in Northern Gateway.

An application to the National Energy Board is expected to be ready in 2009, but timing has not yet been determined.

Enbridge is also scheduling open houses in British Columbia and Alberta this fall and talks with First Nations on agreements that aboriginal communities have a chance to own a portion of the pipeline.

Kinder Morgan, although operating with a low public profile, is also selling a 400,000 bpd TransMountain pipeline to deliver Alberta crude to Asian markets, with a northern expansion of its existing system to Kitimat and a southern expansion to the Greater Vancouver area and Washington state. The combined volume would be 700,000 bpd. A company spokesman said efforts are under way to attract shippers. ●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OUR ARCTIC NEIGHBORS

COURTESY EILIV LEREN/STATOILHYDRO

StatoilHydro's expenses are rising at the Melkoya LNG plant near Hammerfest.

Costs soaring for Norway's Snohvit LNG project

StatoilHydro has revised its investment estimate for phase 1 of the Snohvit offshore Arctic LNG project up to a total of NOK 48.1 billion ($7.3 billion), an increase of NOK 3 billion ($455.3 million) compared to the September 2005 estimate, the company said in a release Oct. 15. The first of four phases is development and startup. The LNG plant onshore at Melkoya came on-stream in September 2007 but has been undergoing technical difficulties. All the additional expenses relate to completion of the plant.

Since a scheduled shutdown at Melkoya this summer, Snohvit has maintained stable production at around 80 percent of planned capacity, according to StatoilHydro. "During a scheduled shutdown in October 2008 a number of meas-

see **BRIEFS** *page 13*

● OUR ARCTIC NEIGHBORS

Tanker collision tests Russian readiness

Government, oil company happy with results of rescue, cleanup exercises at newly opened Varandey terminal in Barents Sea

By SARAH HURST
For Petroleum News

The Varandey oil export terminal in the Barents Sea, which began working in June, hosted international training exercises for tanker and oil spill management Oct. 1, according to operator Lukoil. The exercises were aimed at improving interaction between Russian government agencies and relevant Lukoil services, and assessing the qualifications of personnel and the efficiency and technical capabilities of available equipment.

COURTESY LUKOIL

Russian emergency services and oil company Lukoil handled a simulated spill at the Varandey terminal.

A shuttle tanker with a deadweight of 70,000 tons loaded with crude oil was involved in a mock collision with a supply vessel in the vicinity of Varandey's fixed offshore ice-resistant offloading terminal. A fire broke out on board the oil tanker, several people were injured and three crew members were found overboard. The first tank was also depressurized, which resulted in an oil spill of about 800 tons (5,864 barrels).

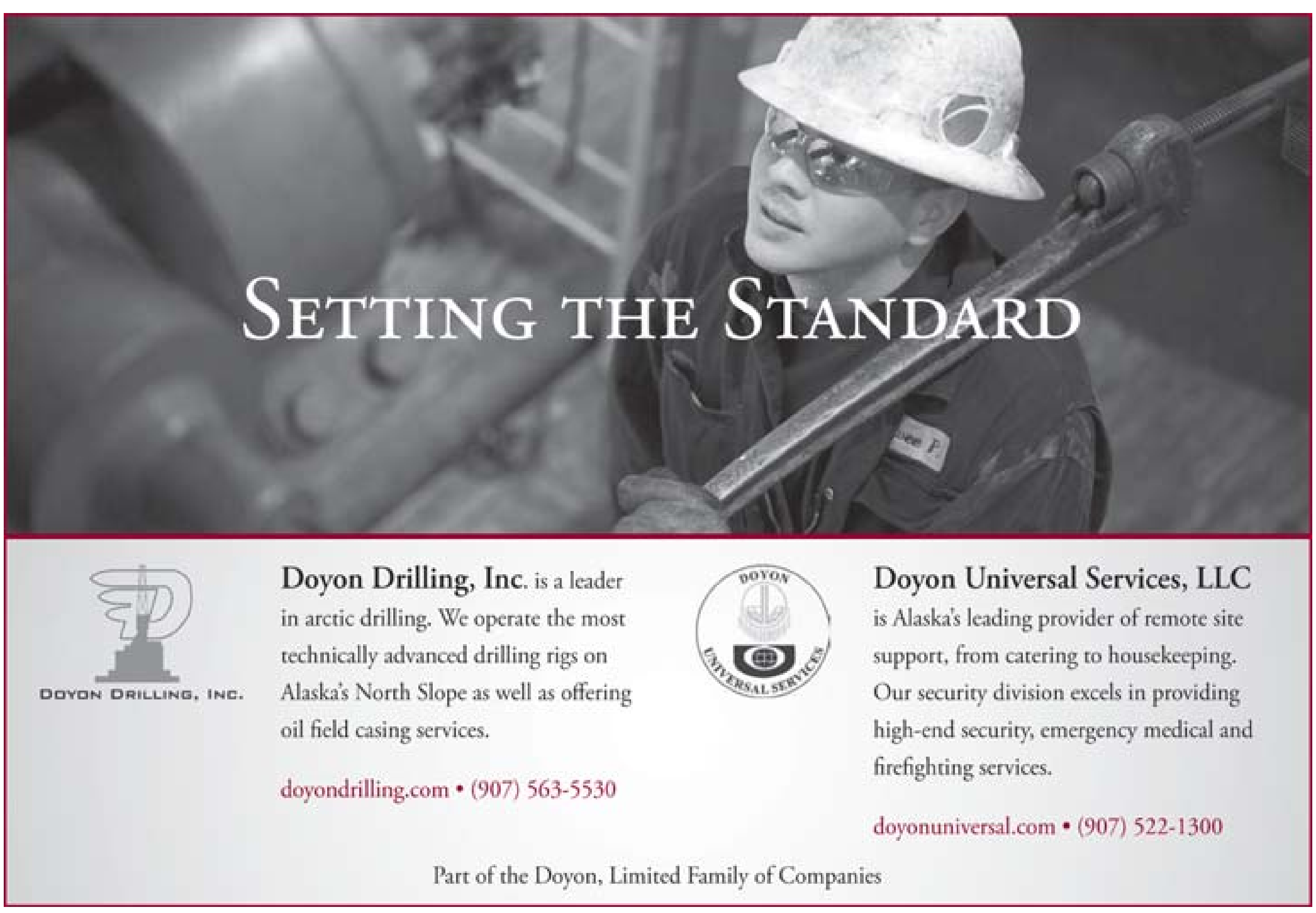
To extinguish the fire, an icebreaker and a harbor tug were sent to the damaged vessel. An Mi-8 helicopter rescued the crew members from the water, deplaned the rescuers on board the oil tanker and evacuated the injured. Airplane investigation and computer modeling results suggested that oil booms should be deployed to contain and eliminate the oil spill. Two boats for the oil boom assembly, four oil-spill boats, one tug boat and five skimmers participated in the operation.

Exercise successful

"As a result of prompt measures, the oil spill in the vicinity of the offshore oil offloading terminal was liquidated," Lukoil said in a release. "Five hundred and fifty tons of oil-contaminated water was collected into special containers. However, part of the oil spill reached the shore due to unfavorable weather conditions. Therefore, extra forces and resources were deployed to protect and decontaminate the coast." Within a five-day period 3,000 tons of oily soil was collected and transported to a landfill, the company added.

"In spite of the fact that the Varandey terminal as a whole, and its offshore section, in particular, are perfect facilities, including from the point of view of environmental protection, Lukoil regards support of its environment-oriented infrastructure as a top priority," said Lukoil Vice President Anatoly Barkov. "These

see **READINESS** *page 13*



continued from page 12

BRIEFS

ures will be implemented to improve the regularity of the plant, including the replacement of seawater coolers and measures to limit the emission of nitrogen oxide and carbon dioxide," the company said.

The cost of phases two to four — scheduled for the period 2015 to 2032 — has also been revised upwards, to NOK 20.8 billion ($3.2 billion), which is NOK 7.5 billion ($1.1 billion) higher than the 2005 estimate. "The increase is in its entirety due to the cost of development related to for example drilling rigs and other material," the company said. "No contracts have been signed for this work. A final concept choice has still not been made for the future compression solution on the field. Hence the uncertainty of this estimate is considerable. Snohvit is still a highly profitable and attractive project."

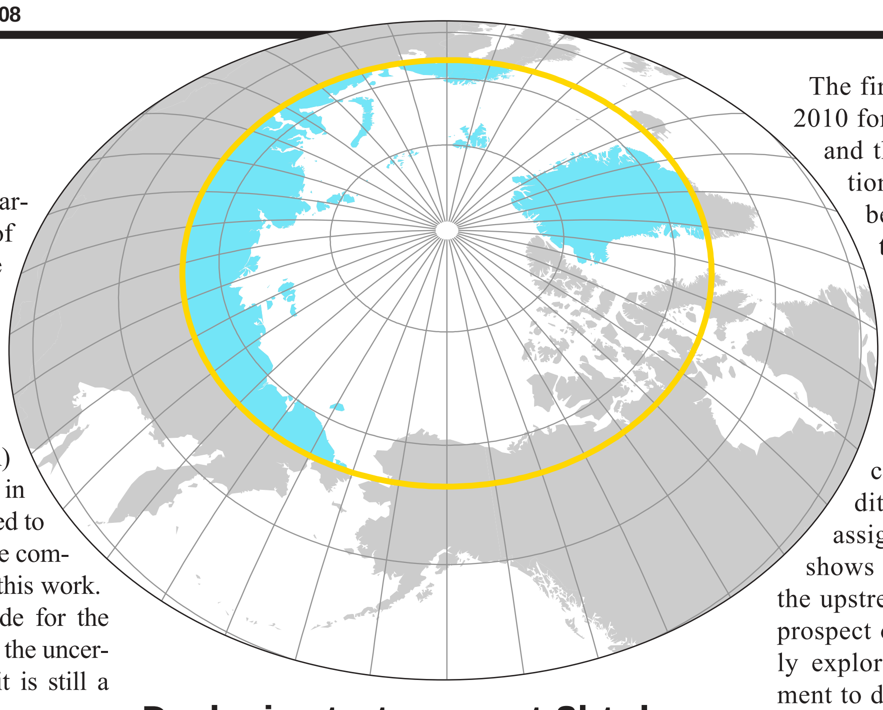
—SARAH HURST

Norwegian independent sells out of Goliat field

Norway's state-owned StatoilHydro has purchased independent Det norske oljeselskap's 15-percent stake in the Goliat oil and gas field in the Barents Sea for NOK 1.1 billion ($166.9 million) after tax, the two companies announced Oct. 13. Eni Norge is the operator of the as-yet undeveloped field.

"We still have a strong belief in Goliat and deem this an advantageous project for the licensees and North Norway," said Det norske's CEO, Erik Haugane. "We have participated actively in the planning of the future development and are confident that Eni, in cooperation with StatoilHydro, will succeed in developing this project further. However, Det norske has chosen to prioritize other projects, i.e. projects related to recovery of new petroleum resources. … We will continue to be the most aggressive company on the Norwegian Shelf. Not in the least with regard to our continued efforts in the Barents Sea, where we are applying for new licenses in the 20th Licensing Round."

—SARAH HURST



Dockwise to transport Shtokman rigs from Korea

Bermuda-based Dockwise has been contracted by Russia's Vyborg Shipyard to transport two drilling rigs for the offshore Shtokman project from South Korea to the Barents Sea, the company announced in a release Oct. 14. Dockwise will install the units on semi-submersible hulls, using the float-over technique. The company will receive $84 million over the three-year contract.

The first rig is scheduled to be loaded in late April 2010 for installation between July and August 2010, and the second in late October 2010 for installation around February 2011. The structures will be transported from Geoje Island, Korea, to the assembly locations in the Murmansk harbor area. Each rig is estimated to weigh around 22,000 tons.

"The Vyborg-Shtokman contract is a milestone in Dockwise's history," said the company's CEO, Andre Goedee. "It demonstrates our primacy in handling extreme challenges: scale, distance, and climactic conditions are the significant features of this assignment. Furthermore, our installation role shows how Dockwise is developing its presence in the upstream production cycle. We are excited by the prospect of the Russian Arctic market and are actively exploring ways to build upon today's announcement to develop long-term relationships with Russian clients."

Dockwise is a marine contractor with a workforce of more than 1,200 people both offshore and onshore. The group has offices around the world and three engineering centers in the United States, Holland and China. The company manufactures specific motion reduction equipment such as leg mating units and deck mating units, and owns a fleet of 22 purpose-built semi-submersible vessels.

—SARAH HURST

continued from page 12

READINESS

training exercises were clear evidence that the company has acquired sufficient experience and capabilities to safely operate the terminal in Arctic conditions."

Observers from the United States, Norway, Sweden, Canada and Denmark were present at the exercises, according to Russia's Ministry of Emergency Situations. "All the tasks that were set were completed," said the deputy head of the ministry, Alexander Chupriyan, who led the exercises. ●

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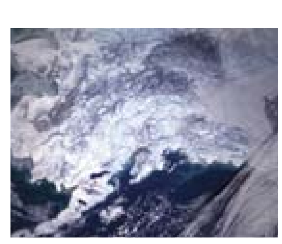

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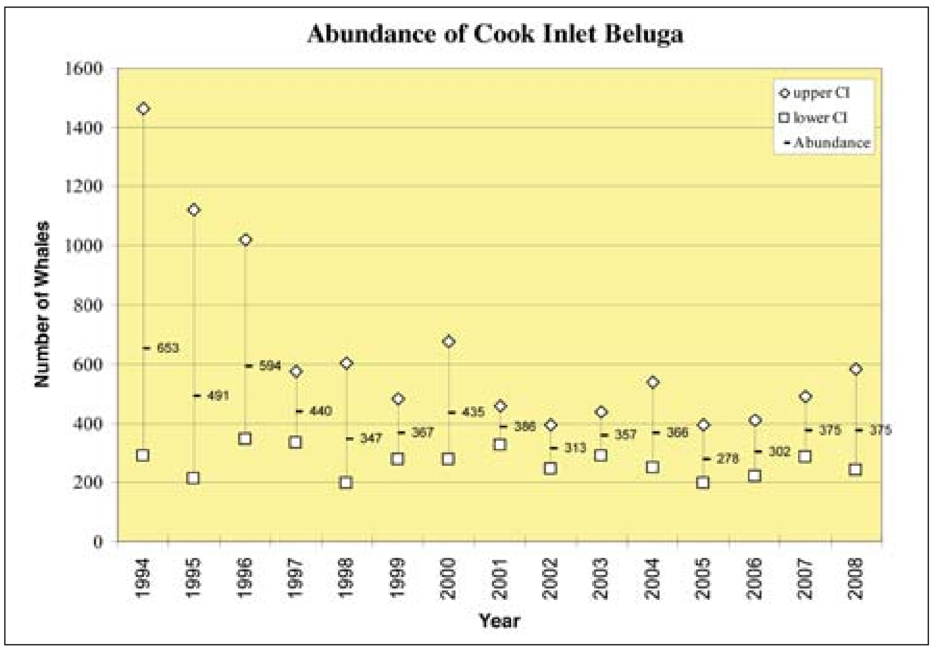

Counts from National Marine Fisheries Service annual surveys of the Cook Inlet beluga whales. Does the trend show a continuing population decline or a modest population recovery?

● SAFETY & ENVIRONMENT

CI belugas on the endangered list

NOAA: Beluga whale population in the Cook Inlet has continued to decline, despite the regulation of subsistence hunting

By ALAN BAILEY
Petroleum News

It's been 18 months since the National Oceanic and Atmospheric Administration stirred an intense debate in Southcentral Alaska by announcing its proposal to list the Cook Inlet beluga whales as an endangered species. And on Oct. 17 NOAA issued its final ruling, confirming that it is listing the whales under the Endangered Species Act.

The agency says that despite restrictions starting in 1999 on the subsistence hunting of the whales, the beluga population is not recovering from an estimated population decline of 50 percent between 1994 and 1998.

"In spite of precautions already in place, Cook Inlet beluga whales are not recovering," said James Balsiger, acting assistant administrator for NOAA's Fisheries Service.

Five populations

The Cook Inlet beluga population is one of five distinct populations recognized in U.S. waters, with the other populations being found in Bristol Bay, the eastern Bering Sea, the eastern Chukchi Sea and the Beaufort Sea. The whale population in Cook Inlet forms what NOAA's National Marine Fisheries Service terms a "distinct population segment," in effect a sub-species that is distinct and isolated from beluga populations elsewhere.

And NOAA says that several factors may be hindering population recovery in the Cook Inlet, including whale strandings; the cumulative impacts of developments in and around the Inlet; oil and gas exploration and development; accidental pollutant spills from industrial activities; AND disease and predation by killer whales.

Under the terms of the Endangered Species Act, NMFS will develop a recovery plan for the whales and within a year the agency must define what constitutes the critical habitat for the animals.

"Listing the Cook Inlet beluga whales means any federal agency that funds, authorizes or carries out new projects or

see BELUGAS page 22

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INTERNATIONAL

Russia considers price-related reserve

By NATALIYA VASILYEVA

Associated Press Business Writer

Russia may establish an oil reserve to influence global commodity prices but won't cut output, the country's top energy official said Oct. 22.

Deputy Prime Minister Igor Sechin, who is in charge of the energy sector, said the government was considering creating an oil production reserve "which would allow it to work more efficiently with prices on the market."

Sechin would not say how big the reserves would be, but said they should be "enough to reach efficient pricing parameters," Russian news agencies reported. "Oil has become more of a financial instrument than a commodity."

He confirmed that Russia wouldn't cut oil output unlike OPEC nations, which are expected to slash production at an extraordinary session Oct. 24.

OPEC Secretary-General Abdullah al-Badri said before a meeting with Russian President Dmitry Medvedev Oct. 22 that he would not ask Russia for oil production cuts as global prices fall.

Analysts had said Russia was unlikely to agree to coordinated production cuts, given that it already is battling with falling output as West Siberian oil fields mature. Declining oil production is bad news for a resource-based economy where revenues from the oil industry account for about 25 percent of gross domestic product.

Largest non-OPEC producer

Russia, the largest oil producer outside OPEC, has seen its stock markets bruised in recent weeks amid deepening fears of a global recession and plunging oil prices. The price of oil has more than halved since peaking at $147 in July. Crude oil in New York traded at $69.5 per barrel Oct. 22. Russian energy stocks had fallen between 6 and 7 percent on the MICEX stock exchange in mid-afternoon trading Oct. 22.

Russian officials have talked about setting up an oil reserve before but have not taken steps to implement such a strategy so far. Analysts have said it would require considerable investment both to buy the oil and build the necessary facilities.

"It is quite unclear whether (the reserve) will be able to influence prices," said Valery Nesterov, an energy analyst at Troika Dialog.

Shervani Abdullayev, oil analyst at Alfa Bank, referred to the idea as a "jabber." "It's just a feeble attempt to stop oil prices from falling. Sechin hardly knows how prices are formed on the market and what tools we have for it," he said. ●

—Associated Press writer Catrina Stewart contributed to this report.

LITERATURE

PNA Publishing releases new book, 'Sarah takes on Big Oil'

PNA Publishing, a division of Petroleum Newspapers of Alaska LLC, released its new hardback, "Sarah takes on Big Oil," on Oct. 17.

The 216-page book was printed at the Indiana plant of R.R. Donnelley.

Touted as the compelling story of Gov. Sarah Palin's stormy relationship with Alaska's 'Big 3' oil producers, Sarah takes on Big Oil was written by Kay Cashman and Kristen Nelson, the longtime editors of Petroleum News, an Anchorage-based weekly newspaper and the state's only standalone oil and gas publication.

As people seek to learn more about Alaska's first woman governor, a recurring question emerges: How did she meet the challenge of balancing the interests of the people of Alaska against those of the state's major oil and gas companies, which supply the lifeblood of the area's economy?

Sarah takes on Big Oil helps answer those questions, PNA said in a press release.

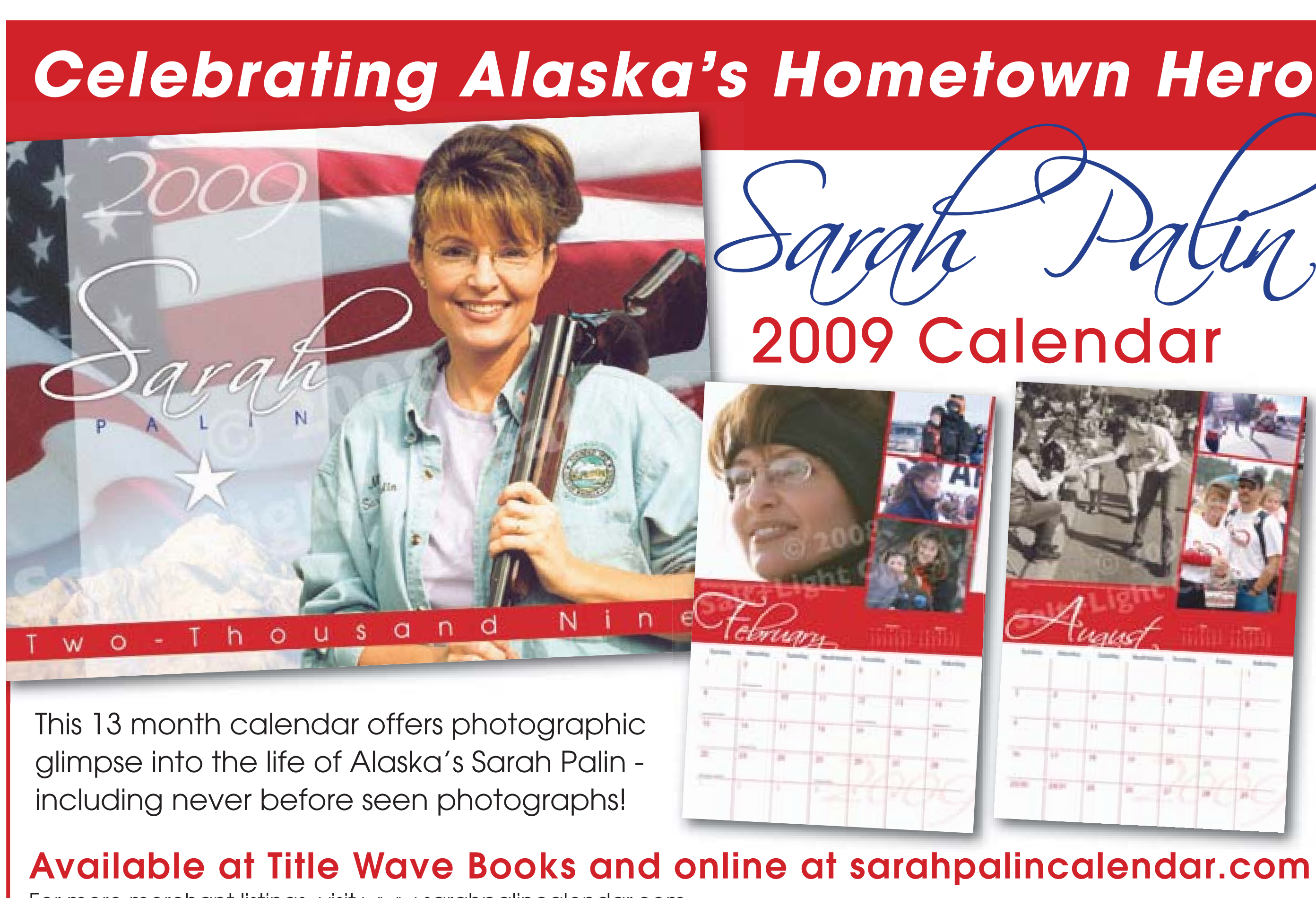
The authors have been asked whether they wrote the book on behalf of Palin.

"We wrote the book because it was timely and interesting. Our newspaper doesn't publish editorials, much less advocate for particular candidates," Cashman said. "And the book is owned by the same company. We presented the Big 3 oil producers' side of the story in the book, as well as that of the Palin administration.

"If you're an Alaskan or one of the oil and gas explorers in the state, you'll likely come away from reading our book with the impression Sarah Palin is a competent leader, someone with a firm grasp of the issues surrounding the proposed gas pipeline from the North Slope," Cashman said. "If you work for the state's three major oil producers — as a contractor or employee — you'll probably remain convinced she has held up the construction of a gas pipeline."

For more information on the book visit www.sarahtakesonbigoil.com or Petroleum News Web page, www.petroleumnews.com.

—PETROLEUM NEWS



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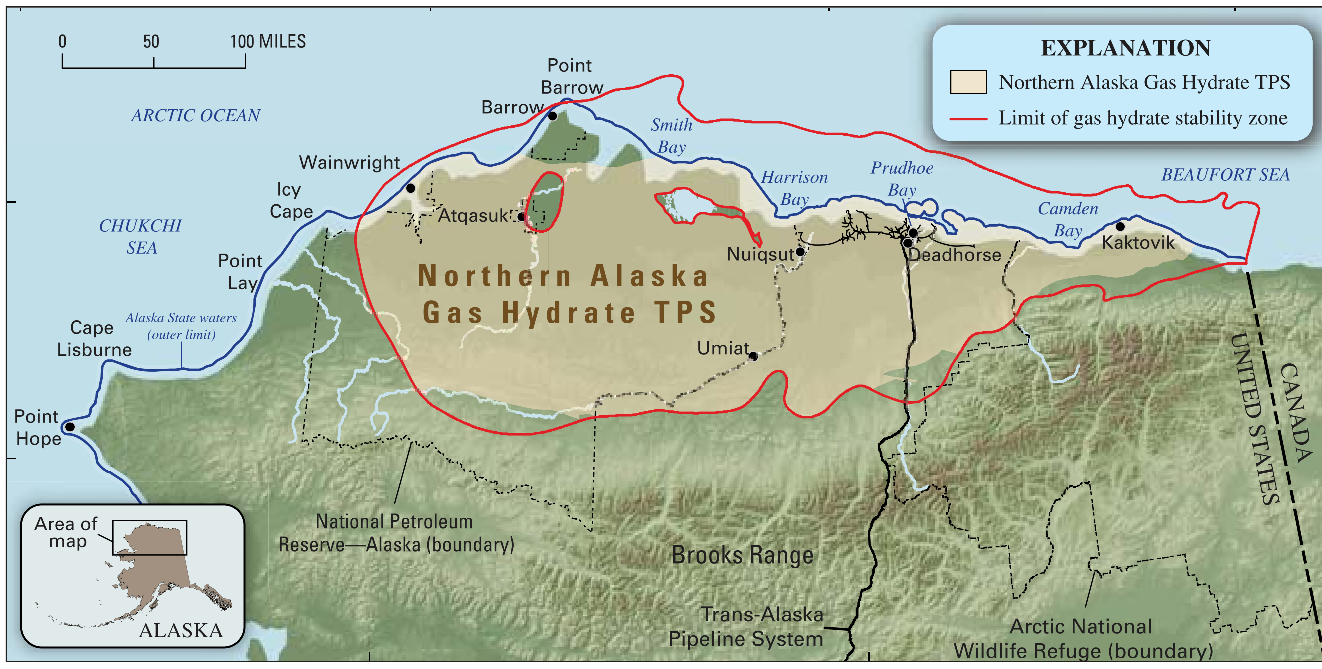

The U.S. Geological Survey has assessed the technically recoverable gas from gas hydrates in the Northern Alaska gas hydrate total petroleum system (or TPS), shaded in tan. This map also depicts the area within which USGS thinks that gas hydrates are stable in the subsurface.

continued from page 1

HYDRATES

locations and sizes of the hydrate deposits. And the estimates only relate to gas that might be recovered by means that appear workable using known technologies.

The assessment does not consider whether gas hydrate production would be economically viable. Economic viability would depend on development and production costs, the existence of a mechanism for moving the gas to market and appropriate market pricing for the gas.

Gas hydrate consists of a white crystalline substance that concentrates natural gas by trapping methane molecules inside a lattice of water molecules (methane is the primary component of natural gas). The hydrate crystals remain stable within a certain range of temperature and pressure. But when decomposed the crystals yield about 164 times their volume in methane.

Promising results

Although some limited tests of gas production from gas hydrate deposits have yielded promising results, no one has yet demonstrated full commercial-scale production from hydrates. However, the results from the tests, conducted in the Mallik well in the Mackenzie Delta and the Mount Elbert well on the North Slope, combined with production modeling have led to a view that gas hydrates can technically be recovered, Timothy Collett, USGS North Slope gas hydrate assessment team member, told Petroleum News Oct. 21.

The well tests together with "the production modeling done under the Department of Energy sponsored gas code comparison study … all document the fact that gas hydrates are a technically recoverable resource," Collett said.

The USGS North Slope assessment says that the most likely production mechanism would be depressurization of free gas associated with the hydrates — depressurization through a production well would cause some hydrate to decompose, thus releasing more free gas.

The Mount Elbert gas hydrate stratigraphic test well, completed at Milne Point on Alaska's North Slope in February 2007 as part of a joint government, industry and university gas hydrate research project, used a technique called modular dynamic testing to test the production characteristics of a gas hydrate deposit. The well also demonstrated the effectiveness of seismic techniques in locating gas hydrates in the subsurface.

But the stakeholders in this particular research program have yet to decide whether to proceed to the next phase of their project, which would likely consist of some form of production test at the Mount Elbert prospect.

Phased approach

Phase one of the USGS assessment overlapped with the research leading to the Mount Elbert well and focused on gaining an understanding of the known gas hydrates in what is termed the Eileen gas hydrate trend in the central North Slope. In phase two the USGS scientists used their understanding of gas hydrates obtained in phase one to identify and characterize potential gas

see **HYDRATES** *page 17*

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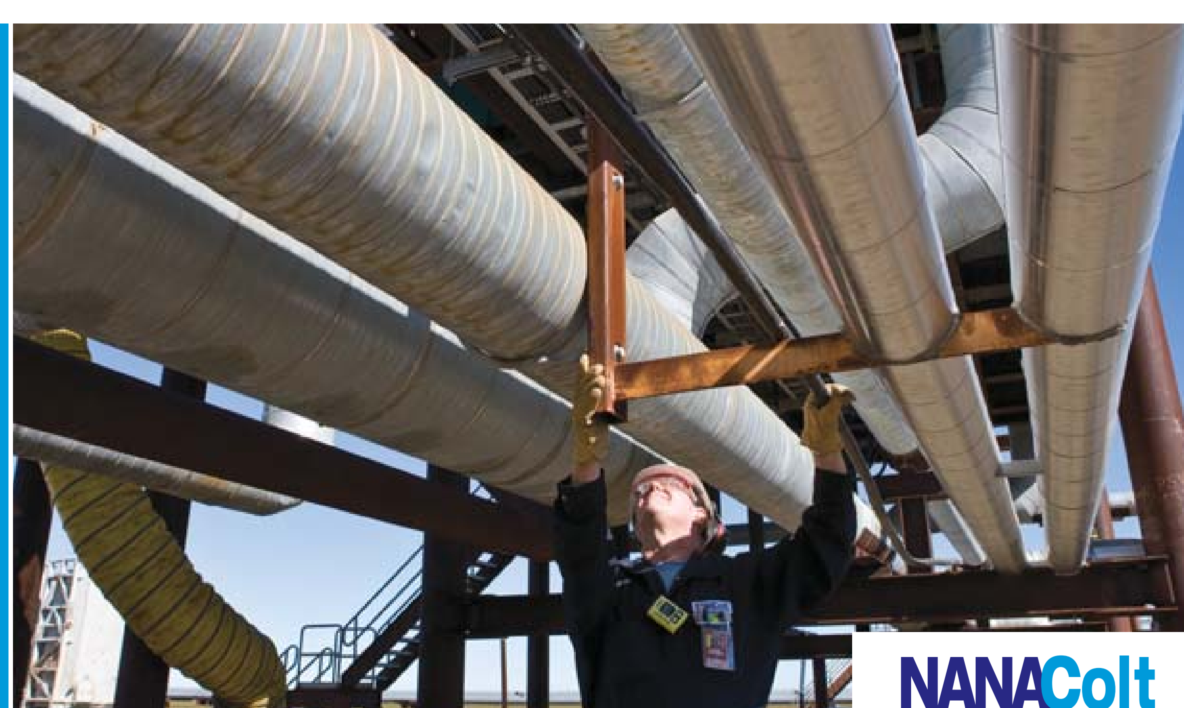

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HYDRATES

hydrate deposits across the whole North Slope assessment area. Then in phase three the scientists proceeded through a systematic assessment of technically recoverable gas, using the results of the previous phases.

The upshot was the recognition of three gas hydrate assessment units in northern Alaska. Those assessment units correspond to three major stratigraphic units, the Nanushuk formation, the Tuluvak-Schrader Bluff-Prince Creek formations and the Sagavanirktok formation. These units all occur in what geologists term the Brookian sequence, the youngest of the three major oil and gas bearing rock sequences of northern Alaska. The gas hydrates occur in these relatively young rocks at fairly shallow depths, in a zone that generally straddles the base of the permafrost.

But the gas that forms the gas hydrates has probably migrated upwards from conventional oil and gas fields deeper down.

"As part of the gas hydrate petroleum system assessment, geochemical analysis of known gas hydrate occurrences revealed a link between gas hydrate accumulations and more deeply buried conventional oil and gas occurrences, in which methane migration from depth has charged the reservoir rocks in the gas hydrate stability zone," USGS said.

And an analysis of industry-acquired seismic data indicated that the North Slope gas hydrates occur in deposits occupying "limited, discrete volumes of rock bounded by (geologic) faults and downdip water contacts," USGS said. The hydrates probably formed from gas and water when the Arctic became cold about 1.88 million years ago.

Extrapolated across region

USGS used this knowledge of the geology of the gas hydrate deposits to estimate the number and size of potential deposits in each of the assessment units throughout the North Slope region. That led in turn to the estimates of technically recoverable resources.

However, the assessment only included volumes of gas hydrates thought to lie below the base of the permafrost and did not include any free gas below the gas hydrate stability zone. The assessment did not consider the possibility of gas hydrates being associated with some gas fields near Barrow.

And the USGS scientists only counted potential gas hydrate deposits likely to contain 50 billion cubic feet or more of natural gas — that minimum accumulation size is somewhat smaller than what the USGS normally uses for its assessments because many seismically inferred deposits are close to the existing oil and gas infrastructure, USGS said.

About 24 percent of the assessed gas resource is thought to be in the Sagavanirktok formation assessment unit, 33 percent in the Tuluvak-Schrader Bluff-Prince Creek formations assessment unit and 43 percent in the Nanushuk formation assessment unit.

The estimate mean volume of 85 tcf in this new assessment is considerably less than the 590 tcf that USGS estimated in 1995 in part because the new assessment only applies to technically recoverable gas and in part because the 1995 estimate included offshore federal waters, USGS said.

"In addition, the assessment results reported here are based on geologic data that were not previously available, which afforded a greatly improved appreciation of the North Slope gas hydrate petroleum system," USGS said. ●

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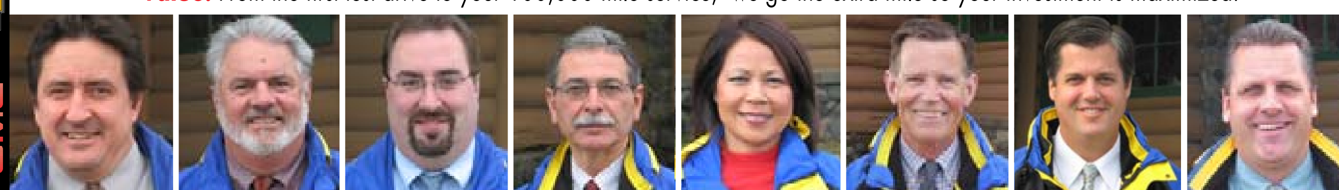

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● EXPLORATION & PRODUCTION

Anadarko permitting four gas prospects

Unprecedented search for gas expanding to cover 80 miles of Native, federal and state land in the foothills between now and 2013

By ERIC LIDJI

Petroleum News

The search for gas in the foothills of the Brooks Range continues to expand.

Anadarko Petroleum recently began permitting a four-year exploration program covering four different prospects spread across an 80-mile swath of Native, federal and state lands.

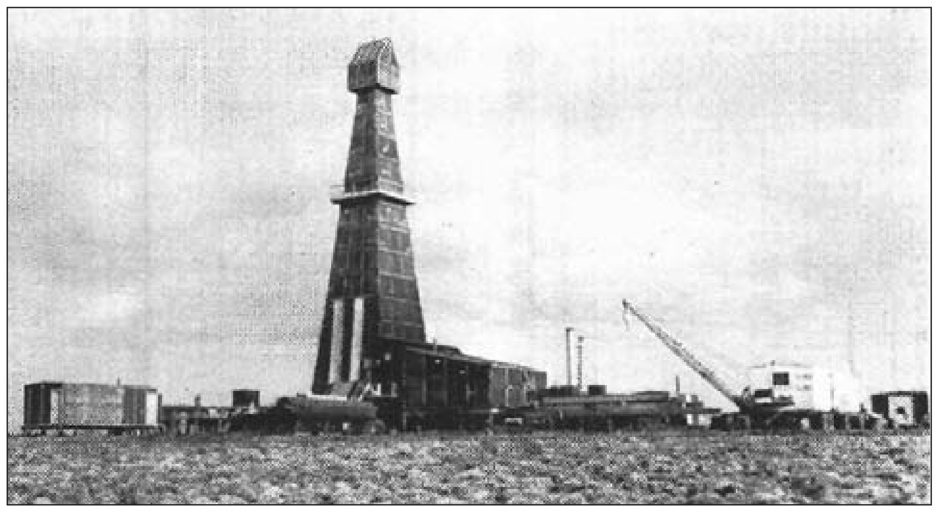
The large independent oil and gas company previously outlined a three-well exploration program in the region for this coming winter, but in filings made public on Oct. 20, Anadarko unveiled plans to drill as many as 11 wells between now and early 2013.

The program covers the Gubik and Chandler prospects where Anadarko drilled exploration wells this year, the Wolf Creek prospect where it plans to drill this winter, and the new Tsavorite prospect farther into the National Petroleum Reserve-Alaska.

Anadarko is the operator on the program, with partners Petro-Canada and BG.

The program is the first in northern Alaska to specifically target natural gas.

Currently, no pipeline infrastructure exists to carry northern natural gas to market, but two companies have competing proposals to build a large-diameter natural gas pipeline from the North Slope to Canada, while a local utility is considering a smaller gas pipeline from Anadarko prospects into the population center of Southcentral Alaska.



The rig used to drill the Titaluk No. 1 well. Anadarko Petroleum plans to return to the area around Titaluk in coming years to test the Tsavorite prospect.

Permitting two programs

The permitting covers two interconnected drilling programs, one on Native lands east of Umiat and the other on federal lands across the Colville River in NPR-A. The company also plans to use a large corridor of state lands and waters for road construction.

Anadarko is proposing eight well locations in NPR-A, split between the Wolf Creek and Tsavorite prospects on leases the companies picked up in a 2006 federal lease sale.

Anadarko previously staked three Wolf Creek locations, all on AA-086604, around 30 miles west of Umiat. The company is now proposing, but has yet to stake, five Tsavorite locations on AA-086615, AA-086616 and AA-086617, around 60 miles west of Umiat.

The company is still proposing several wells at the Gubik and Chandler prospects on Arctic Slope Regional Corp. land around 20 miles east of Umiat. The proposed locations include Chandler No. 1, started earlier this year but left uncompleted, and two possible locations for Gubik No. 4, a follow up to the Gubik No. 3 well drilled earlier this year.

More than 150 miles of roads

To support those two programs, Anadarko plans to build more than 150 miles of ice and snow roads starting at Drill Site 2P in the Kuparuk River unit and running to the foothills of the Brooks Range, where the road will branch to access the four different prospects.

The ice roads will be around 35 feet wide, designed to handle regular oilfield vehicles, while the snow roads will be much wider to handle specialty equipment like Rolligons and Steigers. Some snow roads could be converted to ice roads during the drilling season.

To aid construction efforts over the course of the program, Anadarko plans to build as many as six staging areas along the proposed network of temporary roads. Each staging area would be a 3,600 square foot ice pad with sleeping quarters and storage areas.

The six proposed staging areas would be at Drill Site 2P, at Shirukak Lake, along the Anaktuvuk River, between the Gubik and Chandler, in lease AA-086603 to support Wolf Creek operations and near Watermelon Lake to support Tsavorite operations.

The company will also use existing infrastructure at Umiat and plans to build 2,500-foot long ice runways near several staging areas to help handle shipments along the route.

Anadarko plans to use the Nabors rig 105 for wells at the Gubik and Chandler prospects, and the Doyon Arctic Fox for wells at the Wolf Creek and Tsavorite prospects.

As previously reported, Anadarko plans to use those two rigs to drill three wells this winter: completing Chandler No. 1 and starting Gubik No. 4 and Wolf Creek No. 4.

Tsavorite follows Titaluk

The search for gas in the foothills dates back to frontier exploration wells drilled by the U.S. Geological Survey and the U.S.

see ANADARKO page 21

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stacie_johnson@platts.com

For sponsorship opportunities, contact:

Lorne Grout
Tel: 781-430-2112
lorne_grout@platts.com

For media inquiries, contact:

Christine Benners
Tel: 781-430-2104
christine_benners@platts.com

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● EXPLORERS 2008 PREVIEW

Savant and ASRC taking on Badami

Reprint from upcoming The Explorers magazine: Denver independent will operate, Alaska Native corp. expands portfolio

By ERIC LIDJI
Petroleum News

The maturation of the North Slope is all about companies bringing new ideas to bear on overlooked projects, and that dynamic could come into play this winter at Badami.

Through a series of business arrangements, a new attempt is under way to make the stubborn North Slope unit as productive as some hoped it would be a decade ago.

The project unites three disparate partners: oil giant BP Exploration (Alaska), tiny independent Savant Alaska and Arctic Slope Regional Corp., or ASRC.

Savant, the local subsidiary of Denver independent Savant Resources LLC, will run the program on behalf of London oil giant BP, the operator and sole working interest owner of Badami. ASRC will be a "minority partner" through its unique relationship with BP.

"If the Savant program is successful, and we are hopeful that it is, then we will have revitalized exploration options on the east-side of the North Slope and we will be a player in its future," Mark Kroloff with ASRC wrote to Petroleum News in September 2008.

The state approved a plan this summer for the companies to take another stab at Badami.

BP shut the field down a year ago to "recharge" the reservoir, hoping a fallow period would increase pressure underground and aid production. That move came after a decade of frustrating starts and stops to develop the complex geology of Badami.

The turbidite formation at Badami is a series of channels, like fingers on a hand. The trouble has been getting them to "communicate" so that oil moves from one to the next.

Savant hopes to solve that problem with recent advances in drilling technology.

Savant coming off Kupcake

Savant is relatively new to Alaska, but already has experience near Badami.

After picking up North Slope acreage in a March 2006 lease sale, the company drilled the Kupcake No. 1 exploration well this past winter from an ice island in Foggy Island Bay, less than 20 miles west of the onshore-offshore Badami unit.

Kupcake ultimately failed to hit the oil resources Savant set out to find.

But Badami gives Savant a chance to pursue a different kind of project, where the goal isn't finding commercial quantities of oil, but figuring out how to get known oil accumulations out of the ground, according to Greg Vigil, executive vice president and chief operating officer of Savant, who spoke to Petroleum News in August.

Savant plans to drill the exploration well in one of the satellite fields outside the Badami Sands participating area, but within the larger Badami unit.

Savant plans to drill horizontal wells at Badami and hydraulically fracture the channels to reach more of the oil-bearing sands. Previous attempts to develop Badami have involved hydraulic fracturing, but only on traditional vertical wells, not horizontal wells.

The technology for fracturing a horizontal well simply didn't exist when BP first tried to develop Badami in the late 1990s, Vigil said.

Hydraulic fracturing involves pumping large amounts of fluid into a well in order to create new avenues in the reservoir for oil and gas to travel to the surface.

Vigil said high oil price alone wouldn't have justified returning to Badami. Only higher prices in conjunction with the new technology promise to make the venture a success.

ASRC following up with BP

After getting Savant to operate the program, BP also brought ASRC on board, following through on a mentoring relationship the companies arranged more than five years ago.

In terms of revenues and earnings, Arctic Slope Regional Corp. is the largest of the 13 regional corporations created by the Alaska Native Claims Settlement Act in 1971.

ASRC holds title to some 5 million acres across the North Slope. Those lands include a percentage of the Colville River unit, extensive acreage across the foothills of the Brooks Range and leases in the Arctic National Wildlife Refuge, and helped the company post more than $1 billion in revenues for three years in a row.

But in addition to owning land, ASRC is also a major player in the Alaska oil industry.

ASRC Energy Services, the main oil field services subsidiary of ASRC, is one of the largest companies in the Alaska oil industry, with more employees in the state than BP Exploration (Alaska), ConocoPhillips Alaska or CH2MHill.

Through its subsidiary PetroStar, ASRC also owns one of the few refineries in Alaska.

But five years ago, ASRC took its first steps toward adding an exploration and production portfolio, in addition to its current work as an oil field services company.

In early 2003, the company entered a "mentoring" agreement with BP. The agreement set up "a framework for sharing data and technical knowledge" between the companies, allowing ASRC to learn about investment opportunities

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BADAMI

on the North Slope.

The companies hoped the new relationship would be mutually beneficial.

"This agreement provides a critical next step in providing ASRC with access to the tools and knowledge we need to become a competitive, independent producer in Alaska," Jacob Adams, then president and CEO of ASRC, said in July 2003.

BP hoped the agreement would help bring more North Slope prospects into production.

"This agreement is … hopefully going to provide an opportunity for a company like ASRC to invest where BP would choose not to," Steve Marshall, then president of BP Exploration (Alaska), said at the time.

Partnerships in the interim

The new exploration effort at Badami will be the first major project under the deal.

"It has been incumbent upon ASRC to be poised and ready to respond when BP is ready to forward opportunities to ASRC," Kroloff wrote in September.

To get "poised and ready to respond," ASRC became involved in a number of other partnerships with companies across the North Slope in recent years.

The company teamed with ConocoPhillips and Union Oil Company of California in 2004 on the Placer No. 1 exploration well on ASRC leases west of the Kuparuk River unit.

More recently, ASRC joined the ongoing efforts of Doyon Ltd. and Usibelli Energy LLC to explore the resources potential of the Nenana Basin just southwest of Fairbanks.

And this past winter, ASRC partnered with Anadarko Petroleum and BG on an exploration well at the Jacob's Ladder unit southeast of Prudhoe Bay. But Anadarko said it found "no commercial hydrocarbons" upon reviewing well logs this spring.

ASRC will be a minority partner to Savant at Badami, and Kroloff said ASRC sees the program not only as an "investment opportunity," but also a way to expand the company's "internal capacity in oil exploration and development."

"Our subsidiary, ASRC Energy Services (or AES) has contracted to BP for many years to operate Badami. We expect that contract to remain intact and should we be successful in exploration with Savant then we would anticipate AES's role to increase as development and operational functions increase in the unit," Kroloff wrote. "For ASRC this is really the proverbial one-plus-one equals three equation." ●


COURTESY SAVANT ALASKA

The Kuukpik Rig No. 5 used by Savant Alaska to drill the offshore Kupcake No. 1 exploration well in March 2008. The well's surface location is an ice island in the Beaufort Sea approximately 4.5 miles east of Point Brower.

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ANADARKO

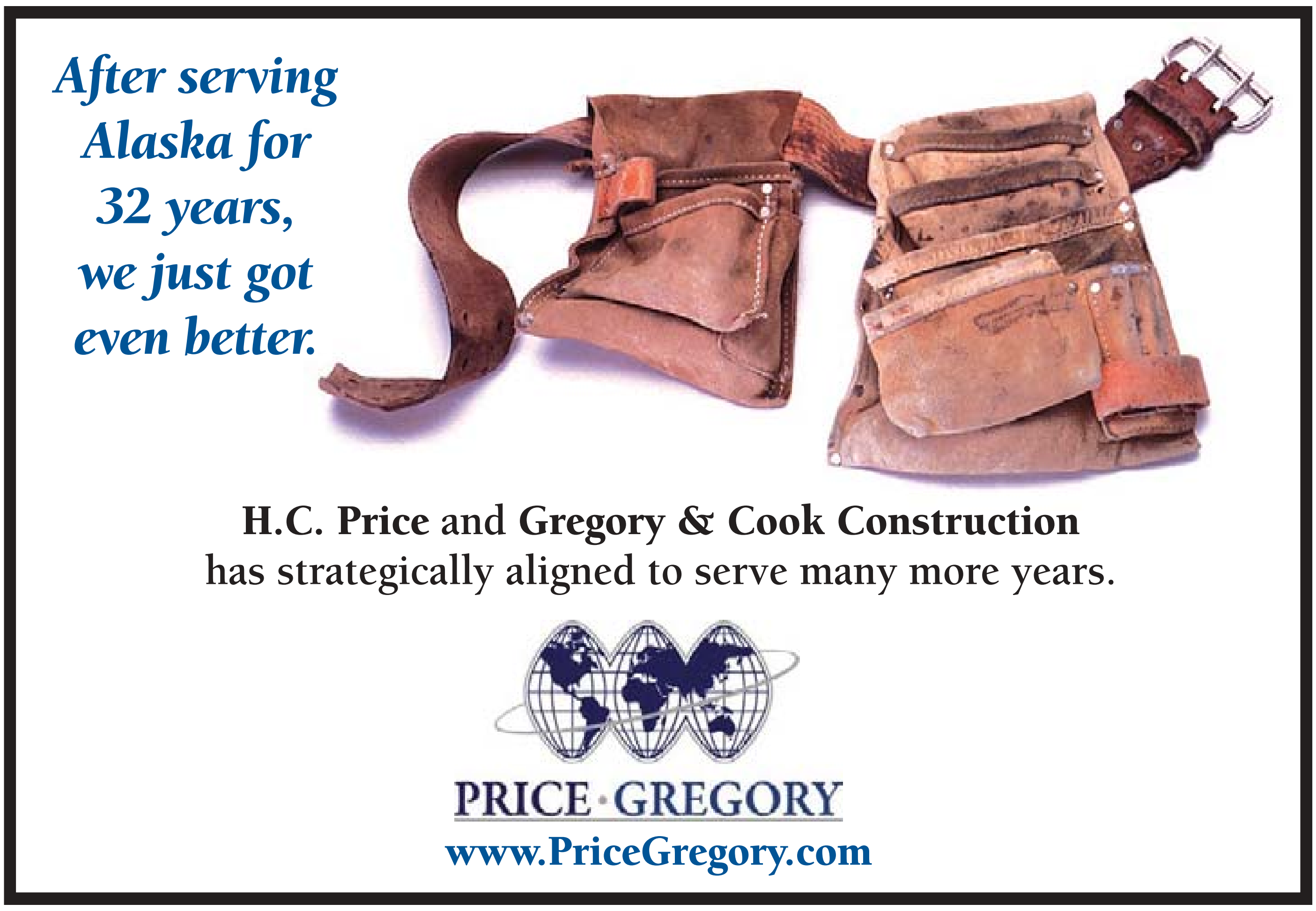
Navy in the years after World War II.

During that time, crews working for the two federal agencies drilled dozens of test wells throughout NPR-A, known at the time as Naval Petroleum Reserve No. 4. Those wells included Gubik No. 1, Gubik. No 2 and the first three Wolf Creek wells.

The five Tsavorite well locations proposed by Anadarko surround the Titaluk No. 1 well drilled by USGS in the spring of 1951 to a depth of 4,020 feet. The well collected samples from the Ninaluk, Chandler, Grandstand and Topagoruk formations.

Although Titaluk No. 1 found both gas and oil in the Grandstand formation, a USGS analysis at the time called the tests "poor," saying "the sands are too thin and are lacking in permeability to have much merit as reservoirs of oil and gas."

The agencies also drilled the Knifeblade No. 1 and No. 2 wells a few miles west of Titaluk to test the Chandler and Grandstand formations. The wells both reached depths of 1,805 feet, but despite the faint presence of gas, neither found "good oil and gas shows." ●



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BELUGAS

activities that may affect the whales in the area must first consult with NOAA's Fisheries Service to determine the potential effects on the whales," NOAA said. "A federal action must not jeopardize the continued existence of a listed species."

Federal agencies will be prohibited from authorizing, funding or carrying out actions that would damage or destroy the critical habitat.

And since many projects that industry or local governments carry out around Cook Inlet require some form of federal permit, the listing decision could impact a broad range of activities, including oil industry operations, planned development at the Port of Anchorage and wastewater treatment at Anchorage.

Varied reactions

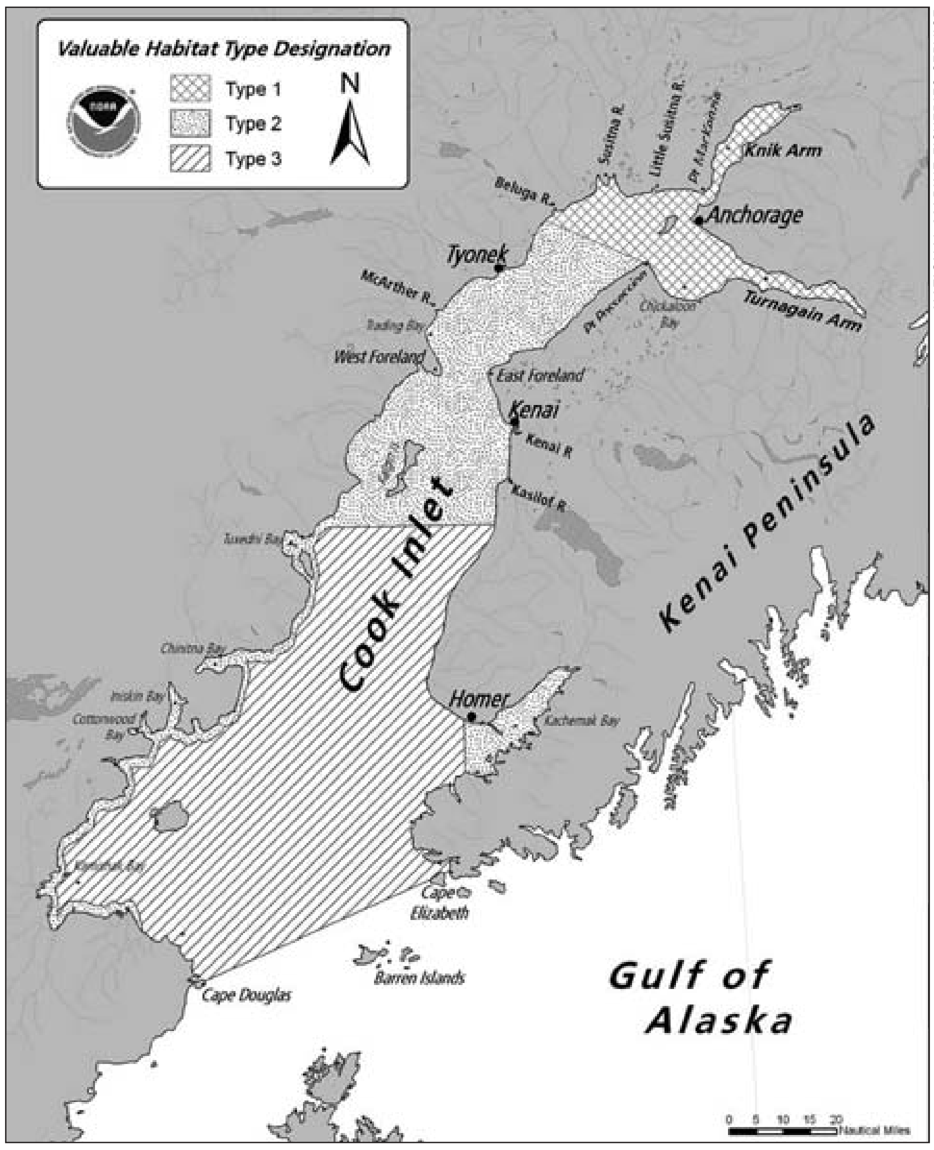
Several environmental organizations have strongly endorsed the NOAA action in listing the belugas.

"The science is clear — and it has been for a very long time," said marine mammal scientist Craig Matkin of the North Gulf Oceanic Society in a press release from advocacy organization Cook Inletkeeper. "The population is critically endangered. The protections of the ESA provide the safety net so that the population can escape extinction and recover. Under the listing a comprehensive, habitat focused, research plan can finally be initiated."

But others have criticized the listing, saying that the NOAA findings on the population decline are unjustified and that an unwarranted listing will have a negative impact on the Cook Inlet economy. The annual NOAA surveys show an uptick in the estimated population since 2005, with the population count remaining constant in 2007 and 2008.

"I am deeply disappointed with NOAA's decision to list the Cook Inlet beluga as endangered under the Endangered Species Act. The population is at low levels but it has increased 35 percent since 2005 and was stable in this year's count," said U.S. Sen. Lisa Murkowski, R-Alaska. " … There are still too many significant scientific questions that remain and I believe it is difficult to justify a listing on a species where we have such a scarcity of data."

"Cook Inlet's beluga whales are deeply cherished by Alaskans and visitors alike, so we are committed to actions that will allow them to thrive in our waters," said Anchorage Mayor Mark Begich. "But at a time when the beluga population is stable, this decision by the federal government is unnecessary and could negatively affect Alaskan families."



NATIONAL MARINE FISHERIES SERVICE

Cook Inlet beluga whale habitat areas, as categorized by the National Marine Fisheries Service. Type 1 is the most valuable habitat. The whales use type 2 habitat somewhat less, while the whales are only observed infrequently in type 3 habitat.

Subsistence hunting

At the core of the debate is the question of whether the beluga population decline resulted primarily from subsistence hunting prior to 1999.

"We would have preferred that NOAA delay this endangered listing decision for a few years to get more population counts, and determine whether the cutback in hunting is working to help the beluga population recover," said Denby Lloyd, commissioner of the Alaska Department of Fish and Game. "Our analysis of NOAA's data indicates that the population has been growing steadily in the last few years, just as studies had predicted."

And the Resource Development Council has criticized NOAA for what the council says is a failure to implement a draft Cook Inlet beluga whale conservation plan that resulted from the categorization of the whales as "depleted" under the Marine Mammals Protection Act in 2000. Jason Brune, executive director of RDC, has told Petroleum News that RDC supported the "depleted" categorization.

NMFS has said in the past that the conservation plan was unfunded and, as a consequence, might not be activated. However, on Oct. 22 the agency released a final version of the plan (see sidebar).

So what are the known facts about the Cook Inlet whale population?

Although a 1979 survey resulted in a population estimate of 1,293 belugas, systematic counting of the whales did not begin until 1994; since then NMFS has conducted annual aerial surveys. The aerial surveys estimated a decline in population from 653 whales in 1994 to 347 whales in 1998. That decline proved particularly severe in the 1990s, as a result, most people seem to agree, of unsustainably high levels of subsistence harvesting of the whales.

The NMFS population estimates reached a low of 278 in 2005 and then rebounded a little, with the 2007 and 2008 surveys estimating the population count as constant at 375.

In a separate project sponsored by Chevron, ConocoPhillips, the National Fish and Wildlife Foundation and LGL Alaska Research Associates, LGL scientists are using marks on the beluga whale skin to identify belugas in the upper Cook Inlet and to monitor the movements of those whales. As of January 2008 the research team had obtained complete identification profiles on 188 whales over a multi-year period at specific sites where whales can be found. But to date there is no way of extrapolating that whale count to an estimate of the total whale population in the upper Cook Inlet region.

Snapshot count

When doing its annual surveys, NMFS attempts to obtain a "snapshot" count of the entire beluga population by flying around the upper Cook Inlet, Knik Arm and Turnagain Arm looking for whales.

Rod Hobbs, leader of the beluga project at the national marine mammal laboratory of the National Atmospheric and Oceanic Administration, told Petroleum News in April 2007 that the researchers conduct surveys on summer days when conditions enable observations around the

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BELUGAS

entire survey area. Surveys take place at low tide, when the area of water that needs to be traversed is at a minimum.

When a beluga pod is spotted the survey aircraft makes eight to 16 passes parallel to the direction of movement of the whales, shooting video of the animals. One video camera films the entire pod, while a second video camera zooms in on details within the pod. The video images provide a recorded means of counting the whales, while observers on the aircraft also conduct counts during the flights.

When analyzing the video images, the researchers match up the whales that appear in both the close-up and broader images. They then count the whales that are only visible in the close-up image and extrapolate that count to make an estimate of the total number of belugas in the complete pod. The estimates of whale numbers also factor in the likelihood that some whales have dived under the water.

Juvenile whales

Brune and others have questioned whether the NMFS observers are able to see all of the juvenile whales in the pods, because the grey color of the young whales blends with the color of the water. However, Hobbs said that it is possible to see the juveniles in the close-up video that is shot during the surveys. Factors such as the skin surface texture of the animals and variations in the water color also enable observers to see young whales, he said.

And in response to questions regarding the possibility that some members of the beluga population may have migrated outside the survey area at the time that a survey is done, Hobbs said that NMFS researchers had reviewed hundreds of hours of surveys from the Gulf of Alaska without finding any evidence for significant numbers of Cook Inlet belugas being located outside the Cook Inlet area.

NMFS extrapolates future Cook Inlet whale populations by plugging the survey numbers into a population model that includes the known characteristics of the beluga whale life cycle and factors in the uncertainties in the population census. The model is run using the first age of reproduction set one-third at five years, one-third at six years and one-third at seven years, Hobbs said.

In 2007 the model found a 65 percent probability that the population would continue to decline — increasing the initial age of reproduction does not result in a major degradation in that statistic.

"If you change that to 10 years it doesn't make much difference," Hobbs said.

The model also predicted a 26 percent probability of extinction of the Cook Inlet belugas within 100 years. That 26 percent probability greatly exceeds the NMFS criterion of a 1 percent probability that triggers an endangered species classification.

But what about the apparent population uptick after 2005?

In September 2008 Hobbs told Petroleum News that NMFS had not changed its views regarding the population decline and that the low population count in 2005 could simply be an artifact of data errors. An examination of the overall trend in the data over multiple years reveals the continuing decline, Hobbs said.

The two most recent data points lie above the multi-year trend line, which also suggests that the rate of decline may be slowing, he added.

Alternative view

Brune vehemently disagrees with the NMFS conclusions.

The margins of error in the estimates all overlap, rendering the differences between the estimates across the period since the 1990s statistically insignificant, Brune said. Moreover, even assuming the population estimates are fairly accurate, the past couple of years have shown a population increase, he said.

"In fact, if you look, since 2005 we've seen a 35 percent growth in the total population," Brune said. "… We haven't seen a decline."

Citing a 2001 paper by beluga specialist L.K. Litzky, Brune said that following the loss of many of the adult whales as a result of hunting in the 1990s, it would take five to seven years for the beluga population to start to recover after subsistence hunting regulations took effect. That's consistent with the recovery in the population observed since 2006, he said.

The only known reason for the population decline in the 1990s that the data indicate was a subsistence harvest of more than 300 whales in that period, Brune said. Information presented in the final Cook Inlet beluga whale conservation plan indicates that tissue sample analysis has not indicated any significant impact of pollution on the whales — the plan says that the impact of the oil industry on the whales is unknown. 22 ●

NMFS issues conservation plan for the Cook Inlet beluga whales

On Oct. 22, five days after it announced the listing of the Cook Inlet beluga whales, the National Marine Fisheries Service announced publication of the final version of its conservation plan for the whales. NMFS originally developed the plan in response to the categorization of the whales as "depleted" under the terms of the Marine Mammals Protection Act. The plan overviews the ecology of the whales, assesses potential threats to the whale population and outlines a series of actions to address those threats.

The agency published a draft version of the plan in 2005. In the final version of the document the agency has restructured the draft plan to reflect comments received from the public, Brad Smith of the NMFS Protected Resources Division in Anchorage told Petroleum News Oct. 22.

Under the terms of the Endangered Species Act NMFS will have to develop a recovery plan for the whales. The conservation plan bears some similarity to a recovery plan but addresses whale conservation rather than population recovery. To develop a recovery plan NMFS anticipates forming a recovery team that includes all stakeholders in the Cook Inlet beluga whale situation, Smith said.

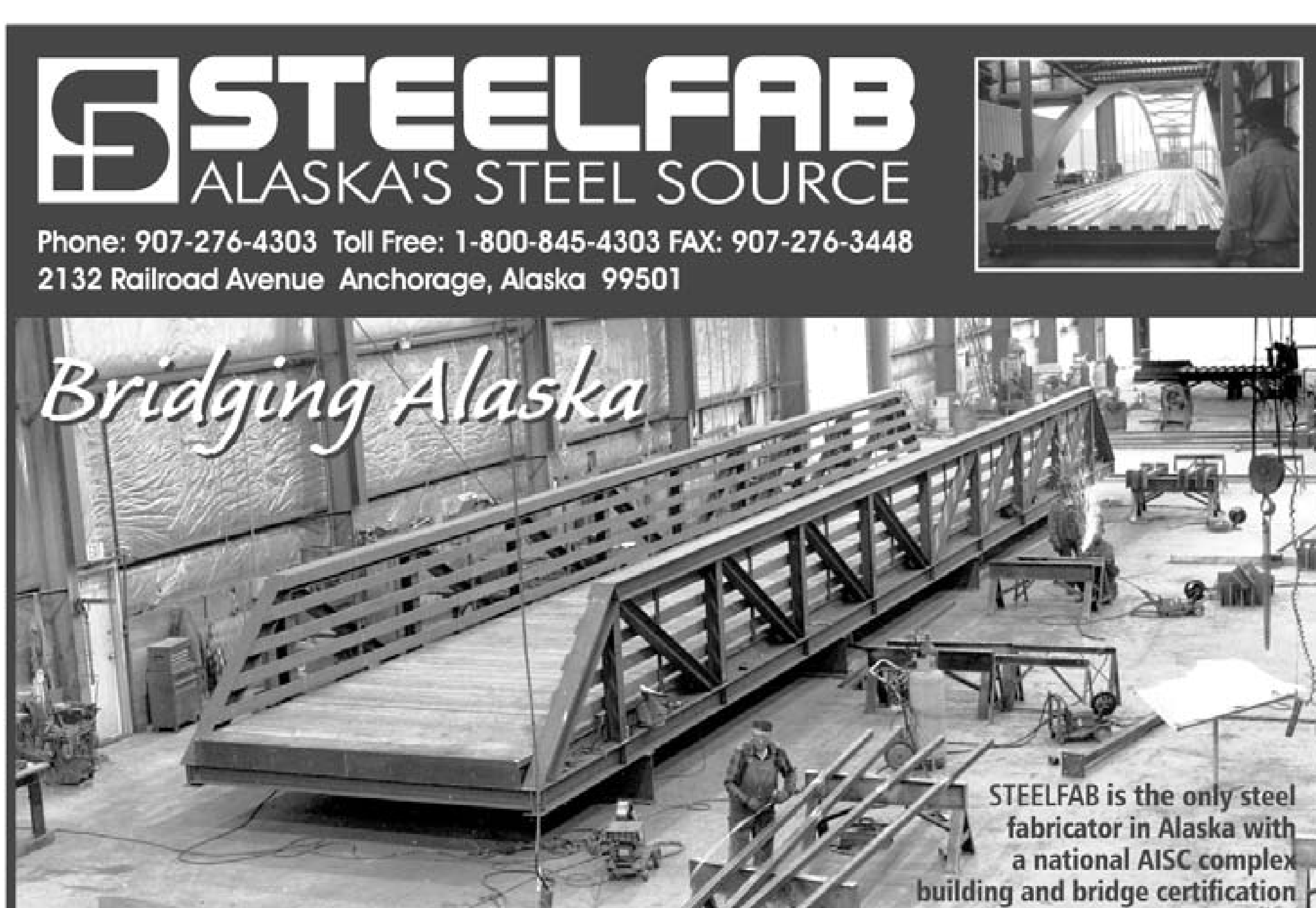
The conservation plan sets out natural and human-induced factors that could pose threats to the whales. Natural factors consist of stranding; predation; parasites and disease; and environmental change. Human-induced factors consist of subsistence harvesting; poaching and illegal harassment; personal use, subsistence and fishing; pollution; the oil and gas industry; development activities around the Cook Inlet; vessel traffic; tourism and whale watching; noise; and whale research activities.

NMFS thinks that, out of these possible threats, the potential impacts of strandings; disease; poaching; prey reduction through fishing; and noise are high. The impacts of environmental change; pollution; the oil and gas industry; and development activities are unknown, NMFS says.

The proposed action plan to address the potential threats includes 20 actions under the general headings of assessing changes to the whale population size; improving knowledge of which factors are limiting population recovery; and refining knowledge of habitat requirements and the whale distribution. NMFS estimates the total cost of carrying out the actions to be about $8.5 million over a five-year period from 2009 to 2013.

The Federal Register notice regarding the conservation plan says that NMFS has not identified funding sources for the plan actions and that the plan "will be used (adaptively) to set regional management and research priorities."

—ALAN BAILEY



● FINANCE & ECONOMY

Appeal threatens Exxon Valdez payments

THE ASSOCIATED PRESS

Prince William Sound commercial fishermen have waited 19 years for punitive damages against Exxon Mobil Corp. in the nation's worst oil spill, and now that a payout is imminent, another delay may be coming from those expecting a piece.

Lawyers for Sea Hawk Seafoods Inc., a Seattle-based company that ran a fish-processing plant in Valdez, have filed court papers objecting to the allocation plan.

They are seeking a new plan that conforms to the U.S. Supreme Court ruling in June, which awarded up to $507.5 million in punitive damages to nearly 33,000 commercial fishermen, cannery workers, land owners, Alaska Natives and others who claimed harm from the 1989 crude oil spill. The plaintiffs had been seeking $5 billion.

After the Supreme Court decision, lawyers for the plaintiffs and Exxon worked out a partial settlement under which Exxon agreed to release $383 million.

The money was to be distributed under an allocation plan approved in 1996 by Anchorage federal Judge H. Russel Holland, and Sea Hawk contends that it is flawed.

According to the company, the Supreme Court decided that the size of punitive damage awards must be proportional to the size of compensatory damage awards already paid to plaintiffs. The company argues the current plan assigns some plaintiffs larger or smaller shares than they deserve.

If the company prevails in its objection, it's likely that cannery workers would be awarded more money than called for in the current plan, and commercial fishermen would receive less.

Plaintiffs will fight change

Anchorage attorney David Oesting, the lead lawyer for the Exxon Valdez plaintiffs, said he will fight Sea Hawk's effort.

"They just want a whole lot more money that they're not really entitled to, in my opinion," Oesting said.

If Sea Hawk gets its way, many other plaintiffs would be deprived of shares they've long expected, he said.

Oesting estimated the Sea Hawk challenge could take 18 months. Until then, the money can't be paid out, he said.

Frank Mullen, a Homer commercial salmon fisherman, said he and other plaintiffs were exasperated by how long it took the courts to decide on punitive damages. Some plaintiffs have since died, and the Sea Hawk motion only adds to the frustration, Mullen said.

Fishermen were hoping the settlement with Exxon might yield checks between Thanksgiving and Christmas, Mullen said.

He's hoping the judge will deny the company motion. It was difficult enough getting thousands of people to agree on the allocation plan, which includes numerous classes of plaintiffs, and it would be calamitous to reopen that debate, Mullen said.

Sea Hawk's lawyers argue it would be fairly simple to replace the allocation plan with a new one leading to "a fair and expeditious distribution" of punitive damages.

Holland warned last year it would be "an embarrassment" to allow infighting to delay a payout. ●

● PIPELINES & DOWNSTREAM

State, feds investigate rupture of gas line

Cause of Sept. 29 injection line break at Prudhoe undisclosed; help from Pipeline and Hazardous Materials Safety Administration

By WESLEY LOY

Anchorage Daily News

The state has asked federal regulators to help investigate the rupture of a natural gas pipeline in late September in the Prudhoe Bay oil field.

The rupture was violent, causing the steel pipe to break apart and sending a piece flying across the tundra. No one was hurt in the Sept. 29 incident.

The state Petroleum Systems Integrity Office has begun an investigation and has asked a federal agency, the Pipeline and Hazardous Materials Safety Administration, to assist.

"The state's in charge of the investigation. We're supporting them," said Dennis Hinnah, an engineer who heads the pipeline administration's Anchorage office.

The federal assistance is significant, as the pipeline administration has taken an increasingly aggressive role in scrutinizing pipelines in the remote North Slope oil fields.

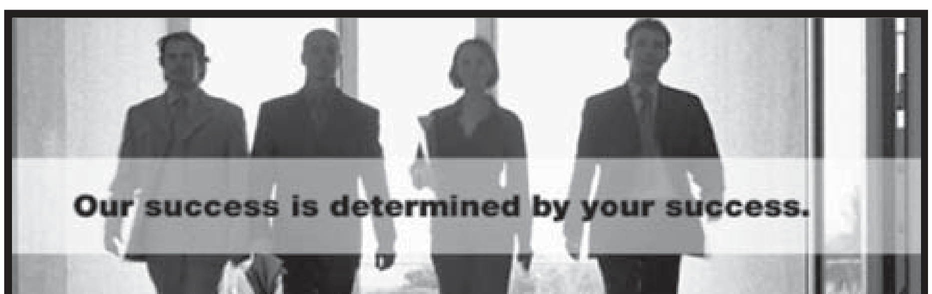
Federal work ramped up

The agency began to ramp up its Alaska work following disastrous leaks from corroded, BP-operated pipelines in 2006. Those leaks ultimately led to BP's Alaska subsidiary to plead guilty to a federal misdemeanor pollution crime. A judge put the company on probation for three years and imposed $20 million in penalties.

BP executives acknowledged lapses in pipeline maintenance, but since then the company has said it is investing hundreds of millions of dollars to replace miles of bad pipelines.

The 2006 spills led to creation of the state's Petroleum Systems Integrity

see RUPTURE page 25



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continued from page 1

CUT

cerns about demand growth have led us to revise our forecast," said analysts James Crandell and James West.

The bank said investors should now expect Canadian producers to trim 15 percent off their E&P spending based on its forecast prices of US$7 per thousand cubic feet for gas and US$75 per barrel for oil.

Barclays said budget cuts will flow through to many oilfield service and drilling companies, particularly those oriented to the North American gas market.

A Peters & Co. report said junior companies that "will be at or close to their credit lines exiting the year may be hard pressed to have their lines increase or to raise capital in the current market environment."

"With the drastic decline in equity prices, many ... intermediate and junior entities will be challenged to raise equity and may have to restrict spending in late 2008 and 2009."

In a year-end debt comparison, the firm identified Birchcliff Energy, Ember Resources, Iteration Energy, Monterey Exploration, Peyton Energy Trust and Storm Exploration as companies expected to have less than 10 percent remaining on their existing credit facilities at the end of 2008.

"These entities will either attempt to raise equity, seek expansion or current debt facilities or restrict spending," the report said, estimating that the peer group will have drawn at least 70 percent of its credit lines by year's end.

Those with credit may cut deals with cash-strapped peers

Those expected to have more than 30 percent spare room on their credit lines entering 2009 include Baytex EnergyTrust, Crew Energy, Highpine Oil and Gas, NAL Oil & Gas Trust, Vermillion Energy Trust, Zargon Energy Trust, Paramount Energy Trust and NuVista Energy Trust.

Those with unused room on their credit facilities may attempt to strike deals with their cash-strapped peers, Peters & Co. said, naming Baytex, NuVista, Vermillion and Zargon as having the strong financial base to "take advantage of such targets."

Tristone Capital said companies with low debt to cash flow and ample room on their credit lines have a chance to pick off weaker companies at depressed prices during the downturn.

Don Rawson, Tristone's director of institutional research, said that strong hedging programs can shield companies during a time of declining commodity prices by supporting both capital programs and acquisitions of weaker companies.

Those expected to have more than 30 percent spare room on their credit lines entering 2009 include Baytex EnergyTrust, Crew Energy, Highpine Oil and Gas, NAL Oil & Gas Trust, Vermillion Energy Trust, Zargon Energy Trust, Paramount Energy Trust and NuVista Energy Trust.

He estimated that at best only 15 percent of volumes by junior producers would be hedged to this point of 2009.

At the upper end, concerns about plans for oil sands megaprojects are building as crude prices shrink, posing challenges for developers to find cash to cover even the smallest outlays.

Michael Tims, chairman of Peters & Co., said the best prospect for moving ahead rests with multinationals, such as the joint venture Kearl lake project by sister companies, Imperial Oil and ExxonMobil.

He doubted companies would cut back a long-term project unless they "no longer like the relationship between capital costs and the commodity price."

Sales to meet margin calls

The problem facing oil sands startups is captured by Connacher Oil and Gas, whose Chief Executive Officer Richard Gusella has been forced to sell off a "significant percentage" of his common shares to meet margin calls.

He said in a statement he was "very disappointed" to have been required to "involuntarily" sell the shares because of the "unprecedented deterioration in capital markets triggered by the worldwide credit and ensuing financial crisis."

Shares in Connacher dropped 12 percent earlier in October after the company said it was shelving a planned expansion of its Montana refinery.

But Gusella said his confidence in Connacher is "undiminished," adding he expects to add to his holdings as "circumstances permit."

He said the principal downside of his action is that it "takes away the ability to recover the substantial value in the marketplace that is now being recognized in relation to the true value of the company."

Gusella said he had also unloaded a "significant percentage" of his shares in Petrolifera Petroleum, which operates in South America, to meet margin calls.

—GARY PARK

continued from page 24

RUPTURE

Office and to a local expansion of the federal pipeline administration, an arm of the U.S. Department of Transportation.

Both agencies aim to keep a closer watch on the aging network of pipes and plants at Prudhoe, the nation's largest oil field, which has been producing since 1977. BP runs the field on behalf of itself and other major owners including Exxon Mobil and Conoco Phillips.

Since the spills, the federal agency has ordered BP to improve pipeline monitoring and upkeep. It requires BP to file monthly status reports.

The cause of the rupture in the high-pressure natural gas pipeline on Sept. 29 remains undisclosed.

Preliminary report to state

BP representatives met the week of Oct. 13 with state officials including Natural Resources Commissioner Tom Irwin to give a preliminary report on the mishap.

But state and federal officials, as well as BP spokesman Steve Rinehart, declined to supply a copy of the report or reveal its contents, saying the findings are preliminary pending further investigation.

Kevin Banks, state oil and gas director, said the federal pipeline administration can lend engineering expertise to try to figure out why the gas line broke.

The pipe, about 8 inches in diameter, carried natural gas to a well pad for injection underground. The gas essentially adds fizz to the reservoir, helping lift more oil to the surface.

When the pipe ruptured, no workers were nearby and no fiery explosion occurred. Safety systems shut down the flow of gas automatically, Rinehart said.

The pipeline failure forced the shutdown of some Prudhoe wells producing about 5,000 barrels a day, less than 1 percent of total North Slope production.

The failed gas line, considered a localized pipe, in not among the major lines that federal inspectors normally oversee, but the pipeline administration is still willing to help with the state's investigation, Hinnah said. ●

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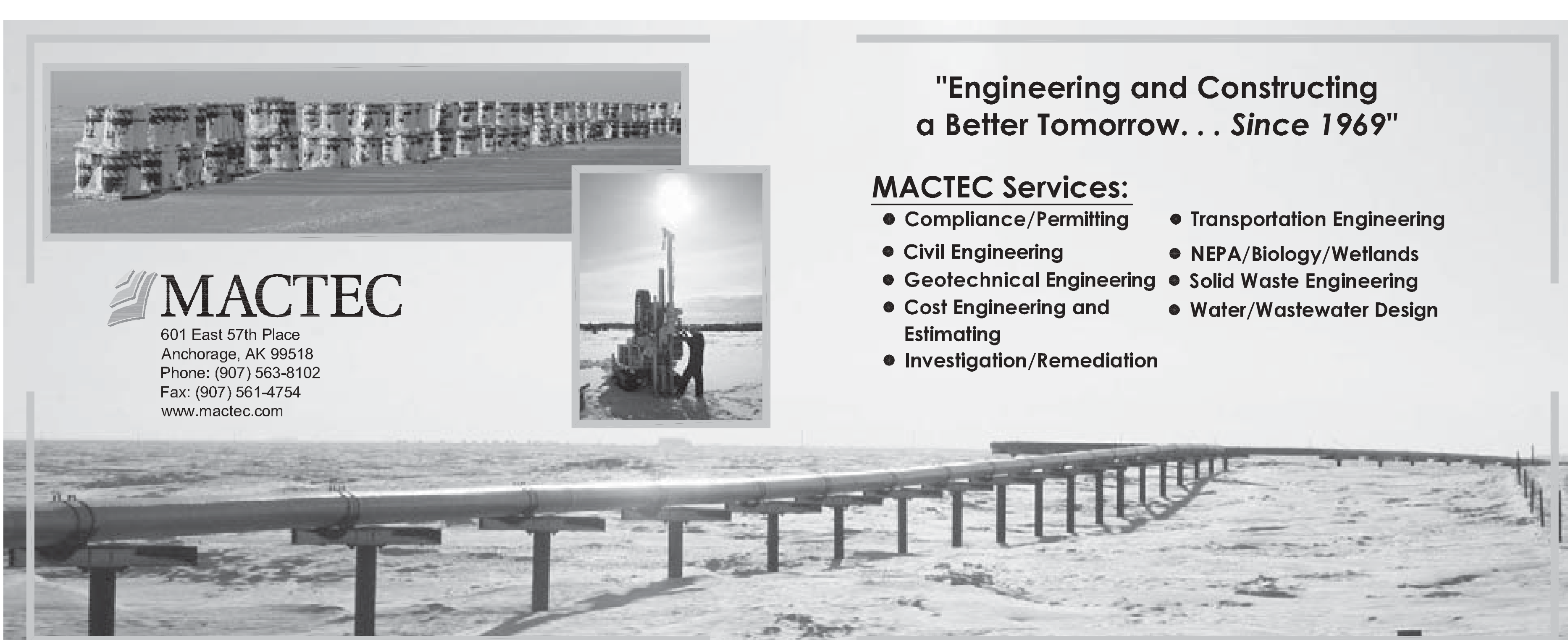

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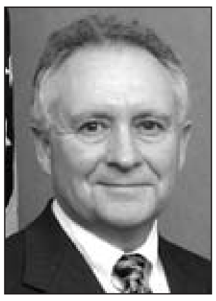
GRANTS

ment share some of the oil and gas revenues with the state and local governments?

On Sept. 30 the U.S. Minerals Management Service took a significant step into revenue sharing by approving the State of Alaska's plan under the Coastal Impact Assistance Program or CAIP, an initiative that forms part of the 2005 Energy Policy Act. MMS approval of Alaska's plan opens the way to the approval of federal grants for projects aimed at environmental remediation and protection around Alaska's coast.


RANDALL LUTHI

And that's a big deal.

Under the terms of the assistance program MMS will disburse $250 million of federal funds in each federal fiscal year 2007 to 2010 among six qualifying states: Alabama, Alaska, California, Louisiana, Mississippi and Texas. Allocation of funds between those states will depend on the relative amount of OCS revenue generated offshore of each state, but will be subject to a per-state minimum of 1 percent of total funds.

Chukchi sale

For Alaska the funding for 2007 and 2008 will amount to the minimum allocation of $2.5 million. But because the bumper Chukchi Sea lease sale that MMS held in February 2008 generated more than $2.6 billion in federal OCS revenues, that sale will have a significant impact on Alaska's future allocation, said MMS Director Randall Luthi in Anchorage on Oct. 16 during the ceremony officially announcing approval of the Alaska plan.

"We expect the funding to Alaska to rise dramatically to approximately between $30 million and $40 million each year for 2009 and 2010," Luthi said.

The release of funds within the program requires that a state submits a CAIP implementation plan and that MMS approves the plan — Alaska is the second of the six qualifying states to receive plan approval.

"It's a great step. … I look forward to continuing this partnership, a partnership with the State of Alaska, with the local communities … as well as the oil and gas industry. All will benefit in the long term," Luthi said.

State support

Tom Irwin, commissioner of the Alaska Department of Natural Resources, said that the state supports responsible offshore oil and gas development, while also protecting natural resources and the users of those natural resources.

"I have faith in the leasing and permitting programs and process, and how the state and MMS both address concerns," Irwin said. "… The Alaska CIAP plan goal is to protect Alaska's coastal areas through wise management of resource development."

And the $2.5 million that will go to the state in 2007 and 2008 is a "huge number" that will fund numerous projects around the state, Irwin said.

MMS will allocate 65 percent of the Alaska funding to the state and 35 percent of the funding to the coastal boroughs of Anchorage, Bristol Bay, Kenai Peninsula, Kodiak Island, Lake & Peninsula, Matanuska-Susitna, North Slope and Northwest Arctic. Distribution of funds between the boroughs depends on a formula involving the proportion of the Alaska coastal community in each borough, the length of each borough's coastline and an allocation of 50 percent of the funding to the two boroughs closest to a leased OCS tract.

The upshot of the funding formula is that the North Slope Borough and the Northwest Alaska Borough between them will receive more than 50 percent of the borough funds, with Anchorage receiving 16 percent of the funds. The other boroughs are entitled to smaller amounts.

Solicited projects

In May 2007 Alaska's Division of Coastal and Ocean Management started soliciting project proposals for grants from the 2007 and 2008 CIAP funding — the state and all of the boroughs except Bristol Bay submitted projects (Bristol Bay is entitled to less than 1 percent of the total borough funding and determined that its fund allocation was too small to warrant the grant application effort).

On the Web

The Alaska Coastal Impact Assistance Program plan is at www.dnr.state.ak.us/coastal/CIAP/ciap.htm

See previous Petroleum News coverage: "OCS impact assistance program moves ahead," in March 11, 2007, issue at www.petroleumnews.com/pnads/519641491.shtml

The upshot of the funding formula is that the North Slope Borough and the Northwest Alaska Borough between them will receive more than 50 percent of the borough funds, with Anchorage receiving 16 percent of the funds.

Projects had to fit within the CIAP mandate that funds must be used for certain environmental activities such as the conservation, protection or restoration of coastal areas; mitigation of damage to wildlife; the implementation of a federally mandated conservation plan; or the mitigation of OCS activities through onshore infrastructure.

And DCOM evaluated projects submitted for the Alaska plan using four criteria:

- the extent to which the project meets the goal and objectives of the Alaska plan;
- the extent to which the project addresses immediate concerns;
- the clarity with which project deliverables are defined; and
- the extent to which the program is dependent on CIAP funding.

DCOM recommendations for project funding went to the Governor's Ocean Policy Subcabinet for final project ranking and have now been incorporated into the state CIAP plan.

On Oct. 16 MMS posted the CIAP Alaska grant program on the federal www.grants.gov Web site, so that projects can start applying for grant money.

Increased funding

Because of the major increase in Alaska CIAP funding for 2009 and 2010, DCOM is soliciting for additional projects to be funded with money from those years, with project proposals due by mid January. DCOM will revise the Alaska plan to reflect the higher funding levels and the additional projects.

The upshot of the project ranking process for projects to be funded from 2007-08 money was the acceptance of 39 tier one projects that will likely consume all of the available funding. The state has lined up 12 additional tier two projects to be funded if money becomes available as a result of any tier one projects being cancelled or deferred.

The projects encompass a wide range of activities.

The state, for example, has proposed two projects to assist with the relocation of the village of Newtok in the Yukon Delta. The state has also proposed some offshore monitoring and measurement studies, including measurements in the landfast ice zone of the Beaufort Sea; the hydro-acoustic monitoring of ambient noise and marine mammals in the Chukchi Sea; and the monitoring of stellar sea lions at remote sites in the Bering Sea.

North Slope Borough projects include an assessment of mitigation measures to reduce the impact of the changing Arctic environment on marine mammals; the formulation of plans to protect archaeological and cultural sites from coastal erosion; and the implementation and enhancement of borough permitting activities.

The Northwest Arctic Borough has put forward projects that include the protection of coastal areas from the effects of waste management, from the impact of sustainable tourism and from marine debris.

The Municipality of Anchorage wants to conduct a four-year project to restore natural habitat around creeks in Anchorage.

—ALAN BAILEY

INTERNATIONAL

Gazprom into Alaska Chukchi exploration?

Barents Observer and Russian news agency Tass have both reported that Alexei Miller, chairman of Russian energy giant Gazprom, said in a Russian television interview that his company has been invited to explore for oil and gas in several blocks on the Alaska outer continental shelf, including blocks in the Chukchi Sea.

"Mr. Miller said that a new round of talks with U.S. authorities is to be held, after which it is to be decided which blocks to be offered to the company," Barents Observer said Oct. 22.

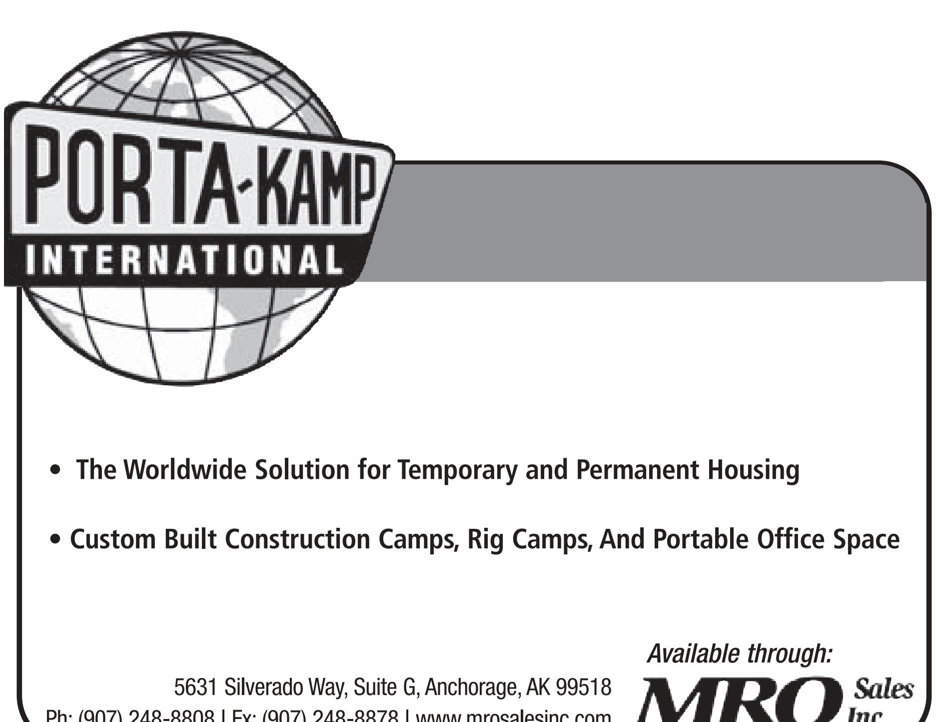
Miller was one of the members of a Gazprom delegation that visited Alaska during the week of Oct. 13. During that visit the Gazprom executives met with senior personnel from the Alaska Department of Natural Resources, senior managers of Arctic Slope Regional Corp., Jim Mulva, chief executive of ConocoPhillips, and with former Alaska Gov. Wally Hickel.

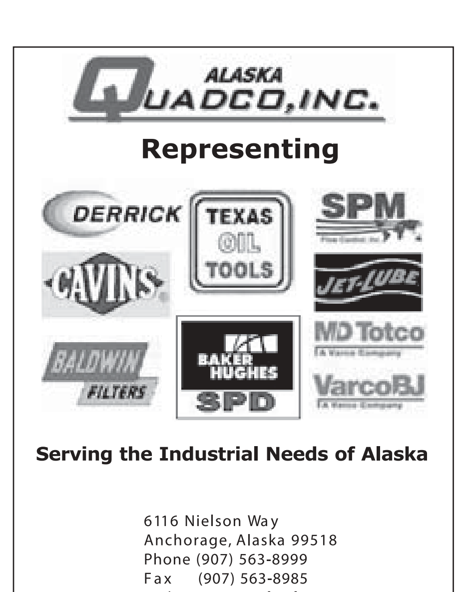
"It was emphasized at the meetings and seminars that the working conditions in the traditional areas of Gazprom's business activity were similar to the ones in Alaska," Gazprom said in an Oct. 14 press release about the Alaska visit. "Gazprom has gained an extensive experience in hydrocarbon field development, gas pipeline construction and operation, environmental protection and resolution of social problems in the Extreme North environment. Gazprom's experience will be used while implementing similar projects in Alaska."

During a conference call with investors on Oct. 22, Mulva was asked about the nature of the Gazprom meetings and said, "I don't think it's probably appropriate for me to get into that. We just a week or two ago met with Alexei Miller, the CEO of Gazprom, and we are discussing several of those opportunities, but I don't think it's appropriate to go through what specifically they may be."

The U.S. Minerals Management Service issues oil and gas leases for Alaska outer continental shelf exploration. Leases are issued as a result of competitive lease sales. The next MMS Chukchi Sea lease sale is scheduled to be held in 2010.

—ALAN BAILEY





● ALTERNATIVE ENERGY

Interior issues geothermal leasing plan

Final PEIS sets the stage for program of geothermal leasing in western states; 20 mw plant possible at Bell Island in Alaska

By ALAN BAILEY
Petroleum News

On Oct. 22 the U.S. Department of the Interior announced the release of the final programmatic environmental impact statement for geothermal leasing in 12 western states, including Alaska.

"Today I'm announcing a plan to make more than 190 million acres of federal land available for developing geothermal energy resources," said Secretary of the Interior Dirk Kempthorne. "… In the plan that we're presenting today … we're proposing to identify about 118 million acres of public lands managed by Interior's Bureau of Land Management and 79 million acres of National Forest System lands as available for potential geothermal leasing."

Federal land within the National Park System will not be available for leasing, he said.

Kempthorne said that the United States will need a wide variety of energy sources, including geothermal energy, to meet the country's future energy needs.

"Because geothermal energy is replenished by heat sources deep in the Earth it is a renewable resource that generates electricity with minimal carbon emissions," Kempthorne said.

World leader

With about 16,000 gigawatt-hours of geothermal electricity generated in 2005, the United States is the world leader in geothermal power generation, Kempthorne said. And almost half the current U.S. geothermal production and about 90 percent of all U.S. geothermal resources occur on federal lands.

"Under a reasonable development scenario the plan that we propose could produce 5,540 megawatts of new electric generation capacity from geothermal resources by 2015, which is enough power for 5.5 million homes," Kempthorne said.

BLM has already conducted three geothermal lease sales and says that it hopes to have two or more sales per year, as nominations come in for land that is included within the PEIS.

The draft PEIS was issued in June and the public comment period for that draft plan ended on Sept. 19. The final plan now moves into a 60-day consistency review by state governors, before DOI can issue a record of decision. The state governors will verify that the plan is consistent with state plans, programs and policies, Kempthorne said.

Kempthorne said that the United States will need a wide variety of energy sources, including geothermal energy, to meet the country's future energy needs.

Proposed action

The proposed action in the PEIS involves opening for leasing much of the BLM and National Forest Land that has geothermal potential — DOI saw this action as preferable to just leasing land near existing power transmission lines. BLM will have to modify 112 land use plans to accommodate the possibility of geothermal leasing. Those land use plans include the Central Yukon, Kobuk-Seward and Ring of Fire resource management plans in Alaska.

And BLM and the National Forest Service will issue or deny any geothermal lease applications that were pending as of Jan. 1, 2005; identify any public lands that are closed or open to leasing; and develop a list of stipulations, best management practices and procedures for future leasing.

Alaska contains extensive lands with volcanic and hot spring features that present geothermal potential. These lands occur in the Aleutian Islands, the Alaska Peninsula, Interior Alaska and Southeast Alaska. Federal land occurs in all of these regions, but the PEIS points out that under the terms of the Alaska Native Claims Settlement Act a substantial portion of that federal land has been withdrawn from mining and mineral leasing — these land withdrawals can be revoked upon BLM recommendation and by final determination by the Secretary of the Interior, the PEIS says.

Three Alaska sites

The PEIS says that in Alaska there are high potential sites for commercial geothermal electricity generation in federal land in Hot Springs Bay Valley in Southeast Alaska, at Bell Island Hot Springs in Southeast Alaska, at Circle Hot Springs in the Interior and at Unalaska in the Aleutian Islands (the City of Unalaska has been pursuing a proposal for a geothermal power plant on the side of the Makushin Volcano, although Petroleum News understands that the planned geothermal source for this project lies in private land).

There are, in fact, pending applications for three 2,560-acre leases at the Bell Island site, which lies within the Tongass National Forest about 43 miles north of Ketchikan. The applications envisage a 20-megawatt power plant to provide power for Bell Island Hot Springs, and possibly to the nearby Yes Bay Lodge via underwater cable. The power plant might also connect to a future Swan Lake to Tyee Lake Electrical Intertie that would connect with the City of Ketchikan and would cross Bell Island.

Exploration at Bell Island would involve drilling some six temperature gradient holes to test for a commercially viable source.●

GOVERNMENT

Northern Oil and Gas forum to be held in Anchorage

More than 250 American and Canadian oil and gas managers and scientists will participate in the jointly sponsored Northern Oil and Gas Research Forum 2008, Oct. 28-30, at the Downtown Anchorage Marriott Hotel.

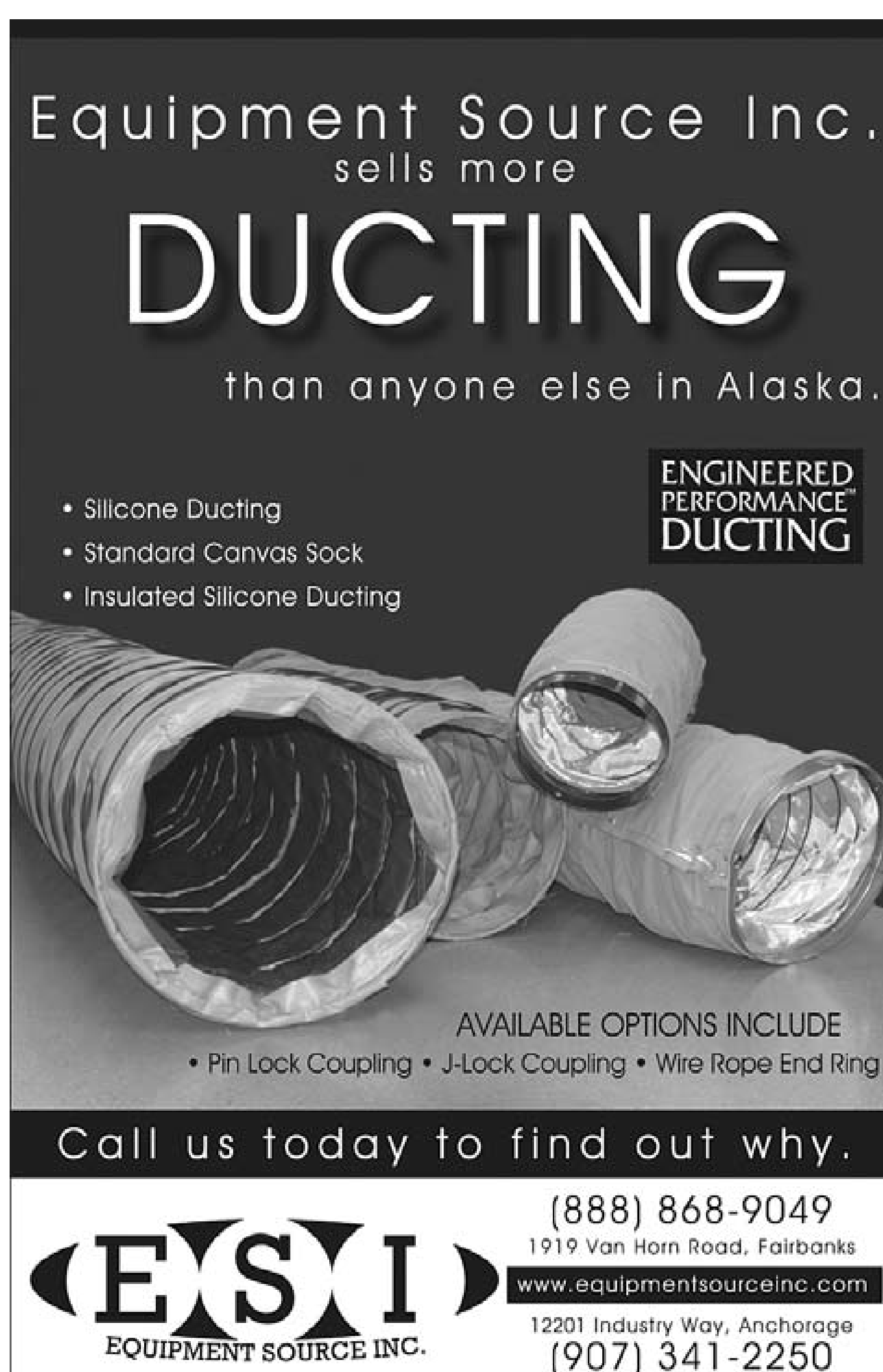
Focus of the forum will be on research programs, how information is used in decision making and future directions for northern oil and gas exploration and development, said the U.S. Bureau of Land Management, one of the forum's sponsors.

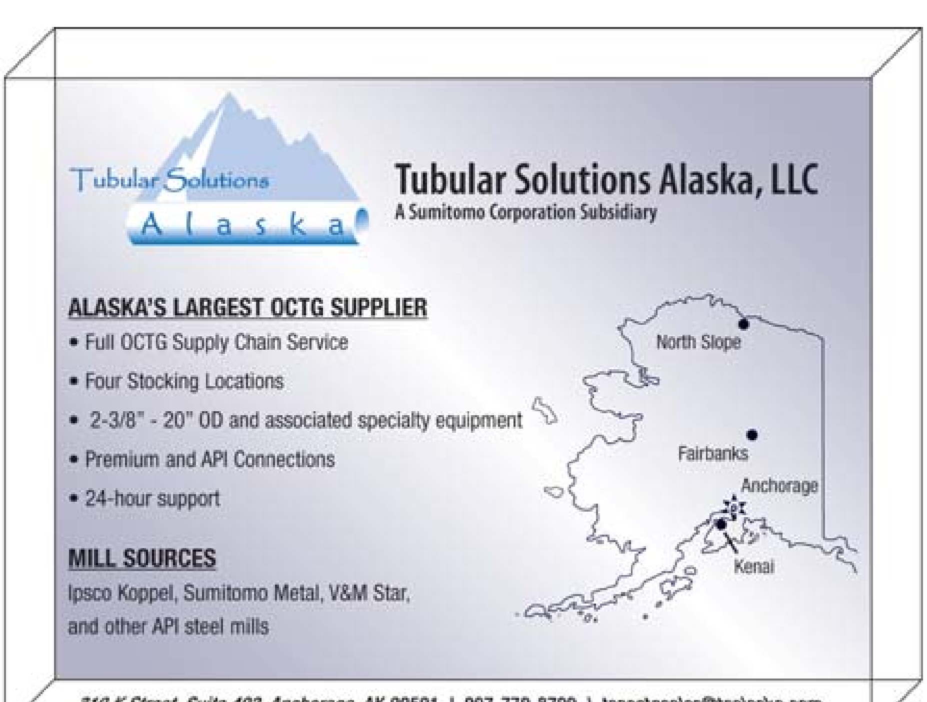
The forum will showcase current research programs by demonstrating how they have contributed to decision making through environmental assessments and the regulatory process, and highlighting the involvement of indigenous peoples in research programs; identify how to move research programs into the decision-making arena; and discuss future oil and gas research needs, including synergies and partnerships for the Beaufort Sea, North Slope and Mackenzie Delta.

In its general sessions the forum has technical and engineering, socio-cultural/socio-economic, biological and physical science programs that will describe the current research and its relevance to the Arctic.

The program and abstracts can be viewed at www.northslope.org. On-site registration will be limited due to seating constraints.

—PETROLEUM NEWS





Business Spotlight

Chiulista Services Inc.

Chiulista Services Inc., a Calista Corp. subsidiary, is the local hire leader for remote camp services. The Donlin Creek Gold Mine project was populated with a high of 96 percent of 250-plus employees from within the Calista Region; this confirmed CSI's commitment to hiring, training, and advancing people from the adjoining communities to jobs of all skill levels. From housekeeping to camp management, CSI provides personnel to carry out the critical tasks associated with operating in far-flung places.

COURTESY PHOTO

Joe Obrochta, President & CEO

Joe Obrochta

After a distinguished U.S. Army career, Joe joined Calista Corp. in 2000. He completed his master's degree in 2006, while advancing within Calista, and became president of CSI in 2007. This past August he and wife Tere, Annie 14 and Ellie 12, became Anchorage residents. Joe's mistress, safely situated under cover, is a "slightly" modified Cobra Mustang. Joe and Tere have remodeled four homes in 10 years (for fun, he says) and they're still happily married after 18 years.

Monique Henriksen

Monique earned a bachelor of arts degree in human resources administration after attending Bethel Regional High School. She's been with Calista companies for three years and, prior to that, spent 10 years in the personnel field. She was named senior vice president of CSI in 2007. Being a single mom with two children — Tyler, 15, and Isabella, age 5 — hasn't always been easy, especially while going to school, but Monique says it paid off. Helping her kids understand the importance of a good education is a priority.

FORREST CRANE

Monique Henriksen, Sr. VP, Alaska Operations

—PAULA EASLEY

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

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

continued from page 1

ARMSTRONG

nies Armstrong had brought to the state, Bill Armstrong said his company would be back.

"We're definitely not leaving Alaska. … We still see huge opportunities on the North Slope," he told Petroleum News. "It's a great place to be and it's a great petroleum system."

Two years later, in 2007, an Armstrong affiliate entered Southcentral Alaska's Cook Inlet basin for the first time.

Armstrong Cook Inlet LLC has since drilled a well in an undeveloped gas field on the southern Kenai Peninsula and is looking to develop that field once it's certain a pipeline will be built to take its natural gas to market. (See Petroleum News archives at www.petroleumnews.com for more information.)

Why is the company back in northern Alaska?

"We're much more bullish on oil than gas, so that's one of the reasons we are coming back to the slope," Bill Armstrong said Oct. 22. "It's a very forgiving petroleum system so we like it. We're glad to be back."

Armstrong said he's also "bullish on oil prices," which he pointed out are "much better than when we first went to the North Slope" in late 2001. "Oil was at $15 a barrel back then, so even if the prices have dropped some recently, they're still much higher than when we first went up there."

Armstrong said he and his staff, which has grown "substantially" since 2005 when the company sold its oil and gas assets in northern Alaska, are "real excited" to be back "on the North Slope" and "looking forward to working with other leaseholders and operators in the Kuparuk River unit area," such as "ConocoPhillips, Pioneer Natural Resources, Eni Petroleum, Chevron and BP."

He said his company had "a good relationship with all those companies in the past, and it will take cooperation between all of us" to get the leases from the Oct. 22 sale explored and developed.

Plans to be just as active as last time

When asked if 70 & 148 LLC planned any exploration work during the upcoming winter season, Armstrong said no.

"This winter would be too quick for us. We have got to get leases issued, which takes seven to eight months," he explained.

"But we don't go into an area NOT to create activity. Our game plan is some variation of what we did before, which is to create a lot of exploration activity. That is good for everybody, including the State of Alaska," Armstrong said.

He reminded the author that when he was first interviewed by her in 2001, he said, "Just print what I do, not what I say."

Armstrong's subsequent track record on the North Slope was three out of four — i.e. in four North Slope prospects that were drilled by Armstrong and the bigger partners it brought in between 2002 and 2005, three discoveries were 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.

First oil flowed from the Oooguruk unit in June 2008. Nikaitchuq is scheduled to produce its first oil by the end of 2009. (Tuvaaq is being developed as part of Nikaitchuq.)

During its first stint on the North Slope and the near-shore Beaufort Sea, Armstrong also helped set records for the shortest time to permit exploration and development projects, initially working closely with both Pioneer and Kerr-McGee for the permitting of Oooguruk and Nikaitchuq. ●

EXPLORATION & PRODUCTION

U.S. Gulf production still languishing

Nearly two months after operators began evacuating offshore platforms and drilling rigs ahead of back-to-back hurricanes Gustav and Ike more than 30 percent of oil and gas production remained shut-in in the Gulf of Mexico, according to the latest statistics issued Thursday, Oct. 23, by the U.S. Minerals Management Service.

From the operators' reports, MMS estimates that 32.3 percent of the oil production and 34.5 percent of the natural gas production in the U.S. Gulf remained shut-in.

The Gulf normally averages about 1.3 million barrels of oil per day, or 25 percent of U.S. domestic oil production, and between 7 billion and 7.4 billion cubic feet of natural gas per day, or about 15 percent of domestic gas output.

The official MMS damage report, now more than two weeks old, stands at 54 platforms destroyed; 35 platforms seriously damaged and taking from three to six months to repair; and 60 platforms receiving moderate damage and taking one to three months before production can be restored. Additionally, an oil pipeline system and eight gas transmission pipeline systems were reported damaged.

Meanwhile, the American Petroleum Institute reported that total petroleum deliveries for the 2008 third quarter fell 5.2 percent from third-quarter 2007, the result of hurricane-related production disruptions in the U.S. Gulf. API also reported that about 4 million barrels per day of U.S. refinery capacity were affected. Gasoline deliveries fell 4 percent, distillate deliveries dropped 7.4 percent, and jet fuel deliveries slipped 2.7 percent.

Ike and Gustav also hindered the delivery of foreign crude oil to Gulf Coast ports. Crude oil imports in September reportedly fell nearly 13 percent to less than 9 million barrels per day compared with September 2007, sinking to their lowest level in more than five years. The federal government delivered close to 5 million barrels from the federal Strategic Petroleum Reserve to a number of refiners seeking replacement crude oil supplies.

"Hurricanes Gustav and Ike hurled some significant challenges at the industry this past month," an API representative said.

—RAY TYSON

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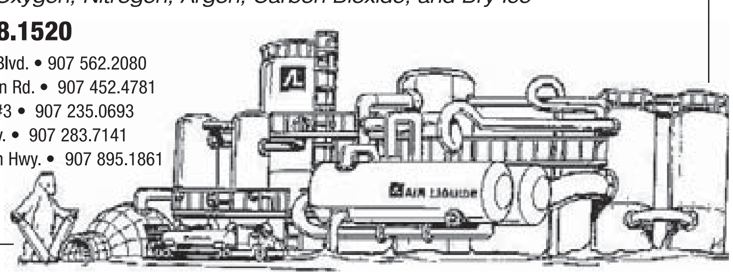

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LEASE SALE

Who was this mystery bidder?

Petroleum News learned after the sale from Bill Armstrong of Armstrong Oil and Gas of Denver that 70 & 148 LLC is "another Armstrong affiliate." Armstrong sold its North Slope and Beaufort Sea interests to Eni Petroleum in 2005 and has since acquired Cook Inlet basin acreage (see Armstrong story on page 1 of this issue).

The state received 72 bids from seven bidders or bidding groups for 60 tracts in the North Slope sale, and 38 bids from nine bidders or bidding groups for 32 tracts in the Beaufort Sea sale.

"Many tracts offered in yesterday's sales were relinquished to the state in the ordinary course of our management of our oil and gas lands," Kevin Banks, director of the Division of Oil and Gas, said in an Oct. 23 statement.

"I believe that new entrants in the Alaska oil and gas industry are motivated to try new concepts to develop prospects that may have been overlooked to date. The economy of Alaska is enhanced when these newcomers can join those active companies already here as part of a vibrant, diversified industry," he said, noting that half of the bonus bids received, approximately $4.55 million, would be deposited in the permanent fund.

The $9.1 million in apparent high bids compares favorably with 2007 and 2006 sales in these areas, which brought in $2.1 million and $2.6 million respectively. Big sales in early 2006 — actually the 2005 areawide sales deferred — brought in $23.4 million. In 2004 the state garnered $11.8 million from the two sales and $4.9 million in 2003.

Interest in Kuparuk area

The 70 & 148 LLC bids accounted for 77 percent of the dollar value of apparent high bids in the North Slope and 71 percent of the apparent high bids at the Beaufort Sea sale — $5 million of $6.5 million in North Slope bids and $1.86 million of the $2.6 million Beaufort Sea high bids. The company placed 20 of the 38 bids in the Beaufort Sea sale, and was apparent high bidder on 19 of the 32 tracts receiving bids. In the North Slope sale, 70 & 148 placed 51 of the 72 bids the state received, and was apparent high bidder on 49 of the 60 tracts receiving bids.

Armstrong told Petroleum News that 70 &148 picked up acreage, "In and around where we picked up leases when we first came to Alaska in 2001, northeast and northwest of Kuparuk and south of Kuparuk, generally in the Kuparuk area — actually in every direction from Kuparuk except east of the unit."

When asked how many prospects his company had identified in the acreage it picked up at the lease sale, Armstrong said there were "a lot of prospects that we identified in the old days, as well as some new ones."

Beaufort Sea bidding

The 70 & 148 high bids in the Beaufort Sea sale included $146.17 an acre for tract 414, the highest per-acre bid in that sale. Tract 414 is on the western edge of the Pioneer Natural Resources Alaska-operated Oooguruk unit, in which Armstrong sold its interest to Eni. Pioneer also bid on that tract, Pioneer's only bid in the Beaufort Sale.

The 70 & 148 bids were all on the western side of the Beaufort Sea sale and included five tracts north of Oooguruk — three of those contiguous with the unit's northern border — and 10 tracts west of Oooguruk, three of those, including tract 414, contiguous with the western border of Oooguruk.

The company also had high bids on four tracts west of Oooguruk and north of the Colville River unit.

Samuel H. Cade (75 percent) and Daniel K. Donkel (25 percent) had apparent high bids of $280,992, 10.75 percent of high bids in the Beaufort Sea sale, on five tracts. Cade-Donkel bid $10.02 an acre for four of the tracts. They bid $21.21 an acre for tract 75, the site of ARCO's Stinson well and the only tract in this eastern area of the Beaufort sale to draw competing bids.

These five tracts were among the six most easterly receiving bids in the sale, stretching across the top of the Arctic National Wildlife Refuge from east of Point Thomson almost to the Canadian border.

In the central part of the Beaufort Sea sale a bidding group of the major Prudhoe Bay owners (BP Exploration (Alaska), ConocoPhillips Alaska, ExxonMobil Production Co. and Chevron) bid $150,048 for a tract on the northern edge of the Prudhoe Bay unit in the area of Niakuk. To the west, ConocoPhillips Alaska bid $106,316.80 for a tract on the edge of the Colville River unit.

AVCG LLC had high bids totaling $83,200 on two adjacent tracts east of Badami, one contiguous to the unit. J. Andrew Bachner had the high bid on two tracts for a total of $52,582.40, both contiguous to Badami—one to the north, one to the northwest.

A bidding group of Sun-West Oil & Gas, Michael Shearn and Shane Spear took a single tract for $52,281.16—the farthest east tract receiving a bid.

Savant Alaska took a single tract for $27,673.60, a tract at the eastern end of a Savant block west of Badami and south and southwest of Liberty.

North Slope bidding

The 49 tracts that 70 &148 took in the North Slope areawide sale begin in the north and form a block with the tracts west of Oooguruk that the company took in the Beaufort Sea sale, extending south along the western edge of the Kuparuk River unit

Where the North Slope and Beaufort Sea sales meet, 70 & 148 took 12 tracts between the Oooguruk and Colville River units. Farther south, between the Kuparuk River and the Colville River units, the company took nine tracts. The company took five tracts on the southern borders of Kuparuk and 10 tracts south of Kuparuk.

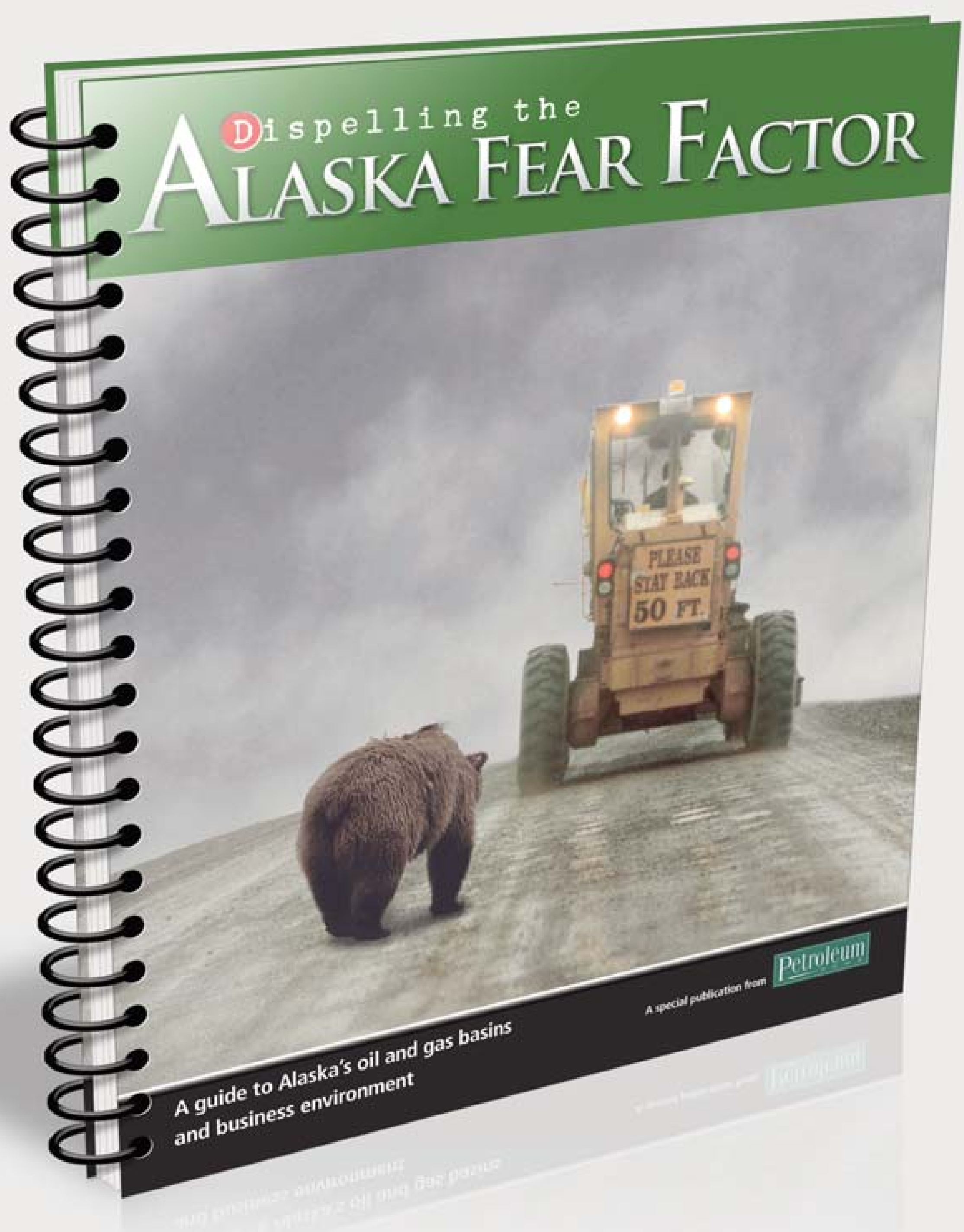
To the south and east of Meltwater, a southern extension of the Kuparuk River unit, 70 & 148 took nine tracts. South of the North Slope royalty line, in the southwestern portion of the sale area, the company took four tracts.

Pioneer Natural Resources Alaska had the second-highest North Slope bid total, $783,027.20 — the company's bid for a single tract, 1211, adjacent to the Pioneer-operated Oooguruk unit. That bid had the highest per-acre bid in the sale, $305.87 as well as the highest tract bid. Tract 1211 also drew a $161.17 per acre bid from 70 & 148.

Talisman subsidiary FEX LP bid $590,400 for six tracts in the southwestern portion of the sale, three adjacent to a four-tract FEX block between the Itkillik and Kuparuk rivers at the southern boundary of the lease sale area, a block which contains the 1960s Itkillik Unit well, the other three tracts farther east, adjacent to a seven-block FEX prospect west of the trans-Alaska oil pipeline, a block which contains the 1960s Richfield Susie well.

J. Andrew Bachner took two tracts immediately south of Badami on the eastern side of the sale area for $52,582.40.

AVCG took a single tract for $45,440 immediately west of the Colville River unit and Savant Alaska LLC took a single tract for $27,673.60 immediately south of Badami.●



Dispelling the Alaska Fear Factor is a comprehensive guide to Alaska's oil and gas basins and business environment. The purpose of the guide is to give E&P companies interested in the state's oil and gas potential the basic information they need to make investment decisions.

The guide's 16 chapters include everything from the geology and prospectivity of Alaska's basins to permitting oil and gas projects. The fear factors underlying the belief that you can find lots of oil and gas in Alaska, but can't make as much money producing it as you can elsewhere in the world, spawned the guide's title, Dispelling the Alaska Fear Factor.

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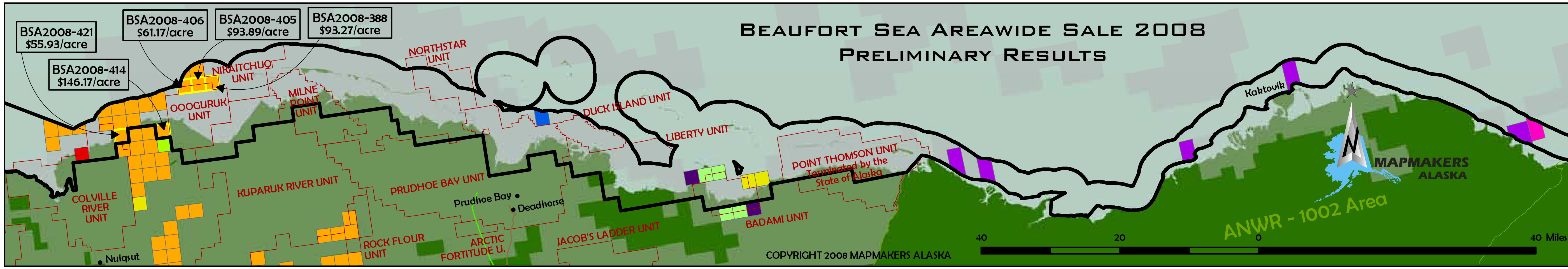
Beaufort Sea Areawide Sale 2008
Preliminary Results
BSA2008-421 $55.93/acre
BSA2008-406 $61.17/acre
BSA2008-405 $93.89/acre
BSA2008-388 $93.27/acre
BSA2008-414 $146.17/acre
NORTHSTAR UNIT
NIKAITCHUQ UNIT
OOOGURUK UNIT
MILNE POINT UNIT
DUCK ISLAND UNIT
LIBERTY UNIT
POINT THOMSON UNIT Terminated by the State of Alaska
KUPARUK RIVER UNIT
PRUDHOE BAY UNIT
COLVILLE RIVER UNIT
ROCK FLOUR UNIT
ARCTIC FORTITUDE U.
JACOB'S LADDER UNIT
BADAMI UNIT
Prudhoe Bay
Deadhorse
Nuiqsut
Kaktovik
MAPMAKERS ALASKA
ANWR - 1002 Area
40 20 0 40 Miles
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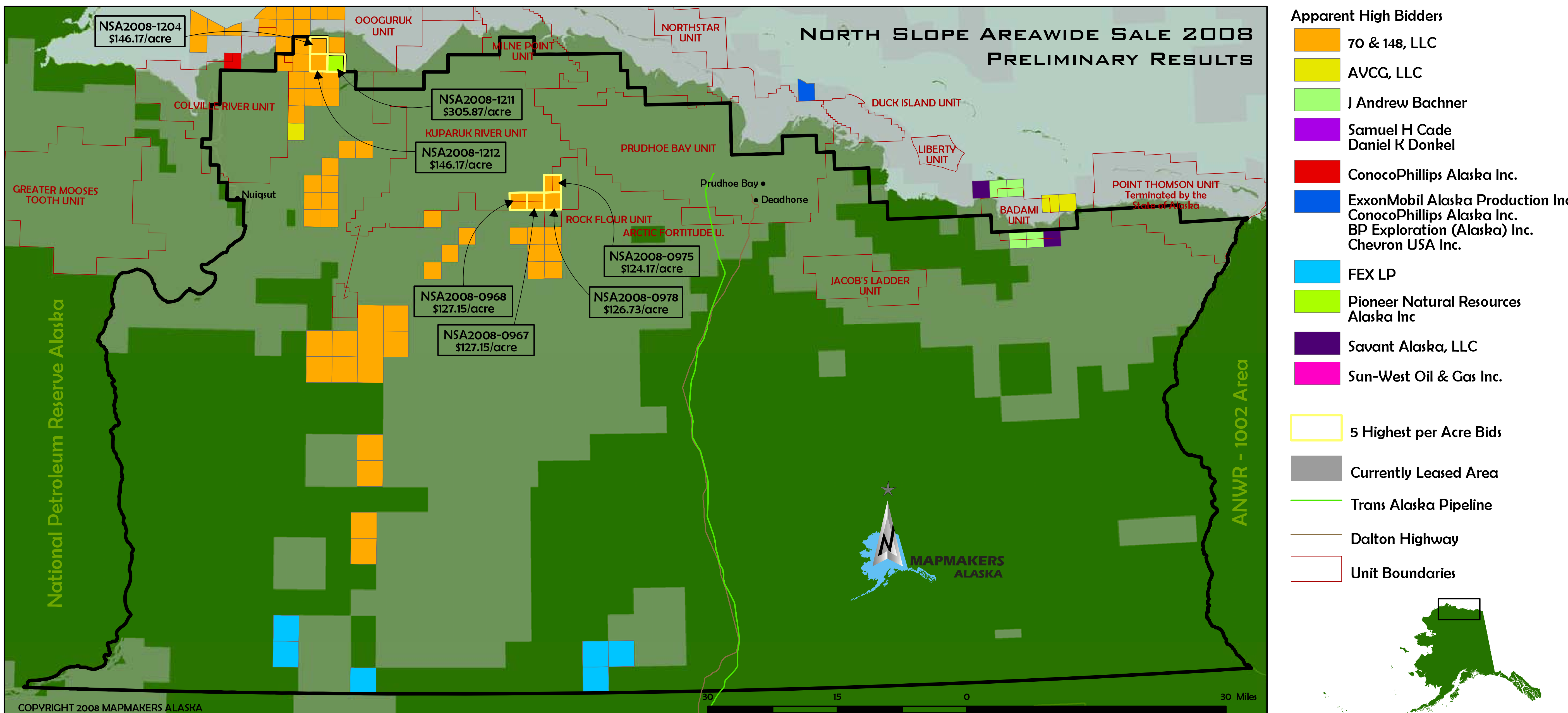
North Slope Areawide Sale 2008
Preliminary Results
NSA2008-1204 $146.17/acre
NSA2008-1211 $305.87/acre
NSA2008-1212 $146.17/acre
NSA2008-0975 $124.17/acre
NSA2008-0968 $127.15/acre
NSA2008-0978 $126.73/acre
NSA2008-0967 $127.15/acre
OOOGURUK UNIT
MILNE POINT UNIT
NORTHSTAR UNIT
DUCK ISLAND UNIT
LIBERTY UNIT
POINT THOMSON UNIT Terminated by the State of Alaska
BADAMI UNIT
COLVILLE RIVER UNIT
KUPARUK RIVER UNIT
PRUDHOE BAY UNIT
ROCK FLOUR UNIT
ARCTIC FORTITUDE U.
JACOB'S LADDER UNIT
GREATER MOOSES TOOTH UNIT
Nuiqsut
Prudhoe Bay
Deadhorse
National Petroleum Reserve Alaska
ANWR - 1002 Area
MAPMAKERS ALASKA
30 15 0 30 Miles
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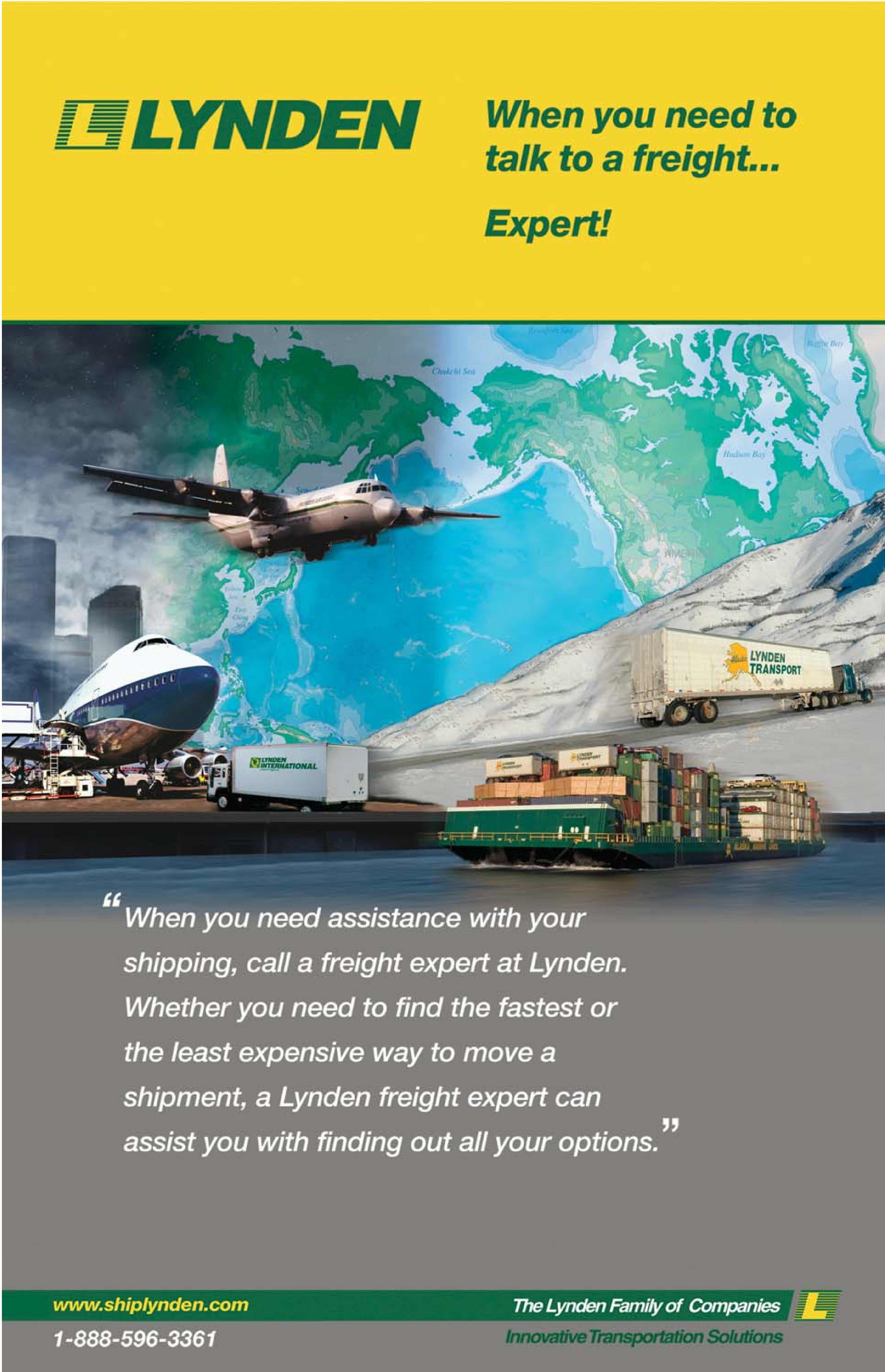
Samuel H Cade
Daniel K Donkel
ConocoPhillips Alaska Inc.
ExxonMobil Alaska Production Inc.
ConocoPhillips Alaska Inc.
BP Exploration (Alaska) Inc.
Chevron USA Inc.
FEX LP
Pioneer Natural Resources
Alaska Inc
Savant Alaska, LLC
Sun-West Oil & Gas Inc.
5 Highest per Acre Bids
Currently Leased Area
Trans Alaska Pipeline
Dalton Highway
Unit Boundaries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MINING NEWS

2 Juniors maneuver to ride out financial storm

Small mining companies adjust strategies as capital markets continue meltdown

21 Yukoner closes in on gold prospector's dream

Junior bets Freegold Mountain could yield next big discovery in Tintina Gold Belt

24 Aussie newcomer eyes Interior Alaska property

Australian Mineral Fields to spend $3 million to explore gold prospect near Tok

An aerial view of the dredge, built by Goodnews Mining Co. in 1937, that recovered the majority of the 650,000 ounces of platinum mined in the Salmon River area of Southwest Alaska.

PHOTO BY PAUL ANDREW LAWRENCE

A special supplement to Petroleum News

WEEK OF October 26, 2008

Petroleum news

● FINANCE

Juniors struggle to survive financial storm

Small miners adjust strategies as markets melt down; analysts predict half will fail, creating new opportunities

BY SHANE LASLEY
Mining News

The financial markets haven't been kind to junior mining and exploration stocks lately. During the past six months, five of Alaska's junior explorers have lost more than three-quarters of their average stock values.

This decimation of junior stocks is not isolated to companies doing business in Alaska and northern Canada, but sweeps the industry across the board. The S&P/TSX Venture Composite Index, which represents about 40 percent of mining companies worldwide, has declined more than 66 percent.

Analysts predict half of all juniors will not survive the financial crisis, but the ones that make it will have less competition in supplying minerals to growing global demand.

A change of fortune

At the beginning of 2008 an atmosphere of euphoria surrounded juniors; gold prices approached $1,000 per ounce, silver and copper hit record highs and investors eagerly poured cash into exploration ventures.

In this environment, everything except for cash was in short supply. In February, juniors attending the Exploration Roundup in Vancouver, B.C., worried about securing enough drills, skilled workers and assay labs, all of which were in short supply for the coming season.

By mid-July, fortunes had clearly reversed. Juniors that normally rushed to tell investors about their latest discoveries suddenly became reluctant to share good news because a spike in stock prices often led to a mass sell-off of those stocks.

A strategic shift

As capital became scarce, juniors began scaling back projects, and the industry adopted a new mantra: "We are focusing on our flagship properties."


COURTESY OF FULL METAL MINERALS

Full Metal Minerals crews continue to explore the company's 40 Mile and Lucky Shot projects. Full Metal also has joint venture agreements with nine companies on projects spanning Alaska.

Even as it closed in on finally becoming a producer, NovaGold Resources Inc. may have initiated a new take on that approach in August when it announced plans to explore "strategic alternatives."

In fact, juniors across the industry are exploring a broad range of alternatives. Their options include mergers, "forward-selling" gold and silver from future production of an anticipated mine, selling off non-core projects, foreign investments, and the old-fashioned "batten down the hatches and ride out the storm," observers say.

Full Metal Minerals, an aggressive Canadian junior that is very active in Alaska, has a business model that puts the company in a good position to ride out the financial storm, Director and CEO Rob McLeod told Mining News recently.

"Since we first formed our company, one of the cornerstones of our business model is to bring in joint venture partners, particularly major mining companies that have the pockets to ride out this type of storm," McLeod said. "We have agreements with BHP, Kinross, Freeport McMoRan as well as just this week we announced another joint venture agreement with a cashed-up junior company (Mosam Capital)."

McLeod said that considering current economic conditions, Full Metal would consider "more than ever now" bringing in major mining companies or large junior companies to jointly explore its other projects that are going to require more capital.

Freegold Ventures Ltd. is also looking at joint ventures as a route to advance its projects.

In an Oct. 17 letter to shareholders, Freegold President and CEO Steve Manz said, "While the capital available in the past few years has allowed us to move all four of our projects incrementally forward by ourselves, in the current market we may look more towards the joint venture model in order to accelerate the exploration of attractive earlier stage targets within our portfolio, and to help minimize equity dilution at these current prices."

McLeod said Full Metal is also considering merger opportunities.

"The other things that I think you will see over the coming months – it is certainly something we have been and would consider – are mergers," he predicted.

Referring to the recent Niblack Mining and Committee Bay merger, McLeod said the combination was a good example of a company with an advanced project and another one with money in the till joining forces.

"I think you are going to be seeing a lot of that in the junior world, and also the late stage development companies and some of the small producers merging to reduce overhead and focus exploration," he added.

Supply and demand

The crisis facing junior miners has implications for mineral commodities as well as the entire mining sector. Exploration performed by juniors is the critical pipeline between prospective properties and proven reserves of the mineral wealth hidden underground. Mining these discoveries is what supplies the ever-growing worldwide demand for minerals. If the exploration companies are hampered in feeding feasible mining properties into the supply chain at pace with global demand, analysts say an increase in mineral prices can be expected.

General wisdom is that the junior stocks should follow the commodities that they are exploring or mining. However, while gold and silver are selling at prices about 225 percent higher than they were five years ago and copper prices are up around 300 percent since 2003, the juniors' stock index is down from 5 years ago.

NovaGold discussed this phenomenon in its third-quarter 2008 financial report. "While gold has appreciated more than 20 percent from one year ago, precious metals companies have traded off with the general market in a major market correction. Management believes that the current share price does not reflect the true value of NovaGold's near-term gold production nor the value of our large strategic development-stage assets. However, because of continued declining world production, we remain bullish on metals prices long term."

Silver lining

The situation has turned into a dwindling-spiral; investors are abandoning junior explorers in favor of less risky investments and without the investment capital, the juniors cannot conduct the exploration required to make the discov-

see JUNIORS page 3

COURTESY OF NOVAGOLD RESOURCES INC.

NovaGold Resources Inc. crews completed more that 32,000 meters of drilling at the Donlin Creek project in southwestern Alaska in 2008. NovaGold management does not believe the company's share price reflects the value of its large, advanced stage exploration projects.

continued from page 3

JUNIORS

eries that will give investors the big returns they seek.

Though this is not a new situation, the unprecedented financial crisis on Wall Street coupled with new commodities investment vehicles – that allow investors to leverage commodities without the traditional risks associated with exploration – may slow the return of investors to the juniors.

Analysts are forecasting the financial meltdown will claim up to half of all juniors. But experts say the dark financial cloud has a silver lining for juniors who can survive. Increased mineral prices are expected in the longer term due to a pinch in the supply line, and investors eventually will return to juniors that can ride out the storm.

While the financial situation is causing juniors to adjust the way they do business, they are looking forward to claiming some of the silver lining in the dark financial clouds.

Manz told Freegold shareholders: "Although the current market conditions are difficult for junior companies, we remain optimistic, continuing to focus on the future, and with our ongoing efforts, expect to emerge from the current market in a stronger position."

Full Metal's McLeod may have summed up the situation best: "Every day that (went) by over the past six weeks or so, things changed, and of course they are getting worse and worse. We will have to see where the commodities bottom out (and) where the share prices bottom out and start rebuilding, like most of the juniors out there." ●

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Contact North of 60 Mining News:

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

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Shane Lasley	PUBLISHER & NEWS EDITOR
Rose Ragsdale	EDITOR-IN-CHIEF (contractor)
Mary Mack	CHIEF FINANCIAL OFFICER
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Mapmakers Alaska	CARTOGRAPHY
Dee Cashman	CIRCULATION REPRESENTATIVE

ADDRESS
P.O. Box 231647
Anchorage, AK 99523-1647

NEWS
907.229.6289
publisher@miningnewsnorth.com

CIRCULATION
907.522.9469
circulation@petroleumnews.com

ADVERTISING
Susan Crane • 907.770.5592
scrane@petroleumnews.com

Bonnie Yonker • 425.483.9705
byonker@petroleumnews.com

FAX FOR ALL DEPARTMENTS
907.522.9583

Several of the individuals listed above are independent contractors

Pacific Rim
Geological Consulting, Inc.

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

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

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● ALASKA

Rock Creek reports smooth startup

New mine reports first gold pour Oct. 1; sale of NovaGreenPower contributes to record third-quarter earnings for junior miner

BY SHANE LASLEY

North of 60 Mining News

COURTESY OF NOVAGOLD RESOURCES INC.

NovaGold Resources Inc. poured its first gold from the Rock Creek Mine near Nome on Oct. 1. NovaGold workers conducted this test pour of gold at Rock Creek in 2007.

NovaGold Resources Inc. reports that the startup of its first mining operation at Rock Creek near Nome is going smoothly.

Production levels at Rock Creek have been higher than the company anticipated, averaging about 50 percent of design capacity during the first month of operation, NovaGold said in its third-quarter financial report.

The gold mine's gravity circuits ran at about 80 percent availability and the carbon-in-leach system is in the process of being charged and commissioned.

Carl Gragnier, NovaGold's vice president of operations, told Resource Development Council members Oct. 2 that the company expects the Rock Creek mine to be running at its full 7,000-metric ton-per-day capacity some time in November.

Gragnier also said crews at the mine had completed the first gold pour Oct. 1.

NovaGold expects to recover 20,000 ounces of gold at Rock Creek before the end of 2008. Once in full production, the mine is projected to produce about 100,000 ounces of gold per year with life-of-mine cash costs estimated at about $500 per ounce. At current metal prices, Rock Creek should generate more than $25 million in cash-flow for the junior in 2009.

The Nome operations, including the Rock Creek and Big Hurrah deposits, have proven and probable reserves of 510,000 ounces of gold; NovaGold plans to double those reserves within the next year.

With 1.81 million ounces in measured and indicated resources and an inferred resource of 330,000 ounces of gold, the Nome operations have the potential for expanded production and a mine life beyond 10 years.

Sale proceeds boost third quarter

NovaGold reported a record C$16.7 million in earnings for the third quarter of 2008, giving the junior NovaGold C$36.7 million in profits for the first nine months of the year. This compares with a loss of C$4.2 million for the same three months a year ago and a loss of C$12.2 million for the first three quarters of 2007.

The company attributes the record earnings primarily to a gain of C$33.5 million on the sale of NovaGreenPower, which was partly offset by a foreign exchange loss of C$7 million due to the devaluation of the Canadian dollar during the quarter. The junior spent C$5.4 million in care and maintenance costs at the Galore Creek project, and C$5.4 million in write-downs of certain mineral properties held by the company.

The Vancouver B.C.-based junior generated revenue of C$1.5 million in the third quarter, down 32 percent from C$2.2 million during the same period a year ago. NovaGold blamed the decrease on lower interest income accrued on smaller average cash balances. Revenues for the year also fell 34 percent to C$3.5 million from C$5.3 million last year.

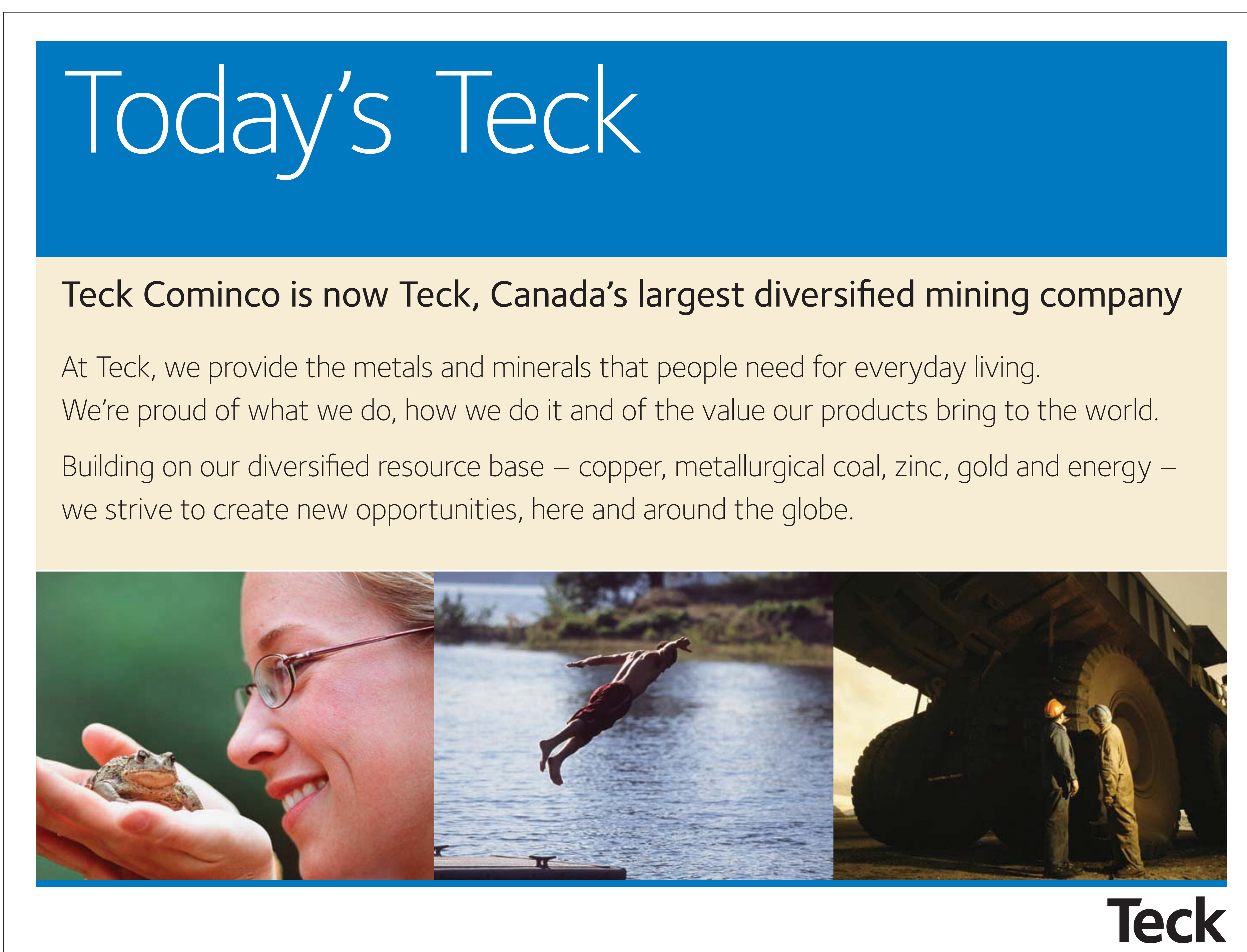
NovaGold's expenses for the third quarter totaled C$20.8 million, compared with C$7.6 million for the same period in 2007. The company charged C$5.4 million for care and maintenance of the infrastructure at its Galore Creek project in northwestern British Columbia and $5.4 million in charges against earnings for the Khotol, Shiko Lake, Ambler, Baird and Kugruk properties, with no comparable items during the same period in 2007.

Looking ahead

The Vancouver B.C.-based miner said it has set aside C$11.6 million of the C$21.4 million it had on hand Aug. 31 for suspension-related expenses at the Galore Creek copper-gold-silver project in Northwest British Columbia.

NovaGold said it currently plans to fund its activities over the next 12 months from cash, relying on cash flow from the Rock Creek Mine, revenue from land and gravel sales and gains from the sale of non-core and liquid assets. Management is still reviewing strategic alternatives to

see STARTUP page 31



● BRITISH COLUMBIA

New power line may carry Alaska power

Conduit could generate billions in capital investment for northwest region mines, economy and transmit electricity to Lower 48

BY ROSE RAGSDALE

For Mining News

The Northwest Transmission Line along Highway 37 is once again on the front burner in British Columbia, and development of the 517-kilometer-long, or 321-mile-long, power line could provide easier access to Lower 48 markets for power generated in Alaska.

British Columbia has resumed the environmental assessment process and First Nations consultation required for the project, following an announcement by the Canadian province's Premier Gordon Campbell Sept. 26 that the power project was back on track.

The B.C. government envisions the power line carrying 287 kilovolts and extending 335 kilometers, or 208 miles, from Terrace to Meziadin Junction and northward to Bob Quinn Lake. It would provide access to the electricity grid, while supporting the economic diversification of the area. Currently, the electrical power grid along Highway 37 ends at Meziadin Junction to the north and Stewart to the west.

"The electrification of Highway 37 is an important part of the ongoing economic diversification of rural British Columbia," Campbell said in his annual Union of B.C. Municipalities address.

"It builds on the success we're already seeing in the Northwest, including the new container port in Prince Rupert, the resurgence of the mining industry and the potential new Alcan smelter. We're making the investments needed now to continue that growth and help communities seize opportunities to diversify and create jobs," the premier said.

The environmental assessment is the first stage of the project.

"The communities in the North have a vision to further open their region to economic opportunities on a global scale, and today I want them to know that we share their vision and we are going to pursue the Northwest Transmission Line," said Campbell.

He described the move as the first step towards building a power line that the mining industry has long maintained is vital to successful development of the northwestern quarter of the province.

Though the mining association declined to comment on the potential of such development, it noted that a transmission line along Highway 37 would facilitate easier connection to Alaska and the Yukon, the southeast region of which has prospective independent power provider developments.

Considerable promise in power line

The government action coincided with a new study, "MABC Report on the Electrification of the Highway 37 Corridor," released Sept. 26 by the Mining Association of British Columbia, which cited 10 potential mining projects in the area that have the potential to attract $15 billion in new capital investments and to create nearly 10,700 jobs, as well as reduce greenhouse gas emissions

see **POWER** page 7

Northwest B.C. mining opportunities at stake

Proposed Highway 37 power transmission line could benefit numerous mine projects currently in various stages of development

Bankable feasibility study completed

Project name: Red Chris
Developer: Imperial Metals Corp.
Direct employees: 250
Indirect jobs (est. 3:1): 750
Capital costs: C$400 million
Annual revenue: C$265.5 million
Annual operating costs: C$137.8 million
Yearly tax: C$38.1 million
Electricity charge: C$11.3 million

The Red Chris project, located 20 kilometers, or about 12 miles, southeast of the village of Iskut, is owned by Imperial Metals, which acquired the porphyry copper project from B.C. Metals Corp. in early 2007 for C$65 million. Red Chris would be developed as an open pit mine and possibly a later supplement to mill feed with higher grade underground ore.

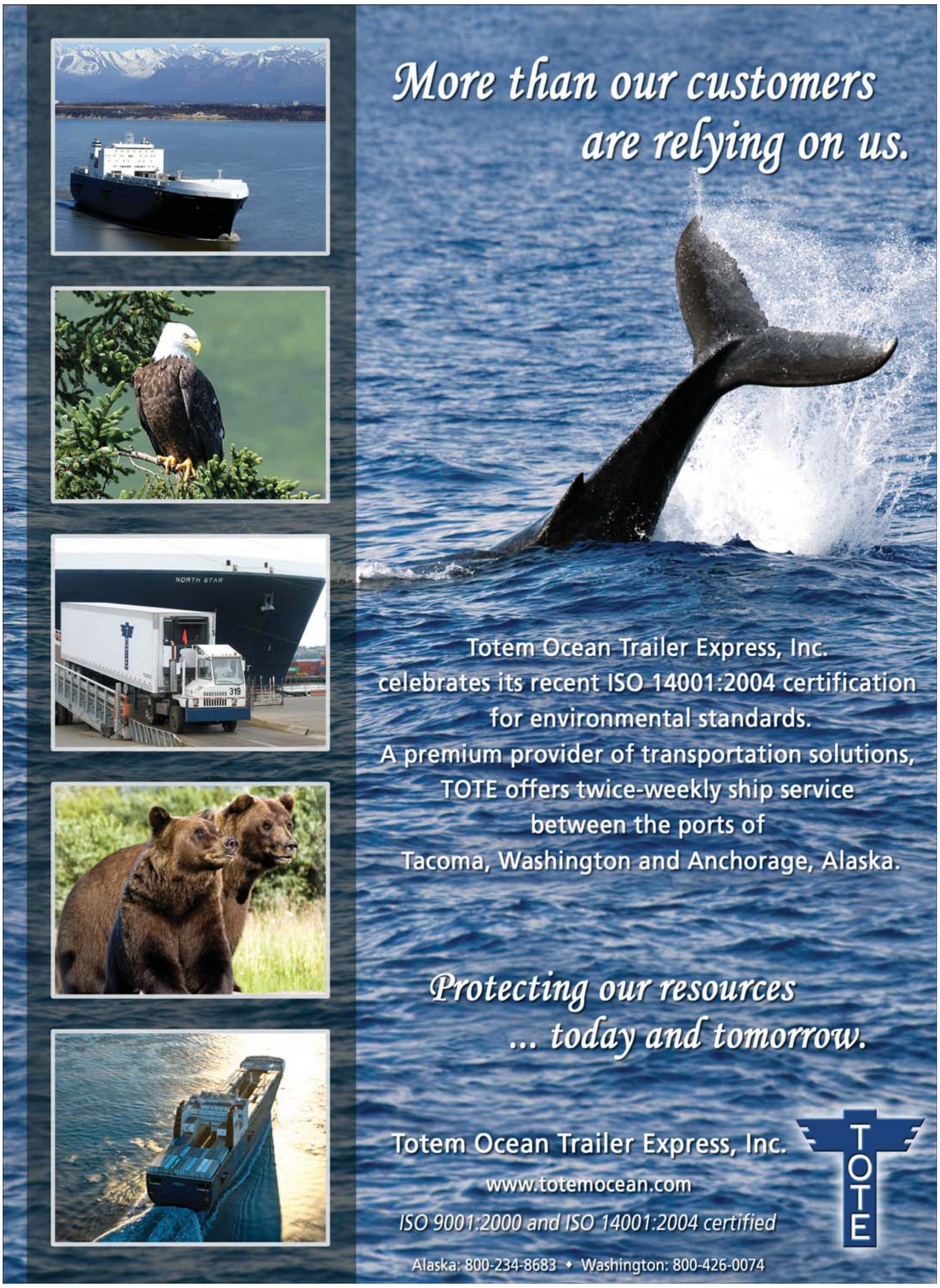
Further exploration is under way while a solution is sought to supply the future mine with power. Red Chris needs an estimated 37 megawatts of power for operations and less than 10MW during construction. The estimated mine life is 25 years.

A 138 kilovolt line could potentially be built in partnership with another mining project or an independent power producer. Capital costs are currently estimated by Imperial at about C$400 million, assuming a transmission line runs from the project to Iskut. Construction would take an estimated 18 to 24 months.

Bankable feasibility study under way

Project names: Galore Creek, Mount Klappan
Developers: Teck Resources Ltd./NovaGold Resources Inc., Fortune Minerals Ltd.

see **OPPORTUNITY** page 6



continued from page 5

OPPORTUNITY

Direct employees: 923
Indirect jobs (est. 3:1): 2,769
Capital costs: C$3.4 billion
Annual revenue: C$905.8 million
Annual operating costs: C$262.4 million (excluding Mount Klappan)
Yearly tax: C$81.3 million (excluding Mount Klappan)
Electricity charge: C$33.1 million

Galore Creek is located about 70 kilometers, or 44 miles, west of Highway 37 and 150 kilometers, 95 miles, northeast of Stewart. After a November 2007 announcement regarding an increase in capital costs, the giant copper-gold project has undergone a period of review and optimization that is expected to reach an initial conclusion in the fall of 2008. Assuming a favorable outcome, a revised feasibility study and project execution plan would be prepared in 6-12 months to confirm the project's viability. After that, proposed modifications to the project's previously approved design will require another one to three years.

Galore Creek's potential power requirement is estimated at 100-145 megawatts during operations with a mine life of 18-20 years. It would require either a mostly dedicated 138 kilovolt line or a 287 kV line.

Mount Klappan, 150 kilometers, or 95 miles, northeast of Stewart and 330 kilometers, or about 210 miles, northeast of Prince Rupert, contains a very large resource of high-rank anthracite coal in four deposits straddling the BC Railway right-of-way southeast of the Red Chris Project. Mount Klappan's Lost Fox deposit was assessed in a positive bankable feasibility study in 2005, that indicated a greater than 20-year mine life at an annual production rate of 3 million metric tons of pulverized coal. Fortune has assessed a number of transportation alternatives, including rail transport of product to the port of Prince Rupert, truck transport of product to the port of Stewart and slurry pipeline transport of product to Stewart or Prince Rupert. Fortune is in the environmental assessment process and expects to submit a final project application in late 2008.

At the 3 Mt annual production rate, the Mount Klappan project would require some 8-10 megawatts of power, under Fortune's current development scenario. However, power consumption could be substantially higher if line power became available.

Pre-feasibility studies under way

Project names: Schaft Creek, Turnagain, Kutcho
Developers: Copper Fox Metals Inc., Hard Creek Nickel Corp., Sherwood Copper Corp.
Direct employees: 600 (excluding Turnagain)
Indirect jobs (est. 3:1): 1,800 (excluding Turnagain)
Capital costs: C$2.99 billion
Annual revenue: C$782.4 million
Annual operating costs: C$340.4 million
Yearly tax: C$123.4 million (excluding Kutcho)
Electricity charge: C$55.5 million

The Schaft Creek project is located 45 kilometers, about 27 miles, west of the Stewart-Cassiar Highway and 60 kilometers, about 37 miles, south of Telegraph Creek. Copper Fox Metals has earned a 70 percent interest in the copper-rich polymetallic Schaft Creek Project, and has the right to acquire up to 93.4 percent interest in the project pursuant to an option agreement with Teck. At feasibility Teck can exercise certain back-in rights in order to participate in the project in partnership. A preliminary economic assessment study released in early 2008 indicates the potential to develop an open-pit mine with a projected daily milling rate of 65,000 metric tons and a mine life of more than 31 years. Copper Fox is pursuing a pre-feasibility study for a 100,000 t/d operation, submitted an environmental assessment application in 2008 and is targeting production by 2011 at Schaft Creek. Capital costs are estimated at $1.43 billion.

Power requirements are estimated at 93 megawatts (140MW under a 100,000t/d operation) with a mine life of 31 years.

The Turnagain project is located 70 kilometers east of Dease Lake and north of Turnagain River. In December 2007, Hard Creek Nickel completed a preliminary assessment study for the Turnagain nickel-cobalt-platinum project that considered a 50,000 t/d operation over a 29-year mine life. The construction schedule was estimated at 24 months with initial capital costs of C$1.38 billion. Future studies were expected to focus on a 100,000 t/d operation to benefit from economies of scale. Further exploration was planned for summer 2008. Hard Creek Nickel also began environmental baseline acquisition studies with a view to entering the provincial and federal environmental assessment processes consistent with a 2012 startup. The metallurgy of the deposits is expected to require a hydrometallurgical processing route.

Power requirements are estimated at 78 megawatts (105MW in a 100,000 t/d operation) with a mine life of 29 years.

The Kutcho project, 120 kilometers east of Dease Lake and 330 kilometers north of Smithers, completed a pre-feasibility study that evaluated the potential development of the Kutcho deposit in September 2007. In June 2008 Sherwood Copper acquired the project and released the results of a preliminary economic assessment that considered a smaller-scale, higher return development concept. The study considered a 4,000 t/d operation for an 8-year mine life and capital costs estimated at C$183 million. A pre-feasibility study is now under way along with an exploration program to support the studies.

Kutcho's estimated power requirement is 10-15 megawatts. The pre-feasibility study assumed diesel-generated power.

Earlier stages

Project names: GJ, Snowfield, KSM, Bronson
Developers: Canadian Gold Hunter Corp., Silver Standard Resources Inc., Seabridge Gold Inc., Skyline Gold Corp.
Direct employees: 1,000
Indirect jobs (est. 3:1): 3,000
Capital costs: C$3.8 billion
Electricity charge: C$68.7 million

The GJ project is located 200 kilometers, or 124 miles, north of Stewart. In March 2007, Canadian Gold Hunter reported a significant, lower-grade copper-gold resource on the property. Additional drilling, a new resource calculation and an economic evaluation of the Donnelly Zone were expected in 2008. A preliminary assumption regarding mine life for this project based on the resource size and suggested production rate is 15 years.

A preliminary estimate of the project's power requirement is 37 megawatts. GJ is located only about 10 kilometers from Highway 37.

The Snowfield project is located 65 kilometers, or about 40 miles, north of Stewart. In March 2008, Silver Standard Resources Inc. reported an increase in the measured and indicated gold-copper resource at the Snowfield project to 3.1 million ounces. Silver Standard planned to follow-up the 2007 program with a four-drill, 20,000-meter exploration program in 2008. The earliest expected start-up date is 2015, with a preliminary estimated mine life of 10 years.

A preliminary estimate of power required for the project is 37 megawatts.

The KSM project is located 20 kilometers, or about 12 miles, southeast of the Eskay Creek mine. In February 2008 Seabridge Gold Inc. published a NI 43-101 resource estimate for the Kerr and Sulphurets zones which confirmed total resources of 29.6 million ounces of gold and more than 5.1 billion pounds of copper at KSM. In April 2008, Seabridge filed a project description with the B.C. environmental regulators, and a preliminary economic assessment is scheduled for completion by the end of 2008. Seabridge also planned a 2008 drill program and began environmental studies required for the permitting process.

The project falls within and adjacent to traditional territories of two or more First Nations. An access road to the proposed plant site, along which a transmission spur line is expected to run, is 12 kilometers, or about 7.5 miles, long. The earliest expected start-up date is 2015 and a preliminary estimate of mine life is 25 years.

The estimated power requirement for KSM is 150 megawatts. The KSM deposits are adjacent to Silver Standard's Snowfield project, which offers potential infrastructure synergies and savings for developers of the two projects.

The Bronson project is located 110 kilometers, or about 68 miles, northwest of Stewart. In May 2007 Skyline Gold Corp. reported completion of an updated measured and indicated resource at Bronson containing significant gold, silver, copper and molybdenum. In August 2007 the company began a preliminary economic assessment, including conceptual pit plans, a mine schedule, process plant design, construction cost estimate, mining and processing cost estimates. The preliminary estimate of the mine life for Bronson is said to be 15 years.

The project's estimated power requirement is 20 megawatts.

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POWER

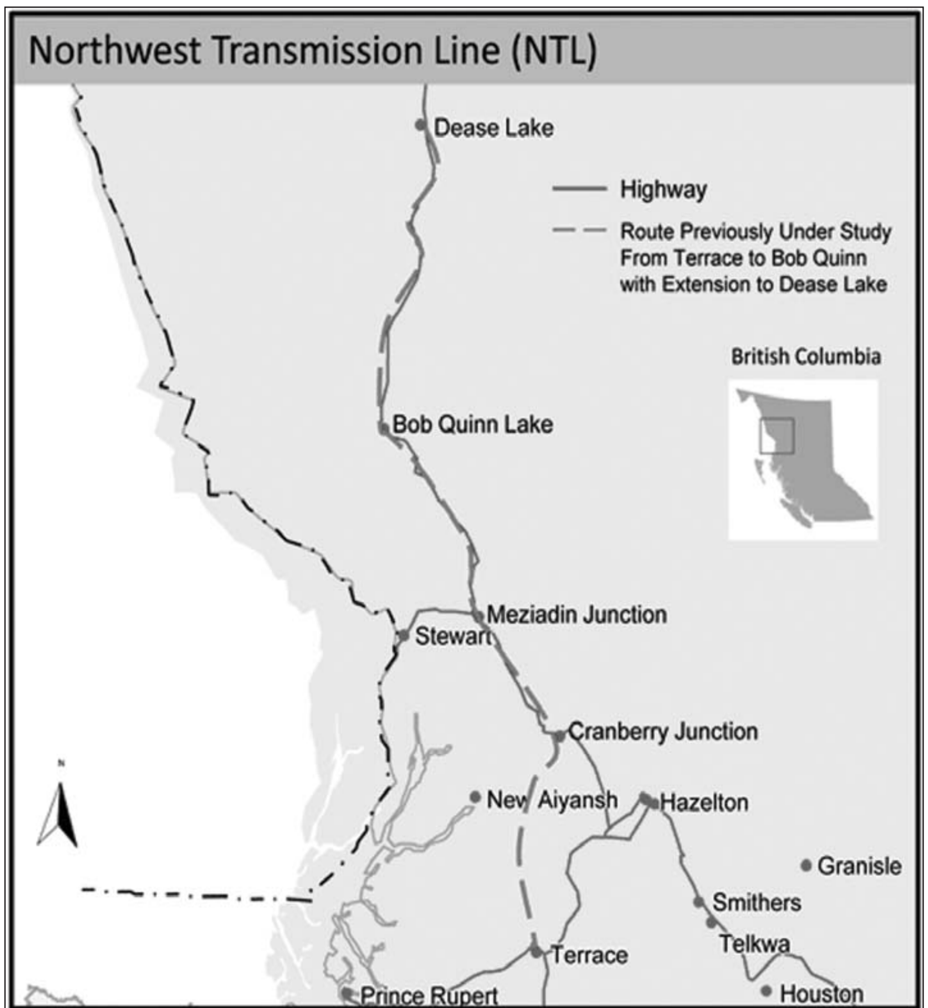
by decreasing reliance on dirty diesel-generated electric power for industry and communities in the region. It also could generate $300 million in annual tax revenues for government, according to the report.

Demand for power in Northwest British Columbia is driven largely by the mining sector, independent power projects and regional municipality growth, with additional opportunities to revitalize the tourism sector.

"We have the potential to create more than 10,000 jobs in a region where unemployment is high," said Janine North, CEO of the Northern Development Initiative Trust. "Electricity can spur economic development through mining, tourism, clean power, transportation and supply industries in the northwest."

B.C. gross mining revenue has nearly doubled during the past seven years, from C$3.6 billion to nearly C$7 billion, and 10 new mines have opened in that time. Investment in mineral exploration soared to a record high of nearly C$416 million in 2007, up 1,300 percent from 2001.

But little of this development has occurred in the mountainous, but scenic, northwestern corner of the province.



Map by Northwest Powerline Coalition
Map for reference only. Scale 1:4,200,000

COURTESY OF MINING ASSOCIATION OF BRITISH COLUMBIA

Public-private cooperation essential

Pierre Gratton, the mining association's president and CEO, said a new power line has the potential to spur economic development in mining, tourism and clean power projects.

PREMIER GORDON CAMPBELL

"The findings of the report provide a strong case for First Nations, the provincial government, industry and communities to work together to make the power line a reality," he said.

Such multi-party cooperation will be needed for the project, which is estimated to cost about C$400 million, Campbell said.

The British Columbia government is seeking a partnership with members of the private sector to fund the project.

Campbell, meanwhile, vowed to invest about C$10 million to immediately restart the environmental assessment process for the power line. The environmental assessment must be completed before construction can begin.

The Tahltan Nation and Gitxsan Hereditary Chiefs have long expressed support for the power line and the joint-venture opportunities it could generate for the First Nations.

"However, first there must be a process that considers all potential social, cultural and environmental impacts," said Bill Adsit, president of the Tahltan Nation Development Corp.

The mining sector envisions construction of a 517-kilometer, or 321-mile, line with an estimated cost of about $600 million. It would generate more than 2,000 megawatts of electricity annually, and also could be fed power from other sources in the northwest, including alternative energy projects in British Columbia, Alaska and the Yukon Territory.

The mining sector envisions construction of a 517-kilometer, or 321-mile, line with an estimated cost of about $600 million. It would generate more than 2,000 megawatts of electricity annually, and also could be fed power from other sources in the north-west, including alternative energy projects in British Columbia, Alaska and the Yukon Territory.

"There is significant potential for power generation in the region, from hydro and wind projects to geothermal," said Gratton. "The power line could reduce greenhouse gas emissions as communities are transitioned away from diesel generators."

The study points out that development of new mines in the region would be dependent on a number of factors, including completion of feasibility studies, continued strength of commodity prices and availability of affordable electric power.

Potential power sources proliferate

In 2007, BC Hydro commissioned an assessment of small hydro resource potential in the province. This report, produced by Kerr Wood Liedal, was released in October 2007. Based on this run-of-the-river hydroelectric resource assessment, the mining association estimated that 12 percent of the province's economically available small hydro resource exists in northwestern British Columbia.

Separate discussions with developers active in the area indicate that 700 megawatts of small hydro are currently being investigated.

B.C. gross mining revenue has nearly doubled during the past seven years, from C$3.6 billion to nearly C$7 billion, and 10 new mines have opened in that time. Investment in mineral exploration soared to a record high of nearly C$416 million

Northwestern British Columbia also has a substantial wind resource. While many of these resources are atop difficult and often glacier-clad terrain on the coast, several projects further inland, including the area of Level Mountain northwest of Dease Lake, with up to 1,500 megawatts of wind power potential are being actively investigated.

The mining association also noted additional potential for geothermal power.

Alaska could make connection

Various studies, such as the Alaska-Canada Electrical Intertie Study commissioned by the Alaska Energy Authority have considered the viability of a transmission connection that links Alaska and/or Yukon.

Though the mining association declined to comment on the potential of such development, it noted that a transmission line along Highway 37 would facilitate easier connection to Alaska and the Yukon, the southeast region of which has prospective independent power provider developments.

The study also said that independent power developers in southeast Alaska have noted two key potential benefits for British Columbia, should a connection between Alaska and BC ever be constructed: Back-up supply during the winter months, when B.C. run-of-river generation is low and the potential to profit from supply of additional energy to the Lower 48.

Alaska Power & Telephone, for example, recently began the permitting process for a 75-megawatt hydroelectric project in the Soule River about 10 miles southeast of Hyder. Designed to be a peaking facility, it would generate up to 270 GWh per year, and could provide electricity West Coast energy markets transmitted via British Columbia's power grid. AP&T is a utility that serves eastern Alaska communities throughout Southeast and the Interior with electricity and telecommunication services.

This full study is available online at www.highway37.com. ●

● GUEST COLUMN

Alaska mining industry faces credit crunch

High-quality exploration, development projects will likely survive despite worldwide shortage of venture capital, financing

BY CURT FREEMAN

For Mining News

The author

CURT FREEMAN

The author Curt Freeman, CPG #6901, is a well-known geologist who lives in Fairbanks. He prepared this column Oct. 22. Freeman can be reached by mail at P.O. Box 80268, Fairbanks, AK 99708. His work phone number at Avalon Development is (907) 457-5159 and his fax is (907) 455-8069. His email is avalon@alaska.net and his web site is www.avalonalaska.com.

The national sucking sound of venture capital exiting the mining industry has now expanded to a worldwide sucking sound as virtually all of the world's economies fight the massive, unprecedented credit crunch which started in the U.S. The mining industry is certainly not alone in feeling the down turn but its effects in Alaska began to be felt last month and continued this month as projects were shortened, plans down-sized or programs cancelled, all in an effort to preserve precious cash reserves. In this maelstrom of uncertainty, several Alaskan properties stand out as high quality producers and development or exploration properties. As was the case in the last down-turn about a decade ago, good projects will continue to get funded since the worldwide demand for metals is unlikely to be affected to any significant or long-lasting degree.

WESTERN ALASKA

NovaGold Resources Inc. announced third quarter operating results from its Rock Creek gold mine near Nome. During the first month since start-up, the mine completed an initial gold pour and has worked on commissioning all elements of the operation. Production levels from stockpiled ore have been slightly above schedule for the first month of operation, averaging about 50 percent of design capacity through the milling circuit. The gravity circuits have run at approximately 80 percent availability and the carbon-in-leach system is in the process of being charged and commissioned. The mine anticipates continuing to ramp up throughput levels during the remainder of the fourth quarter of 2008.

NovaGold Resources Inc. also announced additional drilling results from its Donlin Creek gold project. Total exploration and development drilling in 2008 now totals over 32,000 meters. Drilling in the Phase 2 program includes some additional holes in the East Acma structural zone as well as some select infill holes in the Lewis and Akivik areas. Exploration drilling has also targeted the potential for oxide/non-refractory mineralization on the project. Highlights of drilling from the East Acma area include hole DC08-1705 intersected 266.6 meters of 2.64 rams per metric ton gold in 14 mineralized intervals, hole DC08-1708 intersected 208.3 meters of 3.26 g/t gold in 15 mineralized intervals, hole DC08-1709 intersected 65.4 meters of 6.14 g/t gold in 7 mineralized intervals, hole DC08-1710 intersected 332.7 meters of 3.83 g/t gold in 13 mineralized intervals and hole DC08-1715 intersected 112.9 meters of 3.97 g/t gold in 6 mineralized intervals. Highlights of drilling from the Lewis and Akivik areas include hole DC08-1706 intersected 22.0 meters of 5.03 g/t gold in 3 mineralized intervals, hole DC08-1716 intersected 115.8 meters of 3.15 g/t gold in 11 mineralized intervals, hole DC08-1719 intersected 107.6 meters of 4.25 g/t gold in 10 mineralized intervals, hole DC08-1764 intersected 30.0 meters of 2.84 g/t gold in 2 mineralized intervals and hole DC08-1765 intersected 42.3 meters of 3.22 g/t gold in 3 mineralized intervals. The broad zone of higher-grade mineralization at East Acma continues at least an additional 500 meters to the east of the current pit-constrained resource along the Donlin Creek anticline, an important ore-controlling structure. Many of the drill holes from the East Acma area reported grade-times-thickness values from 200 to over 1,200 gram-meters, intercepting mineralization both below and outside the current planned pit limit. The company also reported that work in other areas of the project suggest the potential for non-refractory gold mineralization. Broad zones of stockwork quartz veining and traces of visible native gold were encountered in an area of a large surface gold target that is open to further expansion. Historical results include DC97-392 with two mineralized intervals: 64 meters of 2.8 g/t gold and 97.9 meters of 3.0 grams of gold per metric ton. Additional soil sampling this season has further expanded the area of surface gold mineralization in several directions.

Zazu Metals Corporation announced additional drilling results from its Lik zinc - lead - silver deposit in the western Brooks Range. Assay results from 23 of 58 holes completed in 2008. Results include 26.82 meters grading 7.84 percent lead, 19.23 percent zinc and 291.3 g/t silver in hole 161, 9.75 meters grading 1.84 percent lead, 10.92 percent zinc and 46.73 g/t silver in hole 166, 14.33 meters grading 1.37 percent lead, 4.32 percent zinc and 135.18 g/t silver in hole 167 and 12.65 meters grading 3.61 percent lead, 7.16 percent zinc and 47.81 g/t silver in hole 168. The company is planning to complete an updated resource estimate following receipt of all 2008 drilling results.

Full Metal Minerals has been informed by New Gold Inc. (formerly Metallica Resources Inc.) that they are terminating the Option Agreements on the Port Moller and Chignik projects in southwest Alaska. Full Metal appreciates the quality technical work completed by New Gold, and will be seeking a new partner to explore these prospective properties.

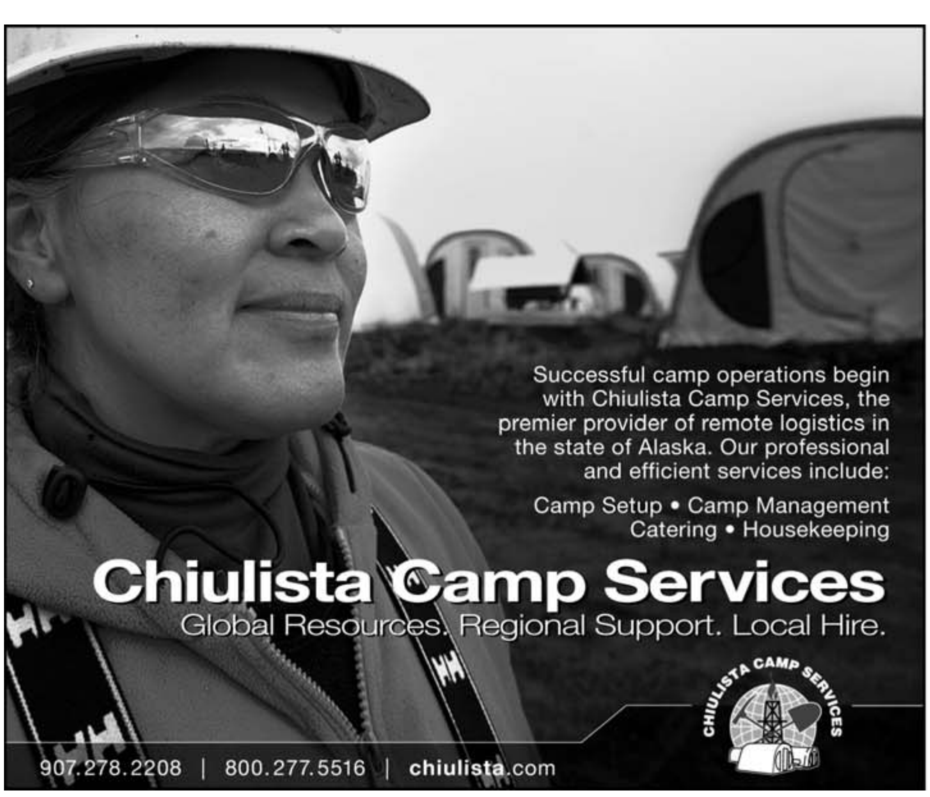
EASTERN INTERIOR

Freegold Ventures announced additional diamond drilling results from its Golden Summit project in the Fairbanks District. Significant results include 303 feet grading 0.027 ounces of gold per ton, 101 feet grading 0.046 ounces of gold per ton and 55 feet grading 0.18 ounces of gold per ton. This drilling tested 200 feet of strike length along the 5,000 foot long Cleary Hill vein system. Follow-up bulk sampling was conducted on this system with approximately 50,000 tons of material sampled during 2008.

International Tower Hill Mines Ltd. announced additional drilling results from its Livengood gold project. Drilling continues to significantly expand the Core Zone of the deposit southward. Results include hole MKRC-0039 which returned 25.9 meters grading 3.35 g/t gold and 57.9 meter grading 1.30 g/t gold and hole MKRC-043 which returned 114.3 meters grading 1.32 grams of gold per metric ton. These new assays, along with early geochemical arsenic 'gold pathfinder' results, indicate that the Core Zone is extensive and remains fully open along strike to the south and east and at depth. As the zone extends to the south significant mineralization continues to be present in all units, including the upper plate rocks and the lower sedimentary package. The 2008 drilling has now defined mineralization over approximately 1.5 kilometers of strike and 500-900 meters of width of the Core Zone. It now appears that the distribution of mineralization may be controlled by the presence of southerly dipping faults and dikes that cross the stratigraphy developing mineralization in all of the units, including the lower sedimentary package, thereby significantly expanding the deposit's potential. The lower sedimentary package is increasingly well mineralized. In addition, the favorable host rocks continue to be shallow to the southwest and are projected to begin surfacing a few hundred meters to the south of the existing drill pattern. Mineralization remains open to expansion. The company plans to release at updated resource estimate in early November.

Full Metal Minerals announced results from an additional 13 drill holes from the LWM zinc, silver, lead, copper prospect near Chicken. Significant results include hole LWM08-35 which returned 12.2 meters true width averaging 6.4 percent zinc, 2.7 percent lead and 39.1 grams of silver per metric ton, hole LWM08-44 which returned 2.3 meters true width averaging 12.2 percent zinc, 31.6 percent, lead and 479.2 grams of silver per metric ton, hole LWM08-49 which returned 4.5 meters true width averaging 7.9 percent zinc, 14.5 percent lead and 179.2 grams of silver per metric ton, hole LWM08-49 which returned 6.2 meters true width averaging 18.2 percent zinc, 4.3 percent lead and 165.7 g/t silver and hole LWM08-53 which returned 5.8 meters true width averaging 13.4 percent zinc, 4.3 percent lead and 74.8 grams of silver per metric ton. Two subparallel zones of massive carbonate-replacement mineralization have been traced over 700 meters of strike length and over 300 meters below surface. The deposit is open for expansion in all directions. Drill hole LWM08-45 is the furthest northeastern step-out hole with assays to-date and it encountered 6.95 meters true width averag-

see FREEMAN page 9



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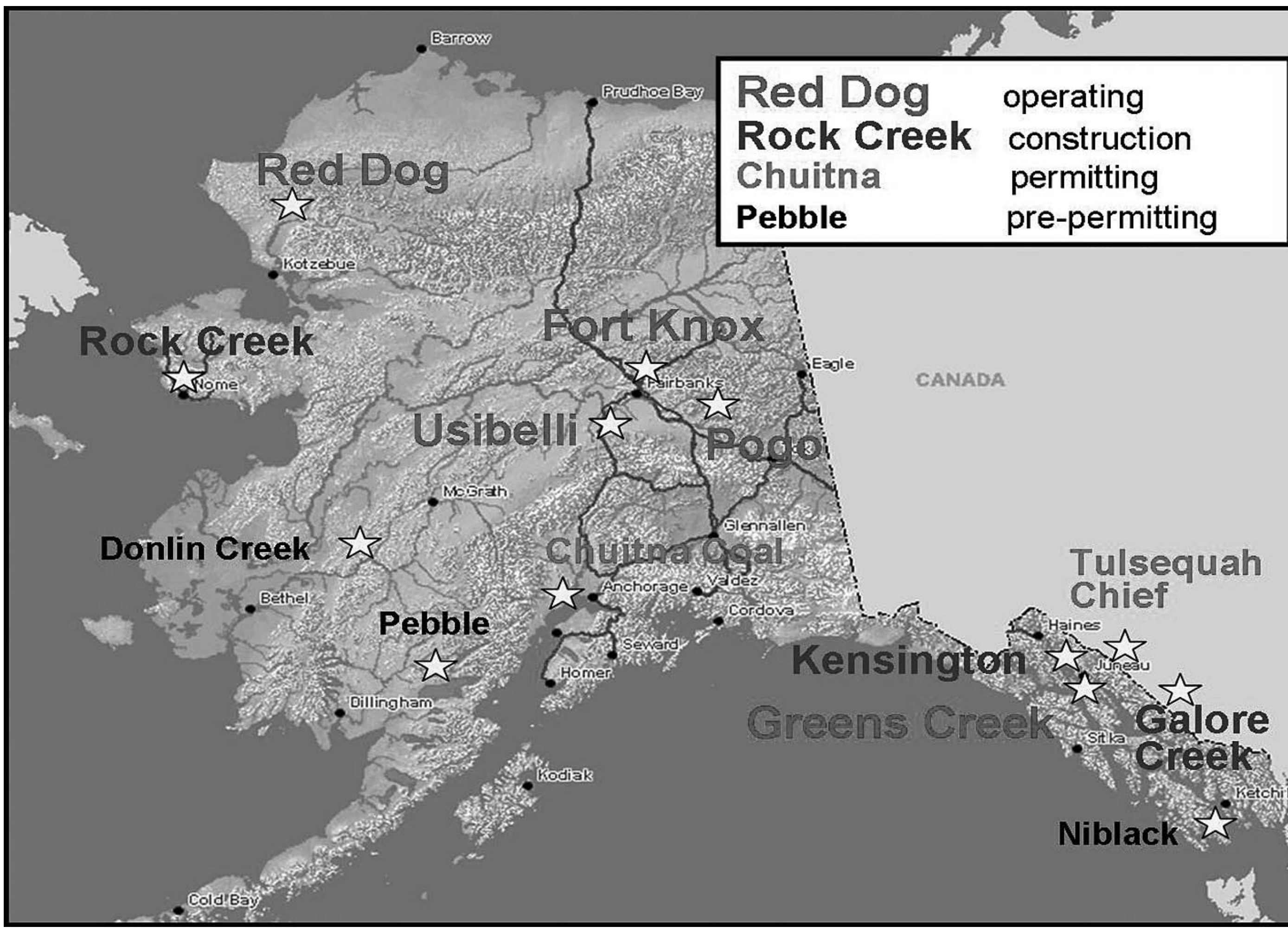
FREEMAN

ing 4.9 percent zinc, 11.6 percent lead and 181.3 grams of silver per metric ton. Additional assays are pending.

ALASKA RANGE

Alaska newcomer **YOW Capital Corp.** announced the signing of a letter of intent with 1618254 Ontario Ltd. to acquire all of the issued and outstanding shares of 1618254 Ontario by means of a one-for-one share exchange. 1618254 Ontario's principal asset consists of exploration and other rights on the Caribou Dome project (locally known as Denali Copper) in the Valdez Creek District. The project is owned by Alaska-based C-D Development Corp. and under option to 1618254 Ontario. Historic exploration and development work on the Property from its discovery in 1963 through 1971 defined a near-surface, high grade copper resource in the form of nine (9) major chalcopyrite-bearing lodes along with numerous smaller lodes that have been explored by trenching and more than 36,000 feet of surface and underground drilling in more than 230 core and percussion holes. In addition to the extensive drilling and trenching, an adit, 1,189 feet in length, and a decline, 1,706 feet in length, were driven by Alaska Exploration Syndicate (AES) into three of the lodes to expose the mineralization at depth and to provide drill stations for further exploration. Drilling and underground worked defined a resource of 550,400 tons grading 5.84 percent copper on only three of the nine copper-bearing lodes known to exist on the project. 1618254 Ontario has commissioned a geological report and plans to soon commission a number of other studies, including water sampling and wetlands studies as well as geographical surveys. Welcome to Alaska YOW Capital Corp.!



Alaska newcomer **Australian Mineral Fields Ltd.** announced that it had acquired the right to earn an 85 percent interest in the Tushtena gold project from Alaska-based **Tushtena Resources Inc.** The project is located 20 miles southwest of Tok in the northern Alaska Range. The agreement allows the company to earn 80 percent of the project by spending $3 million within 5 years of the execution of the agreement. The company can earn a further 5 percent (to a total of 85 percent) by completing a Bankable Feasibility Study. The company will complete a minimum of $500,000 of exploration each year, except 2008, during which time the commitment will be $100,000. The Company will make annual payments of C$100,000 until it earns its 80 percent interest. Historic rock chip samples of up to 1,450 g/t gold have been obtained from the veins outcropping on the project. Other samples include 342 grams of gold per metric ton, 105 grams of gold per metric ton, 118 g/t gold and 163.5 grams of gold per metric ton. Gold is reported to be often free and visible. During 1986 and 1987, 10 diamond drill holes have been reported to have been drilled at the Discovery Zone, in a variety of orientations and with an average depth of only 135 meters. Best reported results include seven feet grading 14.3 g/t gold in Hole AR-4, 3 feet grading 9.4g/t gold in Hole AR-3 and 5.7 feet grading 7.01 g/t gold in Hole AR-9. Mineralization is reported to occur in dominantly east-northeast trending, steep

see **FREEMAN** page 31

● GUEST COLUMN

Beluga whales may have to freeze in the dark

Federal regulators roll out restrictive environmental policies that likely will strip protections from Alaska's mining industry

BY J. P. TANGEN

For Mining News

While resource development issues other than those offered in conjunction with the availability of affordable energy have gotten very little play during the presidential campaign, a few sub-rosa developments are taking place that shouldn't escape the attention of those who would mine in Alaska.

First, it is fair to say that neither U.S. Interior Secretary Kempthorne nor his predecessor, Gale Norton, made substantial progress in facilitating mineral development. Among the bad decisions made in recent years was the dissolution of the minerals division within the Alaska State Office of the Bureau of Land Management and the conversion of the U.S. Geological Survey to a secret extension of the U.S. Fish and Wildlife Service. Now, as we come to the end of the empire, it is useful to think about the transition.

Typically, when the presidency changes, all manner of bottled up regulatory changes suddenly appear like cicadas on a summer night.

Unlike past Republican administrations, the offerings emerging from the waning Bush administration are anti-development in nature. Two in particular are going to hit Alaska miners particularly hard. The first is the determination that, despite demonstrated population stability, the Cook Inlet Beluga whale is somehow endangered. They may have been at risk when people were throwing harpoons at them, but since that practice has been circumscribed, there is no evidence that our happy local pod is in jeopardy; yet the Bush administration apparently doesn't want to take any chances. The recent extension of ESA protection to polar bears was likewise fatuous because their population is actually increasing, and polar bears, which biologists tell me are little more than a variety of brown bears, can readily adjust their diets to terrestrial mammals if their preferred marine prey is not readily available.

The second regulatory time bomb to emerge from the dusk of the Octennium is the determination by the Environmental Protection Agency to start down the road toward regulating carbon dioxide under the Clean Air Act as a global warming culprit. I am guessing that hundreds, if not thousands, of board feet of timber were used to produce the volumes of back-up documentation required to support the conclusion that carbon dioxide is a bad thing. I am further guessing that the reports do not contain a single reference to the fact that the trees that were sacrificed to make those reams of paper had been busily sucking carbon dioxide out of the air before their demise.

These 11th-hour decisions will, in due course, cause a great deal of agony for miners and others. ESA classification for local Belugas necessarily means that all local development will be affected. Tidewater facilities of all stripes will have to be scrutinized to ensure that they will not adversely impact the habitat. The costs of preserving an isolated population will undoubtedly slow or stop growth at a time when Anchorage in particular and the greater Cook Inlet metropolitan area in general are struggling to accommodate modernization.

EPA's determination to regulate carbon dioxide will of course have much more far-reaching implications. It will

see **BELUGA** page 11

Mining & the law

J.P. TANGEN

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

● NORTHWEST TERRITORIES

Junior discovers lithium near diamond mines

Samples taken from northwest trending pegmatite dike returned significant values of mineral for which demand is expected to grow

BY ROSE RAGSDALE
Mining News

North Arrow Minerals Inc. has discovered a large, lithium-rich pegmatite in the Aylmer Lake area of the Northwest Territories, about 70 kilometers, or about 43 miles, east of existing winter road infrastructure that services the Ekati and Diavik diamond mines.

The Vancouver, B.C-based junior is focused on exploration of a diverse group of gold-silver-base metal-and-diamond-prospective properties in the Northwest Territories and Nunavut Territory.

North Arrow Sept. 18 said the northwest trending "Big Bird" pegmatite dike is intermittently exposed over a strike length of at least 1,200 meters with observable widths of up to 40 meters. Five of seven grab samples from the dike have returned assays greater than 1.5 percent lithium with a highest value of 3.3 percent lithium. Mineralization is contained in the lithium-bearing mineral spodumene.

Results from a program of geological mapping and channel sampling in September were even more encouraging, the junior said Oct. 20.

Channel samples were collected at 10 locations along a 1,100-meter strike length with individual channels separated by distances ranging from 80 meters to 200 meters. Eight of the 10 channel samples returned assays greater than 1.18 percent Li2O with a highest value of 3.1 percent Li2O.

North Arrow said the channel sampling results confirm the continuity and grade potential of the Big Bird pegmatite, noting that typical grade estimates for lithium deposits tend to range from 0.50 percent to 1.50 percent Li2O.

Lithium-bearing pegmatites can be zoned and can contain additional associated rare metals, including tantalum and tin near their margins, the junior added.

Exploration of the Big Bird pegmatite, so far, has been restricted to outcrop exposures in the interpreted centre of the dike. Marginal portions of the pegmatite and its contacts with adjacent country rocks are covered by overburden and water. As a result, future exploration on the property will include total field magnetic surveys, North Arrow said.

Metal of the future

Lithium is a soft alkali metal with a silver-white color. Under standard conditions, it is the lightest metal and the least dense solid element. Like all alkali metals, lithium is highly reactive, corroding quickly in moist air to form a black tarnish. For this reason, lithium metal is typically stored under the cover of oil. When cut open, lithium is shiny, but contact with oxygen quickly returns it back to the dull silvery grey color. Lithium is also highly flammable.

The 33rd most abundant element on Earth, lithium only appears naturally in the form of compounds due to its high reactivity. The element occurs in nature with a number of other minerals, but is also commonly obtained from brines and clays; on a commercial scale, lithium metal is isolated electrolytically from a mixture of lithium chloride and potassium chloride.

Though lithium markets vary by location, global end-use markets are estimated as follows: batteries, 20 percent; ceramics and glass, 20 percent; lubricating greases, 16 percent; pharmaceuticals and polymers, 9 percent; air conditioning, 8 percent; primary aluminum production, 6 percent; and other uses, 21 percent. Lithium use in batteries has expanded significantly in recent years because rechargeable lithium batteries are being used increasingly in portable electronic devices and electrical tools.

Demand to rise for lithium batteries

According to the U.S. Geological Survey, the market for lithium compounds with the largest potential for growth is batteries, especially rechargeable batteries. Demand for rechargeable lithium batteries continued to grow for use in video cameras, portable computers and telephones, and cordless tools. At least two major automobile companies have been pursuing development of lithium batteries for hybrid electric vehicles, vehicles with both an internal combustion engine and a battery-powered electric motor. Most commercially available hybrid vehicles use other types of batteries, although future generations of these vehicles may use lithium. Non-rechargeable lithium batteries are being used in calculators, cameras, computers, electronic games, watches, and other devices.

In 1976 a National Research Council Panel estimated lithium resources at 10.6 million metric tons for the Western World. With the inclusion of Russian and Chinese resources as well as new discoveries in Australia, Serbia, Argentina and the United States, the total has nearly tripled by 2008.

The United States remains the leading consumer of lithium minerals and compounds and the leading producer of value-added lithium materials.

Demand will outpace production

Chile is currently the leading lithium metal producer in the world, with Argentina next. Both countries recover the lithium from brine pools. In the United States lithium is similarly recovered from brine pools in Nevada.

China may emerge as a significant producer of brine-based lithium carbonate around 2010. Potential capacity of up to 55,000 metric tons per year could come on-stream if projects in Qinghai province and Tibet proceed.

Much of the increased demand for lithium is expected to be driven by the automotive industry. Both General Motors Ltd. and Chrysler Corp. have recently announced plans to produce lithium battery-powered electric cars as early as 2010. - North Arrow

The total amount of lithium recoverable from global reserves has been estimated at 35 million metric tons, which includes 15 million metric tons of the known global lithium reserve base.

In 1976 a National Research Council Panel estimated lithium resources at 10.6 million metric tons for the Western World. With the inclusion of Russian and Chinese resources as well as new discoveries in Australia, Serbia, Argentina and the United States, the total has nearly tripled by 2008.

However, current mining methods won't provide enough for the future need for lithium-ion batteries, according to Meridian International Research.

Discovery considered strategic

The discovery of the Big Bird pegmatite represents a strategic acquisition for North Arrow, considering that demand for lithium is expected to grow in the coming years with lithium battery technology being applied to the production of electric-powered automobiles.

Much of the increased demand for lithium is expected to be driven by the automotive industry. Both General Motors Ltd. and Chrysler Corp. have recently announced plans to produce lithium battery-powered electric cars as early as 2010, North Arrow said. ●

continued from page 10

BELUGA

affect everything from reindeer flatulence to mine-mouth power plants, and the displacements will not be pretty. If the means of production for electricity come under stress now, regardless of how the carbon dioxide regulatory scheme unfolds, those stress factors are going to increase.

One can only wonder at the motivation of those who would save the planet by stifling our domestic lifestyle. I am not among those who are terribly upset if the people of Tuvalu or Bangladesh or Manhattan will have to relocate to higher ground sometime in the next millennium. The idea that global warming causes populations of Canada geese to increase doesn't offend me. Until recently I would have thought that to be a good thing.

The short-term threat to mineral production, availability and, by extension, to national security is far greater than any long-term danger to either the Beluga whale or the arctic ice pack. Development of Beluga coal is far more beneficial to our prosperity than any imagined insult to the Cook Inlet cetacean. Likewise, additional restraints on the ability to develop low-cost power at Cook Inlet may stifle the evolution of mining projects in Southwest Alaska.

These closing shots from Bush 43 are wholly unwelcome. Tragically, however the election is decided, there appears to be no commitment to mitigate these regulatory errors. The orientation of our present and future leaders appears to involve making it more and more difficult for those who would develop domestic resources to survive. One can only hope that perhaps one day soon there will be a listing under the ESA for "miners, Alaska subpopulation" and we will finally get the protection we need. ●

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● ALASKA

When the dust settles…

AMA director Borell predicts Alaska will become more attractive to mining companies and reflects on important events of 2008

COURTESY OF USIBELLI COAL MINE

While most of the production from the Usibelli Coal Mine near Healy is used for power generation within Alaska, the coal producer's exports are expected to top 500,000 metric tons in 2008, nearly a third of its annual production.

BY SHANE LASLEY

North of 60 Mining News

Alaska's mining industry captured the attention, not only of Alaskans but also the country during the past year when a controversy over the proposed Pebble Project in Southwest Alaska bubbled to the surface. Supporters and opponents of a ballot initiative aimed at blocking the mining venture squared off in a vocal and often strident campaign that made headlines nationwide.

Alaska Miners Association director Steve Borell cited the contest over development the world-class copper-gold-molybdenum deposit as the state mining industry's hottest issue of the year. Borell reviewed issues and challenges facing the industry during the past year in a recent interview.

Though the Kensington Project near Juneau was not as widely publicized, an anticipated U.S. Supreme Court ruling on the potential gold mine's tailings permits will set a precedent that is destined to affect mine permitting across the nation, Borell told Mining News.

A financial crisis that rivals the Great Depression, meanwhile, has dominated headlines in recent weeks, but turmoil in the financial markets hit the mining industry several months now. Zinc is selling for half of prices buyers paid a year ago, and junior mining stocks have tumbled over the past 12 months.

The mining industry is divided into three categories: Large mines, small placers and exploration projects. To talk about Alaska's mining industry, Borell said, "You have to take a snapshot of all three separately."

The youngest and oldest "large mines"

The number of large-scale operating mines rose to six when NovaGold Resources Inc. began operations at its Rock Creek gold mine on the outskirts of Nome a few weeks ago. After a lengthy court battle with environmentalists followed by complications associated with record snowfall amounts over the past winter, NovaGold fired up the plant on Sept. 19.

"In Alaska, a mine with 100 people is a big mine, in the rest of the world that is a real small mine," Borell said.

The mining association director said he is thankful to have Rock Creek on Alaska's large-mine roster; 20 years ago, Alaska only had one large-scale mine, he explained.

The Usibelli Coal Mine, a fourth generation family-owned Alaska business in Healy that has been in production for 65 years, was that first mine. The Interior mine, too, has only about 95 employees.

In September, Usibelli said it would send two trial shipments of coal this year to new Pacific Rim customers. While most of Usibelli's coal output is used for power generation within Alaska, the coal producer's exports are expected to top 500,000 metric tons in 2008, nearly a third of its annual production.

Lower zinc prices will hurt revenues

When it comes to the large operating mines, Borell said, "The real crunch is going to be zinc prices going down and that is going to hurt. It will hurt both Red Dog and Greens Creek and that will make the biggest difference on revenues to the state."

Due to strong zinc prices in 2007, Teck Resources Ltd. paid $58 million in royalty payments to its partner NANA Native regional corporation and $230 million in federal and state taxes from production at the Red Dog Mine in Northwest Alaska. Over the past year, zinc prices have declined steadily; a pound of zinc is only selling for about

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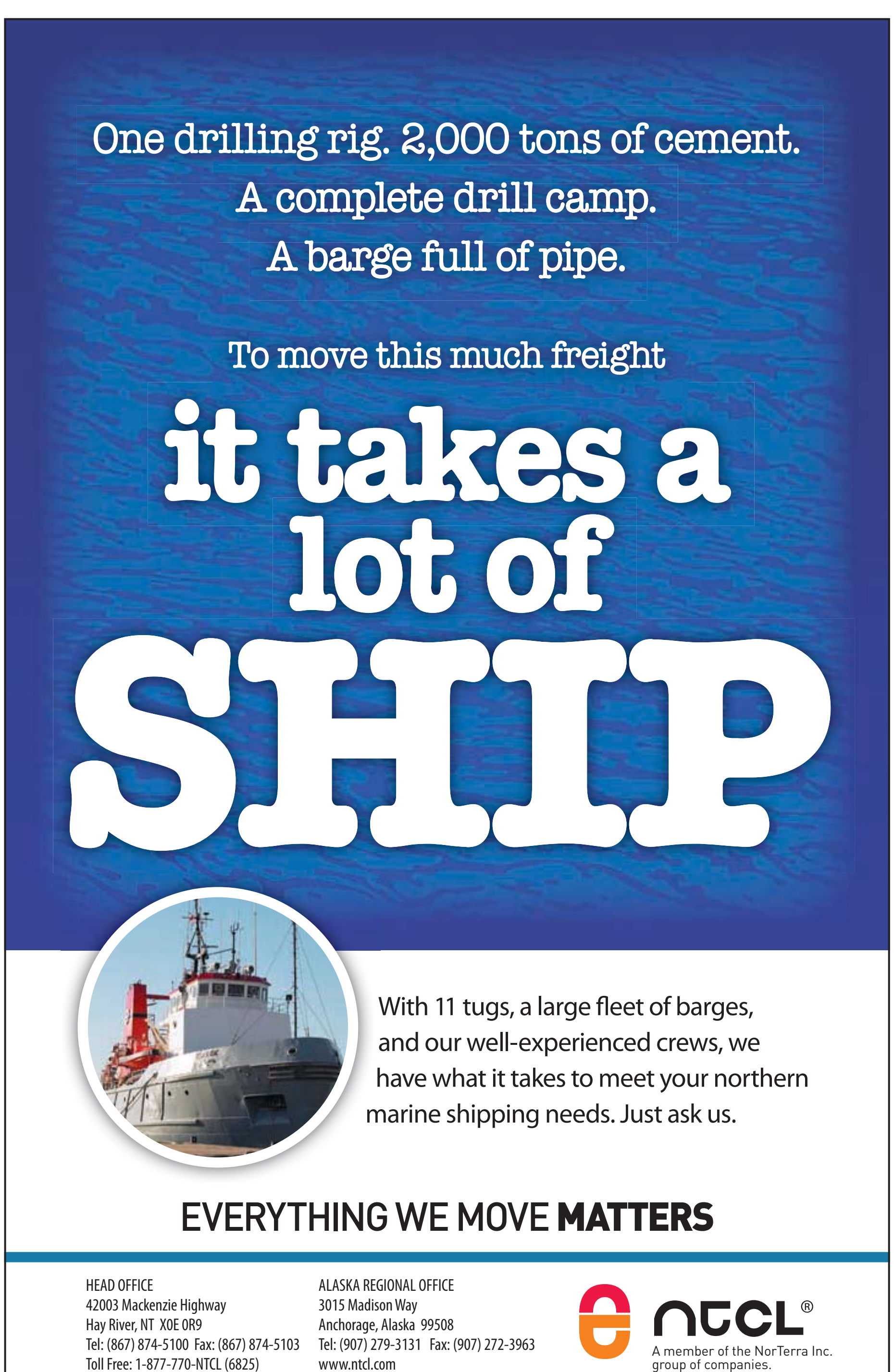

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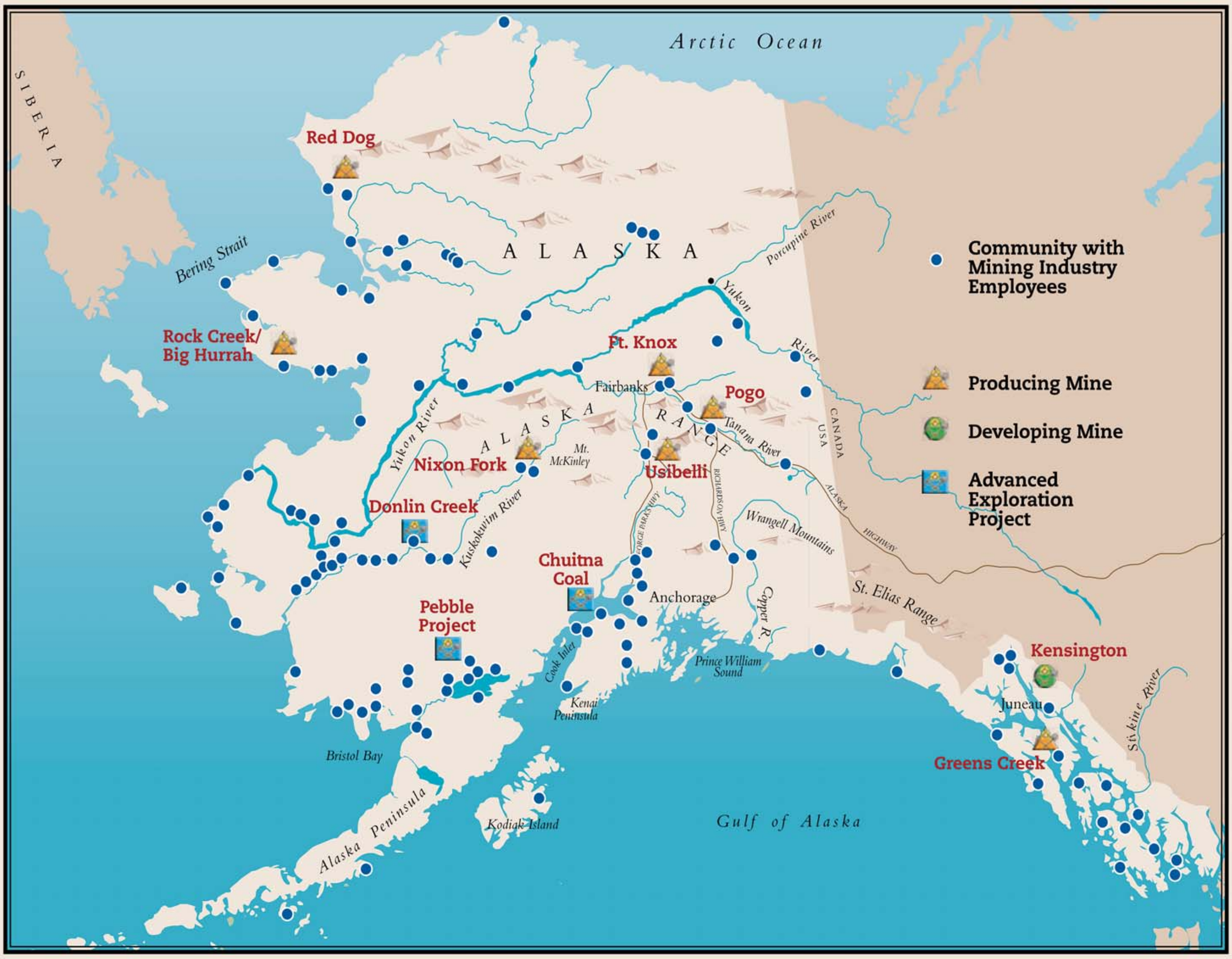
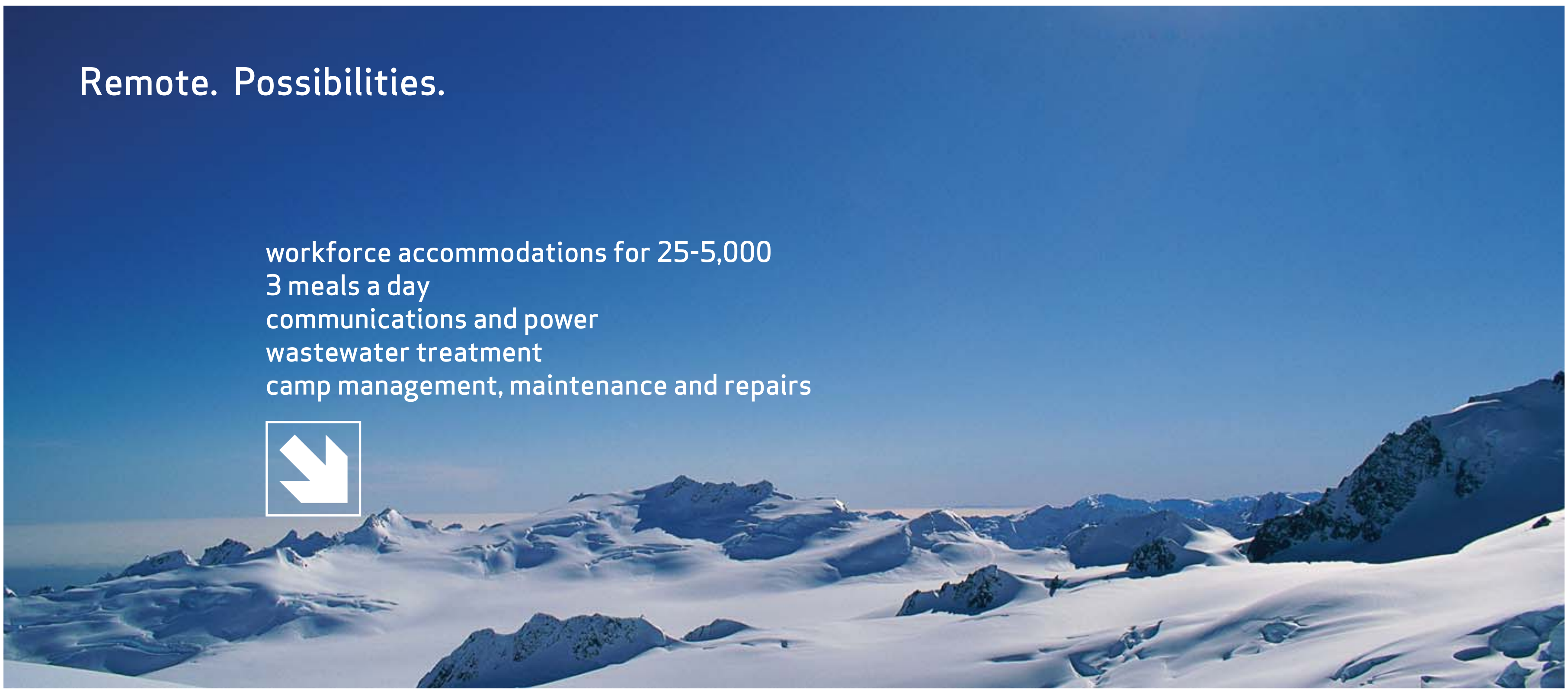


COURTESY OF ALASKA MINERS ASSOCIATION



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YEAR IN REVIEW

Advanced stage exploration projects

Coeur d'Alene Mines Corp.'s Kensington gold mine project, located about 45 miles northwest of Juneau, is expecting a Supreme Court ruling on its tailings permits in early 2009. If the court upholds the permits, Coeur hopes to complete its tailings facilities and begin gold production by the end of next year. Once in production the mine will employ about 200 people, and produce about 140,000 ounces of gold per year. Proven and probable reserves measure about 1.4 million ounces of gold, and an additional 623,000 ounces indicated and 243,000 ounces inferred gold resource.

Donlin Creek LLC, a 50/50 partnership between NovaGold Resources Inc. and Barrick Gold Corp., manages the Donlin Creek Project in Southwest Alaska. NovaGold reported a resource estimate of 31.7 million ounces of measured and indicated resources grading about 2.5 grams gold per metric ton. More than 32,000 meters has been drilled at Donlin in 2008. The preferred project design includes a 50,000-metric-ton-per-day plant that would produce more than 1 million ounces per year. A feasibility study is targeted for the first quarter of 2009, with permitting beginning later in the year.

Pebble Limited Partnership, a 50/50 partnership between Northern Dynasty Minerals Ltd. and Anglo American PLC, is advancing the Pebble copper-gold-molybdenum project in Southwest Alaska toward permitting. The project consists of two deposits. The Pebble West deposit hosts a near-surface resource of 4.1 billion metric tons containing 24.7 billion pounds of copper, 42.1 million ounces of gold and 1.35 billion pounds of molybdenum. The deeper Pebble East deposit hosts a resource of 3.86 billion metric tons containing 49 billion pounds of copper, 45 million ounces of gold and 2.8 billion pounds of molybdenum. A proposed development plan for the project is expected in 2009.

Committee Bay Resources Ltd., after a recent merger with Niblack Mining Corp., is engaged in advanced stage exploration of the copper-zinc-gold-silver Niblack volcanogenic massive sulfide property on Prince of Wales Island in Southeast Alaska. The property has a near-surface indicated resource of 1.424 million metric tons grading 2.86 grams per metric ton gold , 41.73 g/t silver, 1.04 percent copper and 2.14 percent zinc and a deeper inferred resource of 1.893 metric tons grading 2.07 g/t gold, 29.21 g/t silver, 1.65 percent copper, and 2.71 percent zinc. Underground drilling continues at Niblack from a main access tunnel complete this year.

PacRim Coal LP's Chuitna Coal Project is a surface coal mining and export development proposal for an ultra low sulfur, sub-bituminous coal resource located in the Beluga Coal Field, about 45 miles west of Anchorage. The project proposal consists of a surface coal mine and support facilities, transportation infrastructure, personnel housing, logistics center, and coal export terminal. The current project predicts a minimum 25-year mine life with a production rate of up to 12 million tons a year. A complete permit application for the project is expected to be submitted to Alaska Department of Natural Resources by early 2009.

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pound price a year ago.

Earlier this year Hecla Mining Co., which owned a 29.7 percent stake in the Greens Creek Mine on Admiralty Island, bought out partner Rio Tinto's 70.3 percent interest, giving Hecla 100 percent ownership of the mine.

The Greens Creek Mine, located about 16 miles south of Juneau, is known for its silver production, but zinc, lead and gold are also recovered from the mine. produced about 2.4 million ounces of silver, 15,257 ounces of gold, 16,000 tons of zinc, and 9,000 tons of lead at a relatively low average cash cost of $3.43 per ounce of silver, after by-product credits.

Coeur awaits high court ruling

While it is not yet an operating mine, Coeur d'Alene Mines Corp.'s Kensington project has received all necessary permits and completed construction of all facilities needed to mine the gold deposit except for tailing storage.

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YEAR IN REVIEW

Junior mining companies active in Alaska exploration

Full Metal Minerals Ltd. has 11 exploration projects spanning Alaska. The company's two primary projects are the Lucky Shot high-grade gold property about 90 miles north of Anchorage, and the LWM zinc-lead-silver prospect at its 40 Mile property in eastern Alaska. In a joint venture with BHP Billiton, Full Metal is exploring multiple copper-gold porphyry targets on 88,675 acres of Doyon Ltd. land in eastern Alaska. Full Metal has joint venture agreements with both major and junior mining companies, including Kinross Gold, Freeport McMoRan, BHP Billiton, Mosam Capital, Triex Minerals, Altair Ventures, Highbury Projects and Ashburton Ventures Inc.

Millrock Resources Inc. has an exploration agreement with the Bering Straits Native Corp. to explore 152 square miles of BSNC land on the Seward Peninsula. Millrock's primary focus has been on the Bluff gold property about 42 miles east of Nome. Another priority target for Millrock is the Estelle high-grade gold property about 100 miles northeast of Anchorage. The company's other properties include Fortymile gold, Divide gold, Ketchem gold and Iliamna copper-gold about 31 miles northeast of the Pebble deposit.

Freegold Ventures Ltd.'s Golden Summit high-grade gold property is about 5 miles to the north of the Fort Knox Mine. Freegold is using a combination of closely spaced shallow drilling, deeper core drilling and an on-going bulk sampling program using an on-site gravity-based concentration plant. The company is also drilling its Rob high-grade gold property near the Pogo Mine. Freegold is also exploring the Vinasale gold property about 16 miles south of McGrath, where the company has entered into an exploration agreement with a lease option with Doyon Ltd.

International Tower Hills Mines Ltd. has nine projects in Alaska. The company's primary focus in 2008 has been its Livengood gold property about 70 miles north of Fairbanks. ITH is focused on doubling the overall resource, converting a large portion of the inferred resources to indicated and measured and gathering the data needed to complete a preliminary economic scoping study by the middle of 2009. The company's other key targets in Alaska include the LMS high-grade gold project and the Terra high-grade gold and BMP polymetallic properties.

Late this summer, **Mantra Mining Inc**. acquired NovaGold's interest in the 35,000- acre Ambler volcanogenic massive sulfide property located about 180 miles southeast of the Red Dog Zinc Mine. The company also purchased Rio Tinto's interest in the precious-metal-rich property. Mantra plans to continue where NovaGold left off, drilling on the Arctic deposit, when it begins its exploration in 2009. Mantra picked up six additional western Alaska mineral properties from NovaGold in 2008, giving the company mineral rights on more than 485,000 acres in Alaska.

Newmont Mining Corp. entered into three joint venture agreements with Gold Crest Mines Inc. to explore for gold deposits on the AKO and Luna properties, covering about 15,200 acres in the Kuskokwim region of Southwest Alaska about 120 miles south of Donlin Creek. Newmont also has a joint venture on the Chilly property located in the Buckstock Mountains about 75 miles northeast of the AKO and Luna claims.

Electrum Ltd. has entered into a joint venture with Gold Crest Mines Inc. to explore the Kisa, Gossan Valley, Little Swift and Gold Creek properties, totaling 15,320 acres in the Kuskokwim region of Southwest Alaska about 120 miles south of the Donlin Creek deposit.

Zazu Metals Corp. completed a 58-hole, 6,900-meter core drill program in 2008 at the Lik zinc-silver-lead deposit located about 13 miles from Teck Resources' Red Dog Mine. Teck is a 50 percent joint venture partner in the Lik property. Zazu can increase its interest to 80 percent by meeting certain spending commitments by 2018. A historic estimate that predates NI 43-101 outlines a resource at the Lik deposit of 26.7 million metric tons grading 9.16 percent zinc, 3.15 percent lead and 49 grams of silver per ton,

Ucore Uranium Inc. is exploring the Bokan Mountain uranium property locat-

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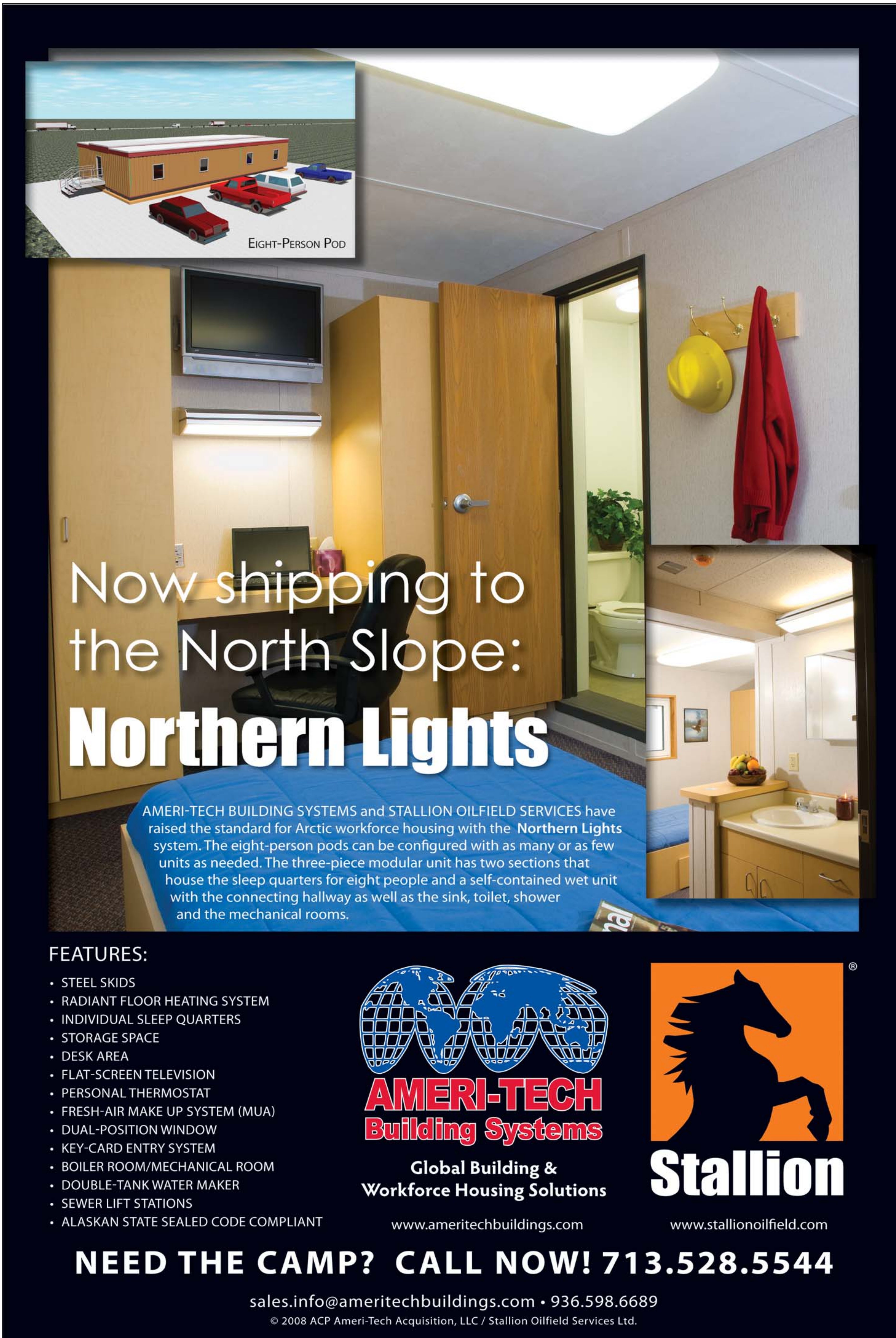
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ERIC LIDJI

The Pebble Partnership has 10 drill rigs and consultants from 50 different firms collecting data that will be used by engineers to create a mine plan for the Pebble project.

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The construction of the tailings facility is pending a decision by the U.S. Supreme Court on a challenge by environmental groups to tailings permits regulators awarded the company.

"If this is not decided the right way, this has long- term ramifications across the country and in Alaska, in particular," Borell said. "I am so pleased that Coeur has stood up to the fight, because if they had not continued the case, it would have stayed with the Ninth Circuit (Court) decision. This is important for the entire country."

Coeur has spent more than $230 million on the Kensington Project, and expects the high court to hear the case in early 2009. A favorable decision early in the year should allow for production by year's end. Once in production, Coeur expects to recover about 150,000 ounces of gold per year from the underground mine.

Because of delays in getting approval of its tailings storage plan, Coeur has reduced its work force at Kensington. The most recent labor reduction occurred in early October when the company laid off about half of its remaining 82 employees. Once in production, the company anticipates paying out about $16 million in annual wages and benefits to some 200 workers at the mine.

"What the large mines are going to be able to do is going to be affected by the price of metals, and it is going to be affected by the economy, but not as severely as the exploration companies. The exploration guys are the ones that are really going to get hit. They have had a very hard time raising money." – Steve Borell, director of the Alaska Mining Association.

Explorers hit hard

Months before the "financial crisis" made headlines, junior exploration companies were feeling the effects of investors' fading confidence in the stock market. Some juniors exploring in Alaska have seen their stock values fall as much as 90 percent in the past six months.

"What the large mines are going to be able to do is going to be affected by the price of metals, and it is going to be affected by the economy, but not as severely as the exploration companies. The exploration guys are the ones that are really going to get hit. They have had a very hard time raising money," Borell explained.

While the current financial situation has forced developers of many early-

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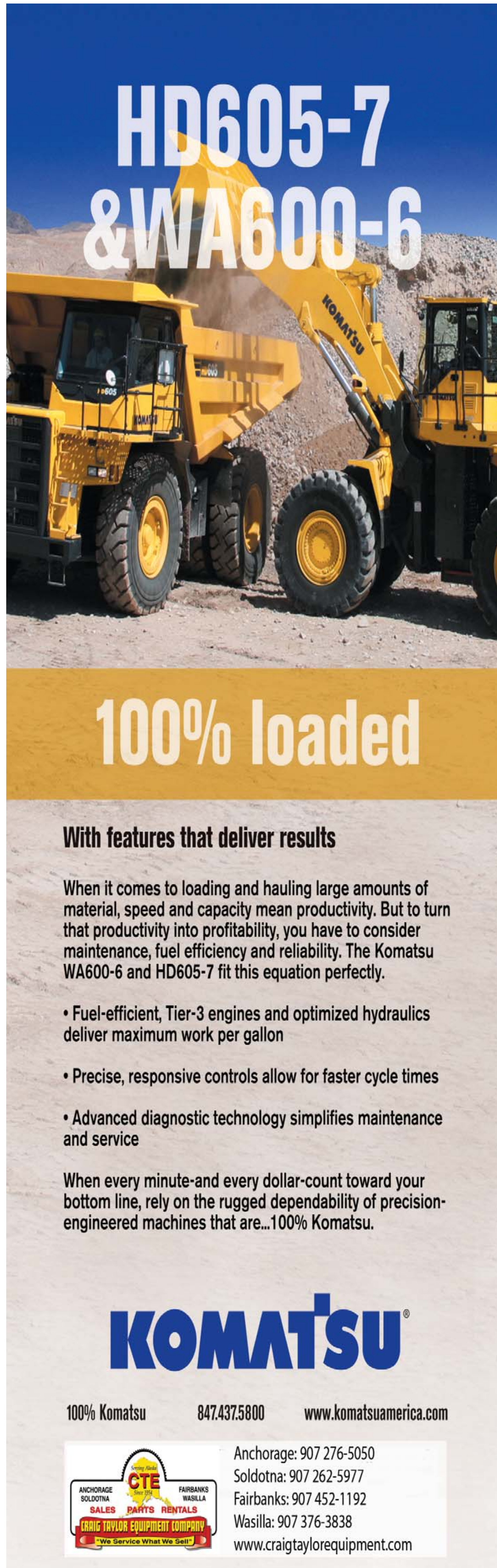
ed on the southern end of Prince of Wales Island about 37 miles southwest of Ketchikan. The company's 2008 drill program at Bokan focused on the I&L zone. In addition to uranium, Ucore discovered rare earth elements and related metals, including yttrium, zirconium, beryllium, and niobium. In 1989, the U.S. Geological Survey estimated that the property hosts more than 11 million pounds of uranium as well as tantalum, niobium, and rare earth elements.



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REVIEW

stage exploration projects to scale back, advanced stage projects have continued at expected levels this year.

NovaGold Resources, for example, has "spun-out" its early-stage exploration properties in Alaska and shifted its focus to its core assets. At the Donlin Creek gold project in Southwest Alaska, NovaGold and partner Barrick Gold Corp. have completed a 21,000-meter drill program originally budgeted for 2008 and have expanded into a Phase-2 program for a total of more than 32,000 meters of drilling for the year.

Most other junior exploration companies have taken a similar approach; concentrating their efforts and capital on their flagship properties.

The number of large-scale operating mines rose to six when NovaGold Resources Inc. began operations at its Rock Creek gold mine on the outskirts of Nome a few weeks ago.

In addition, some exploration companies are choosing to merge with one or more of their fellow juniors. Niblack Mining Corp., for example, combined operations with Committee Bay Resources Ltd.

The merger provided the capital for Niblack to continue underground development and exploration at its high-grade gold/copper-rich volcanogenic massive sulfide prospect on Prince of Wales Island in Southeast Alaska, and provided the well funded Committee Bay Resources with a property to develop when it is too cold to explore its flagship asset in northern Nunavut, Canada.

Junior explorers also have reduced costs and risk on exploration projects by entering into joint venture agreements with others. Full Metal Minerals has joint venture agreements with seven different companies – including Kinross Gold, Freeport McMoRan and BHP Billiton – on properties spanning Alaska.

World-renowned Pebble

The Pebble Project, often described as a world-class copper deposit, also could be described as world-renowned after the past year's media coverage of the controversial project.

The controversy arose because a multimillionaire, whose wilderness getaway is near the Pebble deposit, took issue with plans for the mining project. Pebble is also located within the same watershed as the Bristol Bay salmon fisheries.

Opponents of the Pebble Project, in an attempt to prevent development of the giant copper prospect, organized a citizen's initiative to go on Alaska's primary ballot. Because Ballot Measure 4 threatened not only Pebble but all large-scale hardrock mining in the state, Alaska's mining industry united against it. Alaska's citizens sided with mining when they voted down the ballot measure in August.

The Pebble Partnership, a 50/50 partnership between Northern Dynasty Minerals Ltd. and Anglo American plc, has continued to carry out drilling and baseline studies at the project in preparation of a proposed development plan expected to be released next year.

Borell told Mining News that he

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COURTESY OF COEUR D'ALENE MINES CORP.

Coeur d' Alene Mines Corp. has spent more than $230 million and completed all of the construction for the Kensington Project near Juneau, except for a tailings facility. The miner hopes to begin gold production at the site by the end of 2009.

YEAR IN REVIEW

Producing mines in Alaska

NovaGold Resources Inc.'s Rock Creek gold mine began production Sept. 19. Crews began feeding the 6,500-metric-ton-per-day-mill at 25 percent capacity with a ramp-up to full production targeted for year's end. Once in full production, the operation is expected to turn out 100,000 ounces of gold per year. The main pit at Rock Creek has a resource of 500,000 ounces. The company's objective is to increase the resource to 1 million ounces over the next year.

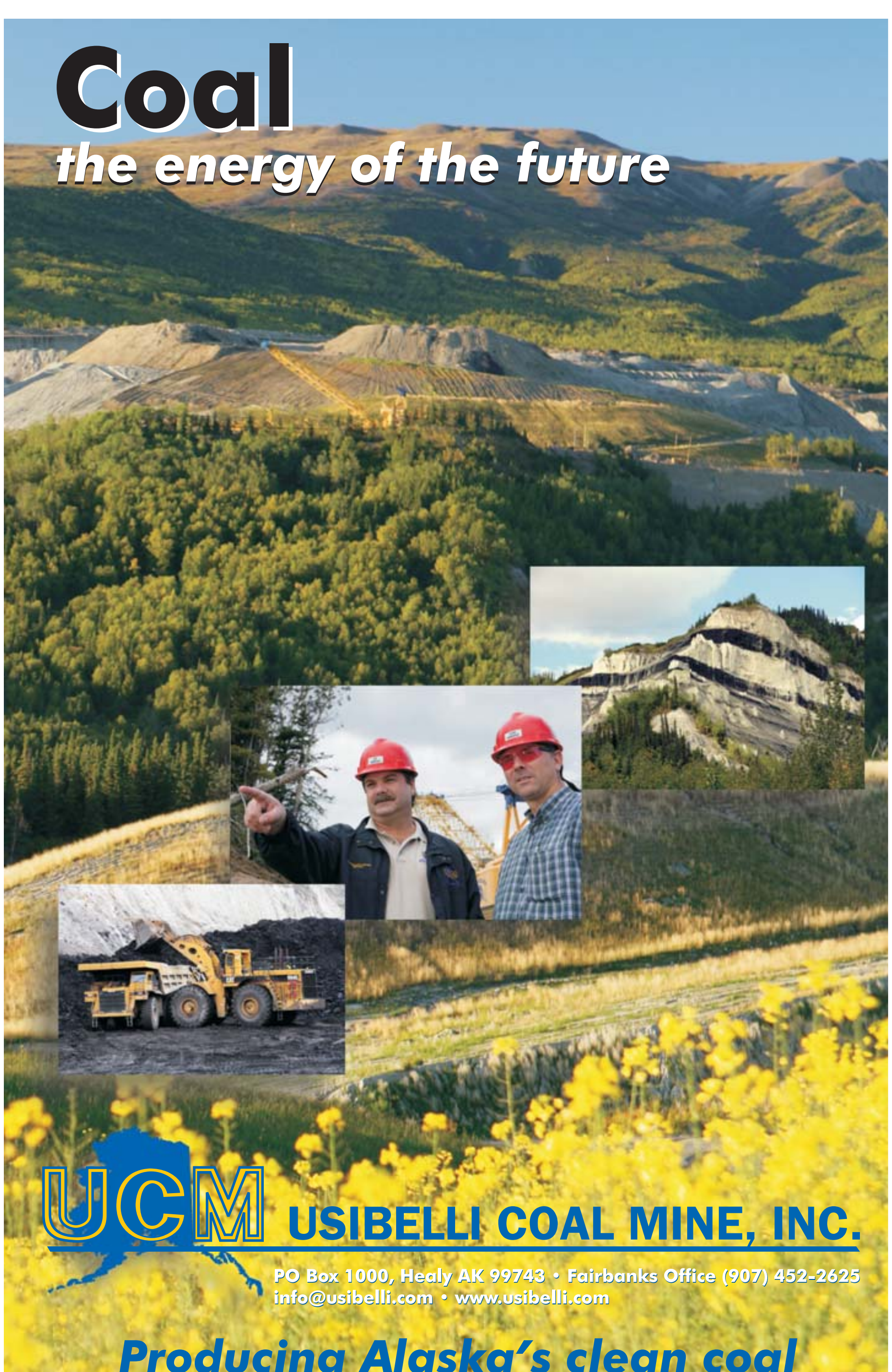
The **Usibelli Coal Mine** is a fourth-generation family-owned business founded in 1943 by Emil Usibelli. The company started off supplying coal to the newly constructed Ladd Army Air Field (now Fort Wainwright). Today, Usibelli transports coal to six power plants in Interior Alaska and ships 500,000 metric tons overseas. The miner has 30 years of reserves at its current production rate of 1.5 million tons of sub-bituminous coal per year and could easily double production if the market demanded.

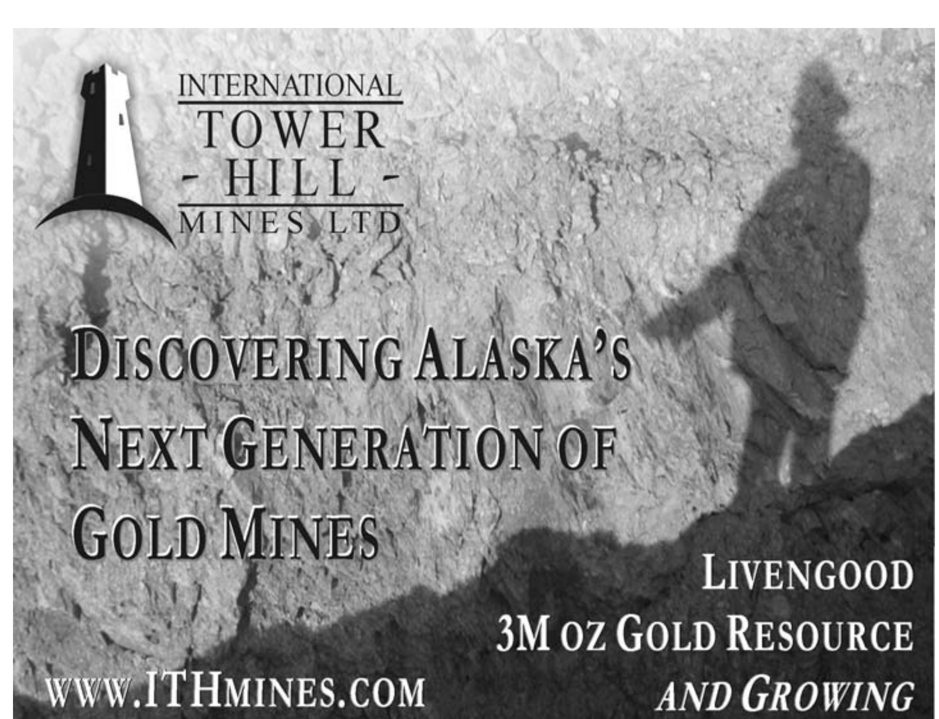
Teck Resources Ltd.'s Red Dog Mine in Northwest Alaska is the world's largest zinc mine and accounts for about 80 percent of the zinc and nearly 30 percent of the lead produced in the United States. Teck and partner NANA Regional Native Corp. are currently acquiring permits to begin mining the Aqqaluk deposit, an extension of the main pit that is currently being mined. The Aqqaluk deposit contains 51.6 million tons of reserves with an average zinc content of 16.7 percent along with 4.4 percent lead and enough ore to extend the life of the mine by 20 years.

Kinross Gold Corp.'s Fort Knox gold mine, about 26 miles north of Fairbanks has been in production since 1996 and currently produces about 330,000 ounces of gold per year. The carbon-in-pulp mill at the open-pit mine processes between 33,000 and 45,000 metric tons of ore per day. In February Kinross' board of directors approved the construction of a heap leach facility and expansion of the open pit mine. These upgrades are expected to extend the life of the project from 2012 to 2018 and double expected life-of-mine production to 2.9 million ounces of gold.

The Pogo Mine, located about 110 miles southeast of Fairbanks, is Alaska's second largest gold mine. The underground gold mine, which went into production in early 2007, suffered some early setbacks. Teck Resources Ltd., 40 percent owner and operator of Pogo, realized its first profit from the mine in the second-quarter of 2008. Mitsubishi Group companies own the other 60 percent of Pogo. Teck said it is on track to reach a gold production target of 340,000 ounces at Pogo in 2008 and expects operating costs to remain near current levels for the balance of the year.

Greens Creek Mine, located about 16 miles south of Juneau, had a change in ownership this year. Hecla Mining Co., which had previously owned a 29.7 percent stake in the mine, bought out majority partner Rio Tinto and acquired full ownership of the polymetallic mine. During the second-quarter of 2008, Hecla produced about 2.4 million ounces of silver, 15,257 ounces of gold, 16,000 tons of zinc, and 9,000 tons of lead at an average cash cost of $3.43 per ounce of silver, after by-product credits. Hecla said it anticipates producing a total of 9 million ounces of silver in 2008 at an average cost of about $3.25 per ounce, given current metals prices.





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would like more Alaskans to see Pebble firsthand. He believes that once people get to witness what the Pebble Partnership is doing at the project site, they will have more confidence in the development.

Placer mining; a lead to the lode

Placer mining in Alaska is not as prominent as it has been in the past. Borell said this is a characteristic of mining around the world. The placers – which can typically be produced with conventional means and for less expense than hardrock mining – are mined first and then the source of those placers are sought out.

The largest operating placer gold mine in Alaska is Silverado's Nolan Creek Mine. Crews work through the winter mining frozen gravels from underground. Located 280 miles north of Fairbanks, the gold-bearing gravels at Nolan Creek do not thaw until mid-June. During the ensuing three months, crews work around the clock, sluicing as much ore as possible before subfreezing temperatures return to the Arctic.

The placer gold recovered from the property is about 75 percent nuggets larger than 0.1 ounce. The largest nugget recovered at Nolan Creek was 41 ounces.

Silverado is searching for the lode source of the huge nuggets it finds in the frozen gravels. Because of the crystalline nature and other characteristics of some of the placer gold recovered the company believes it is close to the lode source.

Vancouver, B.C.-based Silverado concluded that the large nuggets it is finding in the valley originated in the five-mile-long Solomon shear zone, which runs along the east side of Nolan Creek. The Workman's Bench, which adjoins Pringle Bench, is currently being developed as the prime target for gold and antimony resources.

The company has tunneled beyond the placer deposit into an area under Workman's Bench where it believes the lode source is located. The placer miner turned hardrock explorer says drilling is being conducted on the Workmen's Bench to determine whether the company can confidently proceed with additional test mining.

Goldrich Mining Co., formerly known as Little Squaw Mining Co., also has Arctic placer mining claims that it is exploring for its lode potential. The Spokane, Wash.-based company controls 14,993 acres in mining claims covering most of the Chandalar Mining District on the southern slope of the Brooks Range about 190 miles north of Fairbanks.

Recent drilling at Little Squaw Creek indicates that about 8.8 million cubic yards of pay gravel holds about 216,602 ounces of gold and the company has been searching for the lode source of that gold.

The property hosts the Mikado Lode, a historically mined hardrock deposit. Goldrich says the Chandalar District has not experienced any kind of exploration study utilizing modern exploration techniques, and many of the source lodes for the rich placer gold deposits remain undiscovered.

Goldrich has begun exploring the Chandalar property for its lode potential.

When the dust settles

About 70 percent of the 39.4 million troy ounces of gold recovered in Alaska from 1880 through the end of 2006 has been placer. While placer gold has proven to be abundant in nearly every three modern operations are mining the lode source of the placer.

Alaska is rich not only in its gold potential, but also abundant prospective and proven deposits of copper, coal, zinc, uranium, silver, platinum, lead and molybdenum. Major deposits have been discovered in every region of the state.

Borell said he is confident that with growing uncertainty worldwide, Alaska mining companies.

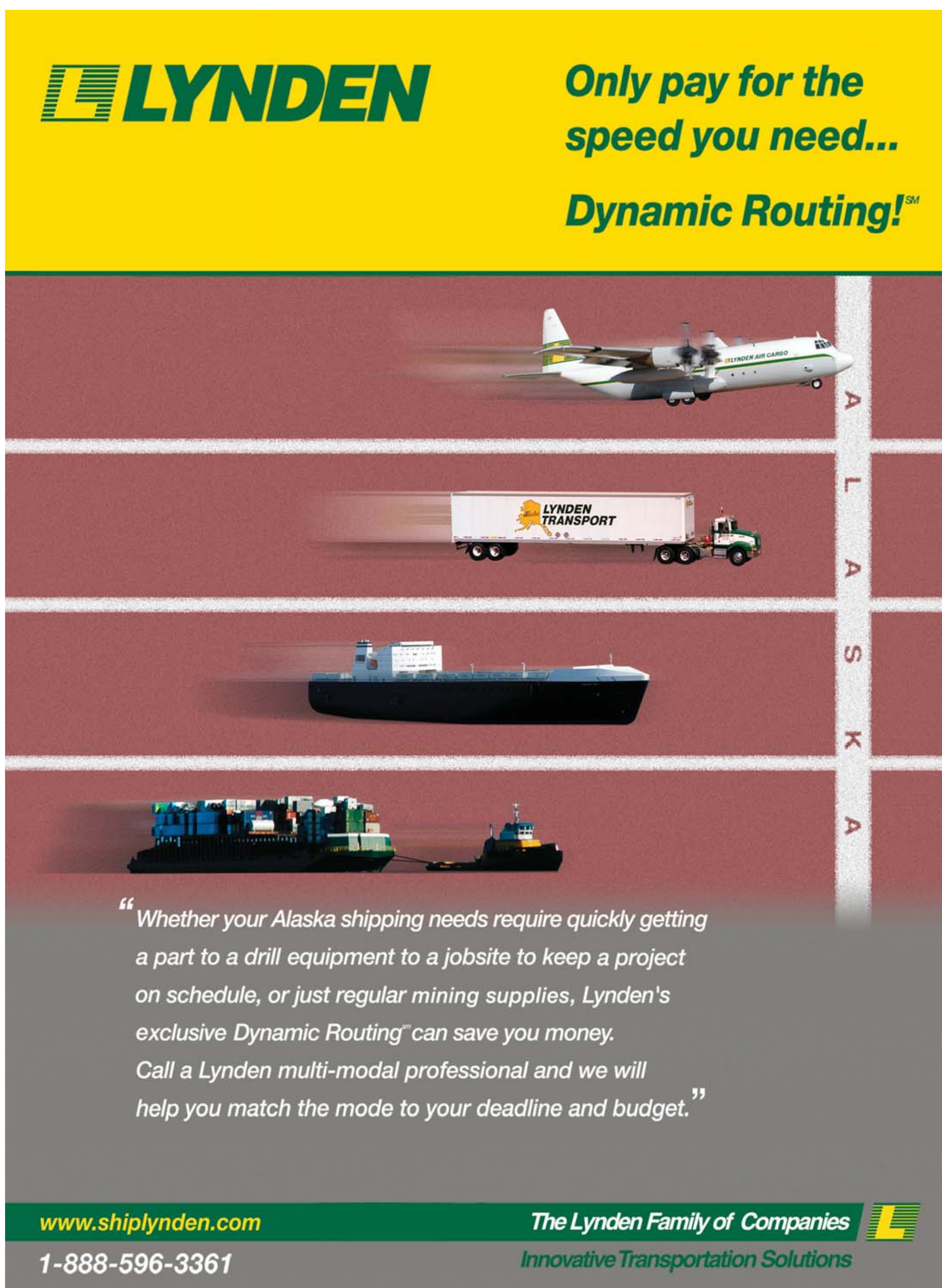
Talking about the current financial situation, Borell said, "My personal opinion is; yes that is tough. It is going to hurt everybody. It is one more layer of uncertainty and is one more reason – with the mounting uncertainties elsewhere – people are going to come to Alaska. When the dust settles, people are going to look at Alaska even harder." ●

YEAR IN REVIEW

Active placer mining operations in Alaska

Silverado Gold Mines Ltd. has recovered 26,879 ounces of placer gold from channel and bench deposits in the Nolan Valley through 2007. The largest nugget recovered from the property, located about 280 miles north of Fairbanks, weighed 41.35 ounces and was valued at $16,000 by weight, and sold for $50,000. Due to the coarse nature of the placer gold recovered, Silverado has begun exploration for the lode source of the gold. This season, the company completed 34 drill holes totaling 11,597 feet as part of its 2008 exploration drilling at Workman's Bench, the company's prime exploration hardrock target.

Goldrich Mining Company has 14,993 acres in mining claims that cover most of the Chandalar Mining District, about 190 miles north of Fairbanks. A scoping study of the Little Squaw Creek placer gold deposit outlines a resource of 8.8 million yards of gravel averaging .0246 ounces of gold per yard for a total of 216,602 ounces of gold. Goldrich has begun exploring the Chandalar property for its lode potential.



● YUKON TERRITORY

Yukoner closes in on exploration dream

Junior bets that Freegold Mountain Project could yield the next big precious metal discovery in Canada's portion of Tintina Gold Belt

BY ROSE RAGSDALE

For Mining News

FREEGOLD MOUNTAIN, Yukon Territory - Bill Harris, chief executive and chief operating officer of Northern Freegold Resources Ltd., is pursuing an exploration adventure of a lifetime, literally.

Harris, who was born and raised just 10 miles from Freegold Mountain, began prospecting for gold in the Dawson Mountain Range as a young child, tagging along behind his father, Glen, and their good friend Fritz Gruder in the 1960s.

Nearly four decades later, his intimate knowledge of the area's geology is paying off with eye-popping results.

Since early in the season, Northern Freegold has scored big with its 2008 drilling. The first hole of the season – drilled in mid-April – hole GRD08-68, intersected 3.25 meters, or 10.66 feet, of 100.69 grams per metric ton, or 2.94 oz/ton gold within 37.80 meters, or 124.02 feet, of 10.41 g/t (0.30 oz/ton) gold in Freegold Mountain's Nucleus Zone. The high-grade mineralization in hole GRD08-68 is hosted in massive pyrrhotite with lesser pyrite and chalcopyrite.

In July the junior reported results for five more drill holes, noting that four of them were step-out holes drilled to the east of hole GRD08-068. Two of these, GRD08-071 and GRD08-073, intersected a sulphide-rich zone similar to Hole GRD08-068. Hole GRD08-073 intersected 1.23 meters, or 4.04 feet, of 92.74 g/t (2.70 oz/ton) gold within 46.96 meters, or 154.07 feet, of 9.6 g/t (0.28 oz/ton) gold.

'A consolidation story'

Harris said the results have confirmed his long-held suspicion that the sprawling, hilly expanse of the 1,000 claims he

see FREEGOLD page 21

ROSE RAGSDALE

Debbie James, a geologist at Northern Freegold Resources Ltd., examines core samples at the exploration camp for the Freegold Mountain Project in central Yukon Territory.

● ALASKA

Water management tops mining concerns

Alaska convention will offer short course focusing on second-most important subject to miners, covering exploration to closure

BY SHANE LASLEY

North of 60 Mining News

The theme of the Alaska Miners Association's 2008 annual convention is "Water Management for Mining."

Bill Jeffress, principle consultant in Anchorage for SRK Consulting, told Mining News, "Everything that is done with mining, from the initial exploration through development, closure and post-closure revolves around water quality."

Jeffress is coordinator of the "Water Management for Mining" short course, a two-day technical course that will provide an overview of all aspects of water management from establishing baseline conditions to post-mine closure.

Early detection

AMA director Steve Borell told Mining News that water management has always been an important issue to mining, and the industry has an increasing awareness of the importance of focusing on water issues during the early exploration phase.

Jeffress emphasized that in modern mining, water management is something an explorer should begin from the first assessment of the property. He said a company can collect basic hydrology information by the observation of seeps, ponds and streams.

Water management goes beyond the hydrology. To understand how to effectively manage water a company also needs to characterize the ore, the overburden and the waste rock associated with the deposit.

During drilling an explorer can begin to collect this information by having a lab do a multi-element analysis on the rock and soil, and testing to discover whether the material is net-acid-generating or net-neutral.

Jeffress said, "The more information you have on that initially, the better idea you have on what it's going to take to mine it."

Collecting baseline data on water can take several years. By beginning to collect this data during early exploration a company can advance the development of a project by a couple of years.

"If they have some good surface and groundwater information, that makes the package that much more appealing to a prospective buyer," the consultant said.

Design for closure

One of the biggest questions facing a company that is considering putting together a mine plan on an advanced stage exploration project is: If we are able to permit and mine a project, can we close it?

"As soon as you start designing your mine, part of that design is closure. We say 'design for closure' and that all revolves around water, "Jeffress said.

To accomplish this, a developer needs to do a thorough job of characterizing the mine site, and get a good handle on water quality through the operations and closure.

Water balance is another key issue when designing a mine. According to Jeffress, this is critical during advanced exploration and operation. This information lets the company and the permitting agencies know whether or not the operation will need to discharge water. A zero-discharge operation is preferred and is easier to permit than an operation that requires discharge.

"It all goes back to how you manage your water and getting a good handle on what the water balance is," Jeffress added. ●

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FREEGOLD

has painstakingly amassed through property acquisitions and consolidation into a district-scale land package holds a substantial quantity of gold.

"It's the biggest land package in the area. Its 35 kilometers (about 21 miles) long and 10 kilometers (6 miles) wide on one end and 7 kilometers (about 4 miles) on the other end," Harris told Mining News during a recent interview.

Calling the 64-square-mile, or 166-square-kilometer Freegold Mountain Project a "consolidation story" that actually began in the 1950s, Harris said it came together after he reviewed a wealth of historical data on the area that he and his father had collected over the years and gleaned additional information about various exploration programs in the area.

"Putting it together in one land package is what made sense," he said.

The scale of the land package enables Northern Freegold to look at the regional geology rather than trying to understand the big picture by working small individual claims.

Though Harris can only guess at where future exploration will take the project, he is quite clear about its origins. Growing up in central Yukon Territory and prospecting for nearly 40 years, he saw a parade of prospectors and explorers come and go. Harris and his father made numerous discoveries in the region, themselves, and worked with various companies over the years on different projects.

The Freegold Mountain Project area has seen more than 80 different operators on different parts of the property over the years. The acreage has historic N43-101-established inferred resources of at least 700,000 ounces of gold, more than 15 known gold occurrences and unlimited potential.

Junior assembles strong team

Northern Freegold, meanwhile, has put together a winning management package too. In addition to Harris, Sue Craig, a geologist and Harris' wife, has taken on the

see **FREEGOLD** *page 23*

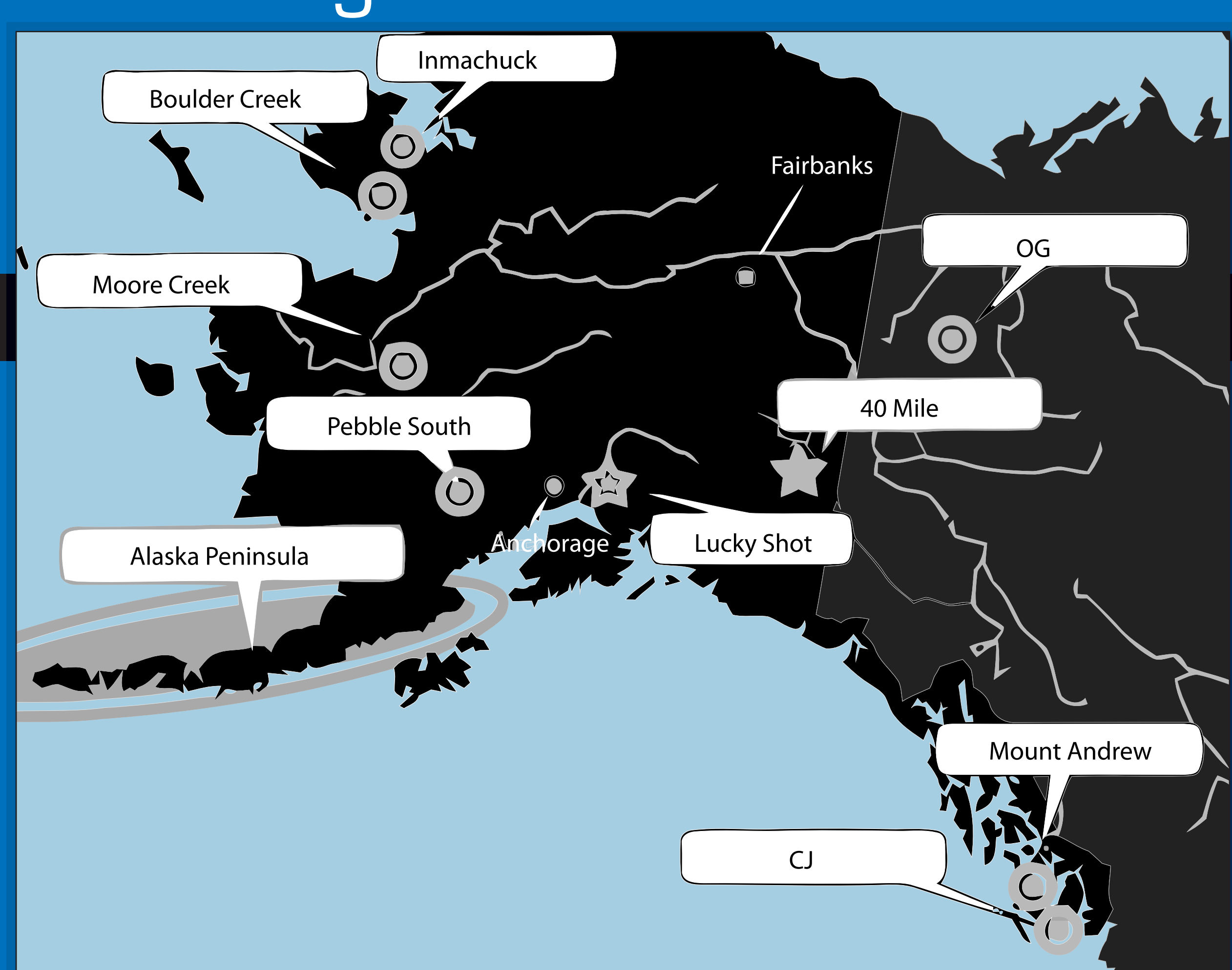
ROSE RAGSDALE

Exploration at the Freegold Mountain Project has returned spectacular drill results, including this core sample which assayed with a grade of 115 grams per metric ton over a short interval in the Nucleus Zone.

ROSE RAGSDALE

The Freegold Mountain property looms above the exploration camp of Northern Freegold Resources Ltd. The junior mounted a $10 million exploration program this year and completed more than 22,773 meters, or 74,695 feet, in 97 drill holes.

Revealing the Potential of Alaska



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● ALASKA

Bill seeks disclosure for initiatives

Rep. Kyle Johansen proposes initiative finance reform; bulk of Ballot Measure 4 funding came from outside “soft money” group

BY SHANE LASLEY
Mining News

Alaska Rep. Kyle Johansen, R-District 1, told attendees at Alaska's Resource Development Council Oct. 2 breakfast that Alaska's initiative process has become a multimillion-dollar industry.

Johansen is working on legislation that would hold individuals and groups in support or opposition to ballot measures to similar financial disclosure standards as those required of elected officials.

Johansen argued that initiative-created law has the same authority as law created by elected officials, and should be held to the same disclosure standards. The purpose of this disclosure would be to help inform Alaskan voters about the individuals and groups who are making state law through the initiative process.

“Currently, ballot groups may accept contributions without limitation,” Alaska Public Offices Commission Executive Director Holly R. Hill told Mining News. “This includes corporations, unions, organizations, as well as individuals and organizations from outside Alaska.

“However, candidates for state office may not receive corporate contributions and may receive only limited out-of-state contributions from nonresident individuals.”

About 56 percent of the $2.85 million raised to promote Ballot Measure 4 by the Alaskans for Clean Water campaign came from a Virginia-based soft money organization, and seven individuals from outside of Alaska contributed between $2,500 and $50,000 each to the “vote yes on 4” campaign, according to the APOC Web site.

Initiatives target Alaska mining

Alaska's mining industry has become the target of five “citizen initiatives” since Rep. Jay Ramras, R-Fairbanks, warned Alaska in late 2006 that Bob Gillam, owner of McKinley Capital and one of Pebble's staunchest adversaries, planned to bring a mining tax initiative before voters. Ramras is on record opposing the Pebble mine project at which the initiative was aimed.

“Bob Gillam, who is a very unique individual, has a mind to assert a public ballot initiative to tax the industry depending on the industry's posture toward the Pebble mine,” Ramras told the Alaska Miners Association. “That is like an ultimatum and something that you might want to consider because it would put together pretty draconian measures that would be pretty punitive to the industry.”

District 1 State Rep. Kyle Johansen has proposed a bill that would hold individuals and groups in support or opposition to ballot measures to similar financial disclosure standards as those required of elected officials.

Ramras urged the miners to make peace with Gillam.

When asked, Ramras said he thought that the miners did not take his warning seriously, and they were underestimating their adversary.

Though a mining tax initiative has not taken a foothold – Mining News sources suggest that the idea may be back on the table – opponents of Pebble have actively used the initiative process in attempts to create law that would make it extremely difficult (if not impossible) for Pebble and other large-scale hardrock mines to operate in Alaska.

The initiative industry

The most widely known of the five anti-mining proposals floated last year was 07WTR3, or Ballot Measure 4, as it became known before Alaska voters rejected it during the August primary.

In the days leading up to the 2008 primary election, Alaskans Against the Mining Shutdown, the group opposing Ballot Measure 4, challenged the ACW campaign to reveal the source of the out-of-state soft money contributions it received.

One of the sponsors of Ballot Measure 4 was Art Hackney, an Anchorage-based political consultant. Hackney not only sponsored the initiative, but his firm, Hackney & Hackney, Inc., reportedly earned between 10 percent and 15 percent of money spent on the “Alaskans for Clean Water” campaign for handling most of the advertising. The campaign attempted to convince voters to approve the initiative.

Hackney also sits on the board of “Americans for Job Security” a Virginia-based group that, according to the APOC Web site, contributed $1.6 million to the “Vote yes on 4” campaign. AJS is a soft-money advertising organization that is not required, or willing, to disclose the source of its funding.

In the days leading up to the 2008 primary election, Alaskans Against the Mining Shutdown, the group opposing Ballot Measure 4, challenged the ACW campaign to reveal the source of the out-of-state soft money contributions it received.

Willis Lyford, campaign director for the mining group said Alaskan voters deserved to know who funded the clean water group, and “we will make this request of ACW every day between now and the election until they make full disclosure. AJS is a soft-money shadow group with questionable campaign practices.”

Other groups also supported the clean water initiative, including Trout Unlimited, which threw in $45,000 and

see BILL page 23

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FREEGOLD

job of president and assumed primary responsibility for raising capital and handling the junior's administration.

Craig, a former executive assistant to Yukon Energy, Mines and Resources Minister Archie Lang, spent 10 years with Alexco Resource Inc., moving the Brewery Creek heap-leach mine from exploration to production and then award-winning reclamation. More recently, she led the Galore Creek Project in northwestern British Columbia through the environmental permitting process and won more awards.

In July, Northern Freegold also hired Febrizzio Colombo as exploration manager to draw on his extensive experience in mine project management around the globe and in mineral resource calculation, Harris said.

The junior also hired local placer miners during the past two years to provide support services to its exploration camp at Freegold Mountain.

Rapid ramp-up of exploration

After an extensive geophysical and mapping program on the property in 2006, Northern Freegold mounted a $5 million drilling program in 2007.

From June to October, 70 workers in three separate camps swarmed over on the property, focusing on seven zones by diamond drilling 11,430 meters in 57 holes, rotary drilling 4,365 meters in 116 holes, taking 1,500 soil samples and acquiring 130 line-kilometers of ground geophysics.

Encouraged by what the junior found in 2007, Harris led the charge to get an early start in mid-April on a $10 million in follow-up exploration program this year, completing 22,773 meters, or 74,695 feet, in 97 drill holes by September. Results are pending on 83 holes with four diamond drills and one rotary rig pursuing both follow-up and initial targets.

So far, the aptly named Nucleus Zone in the northwest quarter of the property is the center of the action. With mineralization running to a depth of 250-300 meters, it is open in all directions, "which is a good thing," said Harris with a dry chuckle.

Another target, the Goldy Zone in the southeast quarter of the property, has shown high-grade gold mineralization to a depth of 75 meters and continues 100 meters along length. In 2007 drilling at Goldy, assay results showed 53.8 meters, or 176.3 feet grading 3.6 g/t gold including 15.45 g/t gold over 9.3 meters, or 30.50 feet. The objective of 2008 drilling was to understand from which direction the mineralization is coming.

Drill hole GY08-27 intersected 23.70 meters, or 77.76 feet, of 2.84 g/t gold, including

1.75 meters, or 5.74 feet, of 21.18 g/t gold and 1.45 meters, or 4.76 feet, of 11.26 g/t gold.

"Encountering high-grade gold intervals near surface in the Goldy Zone is very encouraging," Harris said Sept. 25. "The potential of expanding the mineralization within the shear zone is excellent as the shear zone may represent part of a larger regional mineralizing system."

Among other targets are the more centrally located Stoddart and Ridge zones, which had features that had never been tested. Harris said two drill holes in the junior's 2007 program yielded new discoveries of good copper grades and revealed copper-gold-molybdenum porphyry-style mineralization.

In all, five different deposit types have been discovered on the property. In addition to the copper and gold porphyry mineralization, the property has high grade gold and copper massive sulphide, high-grade skarn gold and silver, high-grade polymetallic vein gold-silver-copper mineralization and high-grade epithermal vein gold and silver.

Debbie James, one of 14 staff geologists working on the Freegold Mountain Project this year, said the experience had been like trying to piece together a giant underground puzzle.

The scale of the land package has allowed Harris to look at the geology on a regional basis for the first time, instead of working on postage stamp-sized claims. The overview has already aided exploration considerably: while the company hit mineralization in every one of its 26 drill holes in 2006 by playing it safe and drilling known deposits, in 2007, it put faith into its new model and stepped out. Now it's hitting longer, higher grades.

Good news on all fronts.

The idea of finding huge quantities of gold at Freegold Mountain requires no stretch of the imagination. A substantial quantity of placer gold, primarily coarse nuggets and wire gold, has been found directly downhill from Freegold Mountain in Mechanic Creek over the years.

Not only does the property sit uphill from placer gold streams that are still actively mined, it also lies near the center of the Yukon portion of the Tintina Gold Belt, a boomerang-shaped mineralized region in which more than a half-dozen major deposits have been discovered. This belt is home to the Fort Knox and Pogo gold mines to the north and the Donlin Creek gold deposit in the west. Mineralization identified in some zones at Freegold Mountain, in fact, has been likened to that found at Fort Knox, a mine which averages annual output of about 300,000 ounces of gold.

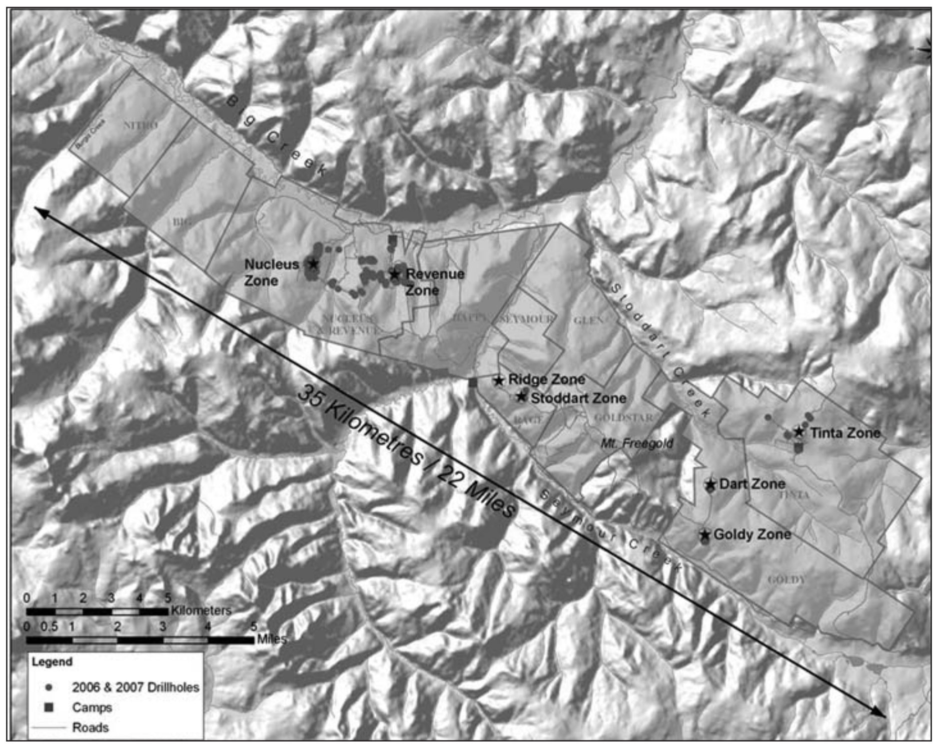
Harris now sees no end in sight for gold discoveries at Freegold Mountain.

"There are so many targets. We will just keep drilling after we get a resource estimate," he said. "I don't think we'll get to the end of this thing any time soon. It's a long way from finished."

Further complicating the outlook is significant copper mineralization on the property.

"We've got copper boulders that run up to 25 percent copper and 2.5 ounces gold per metric ton," Harris said.

Northern Freegold is working toward an updated resource calculation for the project by the second quarter of 2009, according to Harris. ●



NORTHERN FREEGOLD RESOURCES LTD.

continued from page 22

BILL

the Renewable Resources Coalition, an anti-Pebble group that Hackney helped to form. It donated $150,000 to pro-Ballot Measure 4 coffers. The largest individual contributor was Gillam, who, according to APOC, spent $820,000 to convince voters to approve the anti-mining legislation.

Alaska's mining industry spent more than $6.6 million dollars convincing Alaskans to oppose the ballot measure.

House Bill 355

Johansen is sponsoring House Bill 355 that would require individuals or groups that financially support or oppose a ballot initiative to identify themselves and the amount of their contributions. The Open and Transparent Initiative Act also would require initiative groups to register with the APOC.

HB 355 also would set electronic filing requirements. Johansen said this is needed because disclosures of financial contributions are not currently published in a timely manner or easily available to the public.

In short, according to Johansen, HB 355 seeks to allow Alaskan voters to make the most informed decision as possible and knowing who financially contributes to initiatives is a significant part of that decision. ●

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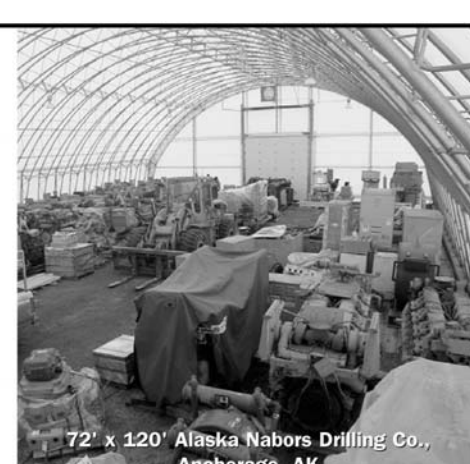

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ALASKA

Red Dog Mine operator, Teck Resources, orders two new mills

Teck Resources Ltd. has purchased two new M3000 IsaMills equipped with 1.5 megawatt motors for its Red Dog zinc mine in Northwest Alaska. The new equipment will be used to grind harder ore from the Aqqaluk deposit adjacent to the mine's main deposit.

The regrind circuit at Red Dog currently uses 10 vertical tower mills. The IsaMills will replace seven of them. One mill will regrind materials to 13 microns, and the other to 25 microns after the first phase of flotation.

The IsaMill was originally designed to improve efficiency and metallurgy of ultra-fine grinding. It was later discovered that the mills work well at coarser sizes, providing a more energy-efficient operation with the added advantage of improved recovery.

Because of Red Dog Mine's remote Arctic location in Northwest Alaska, it uses diesel generators to power its operations. Thus, energy efficiency was the primary motivator for Teck to upgrade the mine's regrind circuit.

The mills are expected to be commissioned and installed by the first quarter of 2010, in time to begin grinding ore from the Aqqaluk deposit.

Permitting Aqqaluk

In May 2007, Teck asked the U.S. Environmental Protection Agency to modify its water discharge permit issued under the National Pollutant Discharge

see **RED DOG** *page 28*

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Years of Excellence

Australian junior looks north to Alaska

Australian Mineral Fields agrees to spend $3 million to explore high-grade gold property near Tok; plans to apply Down Under model

BY SHANE LASLEY
North of 60 Mining News

Australian Mineral Fields Ltd. has signed an agreement with Alaska-based Tushtena Resources Inc. that grants the Perth-based junior the right to acquire up to an 85 percent stake in the Tushtena gold project 20 miles west-southwest of Tok.

The Australian junior can earn 80 percent interest in the Tushtena project by spending $3 million within five years. The company also can increase its stake to 85 percent by completing a bankable feasibility study.

Australian Mineral has seven exploration projects in Western Australia. The Tushtena property in Alaska marks the company's second overseas project. The first project was a grassroots exploration project in eastern Canada.

Australian Mineral has agreed to spend a minimum of C$500,000 per year in exploration. In addition, the junior made a cash payment of C$100,000 to Tushtena Resources, and has agreed to make annual payments of C$100,000 to the privately owned Alaska company, until Australian Mineral has earned 80 percent of the project.

Due diligence

After signing the deal in April, Australian Mineral Fields began re-sampling core from historic drilling on the property. In addition to sampling previously reported intersects, the company also tested sections of core that apparently were not tested in the past.

In a report on its first batch of due-diligence performed over the summer, Australian Mineral said the re-sampling has confirmed – and in some cases upgraded, reported intersections from the historic drilling. The company also reported that the previously un-sampled sections of the core returned additional intersections.

Assay results from the re-sampling of hole AR-4, drilled in 1986, revealed an intercept of 9.5 feet with an average grade of 24.58 grams of gold per metric ton. The re-sampling of hole AR-9 returned a 6-foot intersection with an average grade of 12.96 g/t gold.

The company also intersected 4 feet of mineralization in hole AR-7 grading 2.19 g/t gold, which had not previously been sampled. These discoveries lead AMF to believe the mineralization may be better and more widespread than previously thought.

Why Australian Mineral Fields?

Australian Mineral Fields is led by a group of mining industry veterans with experience working all over the world. Many of these individuals built distinguished careers primarily with Placer Dome, now a part of Barrick Gold Corp., including company Chairman John Loney, and President and Chief Executive Officer Mark Willson.

The aggressive junior says its team of mineral explorers has considerable expertise in integrating and applying a range of advanced three-dimensional and 4-D (time) modeling, simulation and data analysis technologies that can dramatically accelerate the exploration process while reducing risks and costs.

The extent and sophistication of the integration allows the team to evaluate, compare and interpret the widest possible range of data more rigorously, rapidly and precisely than ever before. The exploration team's advanced skills as well as integrated software applications constitute a competitive edge, the company said.

Why Alaska?

Australian Mineral has seven exploration projects in Western Australia. The Tushtena property in Alaska marks the company's second overseas project. The first project was a grassroots exploration project in eastern Canada.

Australian Mineral said it chose to look to Alaska for many of the same reasons it focuses on Western Australia; a high degree of prospectivity, mining friendly legislation and good infrastructure.

In developing the exploration model for the projects of Western Australia, the company said it recognized that what it learned could be applied elsewhere in the world. Two areas where Australian Mineral believes this to be true include the Grenville Province of eastern Canada and Alaska.

Australian Mineral said it also is able to use personnel experienced in Alaska, minimizing diversion of focus from Australian projects. ●

NORTH OF 60
MINING NEWS
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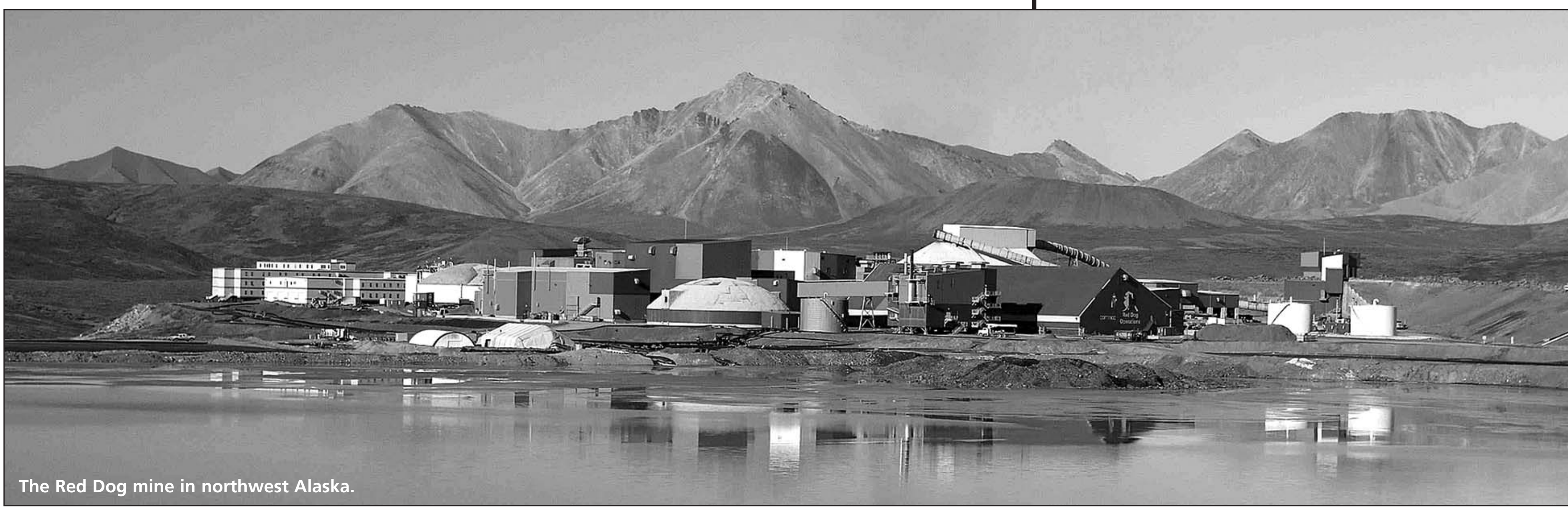
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● BRITISH COLUMBIA

Junior chases B.C. zinc-lead-silver deposits

Canada Zinc Metals completes 2008 exploration on, near Akie property in northeast area of province, expands Cardiac Creek deposit

BY ROSE RAGSDALE

For Mining News

Canada Zinc Metals Corp. Oct. 8 said the first assay results of its 2008 drill program has significantly expanded the zinc-lead-silver bearing Cardiac Creek deposit on the Akie property in northeastern British Columbia.

The news came less than two weeks after the feisty junior changed its name from Mantle Resources Inc. "to better reflect its major focus, being zinc-lead projects in northeastern British Columbia."

A total of 5,161 meters, or 16,773 feet, in 12 drill holes had been completed as of Oct. 8 on the Cardiac Creek property.

The new information provided by these results indicates that the Cardiac Creek deposit is now at least 1 kilometer in length with a dip extent of about 600 meters.

The road-accessible Akie zinc-lead property is situated within the southern-most part (Kechika Trough) of the regionally extensive Paleozoic Selwyn Basin, one of the most prolific sedimentary basins in the world for the occurrence of sediment exhalative zinc-lead-silver and stratiform barite deposits.

Drilling on the Akie property by Inmet Mining Corp. during the period 1994 to 1996 and by Canada Zinc Metals since 2005 has identified a significant body of baritic-zinc-lead SEDEX mineralization known as the Cardiac Creek deposit. The deposit is hosted by variably siliceous, fine grained clastic rocks of the Middle to Late Devonian "Gunsteel" formation.

Another SEDEX zinc-lead-silver deposit of the same age that formed under very similar geological conditions to Akie is the giant Red Dog deposit in Northwest Alaska. Red Dog is the largest zinc mine in the world and is one of the largest accumulations of zinc-lead mineralization.

Vancouver, B.C.-based Canada Zinc Metals filed a NI 43-101 report May 30 that supported an estimated inferred resource of 23.6 million metric tons grading 7.6 percent zinc, 1.5 percent lead and 13.0 grams per metric ton silver at a 5 percent zinc cut-off grade.

Two similar deposits, Cirque and South Cirque, located some 20 kilometers, or 12.5 miles, northwest of Akie and owned under a joint venture by Teck Resources Ltd. and Korea Zinc, are also hosted by Gunsteel rocks and have a combined geologic inventory exceeding 50 million metric tons, Canada Zinc said.

The assay results at Cardiac Creek included 12.13 meters, or 39.4 feet, grading 10.17 percent zinc, 1.75 percent lead, and 12.45 g/t silver. Another interval of 10.35 meters, or 33.6 feet, graded 12.72 percent zinc, 2.04 percent lead and 14.45 g/t silver.

Four of the reported holes are up-dip of previously completed holes and confirm that the deposit continues for about 100 to 115 meters upwards from hole A-06-37A with 25.50 meters, or 82.9 feet, grading 10.08 percent combined zinc-lead), hole A-07-47 with 13.83 meters, or nearly 45 feet, grading 13.86 percent combined zinc-lead, and hole A-07-49 with 15.89 meters, or 51.6 feet, grading 13.65 percent combined zinc-lead. The fifth hole, A-08-55, extends the known mineralization about 100 meters along strike to the southeast from hole A-06-41.

Vancouver, B.C.-based Canada Zinc Metals filed a NI 43-101 report May 30 that supported an estimated inferred resource of 23.6 million metric tons grading 7.6 percent zinc, 1.5 percent lead and 13.0 grams per metric ton silver at a 5 percent zinc cut-off grade.

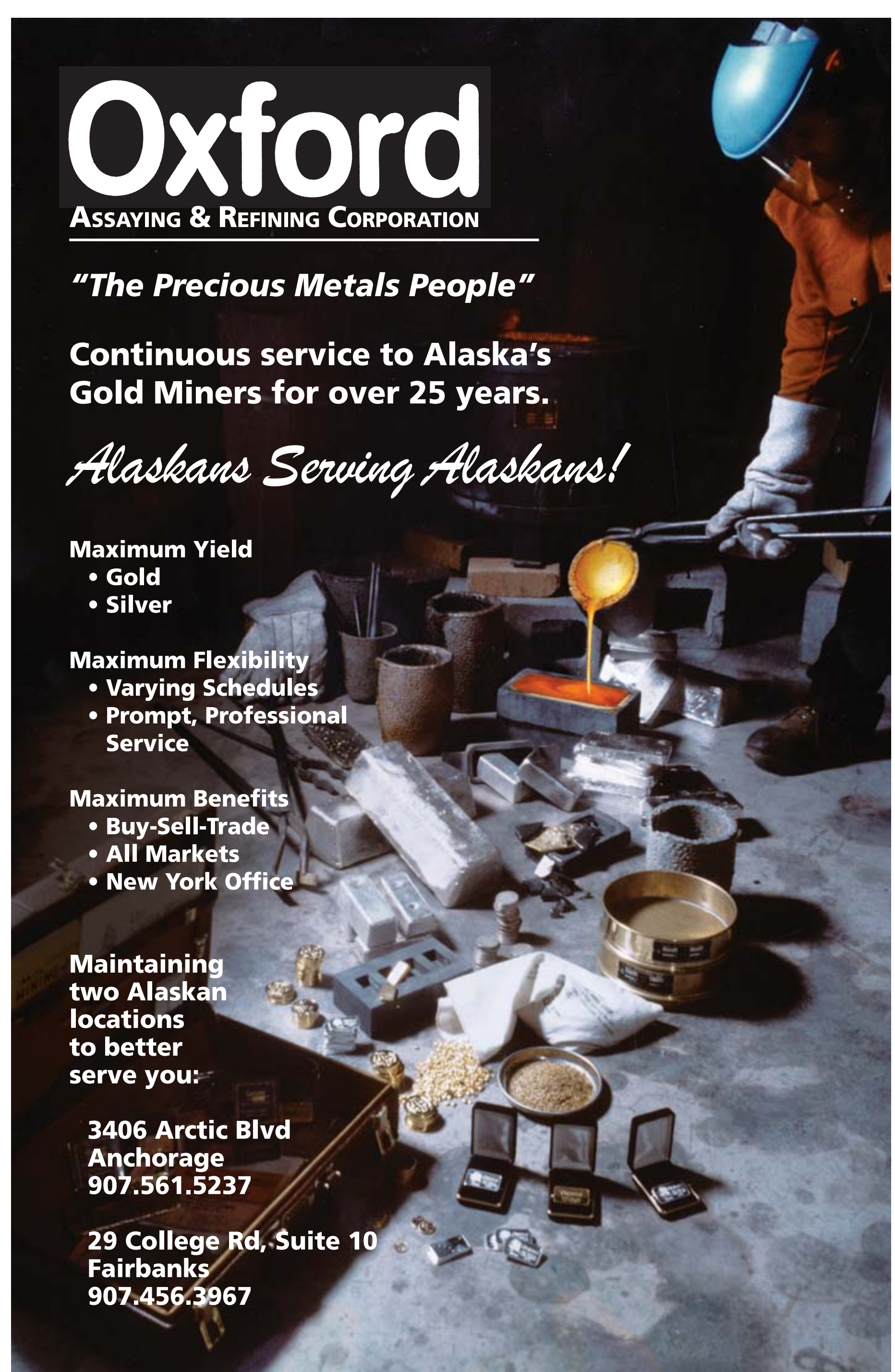
The new information provided by these results indicates that the Cardiac Creek deposit is now at least 1 kilometer in length with a dip extent of about 600 meters.

Canada Zinc Metals President Jim Mustard said the junior met many milestones with its 2008 exploration program including expanding the deposit's footprint with the first assay results,

"The step-out drilling towards the northwest has provided some new insights into the style and nature of the mineralization as we now believe this area represents a separate center of new mineralization on strike from the Cardiac Creek deposit," Mustard said. "Also, the preliminary results of our regional efforts indicate several high potential targets that are hosted by the same geology as seen at Akie."

Canada Zinc also completed 2 holes covering 1,114 meters, on the North Lead Anomaly about 2.3 kilometers, or nearly 1.5 miles, northwest of the nearest drill hole to intersect significant Cardiac Creek zinc-lead mineralization. This drilling was designed to further investigate the Gunsteel-formation-hosted massive sphalerite-galena-pyrite-barite mineralization encountered by Inmet in 1996 in hole A-96-24, which intersected nearly a meter, or more than 2 feet, grading 11.60 percent zinc and 9.05 percent lead and an associated 200-meter-by-1000 meter lead-zinc anomaly in soil. Assay results and further analysis of these holes are pending.

Canada Zinc also completed a regional exploration program from July to September between the Akie property and its Mount Alcock property, 70 kilometers, or 43.4 miles away. The work consisted of data compilation, prospecting, geologic mapping, and silt and soil sampling. The junior identified several new mineral occurrences and initial soil sample results indicate the presence of at least one large, previously unknown lead-zinc anomaly. ●



Congressmen trade words over Kensington

NJ Democrat collects signatures in support of SEACC, while Republicans, led by Rep. Don Young, urge colleagues not to sign

BY SHANE LASLEY

North of 60 Mining News

U.S. Rep. Frank Pallone, Jr., D-New Jersey, has circulated a letter to his fellow representatives encouraging them to sign an amicus curiae brief to the U.S. Supreme Court on behalf of the Southeast Alaska Conservation Council.

U.S. Reps. Don Young, R-Alaska, Bill Sali, R – Ind., and Mike Simpson, R - Idaho, responded to the appeal by Pallone with a letter of their own, urging their colleagues on Capital Hill "not to sign an erroneous amicus brief to kill good-paying American jobs."

The Supreme Court case is the result of SEACC and other environmental groups' challenge of Section 404 Permits issued by the U.S. Army Corp of Engineers for the disposal of tailings at Coeur d'Alene Mines Corp.'s Kensington mine project, 45 miles northwest of Juneau. Though the wet tailings disposal plan had survived federal and state regulatory scrutiny, the anti-development activists filed suit to block the plan on the grounds that it violated provisions of the federal Clean Water Act.

U.S. Rep. Frank Pallone, Jr., D-New Jersey

The environmentalist took their case to the Ninth Circuit Court of Appeals after an August 2006 ruling in which the U.S. District Court of Alaska in Anchorage upheld the mine permits. In May 2007 the appeals court negated permits issued by the Corps and the U.S. Forest Service.

In June the Supreme Court, which only hears about 7 percent of the cases that come before it on appeal, agreed to review what could become a precedent-setting case.

Amicus curiae briefs on behalf of SEACC and the other environmental groups are due by mid-November.

U.S. Rep. Mike Simpson, R-Idaho

Pallone asks for signatures

In his letter to fellow members of the U.S. House of Representatives, Pallone wrote, "Early next year the Supreme Court will hear the SEACC, Sierra Club, and Lynn Canal Conservation v. Coeur Alaska, Inc., Goldbelt, Inc and the State of Alaska case. Please join me in signing a congressional amicus curiae brief to the Supreme Court on behalf of the Southeast Alaska Conservation Council. Our brief is due to be filed with the court in mid-November."

The New Jersey Democrat's letter contends that the Kensington Mine permit "would set dangerous legal precedent with damaging consequences nationwide. If the Supreme Court upholds the mine's permit, it would be the first time since the passage of the Clean Water Act that the Corps has issued a section 404 permit for discharges of process wastewater directly into a lake, river, or stream, burying the receiving water."

U.S. Rep. Don Young, R-Alaska

This, according to Pallone, would risk more than 30 years of Clean Water Act protections.

Alaska, Idaho reps fire back

In response to Pallone's letter, Alaska and Idaho representatives sent out a letter, saying, "The brief is an attempt to further the efforts of a handful of radical environmentalists to stop this particular mine and set a precedent to halt many other mines throughout the United States."

They pointed out that both the U.S. Army Corps of Engineers and the U.S. Environmental Protection Agency said the tailings discharge into the impoundment was properly permitted under Section 404 of the Clean Water Act as fill material, and that Congress has authorized the Corps of Engineers to permit the placement of mine tailings in jurisdictional waters for more than 100 years.

The congressmen also noted that the water in question is "added to those benign mine tailings to make it slurry that can be transported by a pipeline to impoundment. Prior to any water discharge downstream from the impoundment, the company also properly obtained a 402 permit from the EPA."

see **KENSINGTON** page 29

continued from page 24

RED DOG

Elimination System to include development of the Aqqaluk deposit.

This modification to the NPDES triggered a National Environmental Policy Act review, with EPA as the lead regulatory agency. A Supplemental Environmental Impact Statement must be completed to update Red Dog's environmental impact statement, which was developed in 1984 when regulators issued the first NPDES permit for the mine's discharges.

Teck is currently working to complete environmental permitting for the Aqqaluk deposit. Distribution of the draft SEIS is expected around mid-November.

The Aqqaluk deposit borders the northeast edge of Red Dog's main deposit. It contains 51.6 million metric tons of reserves, grading 16.7 percent zinc, 443 percent lead and 79 g/t silver.

Teck Cominco intends to begin developing the Aqqaluk Pit in 2010. Ore from Aqqaluk would initially be blended with ore from the main deposit, at a combined production rate of about 3.3 million metric tons per year, which is the same as current and planned production rates from main pit operations. In 2012, when ore from the main deposit is projected to be depleted, the entire mine's production would then come from the Aqqaluk deposit.

—SHANE LASLEY

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ROSE RAGSDALE

Katrina Jessen, project geologist and manager of the Mike Lake Project in central Yukon Territory, makes a point during a media tour of the gold-rich property while consulting geological engineer and Yukon prospector Bill Wengzynowski looks on.


ROSE RAGSDALE

Yukon-Nevada Gold Corp. Chief Geologist Erika J. Shepard is working with Nicole Sanches, investor relations officer, and Project Manager Terry Eisenman to transition the Ketza River Gold Project in southern Yukon Territory to production from exploration.

● YUKON TERRITORY

Women geologists have arrived in Yukon

More females breaking into the male-dominated mining profession reflects ongoing shortages of skilled workers among other factors

BY ROSE RAGSDALE
For Mining News

The face of the geology profession is changing and no where is the trend more evident than in the Yukon Territory, where a mini-boom in exploration brought scores of women rock hounds trooping to mining camps across the northern wilderness this summer.

"We've had women geologists in the industry all along, but nothing like the numbers we've been seeing lately," said Mike Burke, a senior geologist with the Yukon Geological Survey.

Women are increasingly populating mining teams as high mineral prices has spurred exploration and created a shortage of skilled geologists in the mining industry.

At 10 camps ranging from early stage exploration projects to Yukon's one producing mine Mining News observed significant numbers of women working in vital roles. In addition to traditional jobs such as camp cook and safety officer, women also joined the ranks of geologists, geotechnical specialists and geology students at the camps. From Overland Resources Inc.'s Andrew Project in eastern Yukon to Underworld Resources Inc.'s White River and Black Fox gold projects in the west, women professionals were present in significant numbers.

Taking the lead

Most impressive were women geologists filling pivotal roles at Yukon Nevada Corp.'s Ketza River Project, Northern Freegold Resources Ltd.'s Freegold Mountain Project and at White River and Black Fox.

At Ketza River, mining veteran Erika J. Shepard was hired in April as chief geologist to help transition the gold project from exploration to production.

Northern Freegold has several women geologists, including President Sue Craig, who is one of the most accomplished women geologists in the Yukon with a history of outstanding service at the Brewery Creek Mine and the Galore Creek Project in British Columbia. Craig is also the wife of prospector and Northern Freegold CEO Bill Harris.

Debbie James is one of several staff geologists at

see **WOMEN** page 30

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KENSINGTON

"The Ninth Circuit decision would hurt the mining industry nationwide, which could result in even more unemployment. The impact would surely result in a much broader adverse impact on communities and citizens who rely on environmentally sound mining practices for their economies," the Republicans argued.

Reps. Young, Sali and Simpson said the fate of the mining industry hangs in the balance.

No permit, no jobs

The representatives also discussed the importance of Kensington to the economics of the Juneau area, especially Alaska Natives.

"A key partner in the mine's development is Goldbelt, the local Native group which represents the Tlingit people in the Juneau area. Alaska's Tlingits currently have a 62 percent unemployment rate among adult males. The Kensington Project would provide them with some of the best-paying jobs available in the region," the congressmen wrote.

The letter includes an excerpt from an article that appeared earlier this year in a North of 60 Mining News: Randy Wanamaker, a Tlingit Indian and registered geologist, told the Senate Energy and Natural Resources Committee in January "... hardrock mining is vital to communities like Juneau because it brings social and economic stability in the form of high-paying jobs and substantial tax revenue that provides opportunities for economic parity for members of minority groups."

"The Ninth Circuit decision would hurt the mining industry nationwide, which could result in even more unemployment. The impact would surely result in a much broader adverse impact on communities and citizens who rely on environmentally sound mining practices for their economies." - U.S. Reps. Don Young, R-Alaska, Bill Sali, R – Ind., and Mike Simpson, R - Idaho

Once in operation more than 200 workers are expected to be employed at the Kensington gold mine. Coeur d'Alene Mines Corp.'s Alaska subsidiary, Coeur Alaska, has agreed to give hiring preference to shareholders from three Southeast Alaska Native corporations – Goldbelt Inc., Klukwan Inc., and Kake Tribal Corp.

Coeur cuts core employees

Young, Sali and Simpson told members of the House that because of the lawsuit-induced delays in the Kensington Project, Coeur is in the process of cutting existing jobs in Southeast Alaska.

Coeur laid off 33 of the 82 workers at Kensington Project in early October. The work-force reduction comes after the company decided it could no longer move forward with a paste tailings plan at Comet Beach, and would wait for a U.S. Supreme Court ruling on its original permit for tailings disposal in Lower Slate Lake.

Meg Day, Coeur Alaska's human resources manager, said the company is working with mining operations in Alaska and the Lower 48 to help the displaced workers find jobs. She said several of the workers have received job offers and interviews from the Greens Creek silver mine, which is about 30 miles southwest of Juneau.

Day said Coeur's priority is to find positions in Alaska's mining industry for as many displaced employees as possible.

The operator of Kensington expects a Supreme Court ruling in early 2009. If the court upholds the permits, Coeur hopes to complete its tailings facilities and begin gold production by the end of next year. ●

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ROSE RAGSDALE

Debbie James, a staff geologist for Northern Freegold Resources Ltd. at the Freegold Mountain Project in central Yukon, pores over a geological map during a presentation at the camp in June.

COURTESY OF UNDERWORLD RESOURCES INC.

Project geologist – Hanne Paulsen, right, is project geologist for Underworld Resources Inc. Here she and Adrian Fleming, Underworld's president and CEO examine an exposed gold vein on the White River Gold property in west-central Yukon Territory.

ROSE RAGSDALE

Stephanie Mrozek is a University of Alaska Fairbanks student who is pursuing a master's degree in geology. She spent the 2008 summer mining season working as a geologist's assistant at the Mike Lake Project in central Yukon Territory.

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WOMEN

Northern Freegold. A 1988 graduate of the University of British Columbia, James said female enrollment among geology majors in Canadian colleges recently has climbed as high as 60 percent.

The influx of female professionals, mostly Canadians, into the Yukon bush this summer included women from New Zealand and Alaska.

The influx of female professionals, mostly Canadians, into the Yukon bush this summer included women from New Zealand and Alaska.

At Underworld's early stage White River and Black Fox projects, Hanne Paulsen, a young woman from New Zealand, served as project geologist. Paulsen worked with local prospector Shawn Ryan whose wife and business partner Cathy, is also a geologist.

Stephanie Mrozek, a student pursuing a master's degree in geology at the University of Alaska Fairbanks and planning her thesis, worked as a geologist's assistant at the Mike Lake Project this summer where Katrina Jessen served as project geologist and manager.

Mrozek, who has spent previous summers working at the Fort Knox gold mine in Interior Alaska, said she came to Canada to broaden her exposure to the industry. She described the UAF geology program as being "top-notch" and its leader, Professor Rainer Newberry, as being an expert in skarn geology.

The program currently has 40-50 women students enrolled, who are pursuing either a master's or a doctorate degree in geology.

Originally from Toronto, Mrozek said she expects to graduate in 2010. She completed undergraduate study in Nevada. ●



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FREEMAN

northwest dipping quartz-arsenopyrite-carbonate veins, veinlets and shear veins up to 0.5 meter thick. Of the 10 drill holes, the Company interprets that only four holes, for a total of 528 meters were drilled in an orientation likely to intersect the mineralized veins. The Discovery zone, the most significant and advanced prospect to date, is co-incident with a reported one-kilometer-long zone containing greater than 250 parts per billion gold and greater than 500 parts per million arsenic in soils. Resampling of historic core intervals was conducted in 2008 and indicated general agreement between 2008 and historic assay results. These results included 2008 results of 9.5 feet grading 24.575 g/t gold in hole AR4 and 6 feet grading 12.956 g/t gold in hole AR9. Welcome to Alaska Australian Mineral Fields Ltd.!

NORTHERN ALASKA

Silverado Gold Mines Ltd. Announced additional results from drilling at the Workman's Bench prospect at its Nolan Creek property in the Brooks Range. The company completed 34 drill holes totaling 11,597 feet as part of its 2008 exploration drilling at Workman's Bench. New results include 2.1 feet grading 0.04 ounces of gold per ton and 42.07 percent antimony in hole 08SH15, 1.8 feet grading 2.88 ounces of gold per ton and 27.657 percent antimony in hole 08SH18 and 1.0 feet grading 0.08 ounces of gold per ton and 63.47 percent antimony in hole 08SH21. This year's drilling has extended the known lateral extent of the stibnite (antimony)-gold vein systems on Workman's Bench from 600 feet to 1,000 feet.

SOUTHEAST ALASKA

Coeur d'Alene Mines Corp. announced that, due to further substantial delay in the Environmental Assessment process triggered by a federal agency's recent actions, the company has requested the Forest Service to terminate the permitting process for a potential alternative paste tailings plan at its Kensington gold project. The company continues to pursue its original tailings plan, which is pending before the U.S. Supreme Court. A decision on the appeal is expected in the first or second quarter of 2009. The company's decision to terminate its alternative disposal plans stems from indications from the Environmental Protection Agency which has now stated it wants Coeur to evaluate yet another new and different alternative for review and raised other issues regarding the modified plan proposal. The Agency comments triggered potentially months of delay and substantial issues in completing a timely modified plan review. The most immediate impact of this action was a layoff of about half of the Kensington project's work force, amounting to 41 of 82 jobs being terminated on the project.

Full Metal Minerals Ltd. and Alaska newcomer **Mosam Capital Corp.** have entered into an agreement whereby Mosam can earn a 60 percent interest in Full Metal's Mount Andrew copper project on Prince of Wales Island. Mosam has the option to earn a 60 percent interest in the property by incurring exploration expenditures totaling $3 million over four years, making cash payments totaling $125,000 and issuing 1 million shares over the four year option term. The style of mineralization and alteration encountered at Mount Andrew suggests an iron-oxide copper-gold system. Copper mineralization occurs within semi-massive to massive magnetite bodies within andesitic volcanic rocks and associated intermediate intrusive rocks, cross-cut by later post-mineralization dykes. Andesitic rocks commonly exhibit tactite-style alteration, coupled with strong sodic and potassic alteration.

Niblack Mining Corp. announced that, as previously announced, Committee Bay Resources Ltd. has acquired 100 percent of the outstanding shares of Niblack and will begin operating under this new name at the Niblack polymetallic project on Prince of Wales Island.

Ucore Uranium Inc. announced additional rare earth element (REE) drill results from the I&L Zone at its Bokan Mountain uranium project. Results include 8.38 meters grading 0.028 percent Y2O3, 0.020 percent Nb2O5, 0.148 percent Light Rare Earth Elements and 0.025 percent Heavy Rare Earth Elements in hole LM08-10, 12.81 meters grading 0.244 percent Y2O3, 0.018 percent Nb2O5, 0.108 percent Light Rare Earth Elements and 0.110 percent Heavy Rare Earth Elements in hole LM08-118 and 7.04 meters grading 0.076 percent Y2O3, 0.143 percent Nb2O5, 0.127 percent Light Rare Earth Elements and 0.075 percent Heavy Rare Earth Elements in hole LM08-25. The company indicated that the I&L zone is significantly enriched in rare earth elements and related metals, including yttrium and niobium along with potentially significant concentrations of highly valuable heavy REE's, including holmium (Ho), lutetium (Lu), terbium (Tb) and thulium (Tm). These are uncommon at most other North American REE deposits and their value could add materially to the uranium values for which the project is more widely known. Surface sampling has identified several zones with even higher REE values outside of the main uranium-bearing zones. Investigations are being made into the area's full suite of mineralization, including uranium, REE's, niobium, beryllium, and zirconium. Samples from the I&L zone have been submitted to a metallurgical facility for mineralogical and recovery testing. ●

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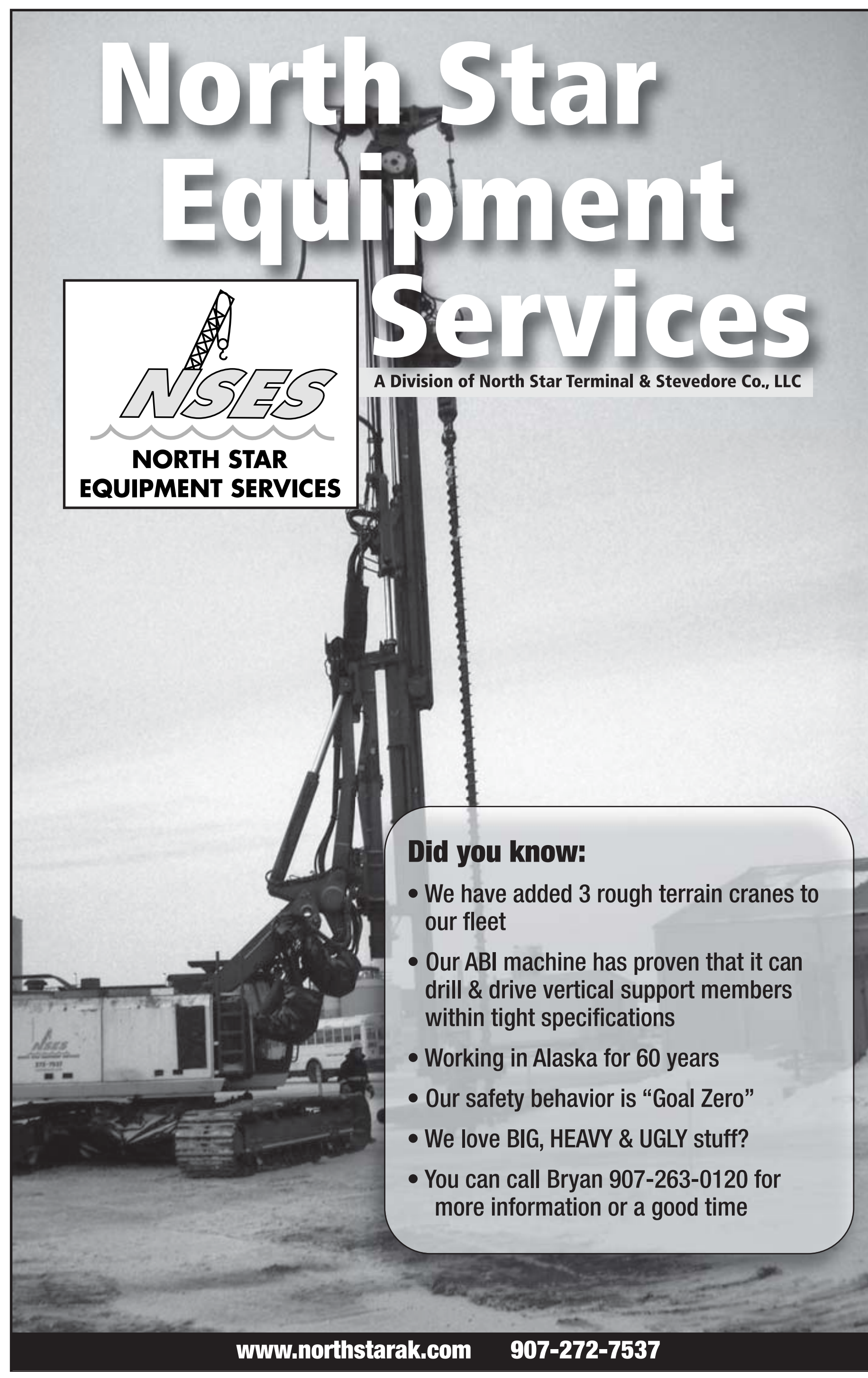
STARTUP

maximize shareholder value, the company said.

Since the end of the quarter NovaGold has sold the Ambler project and other non-core Alaska assets to Mantra Mining Inc. for C$20 million in common shares of Mantra. The company also borrowed $18.8 million in a bridge loan from Auramet Trading, LLC. The junior raised another C$15.3 million from 2.31 million purchase warrants exercised Oct. 1.

NovaGold said Donlin Creek LLC, a 50/50 partnership between NovaGold and Barrick Gold Corp. to develop the huge Donlin Creek gold deposit in southwestern Alaska, will complete a feasibility study on the venture early next year.

The junior and its partner in the Galore Creek project, Teck Resources Ltd., is planning to complete an optimization study for Galore Creek by year's end. ●



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