



page 13 State bullish on crude oil prices; Hawker asking for budget adjustment

December Mining News inside



The December edition of North of 60 Mining News is enclosed.

One-year reprieve for Enstar gas supplies; RCA rejects contracts

Enstar might not get the peace of mind it wants, but it should get the natural gas it needs.

In rulings on Dec. 22, state regulators once again rejected a pair of gas supply contracts between Enstar and two Cook Inlet producers, but allowed Enstar to buy gas from the producers under the contracts and recover the new expense through its rates.

The apparent contradiction highlights the complexity of the regulatory battle.

In the short term, the rulings mean Enstar will have enough natural gas next year to supply around 400 Anchorage businesses that have been in limbo for nearly a month.

"We do plan on purchasing gas in 2009," Enstar spokesman Curtis Thayer said.



CURTIS THAYER

see ENSTAR page 19

BREAKING NEWS

3 Shell defers Beaufort, Chukchi drilling: Hopes to drill in '10, '11 if it wins in court; seismic cancelled after enough data acquired

4 Carriers challenge FERC order: 3 protest revenue pooling requirement designed to remedy BP's chronic under-recovery of costs

6 Increasing costs cloud view of prices: As crude prices fall, higher costs becoming more important for assessing near term in Alaska

EXPLORATION & PRODUCTION

Cook Inlet deal?

State offers to combine prospects to save leases; companies want more time

By ERIC LIDJI

Petroleum News

State oil and gas officials are proposing to consolidate the lease holdings of three Cook Inlet operators in the hopes of speeding development of several offshore prospects.

But the operators are asking the state for more time to develop the prospects.

By combining leases held by Pacific Energy Resources, Escopeta Oil and Renaissance Alaska, the state hopes to get two exploration wells drilled over the next two years.

In return, the companies would keep dozens of



DARREN KATIC



DANNY DAVIS

leases set to expire at the end of the year.

The companies have until March 1 to agree to the proposal from the state.

As currently envisioned by the state, the agreement would require the three independent oil companies to start moving a drilling rig to Alaska by March 15 in order

to drill one well at the proposed unit by June 30, 2009, and another by May 1, 2010.

The proposed unit would include the Kitchen unit, the Corsair unit and the proposed Northern Lights unit, as well as surrounding leases current-

see DEAL? page 19

GOVERNMENT

Hot on the Obama trail

Canada told to waste no time getting energy message to new U.S. administration

By GARY PARK

For Petroleum News

If Canada wants to remain the largest external supplier of petroleum and natural gas to the United States it should waste no time beating a path to the door of the incoming U.S. administration, says a briefing by the Conference Board of Canada.

The authors, Gary Clyde Hufbauer and Jisun Kim, suggest that door is likely open, but it is up to Canada to initiate proceedings.

The board, Canada's largest not-for-profit research organization, explores how the U.S. is likely to deal with climate change matters under President Barack Obama and what that means for



STEPHEN HARPER

Canada's role as one of the world's top five energy producing countries, whose exports fetched C\$90 billion in 2007 (20 percent of the value of all exports) and directly employed 372,200 people.

"At a time of global financial turmoil and the resulting recession (of unknown depth and direction) momentum toward a climate pact has slowed both in the United States and internationally," the document said. "Some experts, however,

have argued that the financial crisis calls for faster — not slower — action on climate change."

The authors probe how an Obama presidency is likely to tackle climate change and the implications for Canada, noting that Obama through his

see MESSAGE page 18

LAND & LEASING

State says work illegal

Claims Exxon did not have permit for well work done last summer at Point Thomson

By KAY CASHMAN

Petroleum News

An individual in the private sector who does permitting for oil companies in Alaska told Petroleum News that recent events at the former Point Thomson unit on the eastern North Slope reminded him of the 1974 movie "Blazing Saddles," and the Mexican bandit who said "Badges? We don't need no stinking badges."

The line, which originated in the 1935 book "The Treasure of the Sierra Madre," would have to be modified for Point Thomson, to read, "Permits? We don't need no stinking permits." And the cul-

AOGCC delays action on Exxon permits

The Alaska Oil and Gas Conservation Commission has decided to hold off making a decision on applications from ExxonMobil for drilling permits for the former North Slope Point Thomson unit.

Petroleum News learned of the decision from a Dec. 19 letter AOGCC sent to Tom Irwin, commissioner of the Alaska Department of Natural Resources.

see AOGCC page 15

see POINT THOMSON page 14

contents

Petroleum News

A weekly oil & gas newspaper based in Anchorage, Alaska

ON THE COVER

Cook Inlet deal?

State offers to combine prospects to save leases; companies want more time



Hot on the Obama trail

Canada told to waste no time getting energy message to new U.S. administration



State says work illegal

Claims Exxon did not have permit for well work done last summer at Point Thomson

SIDEBAR, Page 1: AOGCC delays action on Exxon permits

SIDEBAR, Page 14: Massey: Cycling won't work at Point Thomson

One-year reprieve for Enstar gas supplies; RCA rejects contracts



EXPLORATION & PRODUCTION

3 Shell pushes drilling out to 2010, '11

Seismic cancellation unrelated to 9th Circuit ruling; company hopes to drill in Beaufort and Chukchi if it prevails in court

5 Carbon storage project unveiled

7 Alberta oil sands: It's not over 'til it's over

A few voices speak out for future of Alberta oil sands, citing need for liquid fuel, dropping construction costs, new technology

14 BLM opens travel across tundra in NPR-A

FINANCE & ECONOMY

5 Nexen rescues junior partner

Becomes sole operator of Long Lake project, builds defenses against unwanted takeover bid; deal helps OPTI Canada meet cash call

6 Increasing costs cloud view of prices

13 Alaska bullish, skeptical on prices

Alaska is forecasting higher prices than other oil states, but forecasters admit an adjustment could be required early next year



GOVERNMENT

10 Feds complete geothermal leasing plan

More than 190 million acres in 12 western states — including Alaska — available for leasing, development of geothermal resources



11 Kempthorne appoints council members

LAND & LEASING

7 Alberta toppled as champion

12 DEIS out for Beaufort, Chukchi sales

Minerals Management Service issues draft environmental impact statement for Alaska OCS sales scheduled for 2010, 2011, 2012

OUR ARCTIC NEIGHBORS



8 Bringing umbilical technology to life

Offshore Arctic projects require complex subsea systems and GE subsidiary VetcoGray is already breaking records at Snohvit while looking to the future

8 StatoilHydro completes Barents exploration well

8 Russia brings nuclear power into oil, gas projects

9 ConocoPhillips Russia joint venture advances

PIPELINES & DOWNSTREAM

4 Three carriers challenge FERC order

Pipeline owners protest full revenue pooling requirement designed to remedy BP's chronic under-recovery of costs from tariffs

Alaska's Premier Oil and Gas Consultants



For information about PRA including background material and a complete listing of our consultant staff, please visit our web site at www.petroak.com.

3601 C Street, Suite 822 Anchorage, Alaska 99503
Ph: (907) 272-1232 info@petroak.com
Fx: (907) 272-1344 www.petroak.com

We can provide clients with individuals to fill specific needs, or with integrated teams to manage exploration and development projects.

Skills

- Project Management
- Geophysics
- Geology
- Petrophysics
- Engineering

Data

- Digital Well Logs
- Well History
- Directional Surveys
- Formation Tops
- Seismic
- GIS

Areas of Expertise

- North Slope
- Cook Inlet
- Interior Basins
- Bristol Bay
- Gulf of Alaska

Tools

- Subsurface Mapping
- Seismic Interpretation
- Petrophysical Interpretation
- ArcView/GIS
- Commercial analysis
- Risk Analysis

● EXPLORATION & PRODUCTION

Shell pushes drilling out to 2010, '11

Seismic cancellation unrelated to 9th Circuit ruling; company hopes to drill in Beaufort and Chukchi if it prevails in court; 3-D program cancelled — enough data has been acquired

By **KAY CASHMAN**
Petroleum News

As reported in the Dec. 21 issue of Petroleum News, Shell Oil plans to ask for a rehearing from the full 9th Circuit Court of Appeals on a Nov. 20 ruling issued by a three-judge panel.

Shell's announcement was made by company spokesman Curtis Smith in a Dec. 18 e-mail following Shell's analysis of the Nov. 20 court decision.

Smith, who works for Shell media relations in Anchorage, Alaska, said that because of the panel's decision, the company would defer its 2009 Beaufort Sea drilling program.

He also said Shell was cancelling a 3-D seismic program for the Beaufort. The cancellation of the 2009 drilling and seismic programs was made in the same Dec. 18 e-mail, but later that day Shell Alaska spokesman Phil Dyer told The Associated Press that the company's decision to cancel its seismic program was unrelated to the Nov. 20 court decision. The seismic program was canceled because the company already had the information it needed, he said.

In February 2007 MMS approved an outer continental shelf exploration plan submitted by Shell that included drilling up to 12 exploration wells on 12 tracts over three years.

The company waited until last June to cancel its drilling plans for 2008. Dyer said Shell did not want to wait that long again.

Loss of 800-plus jobs

The deferment of the drilling program means the loss of about 700 jobs directly related to drilling, and well over 100 local support service jobs on the North Slope, Dyer said.

In its Nov. 20 ruling, a three-judge 9th Circuit panel said that the U.S. Minerals Management Service had not conducted an adequate environmental evaluation of Shell's exploration plan. One of the three judges dissented from the opinion.

The 9th Circuit lawsuit merged three different appeals involving the North Slope Borough, the Alaska Eskimo Whaling Commission and several environmental organizations.

In its Nov. 20 ruling the panel ordered MMS to prepare a revised environmental assessment for Shell's exploration plan and, if necessary, prepare an environmental impact statement before the plan could be approved. (The development of an EIS is a complex process that typically takes several years to complete.)

The panel also denied a request by Shell to lift the injunction that the 9th Circuit had placed on the company's planned Beaufort Sea drilling since August 2007. Shell wanted to drill exploration wells in its Sivulliq prospect on the western side of Camden Bay offshore the eastern North Slope.

However, the three-judge panel did uphold MMS' analysis of the potential impact of oil spills that might result from Shell's drilling.

"Despite any other insufficiencies, MMS's environmental analysis does adequately examine the impacts of a potential crude oil spill," said Judge Dorothy Nelson in the panel's majority opinion. "...The agency's assessment

Shell, however, has no intention of abandoning its efforts to drill offshore in Alaska, despite court-induced delays, Dyer said. The original intention was to drill three exploratory wells in 2009. Instead, Shell will put together a drilling plan for 2010 and 2011 that includes both the Beaufort and Chukchi seas, he said.

makes the proper inquiry into the risk of an oil spill, and no further analysis is required in relationship to this exploration plan."

Shell disagrees

Smith said Shell believes that MMS performed a thorough analysis of the company's exploration plan.

"That analysis prompted the agency to properly conclude that any impact from exploration activity in the Beaufort would have minimal impact on marine mammals and subsistence activities," he said.

Shell agreed with the dissenting judge who thought the court "exceeded its field of expertise, and in doing so, ignored the expertise of federal regulators," Smith said. "Furthermore, the court's recent decision places excessive requirements on any future exploration program that could result in unnecessary costs and delays in delivering much-needed energy supplies to U.S. markets."

Judge Carlos Bea, the judge who disagreed with his colleagues on the panel, said that the 9th Circuit Court could not overturn the MMS exploration plan approval on the grounds that the approval was arbitrary or capricious.

For its Beaufort Sea lease sale program MMS had prepared a 1,500-page multi-sale environmental impact statement that "discussed potential environmental effects from the development of each of Shell's lease-sale sites," Bea said.

And, for Shell's exploration plan, the agency had prepared an additional 100-page environmental assessment "that supplemented the multi-sale EIS for two of Shell's lease plots about which MMS decided additional information was needed," he said.

The petitioners and the majority on the panel of judges do not want MMS to "use its extensive prior work to inform its decisions on individual leases," but instead they want the agency to prepare a new EIS for each lease, Bea said.

"This is worse than re-inventing the

wheel: this is re-inventing the wheel for each wheel of the car," he said.

The process will be expensive, time-consuming and largely duplicative, thus defeating the purpose of National Environmental Policy Act regulations that encourage tiering of NEPA documents, he said.

Hopes to drill Beaufort and Chukchi wells in 2010, 2011

The reduced 2009 program "means ... our overall Alaska operating investment will be reduced by tens of millions of dollars. This will have a direct effect on the communities of the North Slope and other areas of the state. Our current level of investment in Alaska is not sustainable given our inability to drill," Dyer said.

Shell, however, has no intention of abandoning its efforts to drill offshore in Alaska, despite court-induced delays, he said.

The original intention was to drill three exploratory wells in 2009. Instead, Shell will put together a drilling plan for 2010 and 2011 that includes both the Beaufort and Chukchi seas, Dyer said.

Alaska Gov. Sarah Palin said she was disappointed in Shell's decision to defer drilling on the outer continental shelf.

"Alaska's economic past and future are tied directly to the development of our abundant natural resources," Palin said in a news release. "The loss of this exploration activity will cost our state's families hundreds of jobs next year."

The governor said the State of Alaska intends to support Shell's petition to the 9th Circuit Court of Appeals for a rehearing in front of the full court.

Kevin Banks, director of the Division of Oil and Gas at the Alaska Department of Natural Resources, said Shell's decision was troubling.

"They can say they will be back in 2010 but it would depend of course on them having some success working their way through the court," he said. ●



ENGINEERING EXCELLENCE

Complete Multi-Discipline
Engineering Services
& Project Management
Concept and Feasibility Studies
Project Scope and Development
Cost Estimating and Scheduling
Engineering and Detailed Design
Procurement Services
Field Engineering
Inspection and Quality Control
Environmental Engineering
**Serving Alaska Industry
Since 1974**



509 W. 3rd Ave. Anchorage, AK 99501-2237 (907) 276-2747 FAX: (907) 279-4088
50720 Kenai Spur Hwy. Kenai, AK 99611 (907) 776-5870 FAX: (907) 776-5871

INDUSTRIES SERVED

- Oil & Gas
- Mining
- Public Safety
- Public Utilities
- Government
- Transportation

Telecom Engineering & Consulting
Microwave Design & Installation
Satellite System Design & Installation
Remote Site & Power Systems
FCC Licensing & EMESurveys
Fiber Optics & Structured Cable
Two-way Radio Systems
Video Surveillance & SCADA

907-562-4693 | www.nstiak.com

Serving Alaska for over 30 years...

- Mechanical & Electrical Inspection
- Commissioning & As-Built Programs
- Revamp
- Functional Check-Out
- Industrial & Modular Fabrication
- Construction: Mechanical & Electrical
- Process Piping
- Welding

Anchorage
ph: 907-344-1577
fx: 907-522-2541

Nikiski
ph: 907-776-5185
fx: 907-776-8105

Prudhoe Bay
ph: 907-659-8093
fx: 907-659-8489

www.udelhoven.com

● PIPELINES & DOWNSTREAM

Three carriers challenge FERC order

Pipeline owners protest full revenue pooling requirement designed to remedy BP's chronic under-recovery of costs from tariffs

By ROSE RAGSDALE

For Petroleum News

Three owners of the Trans-Alaska Pipeline System filed a request for rehearing Dec. 22 with the Federal Energy Regulatory Commission, challenging a new commission order requiring all five of the system's owners to pool revenue requirements and to amend their operating agreement to implement the involuntary pooling.

The commission issued the order Nov. 21 in a broader ruling that addressed vari-

ous rehearing requests from both carriers and shippers on the 800-mile trans-Alaska oil pipeline it received in response its June 20 decision upholding a 2007 ruling by a FERC administrative law judge. The FERC judge found that interstate tariffs charged shippers on the trans-Alaska oil pipeline in 2005 and 2006 were "not just and reasonable" and ordered limited refunds to the shippers that overpaid.

FERC ordered refunds by Dec. 21

In the Nov. 21 order, the FERC ordered

the pipeline owners to issue refunds of the difference between the their 2004 interstate tariffs and comparable 2005 and 2006 filed rates within 30 days, and to file a refund report within 30 days thereafter.

The commission also denied most of the other rehearing requests, but did order the involuntary pooling in response to an argument by BP Exploration (Alaska) Inc. that unless full revenue pooling by all of the pipeline owners accompanied the commission's direction to establish uniform interstate tariffs for the pipeline, BP would be doomed to chronic under-recovery of commission-allowed revenues because its percentage of pipeline ownership consistently exceeds the percentage petroleum volumes that the company ships on the line.

ConocoPhillips Alaska, ExxonMobil Production Co. and Unocal Pipeline Co. challenged this order, and jointly asked the commission to rehear the issue. The three carriers argued that in ordering the full revenue pooling requirement, FERC "committed clear legal errors that can and should be corrected before the matter is submitted to a reviewing court."

To illustrate its concern, BP gave the Commission, in its July 20 filing, an example in which it applied its 2006 ownership share and barrel-mile share to a cost calculation and assumed no revenue pooling. The company said it would have borne 46.8430 percent of all costs, or \$468.43 (ignoring relatively minor variable costs), while under the uniform rate of \$2 BP would have recovered only 37.4587 percent of the total revenues, or \$374.59.

FERC agrees with BP

The commission said it found merit in

BP's contention that if a uniform rate is required, there must be pooling of revenues because costs are allocated on the ownership share, but throughput is not necessarily equal to that share.

Thus, FERC ordered the pipeline owners to modify their governing operating agreement to include an all-inclusive pooling mechanism consistent with its reasoning.

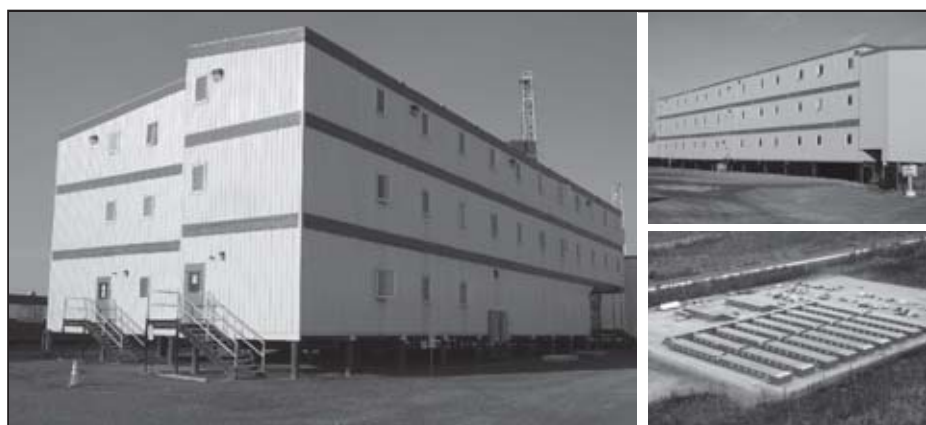
But ConocoPhillips Alaska, ExxonMobil and Unocal challenged the order, arguing that the commission does not have the statutory authority to require involuntary pooling of revenue requirements for purposes of establishing a uniform tariff.

Moreover, even if the commission could approve an involuntary pooling, the statute requires that it can do so only "after hearing" and no hearing on pooling has occurred in the case.

The three protesting pipeline owners said FERC also failed to make any statutory findings required to support approval of pooling. In addition, they said the commission did not find, and had no record on which it could find, that the proposed pooling will be "in the interest of better service to the public."

Further, they argued that the rehearing order did not explain in any way how the imposed pooling would improve service or be "in the interest of ... economy in operation," or how it will not unduly restrain competition.

"The finding of no undue restraint on competition is crucial to the statutory scheme, since the approval of a pooling by the Commission confers broad antitrust immunity on the parties to the pooling," the carriers added. ●



Over 40 years of experience in manufacturing and installing both permanent and temporary workforce housing and modular buildings for Alaska's harsh environment. Supply and erect pre-engineered metal buildings. Contact our knowledgeable sales staff to discuss your upcoming projects.

ARCTIC STRUCTURES
A DIVISION OF ARCTICOR

"Manufactured in Alaska for Alaska by Alaskans since 1963"

arcticstructures.com | 907-522-2425 Toll Free: 800-478-2425 | 9312 Vanguard Dr. #200 Anchorage, AK

Petroleum
NEWS

www.PetroleumNews.com

Kay Cashman	PUBLISHER & EXECUTIVE EDITOR
Mary Mack	CHIEF FINANCIAL OFFICER
Kristen Nelson	EDITOR-IN-CHIEF
Susan Crane	ADVERTISING DIRECTOR
Theresa Collins	MARKETING DIRECTOR
Bonnie Yonker	AK / NATL ADVERTISING SPECIALIST
Heather Yates	BOOKKEEPER
Shane Lasley	IT CHIEF
Clint Lasley	GM & CIRCULATION DIRECTOR
Marti Reeve	SPECIAL PUBLICATIONS DIRECTOR
Steven Merritt	PRODUCTION DIRECTOR
Tim Kikta	COPY EDITOR
Alan Bailey	SENIOR STAFF WRITER
Eric Lidji	STAFF WRITER
Gary Park	CONTRIBUTING WRITER (CANADA)
Rose Ragsdale	CONTRIBUTING WRITER
Ray Tyson	CONTRIBUTING WRITER
John Lasley	STAFF WRITER
Allen Baker	CONTRIBUTING WRITER
Sarah Hurst	CONTRIBUTING WRITER
Paula Easley	DIRECTORY PROFILES/SPOTLIGHTS
Judy Patrick Photography	CONTRACT PHOTOGRAPHER
Mapmakers Alaska	CARTOGRAPHY
Forrest Crane	CONTRACT PHOTOGRAPHER
Tom Kearney	ADVERTISING DESIGN MANAGER
Amy Spittler	MARKETING CONSULTANT
Dee Cashman	CIRCULATION REPRESENTATIVE

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

NEWS
907.522.9469
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

Petroleum News and its supplement, Petroleum Directory, are owned by Petroleum Newspapers of Alaska LLC. The newspaper is published weekly. Several of the individuals listed above work for independent companies that contract services to Petroleum Newspapers of Alaska LLC or are freelance writers.

CORRECTION

Gallons, not barrels, in Prudhoe spill

A story on Prudhoe Bay transit line replacements in the Dec. 21 issue incorrectly referred to the volume of a March 2006 spill as barrels; the story should have said more than 200,000 gallons were spilled.

—KRISTEN NELSON



Alaska's Underwater Professionals...

"Where Safety is The First Step"

- Production platform and sub sea pipeline inspections and repairs.
- Deep water mooring system maintenance & installation.
- Offshore Oil & Gas exploration diving support.

907-563-9060



Keeping you covered.

To advertise in Petroleum News, please contact Susan Crane at 907-770-5592, or Bonnie Yonker at 425-483-9705.

OWNER: Petroleum Newspapers of Alaska LLC (PNA)

Petroleum News (ISSN 1544-3612) • Vol. 13, No. 52 • Week of December 28, 2008

Published weekly. Address: 5441 Old Seward, #3, Anchorage, AK 99518

(Please mail ALL correspondence to:

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

Subscription prices in U.S. — \$98.00 1 year, \$176.00 2 years, \$249.00 3 years

Canada — \$185.95 1 year, \$334.95 2 years, \$473.95 3 years

Overseas (sent air mail) — \$220.00 1 year, \$396.00 2 years, \$561.00 3 years

"Periodicals postage paid at Anchorage, AK 99502-9986."

POSTMASTER: Send address changes to Petroleum News, P.O. Box 231647 Anchorage, AK 99523-1647.

• FINANCE & ECONOMY

Nexen rescues junior partner

Becomes sole operator of Long Lake project, builds defenses against unwanted takeover bid; deal helps OPTI Canada meet cash call

By GARY PARK

For Petroleum News

Nexen and OPTI Canada, partners in the Long Lake oil sands project, know what it's like to be caught in the rumor mill.

The objects of apparently ill-founded takeover speculation earlier in December, they went on a stomach-churning roller-coaster ride that may have come to an end Dec. 17 when they struck a deal that will make Nexen the sole operator of the resource and upgrader and provide a lifeline for cash-strapped OPTI.

For C\$735 million, Nexen bolstered its ownership stake to 65 percent from 50 percent, perhaps creating a firewall against hostile invaders in the process.

For OPTI, an oil sands startup that is struggling to meet its financial obligations, the outcome is less certain.

The two companies saw their shares rocket up as much as 53 percent over a week at the start of December after London's Financial Times reported that France's Total — which some believe has been eying Nexen for several years — was gearing up for a C\$19.7 billion bid for Nexen, which some observers thought would be accompanied by an offer for troubled OPTI that would clean out the Long Lake joint-venture.

But those shares fell back about 10 percent in a day when the Times of London reported that Total had no intention of mounting a hostile takeover.

Still at risk

That didn't exactly squelch the speculation, with John Stephenson, who oversees about C\$1.5 billion in assets, including Nexen and OPTI shares, at First Asset Investment Management, saying there was still a "risk you'll see these companies go."

"They're pretty much on bended knee at this point. The commodity (oil) is so much weaker now that it builds a case for takeovers."

In that climate there was no shortage of analysts ready to toss the names of Royal Dutch Shell, BP and Italy's Eni into the ring.

Whether Nexen has bought itself some time to shake off some of its international assets, such as Yemen, Nigeria, the British North Sea and Colombia, and boost its shareholder value in the

"They're pretty much on bended knee at this point. The commodity (oil) is so much weaker now that it builds a case for takeovers."

— John Stephenson, First Asset Investment Management

process is unclear.

But the Long Lake deal got a decidedly cool reception from Moody's Investors Service, which put Nexen senior unsecured and subordinated ratings under review for possible downgrade.

It was displeased that Nexen has added C\$235 million to its debt on the heels of a US\$1 billion debt hike from a United Kingdom financing in the third quarter which it offset with cash in hand.

Moody's noted that Nexen also faces increases in current and future Long Lake capital spending because of its higher ownership stake.

Other potential problems

OPTI, although happy to report that the deal concluded a process started in November when it hired TD Securities to help with a review of funding operations for its continuing cash requirements, flagged a bunch of other potential problems down the road.

Dundee Securities analyst Menno Hulshof told the Globe and Mail the deal takes care of OPTI's single largest challenge — finding a way to finance what remains of phase one at Long Lake and embarking on the engineering and design of the second phase.

UBS Securities analyst Andrew Potter said that although the deal valuation is low for OPTI it basically removes any financial risk for the junior company.

OPTI Chief Executive Officer Sid Dykstra said funds from the Long Lake transaction would enable his company — which brought a patented technology to the project's upgrading process — to "withstand lower commodity prices and the significant uncertainty in current financial markets."

But OPTI, with a market capitalization of just under C\$400 million compared with C\$4.9 billion in mid-June, has indicated it has just enough cash on hand to carry it through to the startup phase of the Long Lake upgrader in early- to mid-2009.

It warned Dec. 17 that it was lowering operating cash flow for the opening quarter of 2009 because of various project delays and "dramatically reduced" oil prices; said that if the Nexen deal collapsed it would be unable to satisfy key ratios it is required to maintain under its loan agreements; and said there would be a significant increase in the risk that it will not be able to repay a separate C\$150 million revolving loan that is coming due, as well as a US\$71 million interest payment due on other high-yield debt.

But completion of the deal on schedule by late January would give OPTI the

ability to cancel its C\$150 million revolver and permanently lower its C\$500 million revolving credit to C\$350 million, while feeding C\$85 million into its 2009 capital budget. The majority of banks behind the C\$500 million facility have still to approve the deal.

The joint venture partners had earlier stalled a decision on a second phase at Long Lake until 2009. The first phase has recently come onstream at C\$6.1 billion and stage-two would have doubled production of synthetic crude to 120,000 barrels per day at a cost yet to be disclosed. ●

EXPLORATION & PRODUCTION

Carbon storage project unveiled

TransCanada and utility company TransAlta are joining forces on a planned C\$400 million carbon capture and storage project in Alberta.

Operated by TransAlta, Project Pioneer would remove carbon from a coal-fired power plant near Edmonton and either inject it underground or ship it to aging oil fields for enhanced recovery.

The terms of TransCanada's participation were not disclosed.

TransAlta also said it is looking for partners in the oil industry and seeking financial support from the Canadian and Alberta governments.

The company said it hopes to negotiate those commitments in 2009, start construction in early 2010 and start operations in 2012.

The project is designed to meet at least 20 percent of the Alberta government's goal of reducing carbon dioxide emissions by 5 million metric tons a year by 2015.

—GARY PARK



The art of transportation

Carlile has been solving complex transportation challenges for more than 27 years. Like creating a work of art, it takes ingenuity, expertise and the right equipment to deliver seamless service from point A to point B, every time. No matter what it is or where it's going, Carlile delivers.



→→→→→→→→
ROAD - RAIL - SEA - AIR

www.carlile.biz | 1.800.478.1853
ALASKA | HAWAII | UNITED STATES | CANADA



- The Worldwide Solution for Temporary and Permanent Housing
- Custom Built Construction Camps, Rig Camps, And Portable Office Space

5631 Silverado Way, Suite G, Anchorage, AK 99518
Ph: (907) 248-8808 | Fx: (907) 248-8878 | www.mrosalesinc.com

Available through:
MRO Sales Inc.

FINANCE & ECONOMY

Increasing costs cloud view of prices

As oil prices fall to levels not seen since mid-2000s, costs are becoming more important for assessing the near term in Alaska

By ERIC LIDJI

Petroleum News

Some say Alaska survived \$40 oil in the past. Others say \$40 ain't what it used to be.

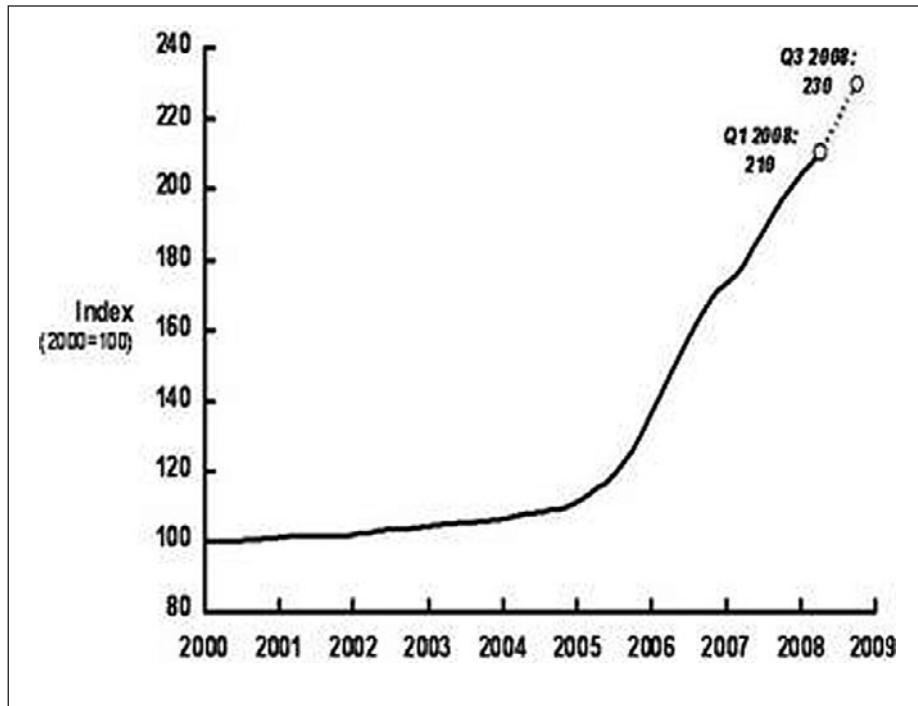
Unveiling her fiscal year 2010 budget on Dec. 15, Gov. Sarah Palin said oil at \$40 to \$42 a barrel would have been considered "healthy" a couple of years ago, and even "relatively high, compared to some years." She added that "compared to the \$140 that we were blessed with many months ago, the \$40-something a barrel looks relatively low."

With the sharp run up in oil prices over the past three years, Alaska became accustomed to benchmarks that would have been unthinkable just a decade ago. But after peaking at \$144.59 per barrel in early July, oil prices began tumbling in October and November.

Through the first three weeks of December, the delivered price of Alaska North Slope crude oil averaged around \$38 a barrel, a price not seen since 2005. And on Dec. 19, Alaska crude oil traded below \$30 a barrel for the first time since Dec. 5, 2003.

While prices remain well above the infamous \$10 oil Alaska faced and survived in 1999, many in the industry say \$40 today doesn't buy what it bought just a few years ago.

"The fundamental cost of our business has changed over the past couple of years," Jim Bowles, president of ConocoPhillips Alaska, told members of the Resource Development Council during their annual conference in Anchorage in mid-November.



Upstream costs have increased this year despite a dampening economy, but falling oil prices have slow cost increases through the fall.

At the same event, outgoing BP Exploration (Alaska) President Doug Suttles estimated oil industry costs have increased between 15 and 20 percent per year for the past few years.

Costs associated with new upstream oil and gas facilities have risen 9.2 percent over the past six months, according to the Upstream Capital Costs Index, published twice each year by the affiliated consulting firms IHS and Cambridge Energy Research Associates.

CERA and IHS create the index using information from their proprietary databases.

The index shows upstream costs dou-

bling since 2005 after several years of only slight growth. A piece of equipment costing \$100 at the start of the decade now costs \$230.

The cost increases over the past six months can be traced in large part to the parallel rise in oil prices, which increased demand for materials and equipment. As such, the fall in oil prices over September and October has already started to dampen the cost of business.

"Hidden in these substantial increases are the first signs of what may be a change in direction," Daniel Yergin, CERA chairman and IHS executive vice president, said in a statement released with the report. "Moderation in the last two months of the third quarter was a response to the unfolding financial crisis and the spending cutbacks and points to a precursor to a downward turn in the direction of the (Upstream Capital Costs Index)."

Tax code measures costs

Industry costs now impact state revenues in a way they didn't just a few years ago.

"Hidden in these substantial increases are the first signs of what may be a change in direction." —Daniel Yergin, CERA chairman and IHS executive vice president

For decades, state economists primarily relied on two figures to estimate oil revenue: the projected price of oil and the projected amount of oil that would be produced in Alaska.

But a new production tax code enacted in 2006, and revised last year, created a credit program to deduct certain capital expenses, like exploration work, from tax payments.

The state issued \$662.2 million in these credits during fiscal year 2008.

The winter of 2007-08 was a banner season for exploration in northern Alaska, as exploration and production companies started 14 wells and sidetracks, worked to bring new prospects online and conducted major seismic programs on Alaska lands and waters.

This winter is shaping up to be just as busy across northern Alaska, with companies planning to drill between 13 and 15 wells, and conduct several major seismic programs.

But sinking oil prices and the global credit crunch threaten to dampen industry interest in high cost environments like the North Slope. So far, that business climate hasn't led to major cutbacks in Alaska, but some companies have spoken about adjusting spending.

The state doesn't expect a slowdown in exploration activity this year. The most recent projections for this fiscal year show tax credits increasing 16.5 percent to \$771.8 million.

For the coming fiscal year, beginning July 1, the projections show tax credits falling 7.2 percent to \$715.6 million, highlighting an expected slowdown in work, and not a reduction in industry costs, according to Cherie Nienhuis, acting chief economist with the state tax division.

"I think this reflects that a bit," Nienhuis said about the most recent revenue forecast.

Although Alaska is a unique cost environment in some regards, Nienhuis said the state estimates tax credits by combining actual receipts with global economic indicators like the cost of materials and labor, as well as the relationship between costs and oil prices.

Ooguruk confuses budget

In her proposed budget for fiscal year 2010 (July 1, 2009, through June 30, 2010), Palin included a \$300 million appropriation for tax credits. The Legislature approved \$400 million for tax credits this year.

The decline doesn't represent a drop in exploration work, though. The budget line only covers exploration companies that don't produce oil yet, and therefore don't pay taxes.

The tax credit information is highly proprietary, but the change from year to year can probably be traced to Pioneer Natural Resources and Eni Petroleum, the partners that brought the offshore Ooguruk unit online this past June. The companies can now deduct expenses from their tax payments, rather than request reimbursements from the state. ●

Contact Eric Lidji at 907-522-9469 or elidji@petroleumnews.com

TDS

Tire Distribution Systems, Inc.

Toll Free: 800 478-2010

Anchorage: 907 562-2010

Fairbanks: 907 452-7131

COMPLETE TIRE SERVICE
PASSENGER
TRUCK
INDUSTRIAL
OFF THE ROAD

Bridgestone, General, Bandag,
Cooper, Firestone, Yokohama



OVER 40 YEARS OF SERVICE

EVERGREEN
HELICOPTERS OF ALASKA, INC

ALASKA OFFICE
1936 Merrill Field Drive
Anchorage, Alaska 99501
Phone: 907-257-1500

Fax: 907-279-6816
Toll Free: 800-958-2454
info@evergreenak.com
www.evergreenhelicopters.com

CORPORATE OFFICE
3650 Three Mile Lane
McMinnville, Oregon 97128
Phone: 503-472-9361

● EXPLORATION & PRODUCTION

Alberta oil sands: It's not over 'til it's over

A few voices speak out for future of Alberta oil sands, citing need for liquid fuel, dropping construction costs, new technology

By GARY PARK

For Petroleum News

In the rush to count the Alberta oil sands down and out there are a few lone voices suggesting otherwise.

Peter Tertzakian, chief energy economist and managing director at Calgary-based ARC Financial, said any hasty attempts to rule out the oil sands as part of the world's future energy needs — even if the rate of development is scaled back — is as “imprudent” as the claims of one U.S. investment bank analyst who predicted the northern Alberta resource was on its way to 10 million barrels per day.

“Don’t bet against the need for oil just because recessionary forces have muted demand,” he wrote in the Calgary Herald.

“And fuel cell cars are nowhere to be seen yet,” he said, referring to a “ludicrous” 2000 claim that one million commercial fuel cell vehicles would be on the road by 2010, when the actual number is about 200 demonstration units.

Tertzakian also noted that major oil sands operators have deferred or shelved about C\$50 billion worth of projects and small companies are no longer “throttling up” to full-steam ahead; the cutbacks mostly affect upgrading projects — the most capital-intensive component of the whole oil sands business.

He said that before the financial crisis hit, there were hopes that, within a decade, 75 percent of Alberta's bitumen production would be upgraded in the province from 60 percent today.

Tertzakian said that's not only an unlikely goal now, but is betting Alberta will only account for 55 percent of upgrading by 2015.

He said it is also clear that production forecasts will be trimmed as multi-billion dollar projects are stopped or scaled back.

Shell cites falling costs

But Tertzakian's case for not being too hasty in burying the oil sands got some backing from Royal Dutch Shell's Chief Executive Officer Jeroen van der Veer, who said falling construction costs may allow his company to revisit plans to expand its oil sands projects.

Peter Tertzakian, chief energy economist and managing director at Calgary-based ARC Financial, said any hasty attempts to rule out the oil sands as part of the world's future energy needs — even if the rate of development is scaled back — is as “imprudent” as the claims of one U.S. investment bank analyst who predicted the northern Alberta resource was on its way to 10 million barrels per day.

He told an energy conference in London on Dec. 19 that Shell expects “procurement costs will come down quite a lot,” which in turn would lower the breakeven costs for an oil sands project.

He said Shell will proceed with projects that could be profitable under various scenarios for oil prices, but was reluctant to say when that might happen.

Petrobank files application

Down the chain from Shell, Petrobank Energy and Resources filed an application Dec. 18 to build a commercial project utilizing its proprietary thermal recovery technology to recover 10,000 barrels per day of partially upgraded bitumen.

Chief Executive Officer John Wright said that if the application is approved “in a reasonable time period, we could be building it by the end of 2009.”

He said a capital budget has yet to be developed, although he predicted it would be about half the cost per flowing barrel of comparable projects, which range from C\$35,000 to C\$50,000 per barrel.

Justin Bouchard, an analyst for Raymond James, said it is a smart move by Petrobank to press ahead now, given that approvals are taking about 18 months, adding that results from Petrobank's existing demonstration oil sands project shows it could be profitable even at current commodity prices.

The commercial demonstration project planned by Petrobank for its Whitesands leases could be the first stage of a project scheduled to grow in stages to 100,000 bpd. ●

LAND & LEASING

Alberta toppled as champion

By way of hammering home the last nail in a dismal year, the Alberta government confirmed that it was third among Canada's three largest petroleum-producing provinces in sales of conventional oil and natural gas exploration rights this year.

In releasing results December 18 for its final bidding round for 2008, Alberta reported conventional rights fetched just C\$937 million, compared with C\$711 million in 2007, C\$1.5 billion in 2006 and C\$1.8 billion in 2005.

On an apples-and-apples basis, the once-undisputed champion was toppled by British Columbia at C\$2.66 billion and Saskatchewan at C\$1.22 billion.

However, Alberta did pick up another C\$288 million from auctions of oil sands rights, the lowest returns since C\$83 million in 2004.

Sales of the bitumen rights raised C\$650 million in 2007, C\$1.96 billion in 2006 and C\$433 million in 2005.

Despite the overall slide in revenues from land, a spokesman for Alberta Energy Minister Mel Knight said those sales are only one stream of the province's non-renewable resource revenues.

He said land is a one-time thing, while royalties from oil and gas production stretch over a long period.

Geologic, fiscal advantages

John Dielwart, chief executive officer of ARC Energy Trust, was less forgiving, arguing that both B.C. and Saskatchewan offer geological and fiscal advantages over Alberta.

He said the Alberta government has failed to understand the impact of its royalty hikes, arguing that the increase in royalties is offset by a decrease in land values and if land isn't being acquired, no wells are being drilled, with a ripple effect across the provincial economy.

Alberta sold rights to 3.68 million hectares (9.09 million acres) in 2008 at an average C\$333.58 per hectare, compared with slightly more than 3 million hectares at an average C\$453 in 2007. The peak year was 2006, driven by oil sands land values, when the province pocketed C\$3.43 billion at an average C\$811.50.

—GARY PARK

In releasing results December 18 for its final bidding round for 2008, Alberta reported conventional rights fetched just C\$937 million, compared with C\$711 million in 2007, C\$1.5 billion in 2006 and C\$1.8 billion in 2005.



Alaska Analytical Laboratory is an environmental lab performing the following services: soil analyses for Gasoline Range Organics (GRO), BTEX (Benzene, Toluene, Ethylbenzene, and Xylene); Diesel Range Organics (DRO) and Residual Range Organics (RRO) following the SW-846 EPA/Alaska Methods.

SERVING ALASKA

FRONTIER
Flying Service, Inc.

Passenger & Cargo Service

Multiple flights daily between Anchorage & Fairbanks

Deadhorse Mon-Fri service from Fairbanks & Anchorage

Fairbanks direct to Nome or Kotzebue

All cargo flights statewide

Reservations & flight info 907-450-7200

Fairbanks Cargo Office 907-450-7250 x282

Anchorage Cargo Office 907-243-2761

5245 Airport Industrial Rd., Fairbanks, AK 99709

1-800-478-6779 www.frontierflying.com

ALASKA

1956 Richardson Highway
North Pole, Alaska 99705
Phone: (907) 687-7394
Email: klovejoy@alaska-analytical.com

ANALYTICAL

LABORATORY

StatoilHydro completes Barents exploration well

Norway's StatoilHydro has completed the drilling of an exploration well on the Nucula oil and gas discovery in the Barents Sea, the company said in a release Dec. 5. The well confirmed a small oil column in sandstone of the Triassic age. The oil-bearing layers were thin, but showed good production properties.

It is too early to reach a conclusion on the size of Nucula, StatoilHydro said, but preliminary calculations would suggest that the resource lies in the lower region of the original estimate, which was 6-12 million standard cubic meters of oil equivalent (37.7-75.5 million barrels of oil). The exploration well was not formation tested, but data has been gathered to evaluate the size and extent of the find.

"We will now evaluate the size of the find and further development opportunities for Nucula," said Geir Richardsen, StatoilHydro's head of exploration activities in the far north.

—SARAH HURST

Russia brings nuclear power into oil, gas projects

Russia's state-owned oil and gas giant Gazprom and its equivalent in the nuclear power industry, Rosatom, have signed a six-year cooperation agreement, the companies said Dec. 16. The agreement includes cooperation in the Shtokman natural gas project in the Barents Sea and in hydrocarbon projects on the Yamal Peninsula; and on creating new technologies and developing competitive products for higher efficiency of natural gas and gas condensate exploration, production, transportation, storage and processing.

"Success in implementing Gazprom's strategic tasks aimed at developing new hydrocarbon production regions is closely linked to the wide application of new technologies and equipment," said Gazprom's CEO, Alexei Miller. "The cooperation of Gazprom and Rosatom ensures a high level of innovation for implemen-

see BRIEFS page 9

VetcoGray brings umbilical subsea technology to life

Offshore Arctic projects require complex subsea systems and the GE subsidiary is already breaking records at Snohvit while looking to the future

By SARAH HURST

For Petroleum News

VetcoGray, the GE subsidiary that provides the subsea equipment for the Snohvit natural gas project in the Barents Sea, believes technology could be developed to extend the length of subsea tie-backs to a record-breaking 600 kilometers (373 miles). In a presentation given recently at the Russian Offshore Oil and Gas Development conference in Moscow, VetcoGray's Fredrik Witting explained what the challenges would be.

Snohvit is currently the world's

longest step-out subsea-to-shore development, with VetcoGray's system connecting the gas field to the onshore Melkoya liquefied natural gas plant 170 kilometers (106 miles) away, Witting said. The system provides 3 kilovolts alternating current of power from shore to the subsea station, technology to avoid hydrates in the pipeline, carbon dioxide reinjection and fiber optic communication that can cope with high data rate requirements for heavily instrumented wells, with a bandwidth of 10 megabytes per second.

If the main umbilical connection fails, there is a backup intervention control system at Snohvit. The main umbilical is 143 kilometers (89 miles) long with a diameter of 90 millimeters (3.5 inches) and a total dry weight of 2,000 metric tons. There are also four infield umbilicals with a total length of 30 kilometers (19 miles). The umbilicals are supplied by cable company Nexans. The hydraulic lines, chemical injection line, optical fibers and electrical power conductors are all inside the umbilicals.

Most of area could be covered

If step-out distance could be increased to 600 kilometers, this would theoretically cover most of the Norwegian Sea and Barents Sea areas with exploration and production activities, Witting said. One of the problems would be that the longer pipeline length would give a higher pressure drop for gas tie-backs. Increased pipeline diameter would not solve the problem, but subsea wet gas compression might boost the pressure, according to Witting.

Manufacturing and installation of a 600-kilometer single-length umbilical would raise other issues. Manufacturing capacity would be stretched — upgrading of plant facilities would be required. Also,

see UMBILICAL page 9



Alaska's *Best* Selection of Commercial Vehicles



Selection, Experience, Service, Commitment, and Value.

- **Selection:** With over 150 Commercial Vehicles in stock we offer the two best names in the truck business, Chevrolet and GMC.
- **Experience:** Our Commercial Sales Team has over 111 years combined experience, we know Alaska & Alaskans better than anyone.
 - **Service:** With a dedicated Commercial & Fleet Service Department we keep you running, stronger, & longer.
 - **Commitment:** We've put more businesses on the road to success and kept them there than any other dealer in Alaska.
 - **Value:** From the first test drive to your 100,000 mile service, we go the extra mile so your investment is maximized.



Kevin Lauer, Manager
265-7535
kevin@aksales.com



Paul Harris
265-7524
pharris@aksales.com



Ron Eastman
265-7555
ron@aksales.com



Dan Bacon
265-7523
bacon@aksales.com



Vilavanh Thippavong
265-5210
vilavanh@aksales.com



Buff Westin
265-7530
buff@aksales.com



Matt Williams
265-7582
mattw@aksales.com



Jay Hoover
265-7525
jayh@aksales.com




Anchorage 265-7542
Toll Free: 1-800-478-9641 (x7542)



Alaska Sales & Service
www.aksales.com

Be fit.

Get custom-measured industrial Arctic gear that fits you.

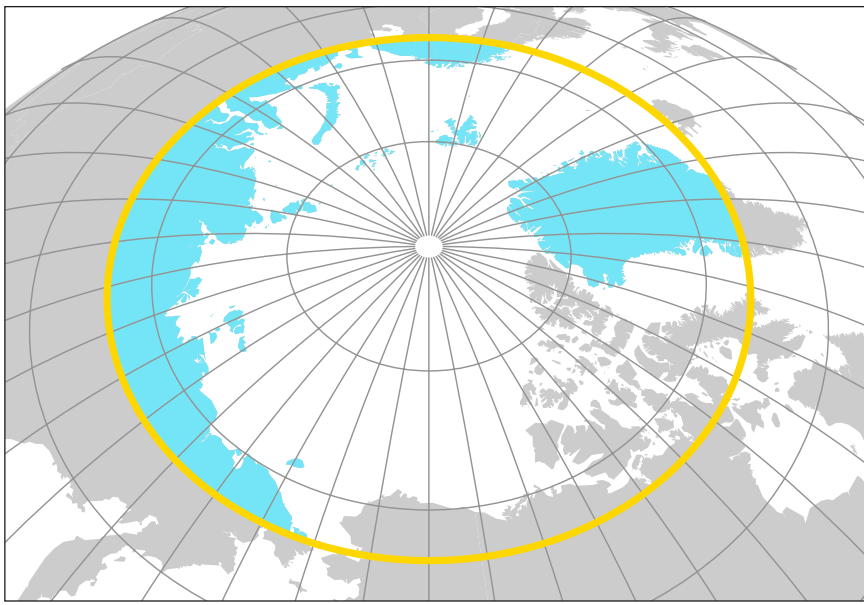
Shop Prudhoe Bay General Store.

We ship anywhere.
Contact: pbgs@brooksrangesupply.com
907-659-2412



For: Arctic Carhartts and safety gear, warm socks, high-tech under armor, electronics, music, smokes, sundries, entertainment, magazines, Native crafts, specialty items and news.





continued from page 8

BRIEFS

tation of the joint projects and will allow us to successfully resolve issues of import substitution.”

—SARAH HURST

ConocoPhillips Russia joint venture advances

Naryanmarneftegaz, a Lukoil and ConocoPhillips joint venture (70 percent and 30 percent respectively), has completed construction of the second stage of the Yuzhno-Khylchuyuskoye oil field in Russia's Nenets Autonomous Okrug, the company said Dec. 10. In the second stage, the capacity of the oil treatment unit was increased by 3.8 million tons a year, and a high-pressure compressor station and sulfur disposal and storage facilities were built.

Construction of the first stage was completed in June 2008. The first stage comprised 32 development wells, an oil treatment unit, an oil desulfurization unit, a tank farm, an export line pump house, a 17-mile high-pressure gas pipeline, a gas treatment station, a 125-megawatt power supply facility and 178 miles of high-voltage transmission lines.

The oil production level at the field is expected to reach 7.6 million tons a year (more than 150,000 barrels per day) in 2009.

—SARAH HURST

COURTESY GE OIL & GAS



The main 89-mile-long umbilical for Snohvit was transported by barge.

continued from page 8

UMBILICAL

only a handful of vessels worldwide are capable of installing the Snohvit umbilical, and a considerably longer umbilical would require vessel upgrades or modifications. Several separate umbilical lengths with field splices might be a more viable alternative, Witting said.

A longer step-out would also place burdens on the communications technology. Snohvit's fiber optic technology is "generally deemed OK for at least up to 230 kilometers," Witting said. For longer distances regenerators or optical amplifiers of the same type used in the telecoms industry would be required. Secondary satellite link back-up systems are independent of step-out distance, but

with limited bandwidth, he added.

As for power supply, high power levels at long and ultra-long distances will require use of direct-current-based technology. Direct current can be used for the main step-out distance, with a subsea DC-alternating-current inverter and local AC network to consumers. DC is not sensitive to transmission distances, and length-incurred power loss can be compensated in the receiving DC-AC inverter.

A 600-kilometer step-out subsea-to-shore gas development would be technically feasible, Witting concluded, and Norway's Ormen Lange, Asgard and Snohvit projects will serve as reference subsea-to-shore developments for the future. Offshore Russia projects such as Shtokman and Ob Taz will offer opportunities to take the subsea-to-shore technology to the next level, Witting said. ●



For Your Survival!

(800) 485-SNOW [7669]

www.SafetyOneInc.com

Introducing Safety One International

Tracked Snow & Tundra Vehicles

Four Season Use!

Camoplast Trooper™

We're the authorized distributor of Camoplast tracked vehicles in Alaska and the western U.S.



New and Used Vehicles • Sales • Service • Parts
Financing Available

Hagglunds

BV206 • Bearcat • SUSV

Snow • Mud • Road • Marsh
Tundra • Water • Sand

We're the largest distributor of Haggglunds BV206 in North America!

Tracks and Parts Currently in Stock!



Snow Vehicle Operator & Winter Survival Training



We're the world's largest snowcat operation and winter survival school, helping companies meet OSHA training recommendations. Our knowledge of OSHA regulations, as they pertain to tracked vehicles and winter survival, is unsurpassed. We've even trained OSHA inspectors!

Our Basic Operator Training is now offered in Alaska. This thrilling, five-day class, led by world-

renowned snow survival expert, Art Seely, consists of three days of classroom instruction and two days of field winter survival training.

CUSTOM CLASS DATES STILL AVAILABLE!

Winter Survival Kits



We sell both Personal and Vehicle Winter Survival Kits that are endorsed by the experts.

For a list of each kit's components, visit
www.safetyoneinc.com.

The Safety One International Representative serving Alaska is:



Fairbanks • Anchorage • Prudhoe Bay
Delta Junction • Kenai/Soldotna

(800) 935-6466

GOVERNMENT

Feds complete geothermal leasing plan

More than 190 million acres in 12 western states — including Alaska — available for leasing, development of geothermal resources

By KRISTEN NELSON

Petroleum News

A potential of 5,500 megawatts of new electric generation capacity is possible from geothermal resources in 12 western states, including Alaska, by 2015, the U.S. Bureau of Land Management said Dec. 18 in releasing a record of decision and approved resource management plan amendments for geothermal leasing.

The decision makes more than 190 million acres of federal land available for leasing and potential development of geothermal energy resources.

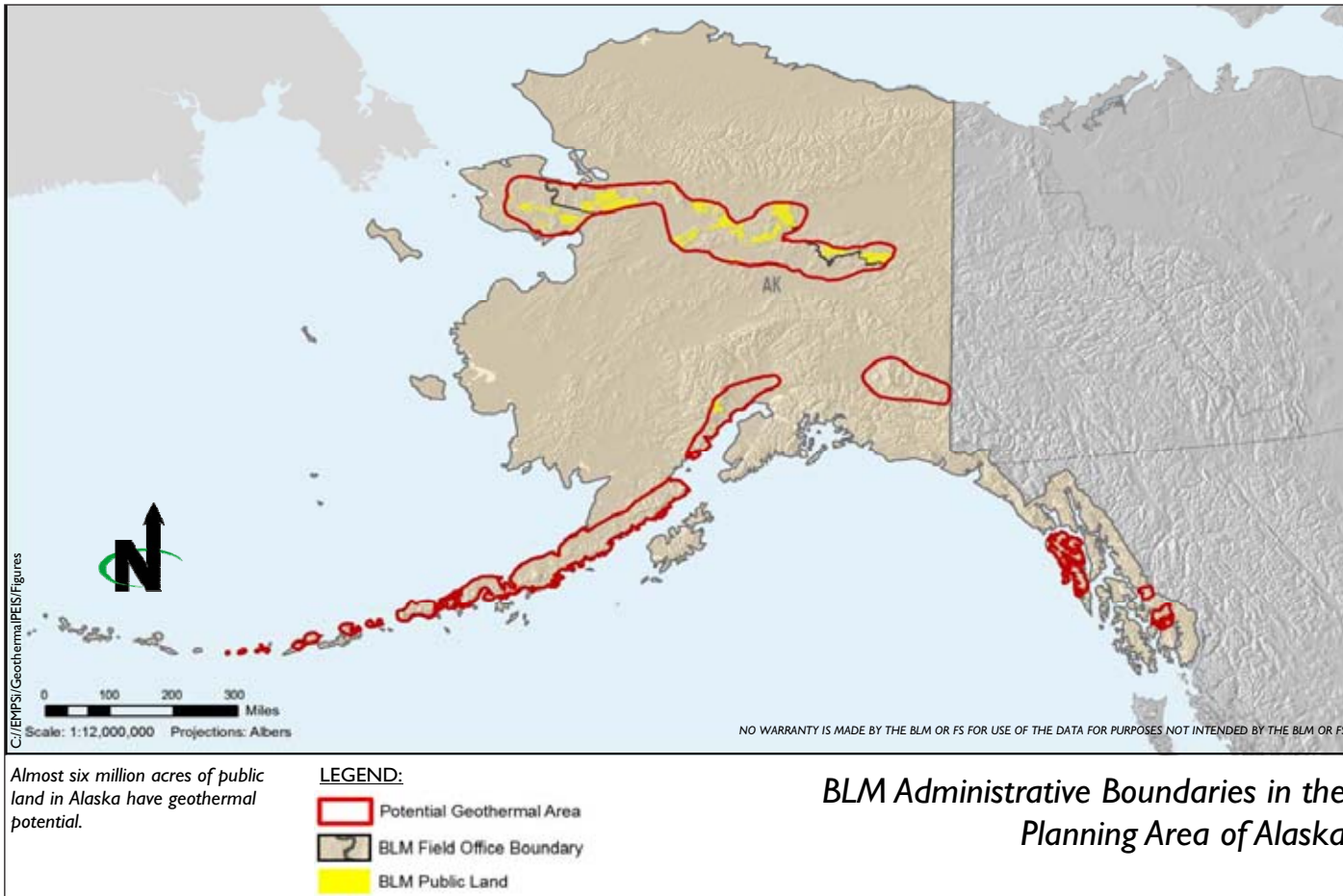
In Alaska the Ring of Fire resource management area has 992,786 acres open for geothermal leasing, with a projected 20 megawatts of power possible from geothermal by 2015 and some 150 megawatts by 2025.

“Geothermal energy will play a key role in powering America’s energy future,” Interior Secretary Dirk Kempthorne said in a statement. “All but 10 percent of our geothermal resources are found on federal lands and facilitating their leasing and development is crucial to supplying the secure, clean energy American homes and businesses need.”

BLM said the approved development scenario envisions as many as 270 western communities could benefit from direct uses of geothermal including heat for buildings; uses in greenhouses and aquaculture; and other possibilities for reducing the need for conventional energy sources.

The record of decision amends 114 BLM resource management plans and allocates some 111 million acres of BLM-managed public lands as open for leasing. An additional 79 million acres of National Forest System lands are also legally open for leasing, the agency said, and since site-specific analysis of future leasing nominations, permit applications and operations plans can refer back to the impact analysis and best management practices included in the approved resource management plan amendments, processing time for future geothermal

see **GEOTHERMAL** page 11



MUSTANG®

Final month to take advantage of these unbelievable finance rates!!

Payments as low as \$425 per month
Financing as low as 0% interest for 48 months

Available Equipment
 Telehandlers
 Skid Steer Loaders All Wheel Steer Loaders
 Tracked Loaders Compact Excavators

Totem Equipment & Supply, Inc. **Totem Rentals, Inc.**

TOTEM
ANCHORAGE
 2536 Commercial Drive
 (907) 276-2858
 Fax: (907) 258-4623

WASILLA
 300 E. Susitna (Knik-Goose Bay Road & Susitna)
 (907) 373-8683
 Fax: (907) 376-9573

www.toteminc.com
 Your full service Alaskan equipment dealer since 1961

- RENTAL - SALES - PARTS - SERVICE -

Piping Process Engineering | Structural Engineering | Civil Engineering | Mechanical Engineering
 Architectural Design | Instrumentation Engineering | Electrical Engineering | Procurement
 Logistics Management | SWPPPs | Erosion Control Design

EEIS CONSULTING ENGINEERS, INC.

Office 4400 Business Park Boulevard, Suite B100, Anchorage, Alaska 99503
 Mailing P.O. Box 92169, Anchorage, Alaska 99509-2169
 Phone (907) 258-3231 Fax (907) 272-1288 Web site www.eeis.net

continued from page 10

GEOTHERMAL

development will be reduced.

Approvals needed

BLM said future geothermal leasing will be subject to all existing laws, regulations and orders, as well as stipulations and terms and conditions, and a comprehensive list of stipulations, conditions of approval and best management plans required for approval of future leases is included in the record of decision.

Lands withdrawn from or administratively closed to geothermal leasing — such as Yellowstone National Park — will continue to be closed to leasing. Wilderness and wilderness study areas are also excluded and BLM has the discretion to close areas of critical environmental concern where appropriate.

BLM said the Forest Service will use information in the programmatic environmental impact statement to facilitate leasing analysis to determine whether geothermal leasing is appropriate and to evaluate land use plans and amend them as needed through a separate environmental review process and facilitate future decisions on leasing National Forest System lands for geothermal development.

Governors favorable

Results of the 60-day governors' consistency review were favorable with none of the governors objecting to the proposed plan amendments, the agency said. The State of Alaska provided a letter finding that the preferred alternative and plan amendments were consistent with state interests, plans, policies and programs. The states of New Mexico and Utah provided comments and recommended changes to the preferred alternative and plan amendments; BLM said it responded to and resolved these questions and incorporated relevant and appropriate comments to improve the proposed plan amendments.

Public scoping meetings were held in July 2007 and the draft PEIS went out for public review and comment in June 2008, followed by public meetings in July 2008 and the final PEIS out for public review in fall 2008.

The PEIS was prepared in response to the Energy Policy Act of 2005.

29 geothermal power plants


There are 29 geothermal power plants operating on BLM lands in California, Nevada and Utah, with total generating capacity of 1,250 megawatts.

The agency said federal lands in the western U.S. contain the largest supply of known geothermal resources in the country. On lands already allocated for geothermal use, an August 2007 sale drew the highest-ever per-acre bid for a lease in California's Geysers field and a sale of leases in Nevada brought a record-breaking \$28.2 million in August 2008.

BLM said geothermal leasing revenues and royalties are shared with the states and counties where leases are located, with 50 percent going to the state and 25 percent to the county.

The U.S. is the world leader in generating electricity from geothermal energy, with some 16,010 gigawatt-hours of electricity generated in 2005. BLM said almost half of this energy production — and about 90 percent of U.S. geothermal resources — are on federal lands.

In Alaska the Ring of Fire resource management area has 992,786 acres open for geothermal leasing, with a pro-

On the Web 

See previous Petroleum News coverage:

"Interior issues geothermal leasing plan," in Oct. 26, 2008, issue at www.petroleumnews.com/pnads/280379500.shtml

"Feds call for comment on geothermal plan," in June 29, 2008, issue at www.petroleumnews.com/pnads/164626594.shtml

jected 20 megawatts of power possible from geothermal by 2015 and some 150 megawatts by 2025. More than 3 million acres are open for leasing in the Central Yukon resource management plan area, but BLM is not projecting any electric generation from geothermal resources.

Pending applications for three 2,560-acre leases at Bell Island Hot Springs in Southeast Alaska are for a 20-megawatt power plant to provide power for Bell Island Hot Springs and possibly to the nearby Yes Bay Lodge via underwater cable.

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

GOVERNMENT

Kempthorne appoints council members

Interior Secretary Dirk Kempthorne has appointed one new member and reappointed four members to the BLM Alaska Resource Advisory Council. The council advises the Bureau of Land Management on public land issues in Alaska.

Mark Hanley, Alaska public affairs manager for Anadarko Petroleum Corp., the new appointment, was named to a seat representing energy and minerals.

Reappointed to the council were: Charlie Boddy, vice president of governmental relations with Usibelli Coal Mine Inc. in Fairbanks, representing energy and minerals; Sandra Key-Holsten, Cooper Landing Advisory Commission, Cooper Landing, representing conservation; Scott Hala, vice president of Alaska Outdoor Access Alliance, Anchorage, representing dispersed recreation; and Jim Posey, general manager of Municipal Light & Power, Anchorage, representing the public at large.

The appointments are for three-year terms.



MARK HANLEY

FORREST CRANE

Line of communication

BLM State Director Tom Lonnie commended the Resource Advisory Council members "for the time they voluntarily dedicate to analyzing BLM land management issues and recommending courses of action to the BLM."

"They provide a valuable line of communication between the BLM and the public," he said. "The diversity of their backgrounds provides our agency with a balanced

see **COUNCIL** page 15

A complete array of services for Alaska



DRILLING SOLUTIONS

ENVIRONMENTAL SOLUTIONS

WELLBORE PRODUCTIVITY

PRODUCTION TECHNOLOGIES

<ul style="list-style-type: none"> Wellsite and project engineering Simulation software Drilling-fluid systems and additives 	<ul style="list-style-type: none"> Technical support Mud mixing ALPINE SPECIALTY CHEMICALS*
<ul style="list-style-type: none"> Cuttings transport and handling Cuttings treatment Enhanced fluids treatment Mud mixing Oilfield screens Pressure control 	<ul style="list-style-type: none"> Production waste management Rig-equipment engineering Rig instrumentation Solids control Waste injection
<ul style="list-style-type: none"> Engineering/simulation software Reservoir drill-in fluids Fluid-loss-control systems Intervention fluids Packer fluids Breakers 	<ul style="list-style-type: none"> Spacers and displacement chemicals Specialized tools Completion fluids Filtration Enhanced fluids treatment
<ul style="list-style-type: none"> Oilfield/production chemicals Chemical management H₂S removal Drag reduction 	<ul style="list-style-type: none"> Production waste management Water treatment



Customer-focused, solutions-driven

www.miswaco.com

721 West First Avenue · Anchorage, Alaska 99501 USA
Tel: 907-274-5564 · Fax: 907-279-6729

• LAND & LEASING

DEIS out for Beaufort, Chukchi sales

Minerals Management Service issues draft environmental impact statement for Alaska OCS sales scheduled for 2010, 2011, 2012

By KRISTEN NELSON
Petroleum News

The U.S. Minerals Management Service has published a draft environmental impact statement for Beaufort Sea and Chukchi Sea oil and gas lease sales planned for 2010-12. BLM said in a Dec. 19 Federal Register notice that the

DEIS is a draft of the National Environmental Policy Act analysis that will enable the agency to make decisions on configurations of the lease sales and applicable mitigation measures.

The proposed sales are: Beaufort Sea sales 209 (2010) and 217 (2011), and Chukchi Sea sales 212 (2010) and 221 (2012). There will be a separate record of

decision for each sale, the agency said, and for Beaufort Sea sale 217 and Chukchi Sea sale 221 there will be an evaluation of new information to determine if a supplemental EIS is needed for those sales.

MMS held public scoping meetings in Barrow, Nuiqsut, Kaktovik, Wainwright, Point Hope and Point Lay — all in the North Slope Borough — and in Anchorage.

A public hearing on the DEIS is scheduled in Anchorage Jan. 15 at 7 p.m. in the first floor conference room at the Centerpoint Building, 3801 Centerpoint Drive, with public hearings to be scheduled between Jan. 16 and March 15 in Kaktovik, Wainwright, Point Lay, Point Hope, Barrow and Nuiqsut. Comments are being accepted until March 16.

MMS has 735 active leases in Alaska outer continental shelf waters, all but two (part of the state-federal Cosmopolitan unit in Cook Inlet in Southcentral Alaska) are Beaufort or Chukchi sea leases.

Issues identified

MMS identified a number of major issues from scoping comments, including protection of subsistence resources and the Inupiat culture and way of life; potential disturbance to bowhead whale-migration patterns; terrestrial and aquatic habitat disturbances and alterations including discharges and noise; effects from accidental oil spills on the environment; lack of effective oil-spill-response technology in the Arctic environment under some conditions; concerns over contamination of sediments, the water column and the food chain that potentially could be associated with OCS oil and gas development; contribution of proposed actions to climate change; lack of baseline data for some resources in the Arctic OCS; cumulative effects of climate change and Arctic oil and gas activities on the existing Arctic environment and environmental resources; future effects of existing activities on human and natural environments on the North Slope; and cumulative effects of past, present and reasonably foreseeable future activities on the people and environment of Alaska's North Slope.

Beaufort DEIS alternatives

For Beaufort Sea sales 209 and 217 the

alternatives are:

- Alternative 1 — no lease sale.
- Alternative 2 — entire area, some 33.2 million acres, would be offered, minus any blocks under lease.
- Alternative 3 — Barrow deferral (from comments received in Barrow): to reduce potential conflicts between bowhead whale subsistence hunters and offshore oil and gas operations the area offshore Barrow, some 68,000 acres, would be deferred. MMS said this proposed deferral area adjoins an area that the State of Alaska has deferred in recent state sales.

•Alternative 4 — Cross Island deferral (issues identified by Alaska Eskimo Whaling Commission, Native Village of Nuiqsut and North Slope Borough): to protect Nuiqsut subsistence bowhead whaling area the area north and east of Cross Island, some 208,000 acres, would be deferred.

•Alternative 5 — Eastern deferral (requests by Native Village of Kaktovik and AEWC): to protect Kaktovik subsistence bowhead whale area, some 284,000 acres would be deferred. MMS said this proposed area adjoins an area the State of Alaska has deferred in recent state lease sales.

•Alternative 6 — Deepwater deferral: since deepwater area of Beaufort Sea unlikely to contain economically viable fields, some 24 million acres, 71 percent of proposed action area, would be deferred. MMS said this would result in a negligible reduction of commercial resource potential. Under this proposal some 1,766 blocks would be offered, minus any currently under lease, comparable to the number of blocks offered in the most recent Beaufort Sea sale held in August 2007.

Chukchi DEIS alternatives

For Chukchi Sea sales 212 and 221 the alternatives are:

- Alternative 1 — no lease sale.
- Alternative 2 — entire area, some 40.2 million acres, would be offered, minus any blocks under lease.
- Alternative 3 — coastal deferral (Corridor II deferral developed by MMS for sale 193 in response to scoping comments): to reduce potential conflicts between subsistence users and OCS oil and gas operations. This was the configuration for sale 193 held in February 2008; some 4.8 million acres deferred; reduction of 17 percent of commercial resource potential.

•Alternative 4 — Ledyard Bay deferral (addresses critical habitat issues identified by U.S. Fish and Wildlife Service for protection of spectacled eiders): defers some 1.1 million acres in and around Ledyard Bay; reduction of 7 percent of commercial resource potential.

•Alternative 5 — Hanna Shoal deferral (minimizes impacts to recognized ecologically sensitive area): defers some 1.1 million acres encompassing Hanna Shoal, identified as important feeding area for Pacific walrus and grey whales; reduction of 4 percent of commercial resource potential.

•Alternative 6 — Deepwater deferral: since deepwater area of Chukchi Sea unlikely to contain economically viable fields, some 5.6 million acres, 13.9 percent of proposed action area, would be deferred. MMS said this would result in a negligible reduction of commercial resource potential. Under this proposal some 6,306 blocks would be offered, minus any currently under lease, comparable to the number of blocks offered in the most recent Chukchi Sea sale held in February 2008. ●



Epoch Well Services, Inc. - We will be here to serve Alaska.
Today and tomorrow!

• Products and Services:

- ▶ DML™ (Digital Mudlogging) Services
- ▶ RIGWATCH™ Digital Drilling Instrumentation
- ▶ myWells.com – Wellsite Data, Anytime, Anywhere

• Local Expertise

• Nationwide Support

301 East 92nd Avenue, Suite 2, Anchorage Alaska 99515
(907) 561-2465 FAX (907) 561-2474
www.epochwellservices.com / www.mywells.com

EPOCH
WELL SERVICES, INC.

On location

judypatrickphotography.com

Wherever Whenever Whatever

Creative photography
for Alaska's oil and
gas industry.

JUDY PATRICK
PHOTOGRAPHY

9 0 7 . 2 5 8 . 4 7 0 4

• FINANCE & ECONOMY

Alaska bullish, skeptical on prices

Alaska is forecasting higher prices than other oil states, but forecasters admit an adjustment could be required early next year

By **ERIC LIDJI**
Petroleum News

Across the country, states with oil interests are scrambling to adjust revenue forecasts in the hope of staving off budget shortfalls. Alaska is adjusting too, but so far the state is much more bullish about short-term oil prices than other oil producing states.

In a forecast released Dec. 9, the state projected oil prices would average \$74.41 a barrel over fiscal year 2010, which starts July 1, 2009. But as of Dec. 22, Alaska North Slope crude oil was only trading at \$25.81 a barrel, the lowest price since May 2003.

While Alaska is far more dependent on oil revenues than any other state in the country, it isn't the only state to use oil price forecasting in order to estimate revenues each year.

In response to volatile prices, Gov. John Hoeven of North Dakota proposed two budget estimates this year, one with oil prices around \$70 a barrel and another with oil prices staying below \$50 a barrel. Under the lower forecast, North Dakota will bring in about \$400 million less over the two-year budget cycle than under the higher forecast.

Over the past few years, oil companies have flooded into North Dakota to develop the massive Bakken formation. North Dakota collects a 5 percent gross tax on oil production, and maintains a "permanent oil trust fund" similar to the Alaska Permanent Fund.

State economists in Louisiana originally predicted oil prices would average \$84.23 a barrel this fiscal year, which runs through June 30. But after a mid-year budget review showed the state facing a huge shortfall, they lowered the forecast to \$68.16 a barrel.

Now, for the 2010 fiscal year starting July 1, Louisiana is projecting an average oil price of \$56.74, about 24 percent lower than the \$74.41 being forecasted in Alaska.

Texas, the leading oil producing state, isn't releasing its upcoming revenue estimate until Jan. 12. Texas is one of the few states in the country still holding onto hope of a budget surplus, and the state has been hesitant to issue any details before the official release.

The state forecasts oil prices by weighing in house estimates against global trends.

This past January, Texas projected an average price of \$68.34 a barrel in fiscal year 2009 and \$69.21 a barrel over fiscal year 2010. The Texas fiscal year starts on Sept. 1.

The U.S. Energy Information Administration expects prices will only increase to around \$51 a barrel through the end of 2009, but will then rise to around \$75 a barrel in 2010.

Volatility means adjustments

Given the drop in prices, some see the

Alaska fiscal year 2010 forecast as too optimistic.

Citing oil prices forecasts from the federal government and the financial sector that all fall well below \$74.41 per barrel, Rep. Mike Hawker, R-Anchorage, recently asked Gov. Sarah Palin to re-evaluate the state revenue projections for the upcoming fiscal year.

If the state can't "convince us those numbers are correct" by providing a "consensus of economic opinion," then the proposed budget will be "dead on arrival" when the next legislative session begins on Jan. 20, Hawker told Petroleum News on Dec. 23.

Typically, budget debates revolve around how to spend money, not how much money is available to spend. The Legislature does not have its own professional economic staff.

The Palin administration admits \$74.41 a barrel most likely won't be the exact price of oil in the coming year, but stands by its estimate considering the information currently available to forecasters, spokesman Bill McAllister told Petroleum News on Dec. 23.

"It will turn out to be wrong," McAllister said. "We just don't know how wrong and in which direction."

The state crafted its most recent price forecast, including the \$74.41 figure, in October and November, a stretch when oil prices started at \$96 a barrel and ended at \$50 a barrel.

Now, the administration is considering a rare interim revenue forecast to bridge the gap between the usual fall and spring reports. Considering the volatility in energy markets, McAllister said it makes more sense to wait a few months to make any budget revisions.

"There is no point in doing another revenue forecast now," McAllister said.

Extreme volatility in commodities markets has troubled state forecasters all year.

In its revenue forecast released in January, the state projected oil prices would average \$66.32 a barrel over the current fiscal year, which began July 1. By April, with prices rising, economists

raised the estimate to \$83.04 a barrel. But in December, they predicted oil prices around \$62 a barrel over the rest of the fiscal year, which runs through June.

Buoyed by record prices and recent tax increases oil revenue accounted for nearly 93 percent of all the unrestricted revenues

collected by the state last year. The state expects that percentage to hover at 90 percent this year and fall to around 88 percent next year. ●

Contact Eric Lidji at 907-522-9469 or elidji@petroleumnews.com



GOV. SARAH PALIN



REP. MIKE HAWKER

JUDY PATRICK



LONG LINE VERTICAL REFERENCE SPECIALISTS
COMMITTED TO PROVIDING THE HIGHEST QUALITY SERVICE

Astar 350B2 Hughes 500D
Astar 350B3 Bell 205



US Operations: Wasilla Alaska (Anchorage)
907-376-3444

CDN Operations: Pitt Meadows (Vancouver)
604-465-7979

www.prismhelicopters.com

30 years experience serving the mineral, oil & gas industries



Doyon Drilling, Inc. is a leader in arctic drilling. We operate the most technically advanced drilling rigs on Alaska's North Slope as well as offering oil field casing services.

doyondrilling.com • (907) 563-5530



Doyon Universal Services, LLC is Alaska's leading provider of remote site support, from catering to housekeeping. Our security division excels in providing high-end security, emergency medical and firefighting services.

doyonuniversal.com • (907) 522-1300

Part of the Doyon, Limited Family of Companies

EXPLORATION & PRODUCTION

BLM opens travel across tundra in NPR-A

The Bureau of Land Management has lifted most seasonal travel restrictions in the National Petroleum Reserve-Alaska, the federal agency said Dec. 19.

With frost measured at deeper than 12 inches and snow depths of more than six inches, travel is allowed in parts of the northeast planning area leased in 1999 and 2002.

Because of a disparity between regulations in different parts of the reserve, those lands in the northeast planning area have stricter guidelines for determining whether snow fall and ground conditions will sufficiently protect North Slope tundra from industrial vehicles.

In early October, ConocoPhillips staked four well sites in the Greater Mooses Tooth unit in the northeast planning area. The company previously announced plans to drill two wells in NPR-A this winter, but has yet to release an official spending plan.

BLM regulations for the rest of the northeast planning area, as well as all of the northwest planning area of the reserve, allow for travel once "frost and snow covers are at sufficient depths to protect the tundra." With those conditions having now been met, travel in those sections of the reserve is now allowed "at the discretion of the permittee."

Anadarko plans to drill one well in the northwest planning area this winter as part of a three-well program crossing state, Native and federal lands in the Brooks Range foothills.

State lands still closed

As of Dec. 17, all state lands on North Slope tundra remained closed to off-road travel.

Although most monitored areas have enough snow, the ground temperatures at a few checkpoints still have not fallen below the threshold required by state regulations.

In the eastern and western coastal areas, the state requires around six inches of snow and ground temperatures around 23 degrees at a depth of nearly a foot before allowing travel.

In the upper and lower foothills area, the state requires around nine inches of snow and ground temperatures around 23 degrees at a depth of nearly a foot before allowing travel.

The snowfall is deep enough at all but one checkpoint in the four regions across northern Alaska. Ground temperatures still remain too warm at five of the 19 monitoring stations.

The next update of state lands was scheduled for after Petroleum News went to press.

—ERIC LIDJI

Massey: Cycling won't work at Point Thomson

The Alaska Department of Natural Resources rejected ExxonMobil's latest plan for the development of the defunct Point Thomson unit, in part because the pilot project proposed by Exxon was smaller than earlier commitments the company made — just 10, 000 barrels of oil and condensate per day.

But will the pilot project Exxon insists it is committed to, and which would bring the field into partial production by 2014, work? In other words, can a reasonable portion of 660 million barrels of oil Point Thomson is thought to contain be produced prior to delivering gas into a yet-to-be-built gas pipeline from the North Slope to Lower 48 markets?

One top Exxon official told Alaska legislators on July 10 that he didn't think it would. (See full story in the July 20 edition of Petroleum News.)

Unlike Alaska Gov. Sarah Palin's administration, Martin Massey thinks Point Thomson's 8-10 trillion cubic feet of gas is necessary to make a North-Slope-to-market natural gas pipeline viable.

Massey, Exxon's U.S. joint interest manager and the company's lead negotiator on Alaska gas pipeline issues, said the 1 billion cubic feet a day of gas the eastern North Slope field could provide for a proposed gas pipeline is critical.

Without Point Thomson gas, firm transportation commitments may not be sufficient to support the project, he said in the July 10 legislative hearing on TransCanada Alaska's application for a license under the Alaska Gasline Inducement Act.

There is ongoing litigation between the Alaska Department of Natural Resources and Exxon — and the other Point Thomson unit owners (Exxon, BP, Chevron and ConocoPhillips hold the largest positions in the unit) — over the timing of Point Thomson development. The unit has been in existence since the late 1970s and the state has grown increasingly impatient with lack of production from the high-pressure condensate reservoir, which includes an oil rim of disputed quality and quantity, liquids which could be produced from the condensate and natural gas.

Because of the volume of liquids, primarily oil, in the condensate, the Alaska Oil and Gas Conservation Commission classifies Point Thomson as an oil field, which means AOGCC approval is required for gas offtake from the field.

AOGCC Commissioner John Norman has told legislators that the later Point Thomson gas sales begin after condensate production starts, the smaller the loss in oil production will be.

Initial production would provide information

The initial production project for Point Thomson, proposed by Exxon in February in a plan of development provided as a remedy in lieu of DNR's termination of the unit, would provide information on how best to produce the field. (DNR rejected it.)

Massey told legislators that he believes, based on information to date, that gas sales are the best way to go, but recognizes there is some doubt about that and with the gas pipeline years away, the companies can try cycling in the interim.

Massey said he doesn't think it will take long to get information indicating which of two paths to take — either expanding the cycling project or finding that the oil in condensate recovery was not adequate. A third option could lead to some additional cycling and gas sales, but the data from the proposed \$1.3 billion cycling pilot will provide the answer, he said.

—KAY CASHMAN

continued from page 1

POINT THOMSON

pruit, he said, would be ExxonMobil, not a Mexican bandit.

The gentleman was one of three private sector permitting contractors who agreed to talk to Petroleum News about the hullabaloo over Exxon's work in the defunct Point Thomson unit. Sometime this past summer, the company augered down 120 feet into an existing gravel drilling pad at Point Thomson for the purpose of installing two conductors — three-foot-diameter casing, or pipe, that is cemented into place as the first part of drilling a well. Exxon's top official in Alaska recently claimed that the work, which state officials said was not permitted, was part of "drilling operations" and therefore allowed Exxon and its partners to retain several of the unit's leases, which the Alaska Department of Natural Resources said expired months ago.

DNR officials, who didn't hear about the conductors being set until Dec. 1, and the three permitting agents, who asked to remain anonymous, said drilling into the subsurface and installing conductors from a gravel pad in Alaska requires a lease or



CRAIG HAYMES

JUDY PATRICK

"The whole point of the permit was because Exxon wanted to get things, equipment out there during the open water season," in case its negotiations with DNR resulted in a decision that would allow Exxon and its partners to reclaim the leases and proceed with their proposed 2009 drilling program. "We definitely did not expect them to set casing to drill. We have never issued a permit to set casing to drill. You need a drilling permit to do that." —Dick Mylius, director of the Division of Mining, Land and Water

unit plan of operations that has been approved by DNR's Division of Oil and Gas, and a drilling permit from the Alaska Oil and Gas Conservation Commission, or AOGCC. Exxon did not have either, and filled out paperwork on June 12 for DNR's Division of Coastal and Ocean Management, saying that it did not need approval from Oil and Gas because the Point Thomson project involved "surface activities only on an existing gravel pad." The company said all it needed was a land use permit.

State officials agreed, and the land use permit (26895) issued to Exxon by the DNR's Division of Mining, Land and

see POINT THOMSON page 15

ENSR | AECOM A trusted environmental partner in Alaska & worldwide

● Consulting ● Engineering ● Remediation

907.561.5700 / 800.478.4307 www.ensr.aecom.com

DEADHORSE CAMP


Rooms NOW available in Deadhorse for the 2008-2009 winter season

907-388-8535—Crew Reservations
907-474-3565—Main Office
www.deadhorsecamp.com
adventure@northernalaska.com

FRIENDS OF PETS

P.O. Box 240981
Anchorage, AK 99524

THIS ADORABLE NEUTERED MALE PEKINESE NAMED TOBY WOULD LOVE TO BE THE KING OF THE HOUSEHOLD AND WOULD PREFER OLDER KIDS OR ADULTS. FOR ADOPTION INFO CALL 333-9534 OR APPLY ON-LINE @ WWW.FRIENDSOFPEPETS.ORG.



COURTESY ALASKA PETOGRAPHY

continued from page 14

POINT THOMSON

Water in July, was for “staging equipment, fuel and a camp at the Point Thomson unit #3 exploration pad.”

Such permits, however, do allow augering or drilling down as much as 300 feet for things like soil testing, but do not allow something as permanent as the setting of conductors or well casing in the hole, director of Mining, Land and Water, Dick Mylius, told Petroleum News Dec. 23.

“The whole point of the permit was because Exxon wanted to get things, equipment out there during the open water season,” in case its negotiations with DNR resulted in a decision that would allow Exxon and its partners to reclaim the leases and proceed with their proposed 2009 drilling program, Mylius said. “We definitely did not expect them to set casing to drill. We have never issued a permit to set casing to drill. You need a drilling permit to do that.”

State of Alaska officials were astounded when they learned Exxon had set conductors on the gravel pad — and that Exxon intended to use what the state considered illegal activity to lay a legal claim to leases that expired after the Point Thomson unit had been terminated.

But just because it hasn't been done, doesn't mean it can't be done.

Land use regulations not specific

State regulation 11 AAC 96.010 says land uses “requiring a permit” or “other written authorization” include “drilling to a depth in excess of 300 feet, including exploratory drilling or stratigraphic test

wells on state land not under oil or gas lease.” (Exxon drilled to only 120 feet.)

Regulation 11 AAC 96.025, which deals with conditions for generally allowed land uses, says drilling is subject to the following conditions: “Holes, pits, and excavations must be repaired as soon as possible; holes, pits, and excavations necessary to verify discovery on prospecting sites, mining claims, or mining leasehold locations may be left open but must be maintained in a manner that protects public safety.” (By definition there is an organic class of minerals that include hydrocarbons.)

The land use regulations do not exclude well conductors as a maintenance method.



MARTY RUTHERFORD

An issue of trust

The first time DNR officials heard about the two conductors being installed at Point Thomson was at a Dec. 1 legislative hearing in Anchorage, which in itself was odd because Exxon and its partners at Point Thomson — BP, Chevron and ConocoPhillips — have been in what company officials have described as “good faith” negotiations with the state to get some of their leases back.

Trust has been cited by top DNR officials as an issue they have with Exxon because the company has not carried through on previous drilling and production commitments for the Point Thomson unit, which Exxon and its partners have

held for more than 30 years.

At the Dec. 1 hearing Exxon Alaska production manager Craig Haymes said that by doing the work at Point Thomson, the company is “trying to show that yes, we can be trusted to execute this plan of development. ... It's in everyone's interest to move the development forward. And we've kept the project schedule alive for the last year and a half — we've kept the schedule alive so we can start production in 2014.”

Obviously shocked by Haymes admission that Exxon had set conductors at Point Thomson, DNR deputy Commission Marty Rutherford said that she had recently spoken with Haymes and was assured “that they would not do any drilling that was not permitted by DNR. I don't think they perceive this (setting conductors) as drilling and they also clearly understand that this (the land use permit) is a general use permit.”

“At the end of the day, agencies can only approve what they have the authority to permit,” acting director of Oil and Gas, Kevin Banks, told Petroleum News Dec. 22. State regulations, he said, clearly require approval from Oil and Gas and AOGCC to drill on state lands. Exxon had neither, he said.

But Haymes disagreed. He told members of the Alaska State House Judiciary and Resources committees Dec. 1 that leases don't automatically expire 90 days after expiration of a unit, but can be held by drilling.

“If you have a drilling operation under way on those leases then you can retain those leases in accordance with regulations and in accordance with the lease conditions,” he said.

In describing work at the drill site

Haymes said: “We've ... set two conductors; we have drilled down to 120 feet (and) set these conductors” using a 75-ton crane.”

Rep. Ralph Samuels, R-Anchorage, asked if ExxonMobil had a permit for the well conductors.

Haymes said it was part of the land use permit. He said that permit stated that the company was going to install conductors on the site, and assured Samuels that all the work had been done according to laws and regulations.

Petroleum News got a copy of the permit. It did not mention conductors or well cellars, nor did Exxon's June 12 application for the permit, but its cover letter to Mining, Land and Water did, as did an attachment to the application titled “Point Thomson Drilling Program: Equipment Staging and Pad Preparation Project Description” that state officials said was circulated to several agencies as part of other permitting applications.

The private permitting agents and state officials said the language that is in the application is what counts, especially when Mining, Land and Water does not permit conductors and cellars and would have assumed the conductor and well cellar descriptions — and the mention of barging activities, a drilling rig and an ice road that were in the other two documents — were there because Exxon was seeking permits for those activities from other agencies.

Still, the permit issued by Mining, Land and Water said site development activities described in Exxon's June 12 plan were covered by the permit. The plan clearly lists the “installation of a cellar(s)

see POINT THOMSON page 17

continued from page 13

COUNCIL

outlook that helps us effectively manage the public lands for multiple use.”

The council has 15 members who represent a cross selection of Alaska and represent energy, tourism, recreation, conservation, Alaska Natives and the public at large.

BLM said the members come from different backgrounds, represent diverse interests and are dedicated to building consensus on public land issues.

The agency said that during the past year the council focused much of its attention on invasive plant management, reindeer grazing in the Seward Peninsula area, the final stages of BLM's Bay Resource Management Plan and the


The council has 15 members who represent a cross selection of Alaska and represent energy, tourism, recreation, conservation, Alaska Natives and the public at large.

National Petroleum Reserve-Alaska.

The council meets three times a year in various locations throughout the state. Its next meeting will be in Anchorage in the first quarter of 2009. Council meetings are open to the public and include a public comment period.

BLM manages 258 million surface acres, 80.8 million in Alaska, and administers 700 million acres of sub-surface mineral estate.

—PETROLEUM NEWS



**GBR
Equipment
Inc.**

**“Where Service & Quality
Control Come First”**

Bobby and Billy Reynolds

6300 Petersburg Street Ph: (907) 535-3550
Anchorage, Alaska 99507 Fx: (907) 562-6468



Your environmental, engineering and sustainability partner.

*Program and Project Management
Construction/Design Build
Permitting and Compliance
Remediation and Rehabilitation
National Environmental Policy Act*

Contact:
Judd Peterson
Industrial Business Team Manager
276.6610



INSPIRATIONS

Hair & Nail Salon

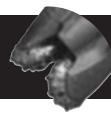
We offer personalized service, catering to the busy professional.

- 11am — 7pm (Late night appointments by pre-arrangement only)
- Each stylist has a separate, enclosed work area for your privacy and comfort

700 W Northern Lights Blvd., Anchorage, Alaska 99503

• Call for appointments • 561-9499

Mention
this ad and
receive a 10%
discount on
hair services!



Russ Baker named new Carlile terminal manager

Carlile Transportation Systems said Dec. 18 that Russ Baker had recently been promoted to the position of Anchorage Terminal manager at the corporate flagship headquarters.

Baker will "oversee the daily operations and processes" at the Anchorage terminal, the company said in a press release.

Baker joined Carlile after moving to Alaska from California and has 30 years of experience in the transportation industry.

He has been employed by Carlile since 2006.

Carlile was started in 1980 by brothers Harry McDonald, chief executive officer, and John McDonald, senior vice president.



RUSS BAKER

Other owners include President Linda Leary, Vice President of Operations Jeff Allan, and Vice President of Human Resources Karl Hoenack.

The business started with three trucks, but today operates more than 350 trucks and 1,500 pieces of trailing equipment. And with more than 650 employees at 12 terminals and logistics facilities throughout Alaska and North America, Carlile remains customer committed for the long-haul.

Eckels named NAC vice president of business development

Northern Air Cargo said Dec. 12 that John Eckels has been named vice president of business development and administration for the company.

Eckels will assume primary responsibility for oversight of the company's growth initiatives including establishment of new business partnerships and strategic alliances. He will also continue to oversee all postal affairs, and key adminis-

trative functions of the company.

Eckels has been employed by Northern Air Cargo for five years and currently serves as senior director of finance.

"John is a lifelong Alaskan. He has a tremendous history in the state's aviation business and we are very lucky to have him as a key member of our team" said NAC President David Karp.

Eckels will assume his new duties effective Jan. 1.

Northern Air Cargo's mission is to offer the highest quality air cargo transportation and related services throughout Alaska and the world.

See full stories in the next Petroleum Directory magazine, which will carry a new name, Arctic Oil & Gas Directory.



JOHN ECKELS

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

ADVERTISER	PAGE AD APPEARS	ADVERTISER	PAGE AD APPEARS	ADVERTISER	PAGE AD APPEARS
A					
ACE Air Cargo		Denali-The Alaska Gas Pipeline		NEI Fluid Technology	
ACS		Dowland-Bach Corp.		NMS Employee Leasing	
Acuren USA		Doyon Drilling	13	Nordic Calista	
Advanced Supply Chain International (ASCI)		Doyon LTD		North Slope Telecom	3
AECOM Environment (formerly ENSR)	14	Doyon Universal Services		North Star Equipment Services (NSES)	
Air Liquide		EEIS Consulting Engineers	10	North Star Terminal & Stevedore (NSTS)	
Air Logistics of Alaska		Egli Air Haul		Northern Air Cargo	
Airport Equipment		Engineered Fire and Safety		Northern Transportation Co.	
Alaska Air Cargo		Epoch Well Services	12	Northland Wood Products	
Alaska Analytical Laboratory	7	Equipment Source Inc.		Northwest Technical Services	17
Alaska Anvil	3	ERA Helicopters		Offshore Divers	4
Alaska Computer Brokers		ESS Support Services Worldwide		Oilfield Improvements	
Alaska Coverall		Evergreen Helicopters of Alaska	6	Opti Staffing Group	
Alaska Dreams		Fairweather Companies, The		P.A. Lawrence	
Alaska Frontier Constructors		Flowline Alaska		Panalpina	
Alaska Interstate Construction (AIC)		Fluor		PDC Harris Group	
Alaska Marine Lines	20	Foundex		Peak Civil Technologies	
Alaska Railroad Corp.		Friends of Pets	14	Peak Oilfield Service Co.	
Alaska Regional Council of Carpenters (ARCC)		Frontier Flying Service	7	Penco	17
Alaska Rubber & Supply		G-M			
Alaska Sales & Service	8	GBR Equipment	15	Petroleum Equipment & Services	
Alaska Steel Co.		GCI		Petrotechnical Resources of Alaska	2
Alaska Telecom		Great Northern Engineering		PGS Onshore	
Alaska Tent & Tarp		GPS Environmental		Polar Supply	
Alaska Textiles		Hawk Consultants	17	Price Gregory International	18
Alaska West Express	20	Heating & Ventilation Sales		Princeton Tec	
Alliance, The		Holiday-Parks		Prudhoe Bay Shop & Storage	
Alta Air Logistics		Industrial Project Services		PTI Group	
American Marine	17	Inspirations	15	Q-Z	
American Tire Corp.		Jackovich Industrial & Construction Supply	12	QUADCO	
Ameri-Tech Building Systems		Judy Patrick Photography	12	Rain for Rent	
Arctic Controls		Kenai Aviation		Safety One	9
Arctic Foundations		Kenworth Alaska		Salt + Light Creative	
Arctic Slope Telephone Assoc. Co-op.		King Street Storage		Schlumberger	
Arctic Structures	4	Kuukpik Arctic Services		Seekins Ford	
Arctic Wire Rope & Supply		Kuukpik - LCMF		Shaw Alaska	
ASRC Energy Services		LaBodega		Spenard Builders Supply	
Aurora Geosciences		Lister Industries		STEELFAB	
Avalon Development		Lounsbury & Associates	18	3M Alaska	
B-F					
Badger Productions		Lynden Air Cargo	20	Taiga Ventures	
Baker Hughes		Lynden Air Freight	20	Tire Distribution Systems (TDS)	6
Bombay Deluxe Restaurant		Lynden Inc.	20	Total Safety U.S. Inc.	
BP Exploration (Alaska)		Lynden International	20	TOTE	
Brooks Range Supply	8	Lynden Logistics	20	Totem Equipment & Supply	10
Calista Corp.		Lynden Transport	20	TTT Environmental	
Canadian Mat Systems (Alaska)		MACTEC Engineering and Consulting		Tubular Solutions Alaska	
Carlile Transportation Services	5	Mapmakers of Alaska		Tutka	
CGGVeritas U.S. Land		MAPPA Testlab		Udelhoven Oilfield Systems Services	3
CH2M HILL		Marathon Oil		Unique Machine	
Chiulista Camp Services		Maritime Helicopters		Unitech of Alaska	
Colville		Marketing Solutions		Univar USA	
CONAM Construction		Mayflower Catering	11	URS Alaska	
ConocoPhillips Alaska		M-I Swaco	5	Usibelli	
Construction Machinery Industrial		MRO Sales	5	U.S. Bearings and Drives	
Cosco Fire Protection		MWH		Victaulic	
Crowley Alaska		N-P			
Cruz Construction		Nabors Alaska Drilling	19	WesternGeco	
Deadhorse Camp	14	NANA/Colt Engineering		Weston Solutions	15
Delta P Pump and Equipment		Natco Canada		Western Towboat	
		Nature Conservancy, The		XTO Energy	

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

continued from page 15

POINT THOMSON

and conductor(s)" under subsection "Equipment Staging and Site Preparation."

BUT in its permit application Exxon described its proposed project activity in these words: "Exxon Mobil intends to stage ice road equipment, fuel and other materials at the Point Thomson un..."

That was the end of the project description, an unfinished sentence, which a Mining, Land and Water official assumed was only missing the completed word "unit."

Samuels: 'It's like Alice in Wonderland'

At the Dec. 1 hearing Haymes said ExxonMobil was not waiting on permits to advance its 2009 winter drilling program at Point Thomson. Of the 22 permits needed from state, local and federal agencies for Exxon's proposed winter drilling program at Point Thomson, 16 are in hand, two have been denied and the status of the other four is unclear.

"It's like Alice in Wonderland," Samuels said, referring to the disputed status of Point Thomson. "They keep issuing permits and you keep spending money and at the end of the day, why would you spend the money and why would they issue even one permit?"

So why did DNR divisions issue any permits to Exxon?

"No one knew what the ultimate decision on the leases would be, whether or not Exxon would get them back ... so when they applied for the permits, we had to treat them like any other non-leaseholder. At the time, it seemed like the right thing to do," Mylius told Petroleum News.

"But we were very forthright with them," he said, referring to the warnings that were part of every permit issued by DNR's divisions and included in cover letters and correspondence from the agencies. Those warnings were in bold type and told Exxon that issuance of each permit did "not mean DNR has changed its position" on the status of the Point Thomson unit or leases, and that Exxon was doing the work "at its own risk."

continued from page 1

AOGCC

Irwin had written to Dan Seamount, the commission chair, on Oct. 29, asking, as a landowner, to be heard on the Point Thomson permit applications AOGCC had received from Exxon.

Irwin also said that state law prohibits drilling on state land without an approved plan of operations from DNR's Division of Oil and Gas, which had rejected Exxon's plan.



DAN SEAMOUNT

In a Nov. 6 response, Seamount said the commission had been officially notified that DNR had terminated 44 of the 45 leases "in the area formerly known as the Point Thomson unit."

Exxon's permit applications were filed "well before that notification but have not been withdrawn," he said. "We understand that ExxonMobil is disputing DNR's determination regarding lease status." He invited both DNR and Exxon "to submit written argument on the question of what action" the commission should take on the drilling applications.

Seamont noted that AOGCC's regu-

lations say permits to drill are "not valid at a location where the applicant does not have a right to drill for oil and gas," while courts have found that a drilling permit "grants no affirmative rights to the permittee to occupy the property," merely removing conservation laws and regulations as a bar to drilling.

The same ruling said — in that case the Texas Railroad Commission — "should not do the useless thing of granting a permit to one who does not claim the property in good faith."

In their Dec. 19 letter to Irwin, the three AOGCC commissioners said they knew that the Point Thomson leases on which Exxon planned to drill were involved in DNR and court "dispute resolution processes," and that if the case was resolved against Exxon, the drilling applications "will be moot."

If the dispute is resolved in favor of Exxon, the commissioners think there will be sufficient time to "promptly" make a decision on the drilling permit applications, and not cause a delay in drilling.

The commissioners also noted that issues raised about the drilling applications might be "intertwined to some extent" with the compulsory unitization petition Exxon submitted to AOGCC, and which is scheduled for oral argument before the commission on Feb. 9.

—KAY CASHMAN

And DNR has not issued permits to Exxon for Point Thomson that require the permittee to be a leaseholder.

On Nov. 14 DNR Commissioner Tom Irwin denied Exxon's application for a permit to build an ice road to move a drilling rig to Point Thomson, and previously rejected the company's plan of operations.

In a Nov. 18 appeal of that action, Exxon said the leases in the contested Point Thomson unit have not terminated, and that DNR "wrongfully" denied the ice road permit for lack of leases. The company said it held the leases on July 10 when it submitted the ice road permit application. "The leases remain in force for so long as ExxonMobil is conducting drilling operations on the leases, and for so long thereafter as ExxonMobil is prevented by an act of the

state from conducting such operations," the company said.

Inspection notes violations

Three days after the Dec. 1 legislative hearing, the Mining, Land and Water official who signed Exxon's land use permit inspected the work the company had done at pad No. 3.

In a Dec. 15 letter to ExxonMobil, Gary Schultz said that the company was "for the most part" in compliance with the environmental stipulations of the permit, but there were some issues of non-compliance," mostly related to Exxon's project description, including the installation of the two well conductors.

Schultz said the land use permit authorizes surface uses only, such as the staging of

At the Dec. 1 hearing Exxon Alaska production manager Craig Haymes said that by doing the work at Point Thomson, the company is "trying to show that yes, we can be trusted to execute this plan of development. ... It's in everyone's interest to move the development forward. And we've kept the project schedule alive for the last year and a half — we've kept the schedule alive so we can start production in 2014."

equipment, but not the installation of conductors, which "is the first step in the drilling of oil wells" and "must be approved by the Division of Oil and Gas. ...

"This activity was not clearly stated in your application and was not approved," Schultz told Exxon.

He also noted that in Exxon's project plan it had said it was going to use only two small areas of the pad, and instead the company was using the entire pad.

He asked Exxon to submit a revised plan by Jan. 9, and warned that Mining, Land and Water might ask the company to remove the conductors next summer.

Legislators get letter

On Dec. 23, Mylius sent a letter to the chairs of House Judiciary and Resources clarifying Mining, Water and Land's position on Exxon's land use permit.

He said Haymes was "incorrect" in saying that the "drilling operations" were being lawfully conducted under the land use permit.

The permit, he said, was issued for surface use only, and that his division does not regulate oil and gas drilling operations. ●

Editor's note: See full story on the Dec. 1 legislative hearing on page 1 of the Dec. 7 issue of Petroleum News.

WHAT'S THE BIG ATTRACTION?



- A. an industry institution
- B. quality, accurate reporting
- C. attractive, readable design
- D. 98 percent market saturation

To advertise in Petroleum News call Susan Crane at 907-770-5592, or Bonnie Yonker at 425-483-9705.

Subscribe at: www.petroleumnews.com

NWTS Northwest Technical Services

Connecting the Right People to the Right Jobs™

4401 Business Park Blvd, Bldg N, Ste 26
Anchorage, AK 99503

www.pdstech.com

Phone: 907-562-1633 | Fax: 562-5875

TEMPORARY & CONTRACT PERSONNEL

Administrative • Professional
Technical • Craft

STAFFING SERVICES

Direct Hire • Temp to Direct



American Marine Services Group

6000 A Street, Anchorage, AK 99518

907-562-5420

www.amarinecorp.com • www.penco.org
alaska@amarinecorp.com



- COMMERCIAL DIVING
- MARINE CONSTRUCTION SERVICES
- PLATFORM INSTALLATION, MAINTENANCE AND REPAIR
- PIPELINE INSTALLATION, MAINTENANCE AND REPAIR
- UNDERWATER CERTIFIED WELDING
- NDT SERVICES
- SALVAGE OPERATIONS
- VESSEL SUPPORT AND OPERATIONS



- ENVIRONMENTAL SERVICES
- OIL-SPILL RESPONSE, CONTAINMENT AND CLEAN-UP
- HAZARDOUS WASTES AND CONTAMINATED SITE CLEAN-UP AND REMEDIATION
- PETROLEUM VESSEL SERVICES, E.G. FUEL TRANSFER
- BULK FUEL OIL FACILITY AND STORAGE TANK MAINTENANCE, MANAGEMENT, AND OPERATIONS

Anchorage

Honolulu

Los Angeles



Providing project management professionals for major projects throughout Alaska and the world

www.hawkpros.com
907.278.1877

continued from page 1

MESSAGE

election campaign argued the U.S. must show leadership in reducing greenhouse gas emissions.

Canada's job, they said, is to make a strong case to the new administration "that Canada is the foremost secure source of clean energy."

Canada's interest significant

Hufbauer said Canada has a significant interest in Obama's climate and energy policies, "especially if Canadian oil sands production is viewed as 'dirty oil.'"

It emphasized the need for Prime Minister Stephen Harper's government to open dialogue with the Obama team to counteract notions about the oil sands and Canada's climate change strategies.

Hufbauer said Harper and his cabinet have proposed a bilateral climate change pact with the U.S., "a rapid move ... that was partly inspired by a desire to protect Alberta's oil sands projects from potential measures that the Obama administration might enact," given that Obama, without specifically fingering the oil sands, said the U.S. should lower its dependence on oil.

He said Canada's case will need to show that on a "well-to-wheels basis" —

from the well to the consumer and making allowance for transportation costs — the oil sands emit no more carbon dioxide than Venezuela and Middle Eastern oil.

Hufbauer also argues Canada will likely be required to establish its commitment to cleaner energy production by investing in and deploying clean technologies, such as carbon capture and storage, while the U.S. will need to weigh the balance between its energy security concerns and its worries about the CO₂ generated by oil sands operations.

Alberta also concerned

Alberta Deputy Premier Ron Stevens

told the Calgary Chamber of Commerce earlier in December that the Alberta and Canadian governments must seek to build a strong relationship with the Obama administration.

To that end the Alberta government office in Washington, D.C., and the province are "committed to getting the accurate facts to U.S. lawmakers," and offsetting misinformation from environmental advocates, he said.

"We are organizing oil sands tours for influential congressional leaders ... speaking to U.S. think-tanks and most importantly getting information to President-elect Obama's advisors," he said.

Stevens said he took some comfort from Obama's campaign message that the U.S. "needs to eliminate oil imports from the Middle East and Venezuela within 10 years."

He said Alberta is anxious to "earn a global reputation" as a responsible energy producer, as evidenced by its C\$2 billion fund to advance large-scale carbon capture and storage technology.

"There's an environmental cost to producing energy from the oil sands, just as there is to producing energy from any source," Stevens said. "But the solution isn't to risk Canada's future by shutting down development."

He said success for Alberta will depend on "how clearly and effectively we convey the importance of our energy assets to both countries."

Standing up for Alberta

Stevens said some special interest groups have portrayed the oil sands as an environmental plague and declared they "will not rest until we have an oil free world. Their stories are misleading or outright false. They conveniently ignore details, they distort facts," he said.

Indicating the success these advocates have had in winning over hearts and minds, Stevens said he and Premier Ed Stelmach "believe we would be negligent if we did not stand up for Alberta's interests wherever and whenever possible to correct misinformation."

"We can't allow special interest groups to gain more of a foothold in their efforts to restrict (exports) of oil sands oil. The scenario is potentially devastating for all of Canada and harmful to U.S. energy security."

Noting that Alberta shipped 1.35 million barrels per day of crude to the U.S. in 2006 — representing 13 percent of total crude imports by the U.S. — he said further technological advances "hold even greater possibilities" for the province's future as a crude supplier to the U.S.

Stelmach visits Texas

For Alberta, the road to Washington also runs through Texas, where Stelmach made a three-day strategic trip in mid-December.

"Texas and Alberta are the pillars of North America's energy economy and it is critical for our jurisdictions to work together on energy development," he said.

"It is equally important that our jurisdictions look for opportunities to collaborate and develop new technologies such as carbon capture and storage as we both transition to meet the demand for cleaner energy."

Stelmach's meeting with Texas Gov. Rick Perry was interpreted as his chance to build friendships wherever he can find them in the U.S., especially with a leader also facing the prospect of federal regulations that could undermine the energy industry. ●

For the past 60 years Lounsbury & Associates has applied the latest technologies to assist natural resource exploration and development in Alaska. We are committed to investing in new technologies and fresh approaches to data acquisition and sharing. This commitment is evidenced through our implementation of high-definition laser scanning. This technology is used to prepare three-dimensional facility models safely, accurately and more cost-effectively than conventional methods. Contact us to discuss how this technology can benefit your next project.

www.lounsburyinc.com

experience you can use
ESTABLISHED 1949

LOUNSBURY & ASSOCIATES
Surveyors • Engineers • Planners

Princeton Tec[®]
BE BRIGHT.

EOS[®] II
UL[®] CL1 Div 1
INTRINSICALLY SAFE
HEADLAMP

WWW.PRINCETONTEC.COM

available through
ARCTIC FIRE & SAFETY
INDUSTRIAL • MILITARY • PERSONAL
Your Safety Specialist!

1-800-260-3473

continued from page 1

ENSTAR

Still, the rulings from the Regulatory Commission of Alaska only give Enstar a one-year fix on gas supplies. The rejected contracts would have covered Enstar for five years.

In a three-page ruling, the RCA chose not to approve those two supply contracts Enstar negotiated separately with ConocoPhillips and Marathon, saying the contracts did not include necessary revisions the commission required in ruling back in October.

However, in a separate nine-page ruling, the RCA allowed Enstar to buy gas supplies from ConocoPhillips and Marathon and pass the cost onto customers through rates.

The apparent contradiction comes from a previously unused provision in the Enstar tariff.

Enstar only needs regulatory approval for supply contracts that increase the average cost of all gas supplies purchased by the utility. Enstar believes the revised ConocoPhillips and Marathon contracts will lower the average cost the utility pays for gas in 2009.

That's 2009 costs, not 2008. Enstar rates are still set to jump around 22 percent next year.

The reason is two existing Enstar gas contracts based on summer oil prices. This past summer oil prices hit record highs. The gas contracts will be priced again next summer.

The new ConocoPhillips and Marathon contracts go into effect on Jan. 5.

Pricing issue unresolved

The decision closes a chapter of the long regulatory debate, but the book is still open.

Gas producers, state regulators and Enstar have been arguing for years about how best to price new gas supplies from Cook Inlet. Because the local market is based around a few producers and a few large customers, there is no local spot price for natural gas.

Enstar needed new gas supplies to cover a shortfall in the coming year.

After state regulators rejected an eight-year contract in 2006 that would have covered the shortfall, Enstar submitted two five-year contracts with ConocoPhillips and Marathon.

On Oct. 31, the RCA approved those new contracts, but required Enstar to go back to the producers and negotiate a price cap based on five North American production basins.

But ConocoPhillips and Marathon refused to implement the price caps.

Instead, Enstar submitted new contracts designed to lower its current average cost of gas, using the provision available to the company since 1987, but never used until now.

The ConocoPhillips contract is \$8.91 per thousand cubic feet of gas, or 5 cents below the average, while the Marathon contract is \$8.93 per mcf, or 3 cents below the average.

Giard criticizes Irwin

Alongside the two rulings, RCA Commissioner Kate Giard issued a statement criticizing the Department of Natural Resources for its comments on the proceedings in the case.

Although DNR was not a party to the case, Commissioner Tom Irwin wrote the RCA on Dec. 11 saying, "The State's best

interest is achieved if the Commission approves both of the proposed gas supply contracts" even if they didn't offer a long-term solution.

"Long-term solutions must reflect the cost to find and develop the new resources that will be required to meet the public demand for gas supply," Irwin wrote, saying that costs to explore and produce gas in Cook Inlet are typically higher than in the Lower 48.

In her statement, Giard said Irwin's comments about the high cost Cook Inlet environment "reflects a disappointing lack of awareness of recent RCA case history."

Giard said concrete information about Cook Inlet production costs are not on the record.

"It is elementary that knowing the cost to produce gas is necessary to truly hit the bulls-eye in setting gas prices," Giard wrote. "We have been denied this information."

Giard said DNR could start requiring leaseholders to give cost data to the RCA, and the Legislature could enact a statute requiring production costs to factor into gas prices.

—ERIC LIDJI



KATE GIARD

continued from page 1

DEAL?

ly outside of unit boundaries.

Currently, those units and most of the surrounding leases are either in default or facing expiration because the operators have not met drilling commitments required by the state.

The three prospects sit along one geologic trend in the waters south of the village of Tyonek. All three prospects also require use of a special drilling rig called a jack-up.

Can it be done in time?

The state sees the move as a possible solution to a growing debate over whether or not to extend deadlines for companies that have missed work commitments in the past.

The companies say they are amenable to the idea, but can't meet the March 15 deadline.

"There is nobody on the planet that could meet those deadlines. Even if you have the cash in your hands," Pacific Energy President Darren Katic

"There is nobody on the planet that could meet those deadlines. Even if you have the cash in your hands, it cannot be done."

—Pacific Energy President Darren Katic

said Dec. 19. "It cannot be done."

The companies would have to make sure current contracts for a jack-up rig and a ship to carry it to Alaska are valid, and need to get a waiver of the Jones Act, the federal law requiring ships docking at U.S. ports to be registered and built in the country.

"Can all that be done in 43 days?" Katic said.

Escopeta President Danny Davis is asking the state to give the companies until April 15, 2010, to start bringing a drilling rig to Alaska. If they miss that deadline, Davis said the state could terminate the units, cancel the development plans and take back all the leases.

Davis believes an extra year would give the companies time to combine their geological information, sign part-

see DEAL? page 20

Even the Best can get Better.

Nabors Alaska Drilling is the leading oil and gas drilling contractor in Alaska. It's a reputation we've earned over decades by delivering the results and expertise our customers expect.

And now we are poised to get even better.

Our AC Technology drill rigs apply the best new technology to Arctic operations, and are the most efficient rigs we've ever built.

More leadership and more innovation from Nabors Alaska.

Because even the best can get better.



nabors.com

LYNDEN

Finally something that
really saves you time...

And it's **FREE!**



- **EZ SHIPPING:**
Book your shipments on-line
- **EZ TRACING:**
Keep an eye on your shipments
- **EZ EDI:**
Your information integration solution
- **EZ REPORTING:**
Information at your fingertips
- **EZ INVOICING:**
Reduce your paperwork
- **EZ PAYMENT:**
Streamline your accounts payable

www.shiplynden.com

1-888-596-3361

The Lynden Family of Companies

Innovative Transportation Solutions



continued from page 19

DEAL?

nership agreements and seek new funding for drilling operations.

"It will give us the ability to approach the industry in a much stronger way," Davis said.

Policy shift required

Extending the deadlines another year would require a shift in policy from the state, which hasn't been willing to change lease terms when companies miss work commitments.

In fact, the idea to combine the prospects doesn't technically extend any deadlines at all, because the state doesn't officially take back leases until 90 days after they expire.

"As long as we've got this brief window, let's see what we can do about it," said Kevin Banks, acting director of the Division of Oil and Gas.

If the state doesn't extend the deadlines further, and the companies can't meet the current deadlines, it could easily set the stage for another debate like one in early December that set state legislators and industry representatives against state oil and gas officials.



KEVIN BANKS

During a public hearing, lawmakers like Rep. Jay Ramras, R-Fairbanks, and Rep. Craig Johnson, R-Anchorage, suggested the state should extend drilling deadlines, even to companies that haven't met work commitments, in the hope of increasing production.

Top state oil and gas officials like Deputy Resources Commissioner Marty Rutherford said sometimes putting expired leases up for bidding is the quickest path to development.

The companies admit to missing deadlines, but believe the state is missing an opportunity to possibly see oil and gas production from prospects that have sat undrilled for decades.

In addition, Pacific Energy believes its deadlines, which it inherited in the acquisition of Forest Oil in August 2007, are next to impossible to meet. The state has argued that Pacific Energy knew the terms of the leases when it purchased them last year.

Together for good and bad

Combining the three prospects into one unit makes sense in many ways.

Unitization is designed as a way to bring a number of independent leases inside a single boundary in order to conserve resources and avoid overlapping facilities or expenses.

The three prospects sit along the same geologic trend under the waters of Cook Inlet, and none of the three prospects can be drilled without a jack-up rig, which would have to be brought to Alaska by ship for the work.

By making the prospects into one unit, the companies could avoid having to try separately to find investors for the project, secure a rig and ship it to Alaska.

But while the companies seem interested in partnering, they worry about having all their eggs in one basket. Combining the prospects would mean waiving on-going appeals and applications, giving the state the ability to deal with the companies in one fell swoop.

Even as it pursues the partnership, Pacific Energy is planning to appeal a recent state decision not to expand the boundaries of the Corsair unit to include soon-to-expire leases. ●

Contact Eric Lidji at 907-522-9469
or elidji@petroleumnews.com

NORTH OF 60 MINING NEWS

- 2 Turnkey gold mine sells for \$500,000
Junior buys Nixon Fork; plans re-evaluation of high-grade mineralization in '09
- 8 Diamond miners commit to northerners
Companies join government in pledge to recruit and develop NWT labor force
- 14 Western Canada bolsters industry
B.C., Yukon streamline rules, propose financial relief for miners, investors

A special supplement to Petroleum News

WEEK OF
December 28, 2008

Petroleum
news

Drilling at Hecla's Greens Creek silver mine as been able to maintain an eight- to 10-year reserve for the past 20 years.

COURTESY HECLA MINING CO. AND JIM VANGUNDY PHOTOGRAPHY

• ALASKA

Sold: Turnkey gold mine near McGrath

Pacific North West Capital agrees to buy Nixon Fork; high-grade gold mine comes complete with equipment, stockpiles and permits

By SHANE LASLEY

Mining News

Pacific North West Capital Corp. has agreed to pay \$500,000 to acquire an option to purchase a 100 percent interest in a company that owns the Nixon Fork gold mine.

Pacific North West Capital said it paid \$100,000 to Mystery Creek Resources Inc., an Alaska subsidiary of St Andrews Goldfields Ltd. upon signing a letter of agreement to the transaction.

The Vancouver, B.C.-based junior has until Feb. 15 to exercise the option.

A payment of \$100,000 is required on closing of the purchase of the Mystery Creek shares and the balance will be paid in equal installments May 1, July 1 and Sept. 1.

Mystery Creek's primary asset is Nixon Fork, which is located 56 kilometers, or 35 miles, northeast of McGrath, Alaska. The company operated the high-grade gold mine for nine months in 2007. The company shut down operations in early October of that year to complete additional drilling to better define the resource. In the spring of this year St. Andrew put Nixon Fork up for sale.

Terms of the mine's sale are subject to regulatory approval and satisfactory completion of a due diligence review by Pacific North West Capital. The company said it intends to complete due diligence by Feb. 15 and establish an appropriate strategy to continue development of the project.

The Vancouver B.C.-based company said it will conduct a comprehensive re-evaluation of mine reserves/resources, metallurgy, mining scenarios, and permitting and a financial analysis of the mine in 2009. These studies will form the basis for a planned re-start of mining operations.

Turnkey gold mine

With the purchase of the Nixon Fork Mine, Pacific North West Capital has a turnkey gold mining operation complete with equipment, stockpiles and permits.

The Nixon Fork Mine includes a 200-metric-ton-per-day flotation plant with a gravity gold separation circuit, a sulfide flotation circuit, and a newly constructed CIL gold-leaching circuit. The mine also boasts a fleet of mining vehicles, a power plant, maintenance facilities, an 85-person camp, office facilities, and five aircraft



STEVE TELLER

After shutting down production at Nixon Fork in October 2007, Mystery Creek crews completed 6,930 meters of drilling resulting in 109 intercepts with grade that exceeded 1 ounce per metric ton.

landing strips. The company reports that the mine and equipment are currently winterized and under a care and maintenance regime.

Mining and processing operations at Nixon Fork are fully permitted and bonded. Alaska Department of Natural Resources Mining Section Chief, Rick Fredericksen told Mining News the bonds and permits for the mine are in place and current.

Some 2,100 metric tons of ore is stockpiled at the mine, and about 116,000 metric tons of mill tailings are ready to be processed in the CIL circuit.

Revaluating the resource

Though everything is in place to reopen the mine, Pacific North West Capital does not plan to start up underground mining until 2011. Geologist Greg Myers, the company's vice president of business development, told Mining News that the junior intends to re-evaluate the resource and economics of the project.

"Basically we want to go back into the engineering studies and the metallurgical studies and re-evaluate the resource and the mine plan; and make sure it is on track and makes sense," Myers said.

Myers said the first thing the company plans to do is compile all the information that has been generated to date and get it put into a three-dimensional model so the company can look at it objectively and decide where more exploration work needs to be done.

St Andrews completed an in-house resource update based on drilling it completed in 2007 and 2008. Pacific North West Capital reports a current reserve of

220,000 ounces of gold at 25 grams per metric ton, and a resource of about 162,000 ounces of gold at 18.6 g/t, both containing about 1.2 percent copper. The company said the current resource/reserve would provide for a nine-year mine life and additional drilling should at least double the resource.

The recent drilling, according to Myers, "was right in the underground mine resource area. We would like to step out a little bit from that and look at the project a little more globally and see if we might be able to expand some of the other target areas and bring those into more of a resource category."

Pacific North West Capital said it plans to produce a technical report in late 2009 that incorporates the St Andrews' drill data and with data collected by the company over the coming drill season.

Myers said the company will do an extensive study of the metallurgy in order to better understand the copper and silver potential of the property.

"We definitely want to expand the understanding of the resource and take advantage of the copper that is going to be associated with the mineralized zone," Myers said. "I am not sure from the work that has been done to date where the silver reports; if it is with the gold, if it's with the copper, or if it's something separate. We want to evaluate those three things and make the most of it."

Reprocessing and placer potential

Though the new owner of Nixon Fork does not plan to fire up the mill until 2011, the company hopes to reprocess tailings

through the CIL circuit as early as 2010. Myers said metallurgical studies will need to be completed before a decision is made on reprocessing the tailings.

The company also plans to evaluate the property for its placer potential. There was some placer gold produced on the property in the first half of the 20th Century but, according to Myers, no modern placer mining has occurred on the property. Pacific North West plans to complete some trenching and possibly some limited drilling on Nixon Fork's placer deposits in 2009.

"As far as the placer work, depending on how we go with our permitting to get into some test work in 2009, then the idea would be to expand that into 2010 and, hopefully, have the tailings reprocessing and have the placer into some kind of limited production."

90 years of hardrock at Nixon Fork

Placer gold was discovered in the immediate Nixon Fork area in 1917 and lode gold discovered in 1918 when Yukon-Treadwell Co. and others began working deposits through shafts and open cuts. This work continued intermittently through 1964, reportedly producing 41,440 ounces of gold, 11,282 ounces of silver and 41,440 pounds of copper.

The modern era of Nixon Fork began when Battle Mountain Gold explored the high-grade gold deposit in 1984. Myers was part of the Battle Mountain team that discovered Nixon Fork.

From 1995 to 1999, Nevada Goldfields Inc. operated a high-grade underground gold mine at Nixon Fork that recovered 137,749 ounces of gold and 2.1 million pounds of copper, with additional silver credits. The average production grade was 42 grams per metric ton of gold, with an average production cost of \$266 per ounce. The mine was closed due to declining gold prices.

St Andrew Goldfields purchased the mine in 2003. From 2004 through 2008, the major spent about \$15 million on upgrades to processing facilities and mine infrastructure at Nixon Fork. During this period, the company conducted 9,381 meters of reserve-resource definition drilling, updated a reserve-resource estimate and completed additional metallurgical testing.

see NIXON FORK page 6



AIC has built a solid reputation by taking an impossible idea and making it an accomplished reality. With more than 20 years of experience, we specialize in providing innovative concepts and technical solutions to our global clients.

MOVING THE EARTH

AIC has been an integral part of every major mine developed in Alaska for nearly a quarter of a century, providing construction services in the mining industry throughout Alaska and Russia. We have the expertise, equipment and skilled personnel to tackle the challenging needs of the mining industry – wherever it may take us.

AICLLC.COM



FINANCE

Miners forewarned: '2009 will be tough'

Investment strategist and mining executive forecast continued financial storm; advise miners to hold cash, 'right-size' projects

By **SHANE LASLEY**
Mining News

Though plummeting metals prices and fading investor confidence have hammered the mining sector this year, the Northwest Mining Association's 114th annual meeting in Reno, Nevada, Dec. 1 – 5 drew more than 2,000 attendees, a crowd the yearly gathering has not seen in more than a decade.

Miners and others attending the NWMA meeting said the economy and its impact on the mining industry is their primary concern. The meeting's two luncheon speakers echoed that concern in discussing the current global financial situation and what it means to the industry.



DAVID HARQUAIL

Frederick Sturm, executive vice president and chief investment strategist for Toronto-based Mackenzie Financial Corp., said the fourth quarter of 2008 and the first quarter of 2009 are "going to be nastier than most people are thinking."

The award-winning investor said he expects the markets will begin to recover by midyear, but advises miners to be careful with spending because raising capital could be difficult for a while.

"Do what you need to make sure you have the capital to win you time," Sturm advised.

David Harquail, president and CEO of Franco-Nevada Corp., had a similar message during his Dec. 2 presentation.

"If you don't have dollars, you have to anticipate you probably won't be able to raise dollars for the next 18 months," Harquail warned. "If that is the case, has your management team and your board gotten itself into survival mode to protect your most precious resource – and that's your cash?"

Ironically, when Sturm and Harquail were invited to speak at the meeting months ago, they both expected to be talking about how good life was.

"When we initially set this meeting up and the schedule was being put together, I thought this was going to be a love-in and a cheering fest. It is amazing that in a short three months conditions really have changed," Sturm said.

Bathtub or bungee?

Although the toilet is the first bathroom fixture that comes to mind when thinking about the current economic situation, Harquail used the bathtub to illustrate the likely scenario for market recovery.

"In the last six months we have been in

a freefall. The recovery is either going to be a bungee recovery where we will have that immediate bounce-back or a bathtub recovery," Harquail said during a Dec. 2 luncheon at the NWMA Meeting.

The bathtub recovery, according to Harquail, represents a steep decline in stock prices that maintain the lows for a period of time before a recovery period that ascends the other side of the tub.

The Franco-Nevada CEO said the bathtub analogy also works well because Federal Reserve Chairman Ben Bernanke is pouring water, or liquidity, into the bathtub as fast as he can, but the drain is still open. Once the drain is plugged then liquidity will fill the tub.

Sturm said he believes the recovery will be a combination of the bungee and bathtub scenarios. He predicts that once the current unprecedented volatility has subsided, stocks will have overcorrected, resulting in a snap-back of the market before we are out of the recession.

"I think some of this is going to befall the mining industry. We have come down hard. You are responding quickly. We will have a snap-back, but then we will come down again," Sturm said. "On this snap-back, do what you need to get done quickly because we will not have come out of it just yet."

Mineral prices in the tub

Sturm, who is also manager of the Ivy Global Natural Resources Fund, foresees mineral prices on a similar trend to the stock market. He said mineral prices could snap-back and then settle again during the course of the next year.

The financial advisor advised the miners not to expect to see a return to the high metal prices of earlier this year in the near future. A survey of Morgan Stanley, UBS, Merrill Lynch and Mackenzie Financial shows long-term prices for zinc at 70 cents per pound, copper at \$1.70 per lb., molybdenum at \$10 per lb., and thermal coal at \$70 per ton.

"I am not helping you if I say, just drive past it, it will all come snapping back and be fine. Because if I do that and you fail to 'right-size' your company, then you will find yourself looking for capital at the wrong time, and you will find yourself struggling in your businesses," Sturm explained.

"Right-size" supply

The natural resource fund manager advised the NWMA luncheon attendees to scale back operations to meet lower demand of market conditions. He said the amount of money being spent on consumer goods has lessened and to prevent a surplus of commodities on the market, the producers need to "right size" the supply.

Sturm reminded the audience that when the economy recovered from the downturn in the '80s and '90s, it took the mining industry an additional two to three years before it was able to take part because "we had to work down the copper mountain of inventory first."



FREDERICK STURM

"Focus on profit margin, not on quantity. The only way you can do it is to deny your customer one ton. If you try to get an extra ton out to the next guy's customer, the whole system breaks," Sturm warned.

The Toronto-based advisor applauded the mining industry for recognizing the need to scale back operations and being proactive in doing so.

Surviving the shipwreck

Harquail compared the financial crisis to

a shipwreck. "Some of us were lucky enough to get into lifeboats. The guys that have some cash are in lifeboats and are bobbing away in the waves right now, but we are surrounded by 100 drowning men. We can't pull them all into our boats, we can only save a few," Harquail said.

According to Harquail, Goldcorp CEO Kevin MacArthur said the companies with dollars have to be very selective in terms of which companies they are going to buy. They are going to choose companies with real projects.

"It is only those projects that the majors can say, 'That makes sense within our development pipeline' that are going to get bought. The other ones, we are going to have to wait until the next exploration cycle," Harquail said.

The Franco-Nevada CEO expects major companies to significantly cut back their exploration budgets and use that money to buy up projects that have already been

see **FORECAST** page 6

Stover Smith

Tele: 800.742.5842
Mobile: 907.223.0261

ssmith@victaulic.com
www.victaulic.com

5717 Yukon Charlie Loop
Anchorage, Alaska 99502

Contact North of 60 Mining News:

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



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

<p>Shane Lasley Rose Ragsdale Mary Mack Susan Crane Theresa Collins Heather Yates Bonnie Yonker Clint Lasley Marti Reeve Steven Merritt Curt Freeman Sarah Hurst Allen Baker Tim Kikta Judy Patrick Photography Forrest Crane Tom Kearney Mapmakers Alaska Amy Spittler Dee Cashman</p>	<p>PUBLISHER & NEWS EDITOR EDITOR-IN-CHIEF (contractor) CHIEF FINANCIAL OFFICER ADVERTISING DIRECTOR MARKETING DIRECTOR BOOKKEEPER ALASKA/NATIONAL REPRESENTATIVE GM & CIRCULATION DIRECTOR SPECIAL PUBLICATIONS DIRECTOR PRODUCTION DIRECTOR COLUMNIST CONTRIBUTING WRITER CONTRIBUTING WRITER COPY EDITOR CONTRACT PHOTOGRAPHER CONTRACT PHOTOGRAPHER ADVERTISING DESIGN MANAGER CARTOGRAPHY MARKETING CONSULTANT CIRCULATION REPRESENTATIVE</p>	<p>ADDRESS P.O. Box 231647 Anchorage, AK 99523-1647</p> <p>NEWS 907.229.6289 publisher@miningnewsnorth.com</p> <p>CIRCULATION 907.522.9469 circulation@petroleumnews.com</p> <p>ADVERTISING Susan Crane • 907.770.5592 scrane@petroleumnews.com</p> <p>Bonnie Yonker • 425.483.9705 byonker@petroleumnews.com</p> <p>FAX FOR ALL DEPARTMENTS 907.522.9583</p> <p><i>Several of the individuals listed above are independent contractors</i></p>
---	--	---

NORTH OF 60 MINING NEWS is a monthly supplement of Petroleum News, a weekly newspaper. To subscribe to Petroleum News and receive the monthly mining supplement, call (907) 522-9469 or sign-up online at www.PetroleumNews.com. The price in the U.S. is \$78 per year, which includes online access to past stories and early access to Petroleum News every week. (Canada/Mexico subscriptions are \$165.95; overseas subscriptions are \$200) Or, just purchase the online edition of Petroleum News, which also includes the mining supplement and online access to past stories, for \$49 per year.

The Innovative & Intelligent Choice for Risk Capital Investors

- Unique business model maximizes discovery opportunities, while reducing shareholder risk
- Ten active projects - Over \$5 million in exploration projected for 2008

TEL: 604.669.6660
www.rimfire.bc.ca | TSXV: RFM

GUEST COLUMN

2008: A truly memorable year for mining

Despite industry's tumultuous year, a decades-old truism that 'good projects get funded and good mines make money' offers comfort

By **CURT FREEMAN**

For Mining News

As 2008 winds inexorably to a close, I found myself looking for words adequate to describe what will go down in history as one of the most memorable years in many a moon. Words like tumultuous, unpredictable, singular, turbulent, chaotic, confusing, and unsettling hardly do justice to the past year's events.

As usual, the mining industry played its small but vital role in the scheme of world events. The first half of the year brought stratospheric commodity prices, while the second half sent prices for all but a select few of those same commodities into the financial tailings impoundment.

In January, the mining industry's ability to raise venture or debt capital seemed limitless as evidenced by transactions such as BHP Billiton's \$188.2 billion takeover offer for Rio Tinto. By March, the smell of financial disaster was in the air, and by early September, public mining companies watched in horror as the value of their stocks dropped 5-10 percent per day and mergers such as the BHP-Rio Tinto transaction were withdrawn. As this financial winter deepens, I find wisdom in two

The author

The author Curt Freeman, CPG #6901, is a well-known geologist who lives in Fairbanks. He prepared this column Dec. 19. 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.



CURT FREEMAN

observations that have been truisms for many decades: Good projects get funded and good mines make money.

Western Alaska

In late November **NOVAGOLD RESOURCES INC.** announced that due to ongoing mechanical, processing and regulatory issues, it had suspended operations at its Rock Creek mine near Nome. Issues at the mine site include noncompliance with certain permit conditions, an electrical

fire in the milling circuit and problems with the processing and recovery circuits. Cash flow of \$25 million was anticipated from the mine but the company believes that cash flow will be pushed back at least 6 months due to the issues facing the mine. Shortly after the suspension, the property was put on the option block and is being reviewed by a number of companies.

ZAZU METALS CORP. announced results from 14 additional drill holes at its Lik zinc-lead-silver deposit in the western Brooks Range. Highlights include drill hole 174 with 5.65 percent zinc, 5.38 percent lead and 61.52 grams per metric ton of silver over 8.23 meters; hole 175 with 9.92 percent zinc, 4.06 percent lead and 4.1 g/t silver over 15.85 meters; drill hole 176 with 9.89 percent zinc, 5.75 percent lead and 117.51 g/t of silver over 17.68 meters; drill hole 182 with 9.12 percent zinc, 2.8 percent lead and 97.5 g/t of silver over 43.89 meters; drill hole 160 with 6.26 percent zinc, 2.52 percent lead and 37.72 g/t of silver over 65.53 meters; and drill hole 201 with 9.77 percent zinc, 5.0 percent lead and 114.56 g/t of silver over 20.57 meters. Due to the shallow dipping, stratiform nature of the Lik South deposit, true thickness is estimated to equate to 85 percent to 90 percent of the core intercepts.


ARCTIC OIL & GAS CORP. and **SHELL TRUST DREDGE ENGINEERS** have agreed to pool their respective interests in offshore mining leases in Norton Sound near Nome. Shell holds options over leases in offshore state waters with drill-indicated gold reserves of about 500,000 ounces and onshore placer resources with an additional 500,000 ounces of gold resource. The companies hope to commence production in one or

more of their lease areas in the 2009-2010 time frame with initial production targeted at 250,000-500,000 ounces of alluvial gold per year. Initial efforts will go toward the Denali placer gold project, involving fully permitted onshore claims with 500,000 ounces of drill-indicated reserves and mining equipment already on site. The joint venture has plans to upgrade production equipment at this project to a 60,000-ounce-per-year operation in 2009. The other project which the partners are planning to advance is the Norton Sound Alaska Oceanic placer gold project, which encompasses 720 square miles of OCS leases and 2,000 acres of state leases offshore.

NORTHERN DYNASTY MINERALS and partner **ANGLO AMERICAN PLC** provided an updated resource estimate at the Pebble copper-molybdenum-gold deposit near Iliamna. The report provides the first integrated resource estimate for both the near-surface Pebble West portion of the deposit and the deeper Pebble East portion of the deposit. At a 0.30 percent copper-equivalent cutoff, the Measured and Indicated resources include 5.1 billion metric tons grading 0.43 percent copper, 0.35 grams per metric ton of gold and 256 parts per million molybdenum, containing 48.5 billion pounds of copper, 57.2 million ounces of gold and 2.87 billion pounds of molybdenum. In addition, Inferred Mineral resources stand at 4.0 billion tonnes grading 0.27 percent copper, 0.29 g/t of gold and 220 parts per million molybdenum containing 23.7 billion pounds of copper, 36.9 million ounces of gold and 1.92 billion pounds of molybdenum.

PACIFIC NORTH WEST CAPITAL CORP. announced the termination of its exploration agreement with Stillwater Mining Co. and Calista Corp. on the Goodnews Bay platinum property. The 2008 exploration program culminated with the completion of a seven-hole, 1,706-meter drill program completed at the Last Chance and Susie West geochemical anomalies. No significant platinum-palladium mineralization was identified during the program.

GEOINFORMATICS EXPLORATION announced a summary of its 2008 activities and that it has earned a 100 percent



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

Thomas K. Bundtzen, President

DURABLE BUILDINGS FOR THE SLOPE



Industrial Fabric Building Solutions
Authorized Cover-All Dealer

Paul Nelson, Anchorage
1.907.346.1319

Scott Coon, Anchorage
1.907.646.1219

Or Call Our National Call Center
1.800.268.3768

www.coverall.net

COVER-ALL IS A REGISTERED TRADEMARK OF COVER-ALL BUILDING SYSTEMS, INC.

see **FREEMAN** page 5



Developing

developing our resources

Creating employment opportunities for our rural communities is a priority for Calista Corporation. Through the exploration and development of our subsurface lands, Calista is generating much-needed jobs for our Shareholders – Calista's most valuable resource.



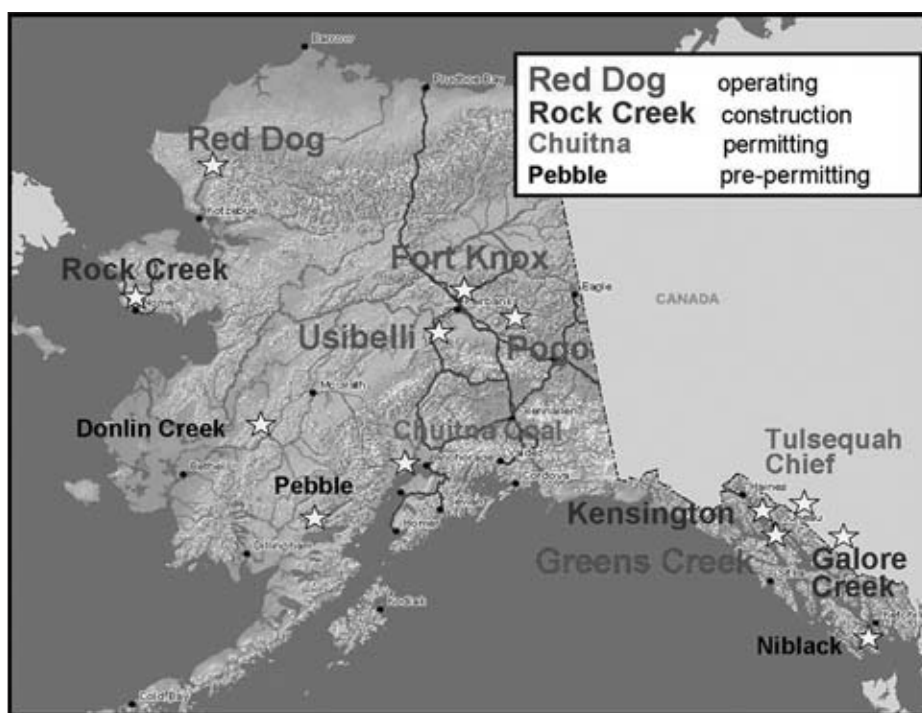
CALISTACORP.COM

continued from page 4

FREEMAN

interest in the Whistler copper-gold project. During 2008 the company completed a total of 11 diamond drill holes (4,303 meters). Five of these holes (2,462 meters) tested extensions of the Whistler Zone/Main Zone resource. The remaining 1,841 meters (6 holes) tested 6 "blind" regional targets all located within 2.5 kilometers of the Whistler Zone/Main Zone resource. These efforts extended mineralization to a vertical depth of 625 meters on the Main Zone with drill hole WH-08-08 returning 726.8 meters grading 0.48 g/t of gold, 0.87 g/t silver and 0.14 percent copper. This work also identified a higher-grade zone north of the Main Zone which returned 76 meters grading 0.61 g/t of gold, 0.27 percent copper, and 4.16 g/t silver in drill hole WH-08-10. Mineralization encountered in three regional targets in 2008 included one hole at the RainTree West prospect, which returned 160 meters grading 0.59 g/t of gold, 6.02 g/t of silver, 0.10 percent copper, 0.20 percent lead and 0.46 percent zinc, including 24 meters grading 1.37 g/t of gold, 6.32 g/t of silver, 0.13 percent copper, 0.36 percent lead and 0.80 percent zinc in drill hole RN-08-06. Drilling at RainMaker prospect returned 151.6 meters grading 0.37 g/t of gold, 0.18 percent copper and 1.83 g/t of silver in drill hole RM-08-01. Drilling at RainTree East prospect returned 20 meters grading 0.38 g/t of gold and 0.15 percent copper in drill hole RN-08-05. Exploration at the Bonanza Prospect returned values up to 69.12 g/t of gold, 424 g/t silver and 1.96 percent copper.

PACIFIC NORTH WEST CAPITAL CORP. announced that it has acquired an option, exercisable until Feb. 15, to pur-



chase a 100 percent interest in Mystery Creek Resources, Inc., a wholly owned Alaska subsidiary of St Andrews Goldfields Ltd. Mystery Creek's assets include the Nixon Fork gold mine near McGrath. Pacific North West has paid \$100,000 on signing of the agreement. Subject to regulatory approval and the satisfactory completion of its due diligence review, Pacific North West may exercise the option by paying a further \$400,000, of which \$100,000 is required to be paid on closing of the purchase of the Mystery Creek shares and the balance is required to be paid in three equal installments May 1, July 1 and Sept. 1. Nevada Goldfields Inc. operated the high-grade underground gold mine from 1995-1999, recovering 137,749 ounces of gold and 2.1 million pounds of copper, with additional silver credits. The average production grade was 42 g/t of gold, with an average production

cost of \$266 per ounce. The mine was closed due to declining gold prices. St Andrews Goldfields purchased the mine in 2003. From 2004 through 2008, about \$15 million was expended on upgrades to the processing facilities and mine infrastructure. During this time 9,381 meters of reserve-resource definition drilling was conducted, an updated reserve-resource estimate was completed and additional metallurgical testing was conducted. Limited production in 2007 resulted in recovery of 6,775 ounces of gold and 78,644 pounds of copper. Pacific North West will conduct a comprehensive re-evaluation of mine reserves/resources, metallurgy, mining scenarios, and permitting during 2009. A financial analysis of the mine will also be completed. These studies will form the basis for making a decision regarding a restart of mining operations.

Eastern Interior

INTERNATIONAL TOWER HILL MINES LTD. announced additional drilling results from its Livengood gold project. The new assays demonstrate continuity of higher grade zones at and beyond the limits of the current resource base. Significant results include hole MK-RC-0099 to the south with 53.3 meters grading 1.1 g/t of gold, 35.1 meters grading 1.3 g/t of gold and 12.2 meters grading 1.2 g/t of gold; hole MK-RC-0098 to the southwest with 62.5 meters grading 1.1 g/t of gold; and hole MK-RC-0095 to the northeast with 13.7 meters grading 1.0 g/t of gold and 126.5 meters grading 1.2 g/t of gold. Hole MK-RC-0095 represents a 400-meter step out to the east-northeast from the Core Zone and suggest significant expansion potential in this direction. The company plans to infill and expand the current resource base with a two-stage 2009 program that will consist of a 5,000-meter winter drilling program and a 6,500-meter summer drilling program.

INTERNATIONAL TOWER HILL MINES LTD. also announced results from exploration at its West Pogo gold project in the Goodpaster District. Six of the 24 rock samples taken from this new zone returned greater than 1 gram of gold per tonne, ranging in grade from 1.2 to 118.5 g/t of gold from sericite-altered granite and quartz vein material. A train of mineralized granite float was encountered 150 meters northeast of a 2003 drill site. Visible gold was identified in several pieces of float. Additional mineralized rocks and anomalous soils were found over an area extending for 700 meters to the east of the visible gold discovery. The mineralization consists of vuggy quartz veins and breccias in granite with strong

see **FREEMAN** page 6



On Location



**Wherever.
Whenever.
Whatever.**

From drill rigs to underground mines to road construction, Judy Patrick has photographed major projects all over Alaska and around the globe.

Judy is prepared for any situation with specialized equipment to be sure she comes back with your best shot. No matter the time, the place or the season.



judypatrickphotography.com



NORTH OF 60 MINING

continued from page 2

NIXON FORK

St. Andrew began production at the Nixon Fork Mine in January 2007. During nine months of production through September 2007, workers ran 18,105 metric tons of ore extracted from the upper portion of the 3300 zone of the Crystal deposit through the mill with an average head grade

of 17.1 g/t gold. The ore grades came in at substantially less than those outlined in an independent technical report prepared for the mine in October 2006. The report envisioned a proven reserve of 47,000 metric tons at 34.05 g/t gold and a probable reserve of 137,500 at 18.05 g/t gold.

St Andrew said it encountered production problems at Nixon Fork due to what engineers described as the irregular geome-

try of the mineralized zones of the 3300 ore-body. In October 2007 the miner suspended production, saying it would concentrate on an underground drill program to better define the geometry of the gold resource on the property.

In early 2008 St Andrew decided to sell Nixon Fork and other non-core assets in order to focus on its flagship asset, the Holloway-Holt gold mine, which is located at the eastern end of St Andrew's land package in the Timmins Mining Camp in north-eastern Ontario.

"The decision to sell Nixon Fork reflects our strategy to continue to focus our efforts and resources on bringing our Holloway Holt property into production as soon as possible," said Jacques Perron, St Andrew president and CEO.

St Andrew completes definition drilling

Since then St Andrew has completed 6,930 meters of underground core drilling. According to Steve Teller, who oversaw Nixon Fork for Mystery Creek Resources while it was on care and maintenance, a majority of this program was infill drilling on the 3300 ore-body.

A few exploration holes also were drilled toward the J5A ore-body and intercepted the downdip extension of the known mineralization.

"The Nixon Fork gold skarns are a challenging target, but the reward is high," Teller told Mining News in May. "During this winter's drilling program, we had 109 intercepts with grade that exceeded 1 ounce per metric ton, including 61 intercepts in excess of 2 oz/t and 19 intercepts in excess of 5 oz/t."

Results from the infill drilling represent a better picture of the mineralization in the

ore-body.

"We tightened up the definition of the ore-body considerably, as far as knowing exactly where it is and knowing how much is there," Teller told Mining News Dec. 19.

The nearly 7,000 meters of drilling, according to Teller, changed the configuration of the ore-body. A NI 43-101 compliant resource estimate including this drilling has not been completed.

The company placed Nixon Fork in care and maintenance when the drilling ended in late March.

The bottom line

In addition to the \$500,000 purchase price, Pacific North West Capital estimates it will take about C\$1 million in capital expense to start up the mine, and C\$18 million per year to operate Nixon Fork, with annual production totaling 40,000 ounces of gold.

Myers told Mining News that the company estimates production costs will average \$460 per ounce of gold.

Much of the initial work being performed, according to Myers, is aimed at trying to bring down that rate.

The company foresees the high-grade gold mine generating an estimated C\$5 million per year net annual income, averaged over the mine's life.

Pacific North West Capital said it is currently expanding its commodity focus to include advanced-stage gold and base metal properties, while continuing to develop its platinum group metal portfolio. The company said the acquisition of the Nixon Fork Mine fulfills this corporate objective.

Pacific North West Capital also reported having about C\$7.4 million in working capital and securities. ●

continued from page 3

FORECAST

proven.

"It is going to be really tough for the head of exploration of some these companies to justify another \$100 million to \$200 million budget for next year, when they look at how many ounces you can buy for those same dollars," Harquail observed.

Resources not optional

The theme of the annual NWMA meeting was "Mining for a Minerals Dependent World."

Sturm said the world's dependence on minerals is the ray of hope for the recovery of mining stocks and metals prices.

"Resources are not optional in a world that will ultimately go on," Sturm told the crowd. "Because these are indispensable industries, the question is 'when,' not 'if.'" The world population, according to Sturm, is increasing annually by 700 million to 800 million people.

"Every five years we have to feed, clothe and house another North America," Sturm said. "If you have a decent mine and today it is not being accessed as valuable as it was

yesterday, and you are wondering will it really be needed in the future, the answer is: 'It will.'"

In addition to a growing population, the financial advisor said the industrialization of China and other emerging economies will add to the demand for commodities.

It is projected that by 2025, there will be 221 cities in China with more than 1 million people, compared with only 35 such cities currently in Europe.

"There still is an awful long way to go, and what you do for the world is indispensable," Sturm told the mining industry representatives.

Resource stocks return to rightful hands

The natural resources fund manager not only foresees the long-term global need for minerals, but he also sees mining as an industry that has overcorrected.

This is why, despite the financial turmoil, he and other long-term investors are buying, or holding on to, mining stocks.

"In violent markets, stocks go back into their rightful hands," Sturm said. "The guys that are buying are the guys that have a longer-term vision. I am buying. The guys that are selling are the guys that just discovered resources a year and a half ago." ●

continued from page 5

FREEMAN

sericitic and local tourmaline alteration. Associated metals include moderate to strong arsenic values and moderate antimony values.

FULL METAL MINERALS LTD. announced final drill results from its 39-hole program at the LWM carbonate replacement project near Chicken. Results include hole LWM08-55 which returned 1.5 meters true width averaging 12.4 percent zinc, 30.0 percent lead and 186.3 grams of silver per tone; hole LWM08-56 which returned 5.7 meters true width averaging 7.5 percent zinc, 11.8 percent lead and 167.6 g/t of silver; hole LWM08-57 which returned 1.2 meters true width averaging 24.8 percent zinc, 10.0 percent lead and 192.4 g/t silver; and hole LWM08-58

which returned 0.9 meters true width averaging 0.4 percent zinc, 37.5 percent lead and 648 g/t of silver. 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 holes LWM08-55, 56 and 58 are at the southwest limit of drilling. Additional drilling is planned in 2009.

Alaska Range

PURE NICKEL INC. and joint venture partner **ITOCHU CORP.** announced results of its summer 2008 drill program at its MAN nickel-copper-platinum group element project. The 2008 fieldwork was focused on drilling activities at the Beta complex. Drill production was less than expected and all holes were lost or abandoned before they reached targeted depth.

The drill holes were targeted at geophysical conductors and intersected wide zones of weakly disseminated sulfide mineralization including one interval of 0.50 meters grading 1.39 percent nickel and 1.27 percent copper. Additional work is planned in 2009.

Southeast Alaska

CONSTANTINE METAL RESOURCES announced additional drilling results from its Palmer massive sulfide project near Haines. New assay results for Zone I mineralization in hole CMR08-17 returned 90.3 feet of 2.52 percent copper, 0.15 percent lead, 3.38 percent zinc, 0.32 g/t of gold and 25.5 g/t of silver including 28.1 feet of 3.50 percent copper, 0.43 percent zinc, 0.48 g/t of gold and 30.93 g/t of silver and an additional 17.3 feet of 0.82 percent copper, 0.71 percent lead, 13.27 percent zinc, 0.49 g/t of gold and 61.3 grams

of silver per tonne. This Zone I intercept is located 75 meters west of high-grade copper mineralization previously intercepted. In zone II, hole CMR08-17 intersected 15.8 feet of 0.91 percent copper, 0.38 percent lead, 21.39 percent zinc, 0.04 g/t of gold and 19.4 g/t of silver. In addition, results for Zone II in hole CMR08-22 included 98.5 feet of 1.70 percent copper, 0.17 percent lead, 5.11 percent zinc, 0.22 g/t of gold and 32.8 g/t silver including 16.0 feet of 3.31 percent copper, 0.29 percent lead, 9.28 percent zinc, 0.42 g/t of gold and 80.2 g/t of silver. In 2008, Constantine completed 12 holes resulting in 17 mineralized intersections, for an aggregate of 14,421 feet of drilling. The exploration to date indicates a minimum lateral extent of South Wall mineralization of 1000 feet horizontally by 1000 feet vertically in three zones, and all zones are open to expansion. ●

Colorado OTR Tires: Wise Choice in Alaska

1. Zero failure history of Colorado brand 63" OTR tires since early 2007
2. Guaranteeing onsite performance of 6 ~ 12 months for all Colorado 35", 39", 45", 49", 51", 57" & 63" tires – both bias & radial
3. Competitive cost-effectiveness against other brands of OTR tires
4. Customizing all OTR tires according to using conditions of any type of mines
5. Providing lifetime liability insurance & onsite engineering service, free of charge, worldwide
6. Delivering OTR tires, 1 ~ 8 weeks, to mines, oil fields & construction sites in Alaska, mainland USA & Canada

Manufactured by **American Tire Corporation**

Website: www.americantire.us

Fax: 626-698-0151

Email: 5980R63@gmail.com

• GUEST COLUMN

By the numbers: The figures don't add up

Growing demand from the world's 6.7 billion people for mineral commodities renders Americans' antipathy toward mining 'irrational'

By **J. P. TANGEN**
For Mining News

I've been thinking a lot about numbers lately, maybe because it is the end of the year, and therefore a time for reflection. But when I read about hundreds of billions of dollars committed to re-energizing the economy or billions of people occupying the planet or billions of pounds of copper from a possible mine at Pebble, I just get confused. That may be because I cannot count past 10 without taking my shoes and socks off.

What do big numbers mean to Alaska's mining industry? From my perspective, sooner or later the hounds of Hell will run the domestic mining industry to the ground (no pun intended) to the extent that it is dependent on access to federal public lands. It is incredibly curious to me, at least, why there is such a rampant antipathy regarding domestic mining. Certainly mining in the United States is safer and more environmentally sensitive than is the case in virtually any other location in the world.

More significantly, we have a huge share of the world's undeveloped resources and many of those resources are located in sites remote from population centers. One can see Russia from Gov. Sarah Palin's porch more easily than one can see the Bingham Pit from Manhattan. Parks are nice and everyone loves a nice forest, but you cannot get

Mining & the law

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



J.P. TANGEN

there without the help of a few tons of iron ore.

Understanding the numbers

What do the numbers mean? Let's start with the world's population. By the latest reckoning, the population is a little over 6.7 billion people, about one third of which is situated in India and one third in China. Alaska consists of 365 million acres of land, about 150 million acres of which is held by the state or private interests (primarily Alaska Native regional corporations). Essentially, we could put the entire population of the world in Alaska and no one would have to stray onto federal land. The population density would be about 50 people per acre, but Mumbai, India's population density, at about 46 people per acre, is almost there already. If we just moved everyone to Alaska, we could use the

Assuming that everyone wants all the things that Americans have (televisions, iPods, microwave ovens, etc.), we can project that each person will require about 1,300 pounds of copper over his or her lifetime, about 670 pounds of zinc, and about 925 pounds of lead.

rest of the world for farming or recreation or whatever. Besides, that population density would generate lots of heat, so – thinking about peak oil – energy minerals wouldn't be depleted at the current rapid rate. Transportation needs would be reduced because if you needed to meet with someone, you would only have to travel across the state and not across the country or halfway around the world.

Assuming that everyone wants all the things that Americans have (televisions, iPods, microwave ovens, etc.), we can project that each person will require about 1,300 pounds of copper over his or her lifetime, about 670 pounds of zinc, and about 925 pounds of lead. I don't have quite enough toes to do all the math, but I think that translates roughly into 8.7 trillion pounds of copper. If the Pebble Project contains 85 billion pounds of copper, that means we would require about 100 such projects just to provide the world's existing population with the copper pipes, electric wires and

hybrid car engines it would need over the people's lifetimes.

An essential industry

If the reserves of the Red Dog mine are 26 billion pounds of zinc, we would need about 17 Red Dog mines to meet the lifetime zinc demand. Red Dog also has about 7 billion pounds of lead reserves. The world's 6.7 billion people will need about 6.2 trillion pounds of lead over their lifetimes, or about 900 times the total lead reserves at Red Dog.

It seems self-evident that the stress of these current numbers is untenable. The national antagonism toward mining is wholly irrational given the obvious trend toward greater demand for even basic commodities.

While the impoverished populations of many Third World countries may not soon be able to successfully demand their fair shares of the global pie, no one can deny that the populations of China and India are palpably striding in that direction.

It is incontestable that figures don't lie (it's the liars that are doing the figuring). When you are dealing with numbers that have more zeros than there are ants at a picnic, it is hard to ponder the implications.

One conclusion that does seem to shine through, however, is that the future of mining for commodities is secure. Let us all hope that a good percentage of that mining will take place in Alaska.

Happy holidays! ●

FUBAR EQUIPMENT LLC

Heavy Equipment & Truck Repair Services



Service or Repairs: Screen Decks - Conveyors - Wash Plants
Generators - Fleet Services - Welding & Fabrication - Truck Wash

Cat • Hitachi • Volvo • John Deere • Cummins • Detroit • International

The One Stop Shop! Over 50 years experience

CALL FUBAR FOR REPAIRS!

Call us: Ph 907-376-7834
Fx 907-376-7843

Visit us: 905 Vicki Way
Wasilla, AK 99654

• NORTHWEST TERRITORIES

GNWT, diamond mines focus on workers

Government and industry agree to take a collaborative approach in building skilled and stable work force in territory

By ROSE RAGSDALE

For Mining News

The Government of the Northwest Territories and three diamond mines in the Northwest Territories entered a Memorandum of Understanding to further development and retention of the Arctic territory's diamond mining work force.

The agreement was signed in Yellowknife Nov. 27 by Minister of Industry, Tourism and Investment Bob McLeod; Minister of Education, Culture and Employment Jackson Lafferty; BHP Billiton Diamonds Inc. President Ricus Grimbeek; Diavik Diamond Mines Inc. President Kim Truter; and Chantal Lavoie, senior vice president of operations for De Beers Canada.

Under terms of the MOU, the diamond mines together with the government will work cooperatively to advance a Northwest Territories Mining Workforce Initiative to develop necessary skills, training, and travel initiatives to allow more of the territory's residents to be employed in the mines; and to identify strategies to attract skilled workers and their families to become residents of the Northwest Territories.

Since the Northwest Territories established its first socio-economic agreement with BHP Billiton in 1996, the combined operations of Ekati, Diavik and Snap



COURTESY OF DIAVIK DIAMONDS MINES INC.

In 2007, the Diavik Mine in Northwest Territories produced 11.9 million carats of rough diamonds.

Lake Mines have provided more than 10,000 jobs for northerners. Some 60 percent of operations jobs in NWT diamond mines are currently held by northerners.

"The NWT's diamond mines are valued partners in our efforts to maximize benefits for NWT residents in the development of our diamond industry," said McLeod.

"This initiative allows us to build on this history of success and sustain the growth of our northern economy by supporting training, jobs and business opportunities, and by creating even more local

benefits from mining," the NWT minister added.

"Through partnerships such as this one, this government is maximizing opportunities for Northerners to improve skills for living and working," said Lafferty. "This agreement will provide Northerners even greater opportunities to take advantage of training and develop the right skills for existing or future jobs in the diamond mining industry."

Mines commit to workers

The mining companies entered the agreement Nov. 27 even as global economic upheaval threatened their operations.

Grimbeek said Ekati Diamond Mine just celebrated its 10-year anniversary and noted that 15 percent of the mine's 1,100 employees and contractors have worked there since Day 1. He also said BHP Billiton Diamonds would like to expand its northern talent and invest its collaborative efforts in developing an even stronger northern mining work force "to ensure the NWT has a great future."

"As a member of the Rio Tinto group of companies, Diavik remains firmly committed to working with and providing benefits to local communities," said Truter. "With the added strength of our combined industry and government efforts, the north should benefit even more from our work, as should each of our companies."

DeBeers Canada's LaVoie said dia-

monds have long been associated with promise and commitment and so it makes perfect sense that the diamond industry takes such an unprecedented leadership position with the Government of the Northwest Territories. "This will ensure long-term delivery on our collective commitments to the North and that we are growing the significant benefits we are already bringing to northerners," LaVoie added.

Miners react to poor economic conditions

By mid-December, at least two of the diamond producers had announced plans for cutbacks or retrenchments in response to deteriorating global economic conditions.

Diavik Diamond Mines Inc., 60 percent owner and operator of the Diavik Mine, which is located 300 kilometers, or 186 miles, northeast of Yellowknife Dec. 10 said it is taking a series of measures to help protect the business and its workers during the current global economic crisis.

"DDMI's approach will position the Diavik business well for the difficult economic conditions. Standards will be maintained in health, safety, the environment and communities," the company said in a statement.


The actions, which include deferring some capital projects and underground production, scaling back exploration and seeking greater efficiency, will help to reduce and defer costs until such time as the global economic situation has stabilized and becomes more favorable, the company said in a Dec. 10 statement.

The Yellowknife-based diamond miner said Diavik will seek to minimize work force reductions at the mine by deferring new hires and eliminating vacant positions. The mine currently employs about 700 workers.


DeBeers Canada, owner and operator of the Snap Lake Mine, Dec. 8 informed the Mackenzie Valley Environmental Impact Review Board that it will take longer than previously envisioned to complete an internal assessment now underway for its Gahcho Kué Diamond Project in Northwest Territories.

DeBeers said it has been working with regulators and stakeholders to advance

see FOCUS page 12



ALASKA



LABORATORY

Alaska Analytical Laboratory is an environmental lab performing the following services: soil analyses for Gasoline Range Organics (GRO), BTEX (Benzene, Toluene, Ethylbenzene, and Xylene); Diesel Range Organics (DRO) and Residual Range Organics (RRO) following the SW-846 EPA/Alaska Methods.

**1956 Richardson Highway
North Pole, Alaska 99705
Phone: (907) 687-7394
Email: klovejoy@alaska-analytical.com**

Worldwide leadership, innovation, and experience...

Ground Stabilization
Permafrost Foundations
Frozen Barrier Containment
Thermopiles & Thermoprobes
Pressure Vessels and Corrosion Protection

www.ArcticFoundations.com

5621 Arctic Boulevard
Anchorage, Alaska 99518-1667
(907) 562-2741

Arctic Foundations, Inc.



• ALASKA

Hecla gets extension for bridge loan

Bank accepts mine plan and gives silver miner more time to repay \$40 million short-term obligation from Greens Creek purchase

By SHANE LASLEY
Mining News

Hecla Mining Co. now has until Feb. to pay off the remaining balance on the \$240 million bridge loan it took out to purchase Rio Tinto's 70.27 percent of the Greens Creek Mine near Juneau, Alaska.

In April, the Coeur D'Alene-based silver miner agreed to pay \$750 million (\$700 million in cash and \$50 million in Hecla common stock) to its Greens Creek partner, Rio Tinto, for 100 percent ownership of the Southeast Alaska silver mine.

Hecla put about \$340 million from its existing cash toward the Greens Creek purchase, and the remainder was funded through a \$380 million debt facility provided by Scotia Capital. The debt facility included a \$140 million, three-year amortizing term loan and a \$240 million bridge loan facility (of which Hecla drew \$220 million at closing.)

In her Dec. 3 presentation at the Northwest Mining Association annual meeting in Reno, Hecla spokeswoman Vicki Veltkamp told the audience that the company has paid back about 80 percent of the loan that the silver miner took out to make the Greens Creek purchase.

Bridge loan

When Hecla took out the loan to help buy Rio Tinto's portion of Greens Creek, the company believed that the cash flow generated from silver sales at its two existing mines would provide more than enough cash to cover the short-term loan.

At the time of the purchase, Hecla President and CEO Phillips S. Baker, Jr., said, "Our Greens Creek and Lucky Friday silver mines generate a great deal of cash flow at current metals prices, which is expected to enable us to pay off the debt in less than three years. We have organized this financing to include a bridge facility that allowed us to eliminate a bank requirement to hedge a portion of our future zinc and lead production, and therefore avoid the earnings volatility associated with market-to-market accounting."

Since the deal closed, silver prices dropped from about \$18 an ounce to its current price of around \$10 per ounce. In addition to falling silver prices, zinc, an important by-product metal at Greens Creek, is also selling for about half the



An aerial view of the dock at Hecla's Greens Creek Mine, located on Admiralty Island in Southeast Alaska.



Ore hauled to the mill at Greens Creek contains significant gold, zinc and lead byproducts, which contributes to Greens Creek being the lowest cash-cost silver producer in the world.

April price. The reduced metals prices left Hecla about \$40 million short when it came time to repay the bridge loan.

In Hecla's third-quarter earnings report Baker said, "Over the quarter we have seen a dramatic decline in the price of silver. The prices of lead and zinc, important by-product metals which impact our cash costs per ounce of silver, have also declined not only over this quarter, but since last year. At the same time, production costs have increased, which affects our cash margins and lowers our income, cash flow and liquidity. So, as we have done numerous times in

our long history, we are aggressively focusing on reducing costs throughout the company and deferring discretionary capital investments and exploration expenses. Fortunately, the Greens Creek and Lucky Friday mines are two U.S. operations that are among the world's lowest-cost silver mines. Both have survived in even tougher price environments, and we will draw upon that experience in these market conditions. Despite the stress in the financial markets, we have repaid the majority of the bridge loan facility, and are pleased our lenders have extended the maturity date on the \$40 million still out-

standing. We are considering all of our options to retire the financing obligations of the bridge and term debt, while reducing our costs to improve liquidity."

When the bridge loan matured in October Hecla reported it had repaid \$200 million of the \$240 million due and it had asked the bank for more time to repay the remaining balance. The financier agreed to give the silver miner an extension on the bridge loan if certain conditions were met.

On Dec. 10 Hecla said the final condition had been met giving the miner an additional four months to pay back the bridge. The final requirement by the financier was an acceptable mine plan. Accepting the mine plan, according to Hecla, confirmed the bridge loan maturity date of Feb. 16, 2009.

Silver miner raises \$21 million

On Dec. 11 Hecla said it had agreed to sell 10.24 million shares of the company's common stock to "selected institutional investors" for \$2.05 a share, raising \$21 million for the silver miner. In addition to the common stock, the securities in the sale included series-1 warrants to purchase up to about 7.68 million shares of Hecla common stock at an exercise price of \$2.45 per share, expiring in five years; and series-2 warrants to purchase up to 7.68 million shares of Hecla common stock at an exercise price of \$2.35 per share, expiring on Feb. 28, 2009.

Low-cost silver producer

Veltkamp told the Reno audience, with the 100 percent ownership of Greens Creek, Hecla is now the No. 1 silver producer in the United States. The company's silver production for 2009 is expected to be 11 million ounces, or about 30 percent of the silver produced nationwide.

The Hecla spokeswoman also pointed out that Greens Creek Mine is the lowest cash-cost producer of silver in the world. She attributed the low-cost silver production to the significant gold, zinc and lead byproducts. She said the company's other producing mine, Lucky Friday, in northern Idaho is also a low-cost silver producer, ranking about third. She said the low production costs will help Hecla through the tough market conditions.

Rising energy costs and lower metal

see **HECLA** page 12

INTERNATIONAL
TOWER
HILL
MINES LTD.

DISCOVERING ALASKA'S
NEXT GENERATION OF
GOLD MINES

LIVENGOOD
3M OZ GOLD RESOURCE
AND GROWING

WWW.ITHMINES.COM

FRONTIER
PLUMBING SUPPLY INC.

GRUVLOK

Your Mining Supplies Source for All of Alaska!
Frontier Plumbing Supply Sells it All

Making Connections For The Future

Anchorage
8630 Toloff Street • Anchorage, AK 99507
P: 907-334-3700 • F: 907-334-3770

Fairbanks
981 Van Horn Road • Fairbanks, AK 99701
P: 907-374-3500 • F: 907-374-3570

• YUKON TERRITORY

Junior targets tungsten-moly deposits

Mineral-rich Northern Dancer claims offer opportunity to develop one of the world's largest known sources of strategic metal

By ROSE RAGSDALE

For Mining News

NORTHERN DANCER PROJECT, Yukon Territory – Folded into the rocks of this remote valley astride the border between Yukon Territory and British Columbia is at least 20 percent of the world's known tungsten resource. And overlapping that abundance is a hefty deposit of molybdenum.

For Largo Resources, this mineral wealth 290 kilometers, or 180 miles, southwest represents a major opportunity and hopefully, a surmountable challenge. The Toronto-based junior is pursuing Northern Dancer and another advanced-stage project in Brazil, the Maracas Vanadium-PGM deposit. It also holds a large (60,000 hectares or 145,000 acres) land position and prospective gold exploration properties in Ecuador.

Northern Dancer hosts widespread tungsten-molybdenum porphyry style mineralization. One of the world's largest known tungsten-molybdenum porphyry systems, the mineralization is hosted in fractures and veins associated with a northeast-trending sheeted vein system in calc-silicate (skarn) rocks and spatially related to a felsic intrusion (quartz-feldspar porphyry). The deposit, which has been tested by drilling for 1500 meters along strike, 500 meters vertically and 600 meters in width, remains open along strike to both the northeast and southwest as well as at depth.



An aerial view of the camp and core shack during 2008 exploration at the Northern Dancer Project in southwestern Yukon Territory.



Simon Culligan, a driller's helper, and Luis San Martin, a driller for Coyne Brothers Drillers, bore for samples during an early summer snowstorm

Overlapping opportunities

Tungsten and molybdenum mineralization are concentrated in two zones, which partially overlap. In the core of the Northern Dancer deposit, there is a higher-grade molybdenum zone where molybdenite occurs within and adjacent to the felsic intrusion. Surrounding and partially overlapping the molybdenum zone is a much more extensive tungsten zone where scheelite occurs in northeast-trending sheeted quartz veins in skarn. At the start of the 2008 exploration sea-

son, the core of Northern Dancer had been partially delineated by 94 diamond drill holes and 496 meters of underground workings. This work was done by AMAX Minerals Exploration from 1977 to 1980 (51 holes) and by Largo Resources, which completed a 17-hole diamond drill program in 2006 and a 26-hole program in 2007.

In April, Largo announced an updated NI 43-101 compliant resource estimate for Northern Dancer with 394 million metric tons of 0.10 percent tungsten and 0.25 percent molybdenum in indicated and inferred resources – 140.8 million metric tons in the indicated category, grading 0.10 percent tungsten and 0.026 percent molybdenum; and 253.2 million metric tons grading 0.10 percent tungsten and 0.022 percent moly in the inferred category. The estimate includes a higher grade tungsten zone containing indicated resources of 17.1 million metric tons grading 0.17 percent tungsten and 0.029 percent moly and inferred resources of 18.7 million metric tons grading 0.16 percent tungsten and 0.023 percent moly.

Largo projected 860 million pounds of tungsten and 205 million pounds of moly in the deposit with a total gross value of \$16.3 billion at April 2008 prices of \$12 per pound for tungsten and \$35 per pound for moly.

During a media tour here in June, Andy Campbell, vice president of exploration for Largo Resources, described the 1,500-hectare, or 3,615-acre, Northern Dancer claims (23 in Yukon and three in British Columbia) as “a very, very large low-grade system” that the company sees as especially prospective.

Campbell said Largo believes its investment in Northern Dancer will prove to be a terrific bargain. “There’s nothing you could get into in precious metals at this stage for this level (of investment). ... We’re already there in terms of earn-in,” he said.

Moreover, the outlook for tungsten is good despite current economic upheaval because the world has few known tungsten resources. Demand for the strategic metal is expected to increase at a compound annual growth rate of 7.8 percent until 2020, according to Largo.

Northern Dancer's potential for molybdenum production, however, is more problematic because of other resources competing for development, Campbell said.

Another factor that favors Northern Dancer is the property's location, just 13 kilometers, or 8 miles, from the Alaska Highway and 300 kilometers, or 186 miles, from a deepwater port in Skagway where ore concentrates can be shipped to smelters in Asia.

One potential complication could be Northern Dancer's location, which will require Largo to obtain permitting from federal, Yukon Territory and British Columbia regulators. Drainage and access for the property are both in British Columbia, though most of the claims are located in Yukon.

Two development breakthroughs

With a target of 2013 for first production, Largo has begun metallurgical testing of core samples and is holding ongoing discussions with potential off-take and joint venture partners.

This year Largo's exploration objective was to provide improved definition of the higher grade tungsten and molybdenum mineralization as well as fill in gaps in information especially at the shallower levels of the deposit.

When Largo optioned the property from Strategic Minerals, all 51 holes that had been drilled were vertical in orientation.

“We changed the angle of drill and were able to show the mineralization in a

see **NORTHERN DANCER** page 11



Welcome to the neighborhood

Being a good corporate citizen means being a good neighbor, and as a good neighbor we've made taking care of the environment a top priority. That's why we have supported voluntary reclamation programs to sustain vibrant and thriving plant and animal communities.

Nobody told us to do it.

Nobody had to, because at Fort Knox Mine being a good neighbor is just part of the job.

Fort Knox Mine

FAIRBANKS, ALASKA

KINROSS

kinross.com

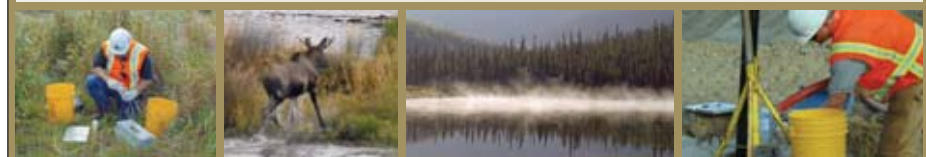


ACHOVICH
INDUSTRIAL & CONSTRUCTION SUPPLY, INC.

**Look to us for your Arctic hose,
oil and rigging needs.**

1716 Post Road
Anchorage, AK 99501
(907) 277-1406

1600 Wells Street
Fairbanks, AK 99501
(907) 456-4414



continued from page 10

NORTHERN DANCER

better light," Campbell said.

Further study of the deposit also showed that virtually all of it is mineralized with no waste, but there are significant zones of high-grade material that can be mined during the first few years of production, said Farshid Ghazanfari, a geological technical consultant to the Northern Dancer Project from Toronto-based Forbes & Manhattan.

Largo has identified 50 million metric tons of high-grade tungsten ore in deposits to the southwest at Northern Dancer and hopes to delineate near-surface targets of molybdenum in high-grade ore to the northeast.

"The molybdenum is very important for us as a revenue generator," Ghazanfari said. "We're hoping as we drill that the cores will show better grades and more sheeted wings that will bump the grade. As we do drill we're getting a better handle on the resources. It's almost like two separate deposits with an overlap of the two."

During metallurgical testing, Largo decided to investigate optical sorting, a technology used in the diamond- and talc-mining industries. Sorting core under normal and ultraviolet light as well as x-rays and with dense media separation, the junior was able to reject about half of the mill. The process will enable the company to shrink the size of its mill by half to 20,000 metric tons per day.

"This keeps the cap-ex costs down, so you get more bang for your buck," said Tim Mann, Largo's vice president of engineering. "From a technical perspective, optical sorting and defining the high-grade zones are the breakthroughs for the project."

Largo envisions developing an open-pit mine in order to get tungsten ore into the mill as soon as possible but actually mining both resources concurrently.

"The mill would be on site, and we're currently thinking that we can produce a tungsten con and a moly con," Mann said.

Positive 2008 drill results

Preliminary analysis by Largo's technical personnel in September indicated that the drill results were significant enough to contribute materially to an upgraded mineral resource estimate that should positively affect the economics of the project.



Geological technical consultant Farshid Ghazanfari examines a chunk of ore in the snow at the Northern Dancer Project in southwestern Yukon Territory.

"This will potentially be achieved by improving the projected grade profile of the mine operation during the initial years of production by the inclusion of near-surface and potentially higher-than-average grade material in the mine production plan

that is not included in the current mineral resource estimate due to the lack of previous drilling information," Largo said in a statement in September.

The company outlined plans for a scoping study by this fall that would have investigated dry stack tailings and diesel generation for power, at least in the early years of the mine. That study would have led to a pre-feasibility study in 2009. Largo, however, opted to defer the scoping study until it could update its resource estimate for Northern Dancer.

"We believe it is in the best interest of Largo shareholders to base the scoping study on an updated resource estimate that incorporates the results of the 2008 drill program, designed as it was to upgrade and expand the existing resource and confirm higher-grade zones of mineralization," Largo President and CEO Mark Brennan said Sept. 29. "Based on the positive results in the first 13 holes, we expect that the updated resource model could significantly improve overall project economics," he added.

By November, Largo had reported assay results from 23 holes in the 38-hole (11,500 meters) program drilled this summer. The results reinforce the junior's


assessment of resources at Northern Dancer.

"Reported drill results are better than expected and continue to confirm the higher-grade tungsten and molybdenum zones. We expect that these results will have a positive impact on an updated resource estimate and the modeling of the higher-grade zones," said Largo's Campbell.


Largo said the new intersects, so far, are narrower but 40 percent to 300 percent higher-grade than the deposit grade.

Highlights include hole LT08-119, which cut 371.50 meters grading 0.15 percent tungsten and 0.025 percent molybdenum of which 79.40 meters graded 0.29 percent tungsten and 0.032 percent moly; and hole LT08-126, which intersected 323.09 meters grading 0.13 percent tungsten and 0.033 percent moly of which 206.00 meters graded 0.16 percent tungsten and 0.033 percent moly.

The molybdenum results also continue to be higher than the deposit grade. On Dec. 5, Largo said it is awaiting final assays from 2008 drilling and expects to complete an updated NI 43-101 compliant mineral resource estimate after it receives them. ●



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



A
L
A
S
K
A

“Whether your Alaska shipping needs require quickly getting a part to a drill equipment to a jobsite to keep a project on schedule, or just regular mining supplies, Lynden's exclusive Dynamic Routing™ can save you money. Call a Lynden multi-modal professional and we will help you match the mode to your deadline and budget.”

www.shiplynden.com

1-888-596-3361

The Lynden Family of Companies
Innovative Transportation Solutions



GPS Environmental, LLC

Industrial/sanitary Water & Wastewater,
Portable Modular Camps & Mining Equipment

7750 King St.

Anchorage, Alaska 99518

Ph: 907-245-6606

E-fax: 1-928-222-9204

paul@gpsenvironmental.com

bill@gpsenvironmental.com

www.gpsenvironmental.com

- GE Zenon Membrane Systems
- Wedeco UV & Ozone
- Gardner Denver pumps & blowers
- Royce Technologies Instruments
- Snyder Industries Poly Tanks
- Replacement Membranes
- Modular Camps/Buildings
- Tega Industries Mill liners
- American Fire Equipment
- Envirodyne Sludge Systems
- Huber Technologies- Screens
- GE Homespring H2O UF filters
- Harrington Plastics
- Bio Sentry- Pathogen Monitor
- ATI Instruments

PDAC 2009

International Convention, Trade Show & Investors Exchange

March 1-4, 2009
Toronto, Canada

Metro Toronto Convention Centre,
South Building

Diamond
Sponsor

Teck

PDAC

pdac.ca

continued from page 9

HECLA

prices have affected Hecla's bottom line. An average annual change in zinc prices of five cent per pound affects Hecla's annual bottom line by \$4.1 billion, and if lead changes by five cents that would affect the company's bottom line by \$2.9 million.

Hecla's average cash cost for silver in the third quarter was \$4.46 per ounce, about \$6 less than the spot price for silver at the end of the quarter.

"Certainly the prices of metals are an upside for us if you believe metals prices are going up in the future," Veltkamp said.

Looking ahead

Veltkamp said Greens Creek has the potential to expand its resources into several ore zones.

"What has happened over the last 20 years is that Greens Creek has basically been able to replace its reserves each year,

and so we continue to have an eight-to ten-year reserve life there as we go forward; we continue to have that and would expect to (in the future.)

The 5250 ore zone has been the primary target for underground exploration at the mine. One hole, drilled 1,000 feet above and along strike of the known reserve and resource, intersected silver grades of 30 ounces per ton with 18 percent zinc and lead. According the Hecla spokeswoman, the company expects to expand the 5250 ore zone and anticipates adding resource to this silver-rich ore zone this year.

Veltkamp said the 25-acre property has potential beyond adding resource to the existing mine. She said the company has found contact rocks across the property that are very similar to the rocks found when more ore is found at Greens Creek giving the company several future drill targets.

"The hope is, and the big jackpot would be, to find a whole new Greens Creek in the area. My geologists tell me that is more likely than not," Veltkamp told the listeners. ●



COURTESY OF DIAVIK DIAMONDS MINES INC.

An aerial view of the Diavik Mine, 220 kilometers, or 136 miles, south of the Arctic Circle.

continued from page 8

FOCUS

development of the project, but in light of the current global economic climate, it may take some time to complete an environmental impact statement for the project. The company also said it would report back to an MVEIRB panel tasked with overseeing the project in late 2009.

Gahcho Kué, located about 300 kilometers, or 186 miles, northeast of Yellowknife, is expected to produce 3 million carats of diamonds annually. It would be DeBeers' third diamond mine

in Canada. The company also owns the Victor Mine in northern Ontario.

The company's Snap Lake Mine, about 220 kilometers, or 136 miles, northeast of Yellowknife, reached commercial production earlier this year, and is now ramping up to full production. Once in full operation, Snap Lake will employ about 560 workers.

DeBeers has established 40 training positions for the Snap Lake Mine, its first diamond mine outside of Africa and Canada's first fully underground diamond mine. The miner aims to fill all 40 positions by the mine's third year of operation. ●



Shaw Alaska, Inc.



- Environmental Assessment and NEPA Permitting
- Natural Gas Pipeline Permitting
- Worldwide Technology-Based Pipe Fabrication Facilities

- Environmental Data Quality Management Services
- Contaminated Sites Closure—Innovative, Technical Solutions
- Homeland Security

- Engineering, Design, and Construction Services
- Natural Gas Pipelines and LNG Facilities
- Hydroelectric and Fossil Fuel Power Plants
- Refining and Petrochemical Facilities

www.shawgrp.com

2000 W. INTERNATIONAL • AIRPORT RD. SUITE C-1 • ANCHORAGE, AK 99502
PHONE: 907.243.6300 • FAX: 907.243.6301

• ALASKA

Redfern submits new transportation plan

Alaska regulators say they will seek additional information about new plan to ship ore down the Taku River before issuing permits

By SHANE LASLEY
Mining News

Redfern Resources Ltd. has come up with a new plan for transporting supplies and ore up and down the Taku River between the company's Tulsequah Chief zinc-copper-lead-gold-silver project in British Columbia and the Port of Juneau, about 40 kilometers, or 65 miles away.

The new proposal, submitted to the Alaska Department of Natural Resources Nov. 19, outlines the use of shallow draft river tugs, tracked articulated vehicles, modified Morgan Skidders, and several other support vehicles to propel and guide air cushion barges on the river route between the mine project across the B.C. border and the river's mouth near Juneau.

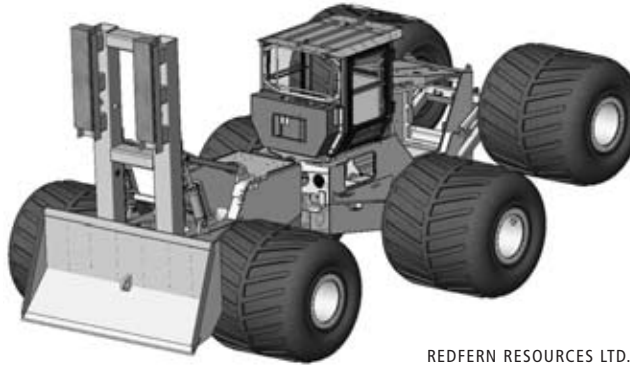
In Juneau, the company intends to load ore produced at Tulsequah Chief onto barges for a short trip north to the Skagway Ore Terminal where it would be loaded onto ships bound for smelters in Asia.

The plan modifies an earlier proposal submitted to state regulators in December 2007 in which Redfern outlined an experimental vehicle called an "Amphitrac" that it planned to use to propel the air cushion barges along the river. In May, Redfern abandoned the idea of using the Amphitrac as a tow vehicle due to delays it encountered in obtaining a detailed design.

Regulators reveal new plan

After reviewing the junior's new proposal in recent weeks, state regulators concluded that changes in it are significant enough to require Vancouver B.C.-based Redfern to reapply for permits to run barges on the Taku River.

The 28-mile section of the transportation route between the mouth of the river and the US/Canada border requires two State of Alaska permits: a Land Use



REDFERN RESOURCES LTD.

Redfern's new Taku transportation plan incorporates the use of Morgan Skidders modified with low-ground-pressure tires to navigate and propel the air cushion barge on the frozen river leading to the Tulsequah Chief Mine.

Permit from the Alaska Department of Natural Resources, Division of Mining, Land and Water, and a Fish Habitat Permit from the Alaska Department of Fish and Game, Division of Habitat.

In addition, DNR's Division of Coastal and Ocean Management requires an Alaska Coastal Management Plan consistency review.

On Dec. 5 DNR released Redfern's application and coastal consistency review documents on the "Tulsequah Chief Mine River Barging Proposal" for public review and comment. DNR said it is a new project review and previously submitted comments will not be considered.

DNR defends 30-day comment period

State regulators have come under fire for the relative brevity of the Alaska Coastal Management Plan consistency review period they established for the new transportation plan. Critics said the 30-day comment period and the six-day notice for a public meeting were too short, citing a 50-day review period for Redfern's previous transportation plan last December.

DNR mining coordinator Tom Crafford told Mining

News that 30 days is the appropriate length for the ACMP consistency review, which is managed by DNR's Division of Coastal and Ocean Management, and the longer 50-day comment period for last year's review also should have been 30 days.

Redfern presented the Taku transportation plan to the public during an informational meeting held at Centennial Hall in Juneau Dec. 11. State regulators also attended the meeting to inform the public of the consistency review and permitting processes.

The public meeting, according to Crafford, was held as early as possible to allow those interested enough time to submit written comments to the permitting agencies before the end of the 17-day ACMP comment period.

Information and testing required

The mining coordinator told Mining News Dec. 18 that the permitting agencies have submitted multiple requests for additional information, and the Division of Coastal and Ocean Management is in the process of compiling the requests into an official request for additional information that will be submitted to Redfern, a subsidiary of Redcorp Ventures Ltd.

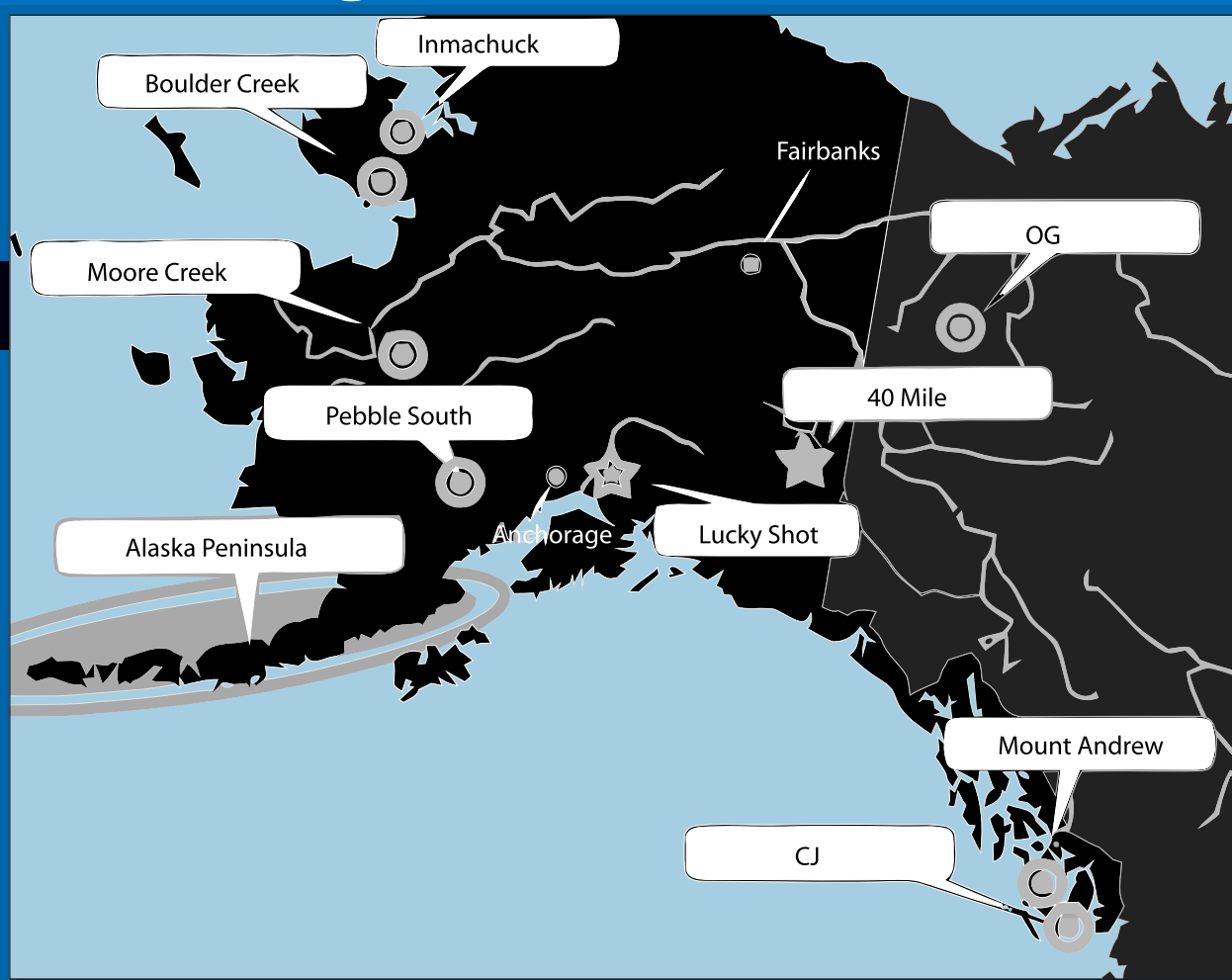
The RFAI "stopped the clock" on the ACMP consistency review Dec. 17. The clock will restart when the company supplies the state with the information requested.

A Redcorp spokeswoman told Mining News that the company is expecting the information request from the state. But after nearly two years of working on the transportation plan, the junior believes it is prepared to answer any questions the regulators have.

"The permitting process for our proposed transportation system using the air cushion barges has been a harmonized process in that agencies from both sides of the

see REDFERN page 19

Revealing the Potential of Alaska



Suite 1500 - 409 Granville Street, Vancouver, BC, Canada V6C 1T2
Tel: 604.484.7855 | Fax: 604.484.7155 | TF: 866.284.2296
www.fullmetalminals.com



• BRITISH COLUMBIA & YUKON TERRITORY

Providing timely relief for miners

Officials in Western Canada fine-tune existing regulations to improve investment climate, clarify rules and order further study

By ROSE RAGSDALE

For Mining News

As financial conditions in the mining industry spiral deeper into a trough with the overall economy, the two westernmost governments in Canada are taking steps to cushion the fall, at least for mining companies doing business within their jurisdictions.

The Yukon Legislative Assembly moved in November to provide new certainty to Yukon's mineral sector by passing amendments to the territory's Quartz Mining Act and Miners Lien Act.

In British Columbia, meanwhile, officials set in motion plans to introduce legislation, subject to the approval of the provincial Legislature, that will extend the Mining Flow-Through Share Tax Credit to the end of 2009, retroactive to Jan. 1, 2009.

The province is also creating a new economic mining task force to help B.C.'s mining industry weather the worldwide economic downturn, Premier Gordon Campbell said Dec. 5.



British Columbia Premier Gordon Campbell

Lowering exploration costs

The Honorable Geraldine Van Bibber, Commissioner of Yukon, quickly gave her assent to the amendments thereby making them law.

"The amended Quartz Mining Act and Miners Lien Act provide valuable clarity and certainty to Yukon's mineral sector during this time of global economic uncertainty," said Brad Cathers, Minister of Energy, Mines and Resources Nov. 27. "This legislation will encourage a mining industry that yields the most benefit to Yukoners, while remaining competitive with other jurisdictions."

The Quartz Mining Act regulates hard rock mining in Yukon. The amendments to the claims administration and royalty sections of the Quartz Mining Act will lower exploration costs, while ensuring the territory sets royalty rates for mine development that are competitive with other Canadian mining jurisdictions. "Yukon's mining sector is a significant contributor to Yukon's economy," said Archie Lang, Minister of Community Services. "The Yukon government is committed to encouraging and supporting a sustainable mineral industry while ensuring that Yukoners receive maximum benefits from our resources."

Extending investment tax credit

"Mining is an incredibly important industry for British Columbia families, workers and communities and this government is dedicated to making sure it remains a strong part of our economy," said Campbell. "In this time of economic uncertainty it's imperative that we do what we can to encourage business and mining in B.C."

Many companies in the resource and renewable energy sectors raise money through flow-through shares, which allow exploration companies to pass eligible expenses to investors. Under Canada's federal income tax rules, investors can deduct 100 per cent of the eligible exploration expenses.

The Mining Flow-Through Share Tax Credit was introduced in British Columbia in 2001, paralleling a federal program. The 20 per cent B.C. Mining Flow-Through Share Tax Credit is available only to individuals. The combined effect of the flow-through share deduction, the federal credit and the provincial credit for an individual investor is to reduce the cost of a C\$1,000 investment to about C\$383.

Since the Mining Flow-Through Share Tax Credit was introduced, investment in mining exploration spending in B.C. has increased by 1,300 percent from \$29 million in 2001 to a record high of nearly \$416 million in 2007.

Protecting contractors and suppliers

In Yukon, the amendment to the Miners Lien Act provides the opportunity for contractors and suppliers to lien mine and mineral assets in situations where they have not been paid for a good or service. Language and definitions in the Miners Lien Act have been amended to provide better clarity and certainty for suppliers, the mining industry and lenders that provide debt capital for mine development.

Yukon officials said the amendments to the Quartz Mining Act and the Miners Lien Act followed public advertising campaigns and a series of meetings, information sessions and workshops, beginning in early 2008.

Studying further assistance

By establishing the Economic Task Force for Mining, B.C. officials aim to bring together industry leaders to monitor the economic situation and recommend measures to mitigate the effects of the global downturn on the mining industry.

"We want to manage the areas we can to ensure investment in B.C.'s mining sector remains strong," said

Minister of State for Mining Gordon Hogg. "By bringing significant innovation and experience to the table, we'll be better positioned to ride out this drop in commodity prices."

Miners applaud the changes

The mining industry praised both the B.C. and Yukon governments for the efforts to improve their respective regulatory regimes.

"The mineral exploration sector is pleased to see the B.C. government recognizes the value of extending the Flow-Through Share Tax Credit," said Association for Mineral Exploration of British Columbia President and CEO Gavin Dirom. "This measure, with the creation of the Economic Task Force, will help B.C. attract investment and remain globally competitive in this challenging time."

"On behalf of the Mining Association of B.C. and as a member of the Minister's Council, I welcome today's show of support for our sector from the B.C. Government," said Mining Association of B.C. president and CEO Pierre Gratton. "A special task force focused on how to ensure B.C.'s mining industry weathers the economic storm all of us are facing is a timely, proactive step. It's an opportunity to look at issues such as transportation, electricity, infrastructure, human resources – to name a few – to ensure we remain competitive in this difficult time and are well-positioned when the economy recovers."

The Economic Task Force for Mining will report through the Minister's Council on Mineral Exploration and Mining. Established in September, the council was created to recommend initiatives and policies for a sustainable, responsible mineral industry.

Carl Schulze, president of the Yukon Chamber of Mines said the group worked with the Yukon territorial government earlier this year towards completion of several government initiatives, including modernization of the Miners' Lien Act to improve viability of financing, modernize Yukon's royalty regime and improve regulations governing claim acquisition. The chamber also submitted suggestions for revamping Yukon's royalty regime, aspects of the Yukon Quartz Mining Act and, most recently, Yukon's energy strategy.

"It is incumbent on the territorial government to improve Yukon's mineral investment climate as much as possible. Even during good times, any jurisdiction is in competition with all others for a finite amount of investment funds. When times become more difficult, the investment climate must be maximized," Schulze said this fall. ●

WE'RE NOT AFRAID TO GET OUR HANDS DIRTY.

Order now!

Available now at the low price of \$78.00 for print or \$49.00 for online.

NORTH OF 60
MINING
NEWS

907-522-9469 | www.miningnewsnorth.com | publisher@miningnewsnorth.com

Alaska Earth Sciences

Comprehensive Mineral
Exploration Services

- Geologic Consulting
- Geo-personnel Services
- Logistics Coordination
- Remote Site Management
- Mineral Claims Acquisition
- Permitting Assistance
- Equipment Rental

11401 Olive Lane
Anchorage, Alaska 99515
907-522-4664

<http://www.aes.alaska.com>

• WESTERN CANADA

Firm provides mining experts for hire

Vancouver-based consulting firm carves niche in demanding exploration sector, while striving to meet industry's evolving needs

By ROSE RAGSDALE
For Mining News

One of the techniques that miners use to effectively and quickly mount a mining exploration program in the wilds of Alaska and Northwestern Canada is to hire out to knowledgeable contractors much of the work involved, including the actual exploring and decision-making.

But it takes a very special kind of temp agency to fulfill such demanding job requirements.

Equity Exploration Consultants Ltd. is one firm that has met this need for 20 years.

The Vancouver, B.C.-based consultant has racked up considerable international experience, managing projects in 24 countries including remote locations in Southeast Asia, the South Pacific and Central America. But Equity concentrates on Western and Northern Canada, and currently manages more than \$20 million in mineral exploration expenditures annually.

Launched in 1987 by mining veterans Henry J. Awmack and David Caulfield, Equity Exploration Consultants was created in response to the need for a geological consulting firm in Western Canada that could provide a complete range of mineral exploration services for juniors. Awmack, Equity's chief operating officer since 2006, and Caulfield envisioned a company that could undertake entire exploration programs in remote areas, providing not only top-notch geological expertise but also the camps, equipment and support personnel necessary to efficiently run an entire exploration program. On a typical project, a client brings Equity a mineral property and a budget, and the consultant does the rest. This includes preparing an exploration program, implementing the proposed pro-

gram and reporting on the outcome. It involves compiling and interpreting all available data on the property; designing a work proposal with detailed budget and schedule to fit the client's objectives; arranging permitting with regulatory authorities; managing the exploration in entirety; and compiling and interpreting results of the fieldwork.

By the mid-1990s, the visionaries were managing major exploration programs in Southeast Asia, the South Pacific and Central America as well as British Columbia and Yukon. Equity's client list had expanded to include major mining companies such as Cyprus Amax and Newmont Mining Corp., as well as numerous juniors. In 1995, Equity participated in the discovery of the Wolverine VMS deposit in Yukon Territory, taking a regional target through initial evaluation and detailed property-scale geological, geochemical and geophysical surveys, to ultimately the discovery drill holes.

Equity stands out at Andrew Project

Today, the privately owned firm has a full-time staff of 7 project geologists and 2 logistics specialists, along with access to up to 50 contract employees at any time, including geologists, prospectors, cooks, camp managers and field assistants.

Equity's president since 2006, Darcy E. L. Baker, led a 21-member team during the 2008 season at the Andrew Project in eastern Yukon Territory.

The consulting firm's client, Australia-based Overland Resources, provided one professional, Managing Partner Hugh Bresser, to work on the \$15 million exploration program.

Baker and colleague, Robin S. Black, were among seven geologists and support personnel, including geotechnical spe-

see EXPERTS page 16

NUNAVUT TERRITORY

Court approves plan to shut down Tahera Diamond Corp.'s Jericho Mine

Tahera Diamond Corp. Dec. 15 said it got court approval to cease operations at the Jericho Mine in Nunavut on Dec. 13.

The Department of Indian and Northern Affairs Canada, meanwhile, intervened under territorial law and intends to retain Tahera's former employees to conduct ongoing care and maintenance of the defunct diamond mine.

Toronto-based Tahera said the shutdown and government takeover of care and maintenance was needed because the company lacked funds to continue care and maintenance of Jericho and because it had failed to find a buyer for company assets. Tahera terminated all remaining staff, effective Dec. 12, and said it will close its office, effective Dec. 31.

As part of the transition, Peter Gillin has resigned as chief restructuring officer, and a corporation managed by Andrew Gottwald, Tahera's former chief financial officer, has been appointed by Canada's bankruptcy court to continue the restructuring.

The court also approved an extension to Tahera's protection from creditors until Jan. 23.

During this period, the company will try to sell its remaining assets in consultation with Caz Petroleum Inc., its leading secured creditor. On Nov. 21 Caz notified the court's monitor that it had acquired the debt formerly held by Laurelton Diamonds Inc.

No value is expected to remain available to shareholders in the disposition of Tahera's assets.

Toronto-based Tahera said the shutdown and government takeover of care and maintenance was needed because the company lacked funds to continue care and maintenance of Jericho and because it had failed to find a buyer for company assets.

—MINING NEWS



Northern Air Cargo announces **NAC Can**—a new program to improve customer service and make shipping with NAC easier than ever.

- Faster drop-offs and streamlined pickups.
- Individual kiosks for small packages, oversize, and general freight.
- Dedicated service agents for custom shipping solutions.

NAC CAN
make air cargo easier!
800.727.2141 www.nac.aero



FOUNDEX

Global Drilling Solutions

- Geotechnical Site Investigations
- Offshore Drilling Specialists
- Gravel, Placer Exploration
- Large Diameter Bulk Sampling
- Grouting, Anchoring & Piling
- 3" to 24" Water Wells
- Ground Improvement
- Wireline Coring NQ3 to PQ3
- Wireline CPT & Vane Testing
- In-situ Testing & Instruments
- Heli-portable Drilling Systems
- Wide Range of Equipment
- Highly Experienced Staff

Anchorage, Alaska
Phone 907-522-8263
Fax 907-522-8262
HGrey@Foundex.com
www.Foundex.com
Surrey BC Canada
604-594-8333

1972 — 2008

36

Years of
Excellence



Providing advertising and design services to Alaska's resource development industry.



907.258.4705 saltandlightcreative.com

• ALASKA

Junior earns 100 percent of Whistler

Geoinformatics reports positive results from its 2008 drill program at Alaska project; identifies drill targets at Muddy Creek

MINING NEWS

Geoinformatics Exploration Inc. Dec. 11 said it has satisfied the acquisition conditions required to earn a 100 percent interest in the Whistler Project from Kennecott Exploration Co. by completing the 2008 field season. The agreement allows Kennecott to retain a back-in right to acquire either a 51 percent or 60 percent interest in the project.

Whistler is one of the largest groups of contiguous mineral claim blocks held by a single company in Alaska, outside of existing mines and mine development projects.

The project includes the Whistler Zone, which has an estimated 1.31 million ounces of gold equivalent in indicated resource with 30 million metric tons grading 0.87 grams per metric ton gold, 2.46 g/t silver and 0.24 percent copper and 4.44 million ounces of gold equivalent in inferred resource with 134 million metric tons grading 0.64 g/t gold, 2.18 g/t silver and 0.20 percent copper. In addition, there is considerable mineralization in the Whistler Zone that has been identified by drilling and reported in the project's 43-101-compliant resource technical report, but has not yet been catego-

rized as a mineral resource.

Some 50 other regional targets are located in and around the Whistler Zone making it potentially one of the great mineral provinces in North America, according to Geoinformatics.

Encouraging drill results

The Toronto-based junior said it completed a total of 11 diamond drill holes for 4,303 meters in 2008 on the property, which is located about 160 kilometers, or 100 miles, northwest of Anchorage. Five of the holes (2,462 meters) tested extensions of the Whistler Zone/Main Zone resource. The remaining six holes (1,841 meters) tested six regional targets all located within 2.5 kilometers, or about 1.5 miles, of the Whistler Zone/Main Zone resource. The regional targets were all defined by geophysical/geochemical techniques, with no surface expression due to thin-cover gravel. Three out of the six targets intersected mineralization. One hole at the RainTree West prospect intersected 160 meters grading 0.59 grams of gold per metric ton, 6.02 g/t silver, 0.10 percent copper, 0.20 percent lead and 0.46 percent zinc.

"It's not as big as Donlin Creek or Pebble, but it has 6 million ounces of gold equivalent, lots of targets and a huge exploration upside," said Darren Holden, chief operating officer at Geoinformatics.

Holden told Mining News that the junior is planning a 2009 exploration program in Alaska, but it must secure further funding to finance additional work.

Geoinformatics recently completed a one-for-10 share consolidation approved by its shareholders in October that reduced its outstanding common stock to 75.7 million shares, effective Dec. 22.

Holden said Alaska offers some challenges, but Geoinformatics likes doing business in the state because it has "a reasonably good climate for mining investment."

Drill targets at Muddy Creek

Geoinformatics also completed an extensive review of the Muddy Creek high-grade gold prospects, located about 13 kilometers, or eight miles, southeast of the Whistler Zone, during the 2008 field season. The review included fieldwork and extensive validation of

see **GEOINFORMATICS** page 19

continued from page 15

EXPERTS

cialists, from Equity who worked on the project. The effort resulted in discovery of several new base metal zones on the Selwyn Basin property. These included high-grade mineralization dubbed the "Darcy Zone," where drilling intersected 43.9 meters grading 11.9 percent zinc.

Baker told Mining News that the Darcy Zone was named after him.

"But I didn't have much to do with the discovery or the naming. I've heard different versions of the story, but it seems that Robin and Hugh named the zones

when I was in Vancouver on break. There are four to five other zones named after various geologists that had worked on the property, but it was the Darcy Zone that had the good drill hit."

Baker also observed that geologists always have a practical need to name the exploration targets that they work on and the Andrew Zone, itself, was named after the son of the prospector that staked the claims in 1996.

Baker is one of Equity's three partners, and Black spearheaded Equity's work in Alaska in 2007 for Rubicon Minerals Corp. and Rimfire Minerals Corp. in the Goodpaster District near the Pogo gold mine.

Firm focus on quality

Equity's evolution as a mining service firm has followed the industry's needs. For example, the consulting firm in 2007 established a new advisory services business unit that focuses on indigenous and community relations. The goal is to provide clients with the capacity and expertise required to engage meaningfully with indigenous and local communities, ensuring business activities consider immediate and long-term social, environmental and economic values, according to Baker.

So what happens to a mining consultant like Equity Exploration when the industry undergoes major contractions

due to an economic downturn?

With luck, little will actually change, according to Baker.

"We are in this business for the long term, and we never compromise our projects just to 'make hay while the sun shines,'" he said. "As a service provider, our business makes it very tempting to take on lots of projects when the work is there (such as during the last few years). Our approach, however, is to only take on a project if we can do a good job of it. This is the only way we can maintain high standards, and it means that our teams are 100-percent dedicated to doing the best job they can for our clients and their projects."

Baker also predicted a drastic tightening of exploration spending in the short term.

"The economic turmoil has hurt our clients and the resource sector will have lots of trouble raising money until things turn around," he said.

"But, people working in mineral exploration are not strangers to highs and lows and the cyclical nature of the business. There will always need to be an exploration and mining industry, so Equity and lots of other companies that we work with will make it through this downturn," he added. ●

Tutka, LLC is a service-driven company specializing in environmental and technical services for Alaska's resource development industries.



6250 Tuttle Place, Suite 5
Anchorage, Alaska 99507

[866] 822-8010 Toll-free
[907] 272-8010 Anchorage
[907] 452-7100 Fairbanks

tutkallc.com

Successful camp operations begin with Chiulista Camp Services, the premier provider of remote logistics in the state of Alaska. Our professional and efficient services include:

Camp Setup • Camp Management
Catering • Housekeeping

Chiulista Camp Services
Global Resources. Regional Support. Local Hire.

907.278.2208 | 800.277.5516 | chiulista.com

From cocktail parties to large corporate functions, Mayflower has been providing full-service catering for every size event in any location for 20 years. Hosting events in banquet and meeting facilities, or off-site anywhere in Alaska, we serve freshly-prepared, creative selections from our standard faire, or our professional chefs will customize menus to meet your budget and location needs.

MAYFLOWER
CATERING

907-274-2223 • mayflowercatering.com • A Chiulista Services, Inc. Business

M N O R T H O F 6 0 MINING

Companies involved in Alaska and
northwestern Canada's mining industry

NEWS DIRECTORY



The Red Dog mine in northwest Alaska.

Mining Companies

Fairbanks Gold Mining/Fort Knox Gold Mine

Fairbanks, AK 99707
Contact: Lorna Shaw, community affairs director
Phone: (907) 488-4653 • Fax: (907) 490-2250
Email: lshaw@kinross.com • Web site: www.kinross.com
Located 25 miles northeast of Fairbanks, Fort Knox is Alaska's largest operating gold mine, producing 340,000 ounces of gold in 2004.

Rimfire Minerals Corp.

Vancouver, BC V6C 1G8 Canada
Contact: Ahnna Pildysh, Mkt. Coordinator
Phone: (604) 669-6660 • Fax: (604) 669-0898
Email: ahnnap@rimfire.bc.ca • Web site: www.rimfire.bc.ca
Gold and silver projects in Alaska, Yukon, BC and Nevada. Preferred partner of senior mining firms. Partnered with the world's three largest gold producers.

Usibelli Coal Mine

Fairbanks, AK 99701
Contact: Bill Brophy, vp cust. relations
Phone: (907) 452-2625 • Fax: (907) 451-6543
Email: info@usibelli.com • Web site: www.usibelli.com
Other Office
P. O. Box 1000 • Healy, AK 99743
Phone: (907) 683-2226
Usibelli Coal Mine is headquartered in Healy, Alaska and has 200 million tons of proven coal reserves. Usibelli produced one million tons of sub-bituminous coal this year.

Service, Supply & Equipment

3M Alaska

11151 Calaska Circle
Anchorage, AK 99518
Contact: Paul Sander, manager
Phone: (907) 522-5200 • Fax: (907) 522-1645
Email: innovation.3malaska@mmm.com
Website: www.3m.com
Serving Alaska for over 34 years, 3M Alaska offers total solutions from the wellhead to the retail pump with a broad range of products and services – designed to improve safety, productivity and profitability.

Air Liquide

Anchorage, AK 99518
Contact: Brian Benson
Phone: (907) 273-9762 • Fax: (907) 561-8364
Email: brian.benson@airliquide.com
Air Liquide sells, rents, and is the warranty station for Lincoln, Miller, Milwaukie, Victor and most other welding equipment and tool manufacturers.

Alaska Analytical Laboratory

1956 Richardson Highway

North Pole, AK 99705

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

Alaska Cover-All

6740 Jollipan Cr.
Anchorage, AK 99507
Contact: Paul Nelson, mgr.
Phone: (907) 346-1319 • Fax: (907) 346-4400
E-mail: paul@alaskacoverall.com
Contact: Scott Coon
Phone: (907) 646-1219 • Fax: (907) 646-1253
Email: scott@alaskacoverall.com
National Call Center: 1-800-268-3768
We are the Alaska dealers for Cover-All Building Systems. Steel framed, fully engineered, LDPE fabric covered, portable buildings in 18 to 270 foot widths and any length.

Alaska Earth Sciences

Anchorage, AK 99515
Contact: Bill Ellis and Rob Retherford, owners
Phone: (907) 522-4664 • Fax: (907) 349-3557
E-mail: wte@aes.alaska.com
A full service exploration group that applies earth sciences for the mining and petroleum industries providing prospect generation, evaluation and valuation, exploration concepts, project management, geographic information systems and data management. We also provide camp support and logistics, geologic, geochemical and geophysical surveys.

Alaska Frontier Constructors

P.O. Box 224889
Anchorage, AK 99522-4889
Contact: John Ellsworth, President
Phone: (907) 562-5303 • Fax: (907) 562-5309
Email: afcinfo@ak.net
Alaskan heavy civil construction company specializing in Arctic and remote site development with the experience, equipment and personnel to safely and efficiently complete your project.

Alaska Interstate Construction

601 W. 5th Avenue, Suite 400
Anchorage, AK 99501
Contact: David Gonzalez
Phone: (907) 562-2792 • Fax: (907) 562-4179
E-mail: dave.gonzalez@aiclcc.com
Web site: www.aiclcc.com
AIC provides cost-effective solutions to resource development industries. We provide innovative ideas to meet each requirement through the provision of best-in-class people and equipment coupled with exceptional performance.

Alaska Steel Co.

1200 W. Dowling

Anchorage, AK 99518

Contact: Joe Lombardo, vice president
Phone: (907) 561-1188 • Toll free: (800) 770-0969 (AK only)
Fax: (907) 561-2935
Email: j.lombardo@alaskasteel.com
Fairbanks Office:
2800 South Cushman
Contact: Dan Socha, branch mgr.
Phone: (907) 456-2719 • Fax: (907) 451-0449
Kenai Office:
205 Trading Bay Rd.
Contact: Will Bolz, branch mgr.
Phone: (907) 283-3880 • Fax: (907) 283-3759
Full-line steel and aluminum distributor. Complete processing capabilities, statewide service. Specializing in low temperature steel and wear plate.

Arctic Foundations

Anchorage, AK 99518-1667
Contact: Ed Yarmak
Phone: (907) 562-2741 • Fax: (907) 562-0153
Email: info@arcticfoundations.com
Website: www.arcticfoundations.com
Soil stabilization – frozen barrier and frozen core dams to control hazardous waste and water movement. Foundations – maintain permafrost for durable high capacity foundations.

Austin Powder Company

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

Calista Corp.

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

CH2M HILL

949 E. 36th Ave., Ste. 500
Anchorage, AK 99508
Contact: Emily Cross
Phone: (907) 762-1510 • Fax: (907) 762-1001
Email: emily.cross@ch2m.com • Web site: www.ch2m.com
CH2M HILL is a multi-national corporation that provides services, project management, engineering, procurement, construction, operations and maintenance – to the energy, resource and process industries and the

NORTH OF 60 MINING

public sector.

Chiulista Camp Services/Mayflower Catering

6613 Brayton Dr., Ste. C
Anchorage, AK 99507
Contact: Joe Obrochta, president
Contact: Monique Henriksen, VP
Phone: (907) 278-2208 • Fax: (907) 677-7261
E-mail: info@chiulista.com
The 100 percent Alaska Native owned and operated catering company on the North Slope, catering and housekeeping to your tastes, not ours.

Construction Machinery

5400 Homer Dr.
Anchorage, AK 99518
Contact: Ron Allen, Sales Manager
Phone: (907) 563-3822 • Fax: (907) 563-1381
Email: r.allen@cmiak.com • Web site: www.cmiak.com
Other Offices:
Fairbanks office
Phone: 907-455-9600 • Fax: 907-455-9700
Juneau office
Phone: 907-780-4030 • Fax: 907-780-4800
Ketchikan office
Phone: 907-247-2228 • Fax: 907-247-2228
Wasilla Office
Phone: 907-376-7991 • Fax: 907-376-7971

Equipment Source, Inc.

1919 Van Horn
Fairbanks, AK 99701
Contact: Jennifer Wormath, marketing and sales
Phone: (907) 458-9049 • Fax: (907) 458-7180
E-mail: jennifer@equipmentsourceinc.com
Web site: www.equipmentsourceinc.com
Alaskan distributor for Kubota Engine, Kubota Generators, Carlin Burners, Engineered Performance Ducting, ABC Mine and Tunnel Ventilation. Manufacturer of portable heaters, EnviroVacs, Emergency-Showers, Light Towers.

Foundex Pacific

2261 Cinnabar Loop
Anchorage, AK 99507
Contact: Howard Grey, manager
Phone: (907) 522-8263 • Fax: (907) 522-8262
E-mail: hgrey@foundex.com • Website: www.foundex.com
Other offices:
Surrey, BC Canada
Contact: Dave Ward
Phone: 604-594-8333
Email: dward@foundex.com
Drilling services relating to exploration, geotechnical investigations and wells.

Frontier Plumbing Supply, Inc.

981 Van Horn Rd.
Fairbanks, AK 99701
Contact person: Bill Vivlamore, President
Phone: (907)374-3500
Fax: (907) 374-3570
E-mail: BillV@frontierplumbing.com
Website: www.frontierplumbing.com
Other Office:
8630 Toloff St.
Anchorage, AK 99507
Frontier Plumbing is your Alaskan Owned Full Line Supplier of Plumbing, heating and Industrial Piping Products.

Fubar Equipment, LLC

905 Vicki Way
Wasilla, AK 99654
Contact person: Raquel Armstrong, Owner
Phone: (907)376-7834
Fax: (907) 376-7843
E-mail: fubar-equip@gci.net
Serving the Mining industry with heavy equipment service and repair on all makes of heavy equipment, also, welding and fabricating. Serving Alaska for over 30 years, from North to South, East to West, we do our best. Get fubared, you'll like it.

GPS Environmental

Industrial Water/Wastewater & Mining Equipment
7750 King St.
Anchorage, AK 99518
Contact: Paul Schuitt
Phone: (907) 245-6606 • Cell: (907) 227-6605
Fax: (928) 222-9204
Email: paul@gpsenvironmental.com
Web site: www.pgsevenvironmental.com
GPS Environmental, LLC is a manufacturer's representative company representing companies that manufacture water treatment, wastewater treatment, mining equipment and modular camps.

Jackovich Industrial & Construction Supply

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

Advertiser Index

3M Alaska.....	19
Air Liquide	
Alaska Analytical Laboratory.....	8
Alaska Cover-All.....	4
Alaska Dreams	
Alaska Earth Sciences.....	14
Alaska Frontier Constructors	
Alaska Interstate Construction (AIC).....	2
Alaska Steel Co.	
American Tire Co.....	6
Arctic Foundations.....	8
Aurora Geosciences	
Austin Powder Co.	
Calista Corp.....	4
CH2M HILL	
Chiulista Camp Services/Mayflower Catering... ..	16
Construction Machinery.....	20
Equipment Source Inc.	
Fairbanks Gold Mining/Fort Knox Gold Mine... ..	10
Foundex.....	15
Frontier Plumbing Supply.....	9
Fubar Equipment.....	7
GPS Environmental.....	11
Jackovich Industrial & Construction Supply.....	10
Judy Patrick Photography.....	5
Lynden.....	11
MRO Sales	
Nature Conservancy, The	
Northern Air Cargo.....	15
Northern Transportation Co.	
Pacific Rim Geological Consulting.....	4
Panalpina	
Rimfire Minerals.....	3
Salt+Lite Creative.....	15
Shaw Alaska.....	12
Taiga Ventures	
Teck Cominco	
Tutka LLC.....	16
URS.....	19
Usibelli Coal Mine	
Victaulic.....	3

Judy Patrick Photography

Anchorage, AK 99501
Contact: Judy Patrick
Phone: (907) 258-4704 • Fax: (907) 258-4706
Email: jpphoto@mtaonline.net
Website: JudyPatrickPhotography.com
Creative images for the resource development industry.

Lynden

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

MRO Sales

Anchorage, AK 99518
Contact: Don Powell
Phone: (907) 248-8808 • Fax: (907) 248-8878
Email: Sales1@mrosalesinc.com
Website: www.mrosalesinc.com
MRO Sales offers products and services that can help solve the time problem on hard to find items.

Northern Air Cargo

3900 W. International Airport Rd.
Anchorage, AK 99502
Contact: Mark Liland, acct. mgr. Anch./Prudhoe Bay
Phone: (907) 249-5149 • Fax: (907) 249-5194
Email: mliland@nac.aero • Website: www.nac.aero
Serving the aviation needs of rural Alaska for almost 50 years, NAC is the states largest all cargo carrier moving nearly 100 million pounds of cargo on scheduled flights to 17 of Alaska's busiest airports. NAC's fleet of DC-6, B-727, and ATR-42 aircraft are available for charters to remote sites and flag stops to 44 additional communities.

Northern Transportation Co.

Alaska: 3015 Madison Way
Anchorage, AK 99508
Contact: Laurie Gray, agent
Phone: (907) 279-3131 • Cell: (907) 229-0656
Phone: (800) 999-0541 • E-mail: lag@alaska.net
Canada: 42003 McKenzie Hwy.
Hay River, NWT X0E0R9
Contact: John Marshall
Phone: (867) 874-5167 • Cell: (867) 875-7600
Fax: (867) 874-5179 • E-mail: jmarshall@ntcl.com

Contact: Sunny Munroe
Phone: (867) 874-5134
Cell: (867) 444-2441; (403) 829-9707
E-mail: smunroe@ntcl.com • Web site: www.ntcl.com
NTCL, Canada's largest and oldest northern marine transportation company, ships dry cargo and fuel to communities and resource exploration projects along the Mackenzie River, the Beaufort Sea coast and Alaska's North Slope.

Pacific Rim Geological Consulting

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

Panalpina

4305 Old International Airport Rd., Suite A
Anchorage, AK 99502
Contact: John Hodel, business unit manager
Phone: (907) 245-8008
Fax: (907) 245-8018
E-mail: john.hodel@panalpina.com
International and domestic freight forwarding and logistics services. Integrated solutions for supply chain management. Specialists in oilfield and mining projects.

Shaw Alaska

2000 W. International Airport Rd, C-1
Anchorage, AK 99502
Contact: Jane Whitsett, office director
E-mail: jane.whitsett@shawgrp.com
Phone: 907-243-6300
Fax: 907-243-6301
Website: www.shawgrp.com
Shaw Alaska is a subsidiary of The Shaw Group, one of the World's largest providers of engineering, design, construction, environmental, infrastructure, fabrication and manufacturing services.

Taiga Ventures

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

Teck Cominco

3105 Lakeshore Drive
Building A, Suite 101
Anchorage, AK 99517
Contact: James Kulas
Phone: 907-426-9129 • Fax: 907-426-2108
Email: jim.kulas@teckcominco.com
Website: www.teckcominco.com
Teck Cominco is a diversified mining company that has been investing in Alaska for over 30 years. Teck Cominco manages both Red Dog and Pogo Mines.

Tutka, LLC (formerly PSSI)

6250 Tuttle Place, Unit #5
Anchorage, AK 99507
Contact: Crystal J. Nygard, principle
Phone: (907) 272-8010 • Fax: (907) 272-9005
Email: crystal@tutkallc.com
Other offices:
3002 Industrial Ave.
Fairbanks, AK 99701
Website: www.tutkallc.com
Tutka, LLC (formerly PSSI) provides environmental and safety technical consulting services to oil & gas, mining, utility, environmental, engineering and transportation industries.

URS Corp.

560 E. 34th St., Suite 100
Anchorage, AK 99503
Contact: Jon Isaacs, Alaska vice president
Phone: (907) 562-3366 • Fax: (907) 562-1297
E-mail: jon_isaacs@urscorp.com
Website: www.urscorp.com
URS Corporation provides comprehensive integrated services to the petroleum industry, including NEPA permitting support and regulatory compliance, engineering design and construction management, field studies, environmental monitoring and contaminated site cleanup.

Victaulic

5717 Yukon Charlie Loop
Anchorage, AK 99502
Contact: Stover Smith, Alaska territory manager
Phone: (907) 223-0261 • Fax: (907) 677-9552
Email: ssmith@victaulic.com
Other Office: 1-800-PICK-VIC
Victaulic has been crafting and providing unconventional solutions for the industry's most unique challenges for over 80 years. Piping. Systems. Solutions.

continued from page 13

REDFERN

border – State of Alaska as well as federal agencies have, together with B.C. provincial and federal agencies formed a working group committee. This working group has been working collaboratively together for the past two years. As a group, all of the various issues and concerns regarding the transportation system have been documented in an issues tracking table and have been vetted through a risk assessment process in order to develop monitoring programs as it relates to fisheries and wildlife,” said Salina Landstad, Redcorp’s manager of corporate communications.

According to Crafford, state regulators also will require testing and operational demonstrations of the air cushion barge and tow vehicles before permits will be issued for operation on the Taku River. The mining coordinator anticipates the state also will require testing on the river. These tests would potentially involve operating the ACB on the river without a load, followed by operations with a barge loaded with inert cargo.

Landstad told Mining News that when construction of the air cushion barge is completed, it and the tow vehicles will be shipped to Juneau. The company anticipates delivery early in 2009.

Anchorage firm to operate ACB

Once the Vancouver B.C.-based junior receives permits to operate the air cushion barge, the company plans to begin barging supplies needed to finish construction at the mine site.

Redcorp said it has contracted Anchorage-based Delta Development Group to operate the tow vehicles on the Taku River during the winter months.

The company also reports that Crowley Maritime Corp., a global marine transportation and logistics services company, will act as technical adviser for the barge operations. Not only does Crowley have extensive experience with maritime operations, but it also operates vehicles similar to the tow vehicles on Alaska’s North Slope.

Redcorp hires Global Project Management

Redfern has targeted production at the Tulsequah Chief Mine by the end of 2009. To achieve maximum efficiency in completing construction at the underground zinc-copper-lead-gold-silver mine project, the junior has hired Global Project Management Corp. to head the project management team and provide owner’s representation on site and with

external contractors.

Redcorp said Global’s principal, William McKenzie, P. Eng, is a well-known expert in project development and construction management in the mining industry and other major projects. McKenzie will bring in additional key staff in order to achieve maximum efficiency during the main construction period at the mine site through 2009.

“Global is a well-known and highly experienced company with extensive experience in project development and construction within the mining industry and have been involved with other mines such as Eskay Creek, Mount Polley and Diavik to name a few. Their experience in project development and cost controls will be of great assistance to us as we develop the Tulsequah Chief mine,” Landstad told Mining News.

Global will assist Redfern in integrating key operating staff into construction management to ensure that there is a smooth transition to operations when the mine is built.

Tulsequah construction

Redfern said the final bridge and causeway connecting the mine site’s access roads was put in place Nov. 30, allowing full movement of equipment and supplies to the site and associated key infrastructure facilities.

Landstad said completion of the road and the bridge allows crews to begin construction and installation of a water treatment plant.

Construction at the project has been suspended for three weeks, starting Dec. 18, for the holidays. In the meantime the company awaits a project execution plan from Global. The Redcorp Board of Directors may extend the suspension of construction activities beyond the three weeks scheduled.

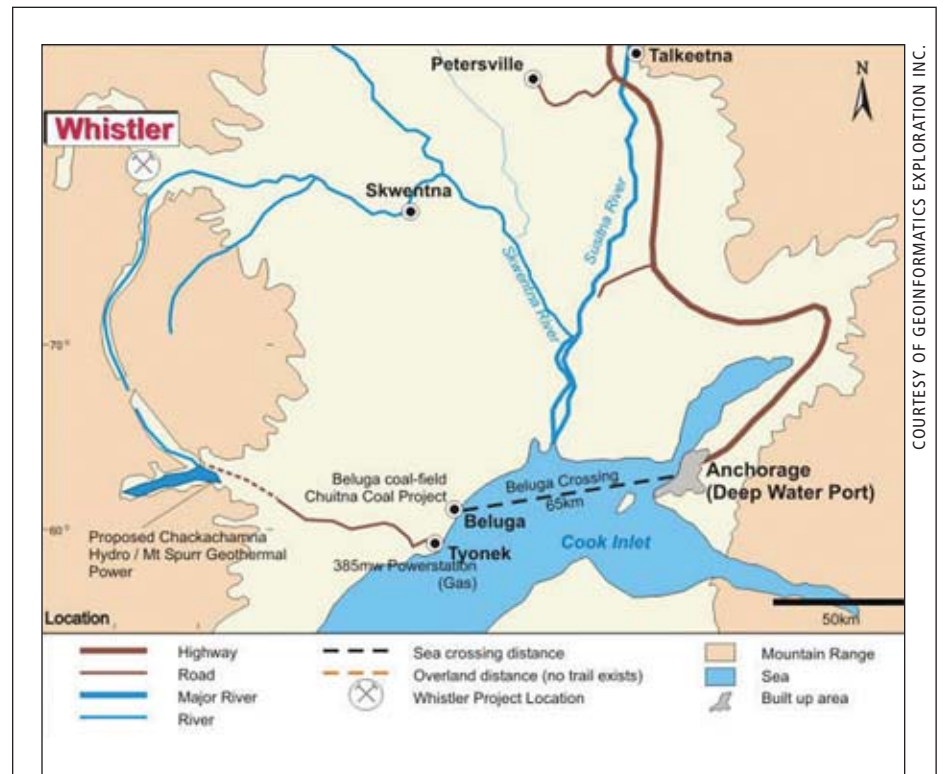
Once crews return to work they will also be engaged in on-site preparation, foundation work, preparation of the mill site, retaining walls and other activities involved with shaping the site for the various surface buildings at the project.

Contractors at the mine also will be working on underground development. The underground work encompasses the construction of a new underground mine beneath old workings that were previously operated by Cominco Ltd. in the 1950s.

The existing 5200 Level drift will be used as the primary access to the mine for all personnel, mine services, equipment and supplies. The drift will be enlarged to accommodate modern diesel trackless equipment. The new mine will operate as

a ramp-entry truck haulage operation for about two years, after which the company plans to use a 2-meter-by-8-meter inclined shaft to hoist rock out of the mine.

Tulsequah Chief is believed to contain a probable reserve of 5.4 million metric tons grading 1.40 percent copper, 1.20 percent lead, 6.33 percent zinc, 2.59 g/t gold and 93.69 g/t silver. With the current reserves, the junior anticipates an eight-year mine life. ●



COURTESY OF GEOINFORMATICS EXPLORATION INC.

continued from page 16

GEOINFORMATICS

Kennecott’s previous reconnaissance data from the area.

The advanced reconnaissance and targeting work identified seven distinct drill targets at Muddy Creek. Highlights of the work were at the Bonanza Prospect with rock chip sampling returning up to 69.12 g/t gold, 424 g/t silver and 1.96 percent

copper. The average rock-chip samples from Bonanza were 9.04 g/t gold, 97.26 g/t silver and 0.55 percent copper along a 400-meter outcropping strike length of a diorite/sedimentary contact.

“Muddy Creek has several high-grade prospects that we are very excited about,” Holden said.

Rock samples from previous exploration by Kennecott had an average grade of 100 g/t gold and 600 g/t silver, he added. ●



Midtown
560 E. 34th Avenue • Suite 100
Anchorage, AK 99503
907.562.3366

Downtown
911 W. 8th Avenue • Suite 300
Anchorage, AK 99501
907.279.0543

www.urscorp.com

3M Alaska



Solutions for the Mining Industry

**Personal Protection Equipment
Environmental Safety • Electrical
Maintenance & Repair • Fire Protection**

Helping protect your workers & facilities.
Increasing productivity & profitability.
Protecting the environment.

Ph: 907.522.5200 • Web: www.3M.com



SRK Consulting (US) Inc.
Engineers and Scientists

Our global experience... Is your global experience.

Earth and water resource specialists.
Every type of mining project on every continent, from grass roots exploration to site remediation.

Over 700 professionals in 33 offices on 6 continents.

Expert advice.

4710 Business Park Blvd., Suite F-40
phone 907.677.3520 | fax 907.677.3620
anchorage@srk.com | www.srk.com

Total Equipment Solutions

Atlas Copco



Atlas Copco DM 45 at Alaska Gold Mine Nome, Alaska

Construction Machinery Industrial is proud to be your Atlas Copco and **Secoroc** drill bits and steel dealer.

IN THE WORLD _____
Atlas Copco, the best in drilling equipment technology.

IN ALASKA _____
CMI, the best sales and product support lineup.

IN YOUR CORNER _____
The Winning Team.



CMI Sales Team



Anchorage, Alaska (907) 563-3822 • (800) 478-3822
 Fairbanks, Alaska (907) 455-9600
 Ketchikan, Alaska (907) 247-2228 • (888) 399-4030
 Juneau, Alaska (907) 780-4030